FINANCIAL STABILITY REPORT

Spring
2025

BANCO DE ESPAÑA
Eurosistema

https://doi.org/10.53479/39987

1 EXECUTIVE SUMMARY

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

3
FINANCIAL POSITION OF BANKS AND THE NON-BANK FINANCIAL SECTOR

4
MARKETS AND ASSET PRICES

5 RISK ANALYSIS

6 MACROPRUDENTIAL POLICY

INDEX OF CHARTS

INDEX OF FIGURES

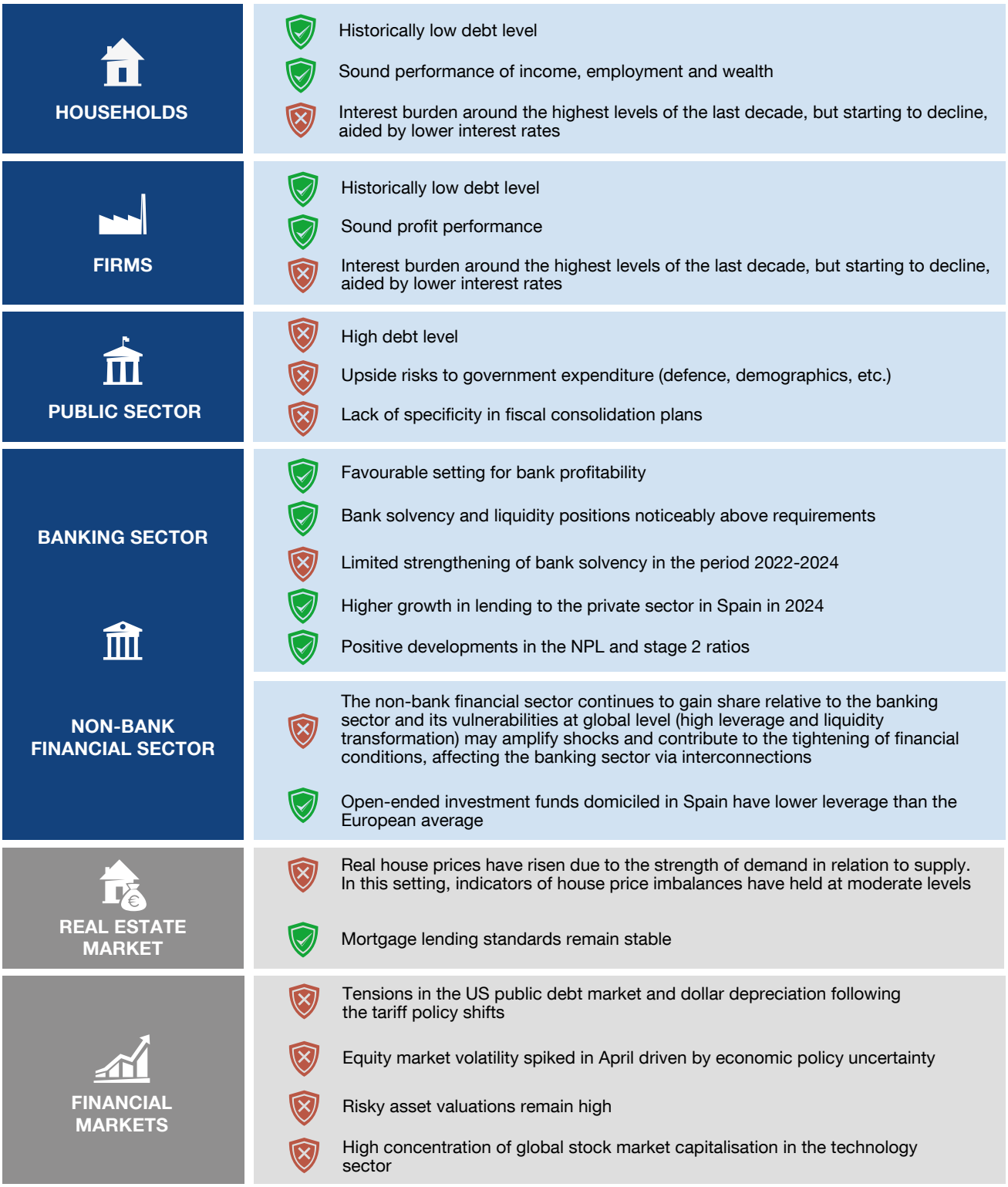
INDEX OF TABLES

INDEX OF BOXES

1

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 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.

The financial position of the sectors that are key to the stability of the Spanish financial system has fared favourably since the Autumn 2024 *Financial Stability Report* (FSR) was published, although some vulnerabilities persist in a global geopolitical and macro-financial environment marked by a high level of uncertainty.

Households and firms

Spanish households and non-financial corporations (NFCs) have strengthened their financial position (see Sections 2.1 and 2.2) and both sectors' debt levels remain low by historical standards. In addition, their income and employment levels have fared well. Meanwhile, the monetary policy easing in the euro area and the consequent fall in key policy rates have started to lower the interest burden for both sectors, although it has remained around the highest levels of the last decade.

Public sector

By contrast, Spanish general government is in a more vulnerable financial position[1] (see Section 2.3). The debt-to-GDP ratio, which fell by 3.3 percentage points (pp) in 2024, remains at high levels (101.8%). The budget deficit stood at 3.2% of GDP in 2024, down 0.3 pp from a year earlier. As has been the case since 2021, the decline in the debt ratio has owed to the increase in nominal GDP, which has outpaced pressure from a positive primary deficit, higher interest expenses and the effect of extraordinary expenditures, such as those linked to the October 2024 flash floods. According to Banco de España projections, the debt ratio and budget deficit will only decline moderately over the coming years.

The foreseeable increase in defence spending – a Europe-wide challenge – raises the risk of Spanish government debt increasing and deviating from the projections. Population ageing and the need for public resources to fund part of the Spanish economy's digital and green transitions also contribute to this risk.

The high level of government debt reduces the Spanish economy's fiscal resilience. It also means that government expenditure is more sensitive to a potential tightening of financing conditions. Greater specificity in the Spanish Government's Medium-Term Fiscal-Structural Plan 2025-2028, which currently does not set out concrete measures to ensure compliance, would help to contain these vulnerabilities.

1 This report analyses the financial position of households and firms, general government and financial intermediaries, zeroing in on their main vulnerabilities, which are those financial and economic conditions that increase the impact or likelihood of the materialisation of risks to financial stability.

Banking sector

The Spanish banking sector's financial position continues to fare well, while its resilience to risks remains stable. Profitability rose again in 2024, driven by growth in net interest income and, to a lesser extent, net fee and commission income and trading income (see Section 3.1). Return on equity (ROE) stood at 14.1%, increasing by 1.7 pp year-on-year and 3.7 pp since 2021. Similarly, return on assets (ROA) rose by 14 basis points (bp), to 0.93%. Spanish listed banks' 2025 Q1 earnings continued to show year-on-year growth in profit.

This improvement in profit generation has resulted in an increase in the volume of dividends and net share buybacks, to 1.1% of risk-weighted assets (RWAs) in 2024, compared with 0.9% in 2023 and 0.4% in 2021 (see Section 3.1.1). Greater profit distribution nevertheless limits the growth in the capital available to contend with adverse economic scenarios.

In this respect, Spanish banks' solvency position strengthened moderately in 2024, with the CET1 ratio[2] growing by 30 bp, to 13.5%, and a voluntary buffer of 3.6%.[3] Meanwhile, the leverage ratio rose by 13 bp, to 5.7%.

Spanish banks' CET1 ratio is lower than that of the other main European banking systems, while the leverage ratio is at a comparable level.[4] The difference between Spanish and European banks' voluntary CET1 ratio buffer is also smaller (see Section 3.1.2).

The results of different stress tests show considerable aggregate resilience to scenarios in which systemic risks materialise, which would also be underpinned by some credit deleveraging in such scenarios, helping to partially offset the depletion of available capital.[5]

Spanish banks' consolidated assets grew by 3.3% in 2024, driven by business abroad (see Section 3.1.3). Turning to business in Spain, their lending to resident households and NFCs increased in 2024 by 1.2% and 0.4%, respectively (see Section 3.1.4). Although moderate, this growth marks a turnaround in the contraction in lending in Spain between end-2022 and mid-2024, associated with the key policy rates rises that began in 2022.

---

2 The CET1 ratio is defined as common equity tier 1 (CET1) capital, which is the highest quality of regulatory capital, divided by RWAs. Assets with lower associated financial risks (e.g. government debt) receive a lower weighting in the calculation of the denominator. The logic behind this lower weighting is that it is less likely that lower-risk assets 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 level required by prudential supervisors and the Pillar 2 Guidance. For comparison with the European figure from the European Banking Authority, the figure provided considers only CET1 requirements. Taking into account the Tier 1 capital and total capital requirements, in addition to the leverage ratio and the minimum requirement for own funds and eligible liabilities, Spanish banks' overall voluntary buffer stands at 3.0%.

4 The leverage ratio is defined as Tier 1 capital (CET1 capital plus additional Tier 1 capital) divided by non-risk-weighted on- and off-balance sheet assets.

5 Credit deleveraging is observed in the stress tests with a dynamic component, such as the 2024 Forward Looking Exercise on Spanish Banks and that conducted as part of the Spain Financial Sector Assessment Program of the same year (see paragraph 62 of the Technical Note on Systemic Risk Analysis).

The credit quality of lending to the private sector in Spain improved in 2024. In December 2024 the non-performing loan ratio[6] stood at 3.2% and the stage 2 ratio[7] at 6.4%, down 0.2 pp and 1.2 pp, respectively, from a year earlier (see Section 3.1.4).

Amid monetary policy rate cuts, the average cost of bank liabilities stabilised at 3.1% in December 2024 (see Section 3.1.5). By liability category, the stabilisation in the average rate on deposits from households and firms stood out. Monetary policy rate cuts will foreseeably drive down the cost of liabilities in the coming quarters.

Spanish banks' liquidity position remains favourable (see Section 3.1.5). In December 2024 the liquidity coverage ratio and net stable funding ratio of the main Spanish banks stood at 167.9% and 132.9%, respectively. These were above the European averages of 163.4% and 127.1% and comfortably over their minimum required levels (100%). The liquidity position is favourable both for euro positions and for those in the other significant currencies for Spanish banks' business.

Non-bank financial sector

The non-bank financial (NBF) sector accounts for a growing proportion of the financial system globally, across Europe and in Spain (see Section 3.2).[8] While banks retain a dominant role in Spain, a potential deterioration in the NBF sector's position at European and global level would also affect the Spanish financial system's stability through direct interconnections (see Section 3.3), downward price corrections to assets in which they hold common positions and a general tightening of financial conditions on wholesale markets (see Section 4.2). In this respect, there continue to be concerns globally over the high level of leverage and the tight liquidity positions of some NBF subsectors, in particular open-ended investment funds and hedge funds.[9,10]

---

6 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 about the customer's ability to meet its obligations, even if they have not fallen due.

7 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.

8 The NBF 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, special-purpose vehicles, 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.

9 Open-ended investment funds can be redeemed at sight and, unless exceptions have been established, investors can realise their investment at any time. Hedge funds are investment funds that seek to maximise their profitability and have no restrictions on their investment strategy.

10 In this respect, see also Section 4.2 of the European Central Bank's November 2024 *Financial Stability Review* and Chapter 1 of the International Monetary Fund's October 2024 *Global Financial Stability Report.*

Real estate market

The outstanding stock of loans for house purchase in Spain rose by 0.5% year-on-year in 2024, while new home mortgages grew by 34.6%. However, the flow of new mortgages remains subdued relative to outstanding lending to the private sector or nominal GDP (see Section 4.1).

New mortgage lending grew in 2024 amid a sharp rise in transactions and real prices in the housing market. However, favourable developments in household income and contained interest rates have so far kept signs of growing house price imbalances at moderate levels. The terms and conditions of new mortgage lending are not currently signalling an easing of credit standards (see Section 4.1).

Financial markets

Monetary policy in the main advanced economies has continued to ease since publication of the last FSR in autumn 2024, and it has done so more quickly in the euro area than in the United States. Following the tariff policy announcements by the United States in early April and the consequent financial turmoil, expectations of further key policy rate cuts have grown in the euro area, but not in the United States. Against this background, yields have continued to fall on the euro area interbank markets while the volume of business expands, driven by the reduction in the Eurosystem's balance sheet.

The financial markets experienced an episode of instability and high volatility following the announcements of higher US tariffs in early April (see Section 4.2). The episode was short lived and markets have gradually stabilised with the easing of the trade tensions. The valuations of risky financial assets remain high by historical standards, especially in the United States.

In response to the escalation of the trade tensions, on bond markets US Treasuries experienced liquidity tensions and rises in their long-term yields in early April, while the German Bund acted as a safe-haven asset. European and US corporate bond markets saw sharp rises in risk premia in April that have since reversed. Corporate spreads are currently at somewhat higher levels than at the cut-off date for the last FSR, but they remain below their historical median in the high yield (higher risk) segment.

On equity markets, global stock market indices responded with a steep drop following the tariff announcements, although they subsequently levelled off and stock valuations have recovered. The European indices have recorded gains so far in 2025, driven by sound banking sector earnings and the prospects of higher defence spending. Overall, the prices on the main global stock market indices are high by historical standards.

On foreign exchange markets, trade tensions have triggered a depreciation of the US dollar against the euro. On the whole, US dollar-denominated assets have not acted as safe-haven

assets like in previous episodes of financial turbulence. Due to the US dollar's pivotal role in international trade and financial transactions, this contributes significantly to raising the uncertainty surrounding global macro-financial developments.

Financial markets in the emerging market economies have proven resilient to the April turmoil, with relative stability in sovereign bond spreads and exchange rates. The latter have fluctuated more in Latin America, where currencies have performed relatively more weakly against the US dollar.

Risks

While the overall picture is one of contained financial vulnerabilities in the domestic sectors, except for general government (Figure 1.1), significant risks to financial stability are however detected.[11]

First, geopolitical uncertainty could materialise in the form of very adverse effects on activity and risk aversion. In this respect, the following are particularly relevant: (i) uncertainty over the United States' policies (for example, on trade, fiscal matters, financial regulation and the environment) and its strategic positioning; (ii) the possible escalation of military conflicts; and, to a lesser extent, (iii) policy uncertainty in the European Union. These factors may give rise to a heterogeneous range of adverse scenarios whose implications need to be analysed separately (see Section 5.1).

After April's heavy turbulence triggered by the announcement of tighter tariffs in the United States, trade policies have swung towards negotiation and less aggressive stances. In particular, the United States has introduced different exemptions and pauses on the initial announcements, while China has also eased some of the harsh countermeasures it adopted. However, it is difficult to predict the medium and long-term outcome of these trade negotiations. More broadly, policy uncertainty, particularly in the United States, remains high even though the financial markets overcame the turbulence in an orderly fashion.

Despite the highly uncertain setting, investors have continued to show a low level of risk aversion since the last FSR. In many cases risk premia remain at low levels by historical standards. Thus, the possibility of sudden, sharp financial market corrections continues to pose a high risk to financial stability (see Section 5.2).

Aside from the geopolitical risks, certain macroeconomic risks with implications for financial stability also exist. In particular, if inflation remains higher in the United States than in the euro area, this could result in a greater monetary policy divergence (see Section 5.3). This scenario

11 The risks are identified in this report as 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.

would contribute to a tightening of global financial conditions and to higher uncertainty over exchange rates.

Cyber risk management is becoming an increasingly key factor behind finance running smoothly, even more so amid geopolitical tensions (see Section 5.4). Although cyber incidents may trigger significant operating disruptions, they are less capable of unleashing a systemic liquidity crisis, thanks in part to the tools for managing this type of scenario available to both banks and supervisors. However, uncertainty exists over new forms of cyber attack that could emerge and it is necessary to remain vigilant.

Macroprudential policy

The Banco de España's macroprudential policy stance (see Chapter 6) is geared towards strengthening the banking sector's releasable capital in order to better support the provision of credit to the Spanish economy in the event of a downturn in the business cycle.

With cyclical systemic risk in Spain currently at an intermediate level, the Banco de España activated the countercyclical capital buffer (CCyB) for exposures located in Spain at 0.5% in 2024 Q4 (applicable as of 2025 Q4). If this risk remains at an intermediate level, the Banco de España's CCyB requirement will foreseeably be raised to 1% in 2025 Q4 (applicable as of 2026 Q4).

At present, it has not been deemed necessary to activate or modify any other macroprudential measures. All the same, the Banco de España continues to monitor closely the macro-financial environment and any systemic risks to financial stability, including changes in credit standards for lending to households and NFCs. In this respect, the Banco de España is making headway in the development of its analytical framework to inform its policy on limits in credit conditions, which, as the macroprudential authority for the banking sector, the Banco de España has the power to activate.

The cut-off date for this report is 12 May 2025.

2

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

Figure 2.1
Financial situation of households, non-financial corporations 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 the impact of the risks to financial stability.

2.1 Households

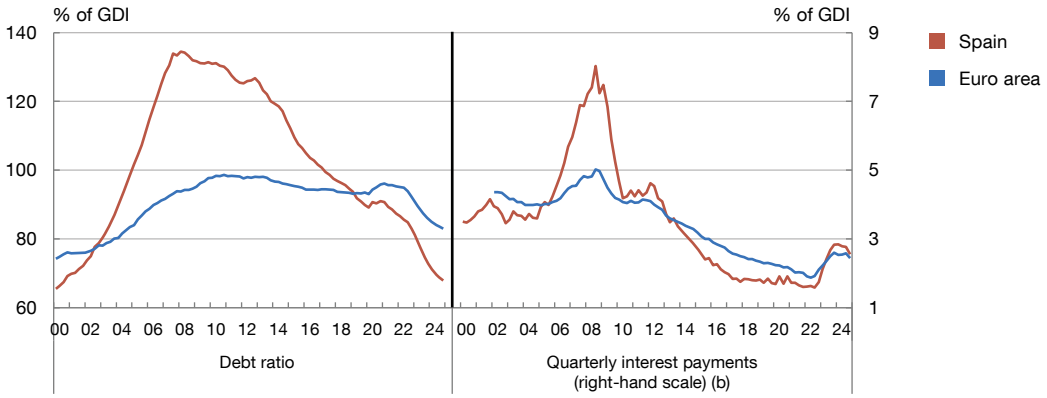
Household saving remained high in 2024 H2, driven by strong income momentum. Wages, which are the largest component of household income, were driven by growth in employment and in compensation per employee in 2024 H2. In that period total household income grew, on average, by 7.6% year-on-year,[1] while real income per household rose by 3.2% year-on-year, surpassing its pre-pandemic (2019) level by 3.5% (Chart A.2.2.1.1 in Annex 2).[2] This income momentum meant that, despite the strength of private consumption, household saving remained high from a historical perspective, amounting to 13.8% of income in 2024 H2 (Chart A.2.2.1.2 in Annex 2).

1 Household income is measured using gross disposable income (GDI) in the National Accounts. This aggregate includes compensation of employees, gross operating surplus (GOS) (profits from households' activity as entrepreneurs), gross mixed income (obtained from self-employed activity), property income (such as net interest payments and dividends received) and net taxes paid (which are subtracted).

2 Real income is calculated by adjusting nominal values using the private consumption deflator. The year-on-year increase in the number of households at December 2024 was 0.9%.

Chart 2.1
The household debt ratio and interest burden have both declined

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



SOURCES: ECB, Eurostat, INE and Banco de España. Latest observation: 2024 Q4.

a Seasonally adjusted data.
b Interest payments are quarterly cash flows (not adjusted for financial intermediation services indirectly measured) and, for consistency, the ratio is calculated using quarterly GDI.

The household debt ratio continued to decline. The debt-to-income ratio stood at 67.9% at end-2024, a level not seen since 2000 and 15 percentage points (pp) below that of the euro area (83%) (Chart 2.1).[3]

Real household wealth grew by 5.1% year-on-year in 2024 H2, a considerable increase.[4] This growth was essentially driven by real estate and financial asset revaluation, while households' net investments recovered slightly in real terms (Chart A.2.2.1.3 in Annex 2).

Debt servicing payments began to decline somewhat in late 2024, after having doubled during the monetary policy tightening cycle. This decline and the growth in nominal income pushed the interest burden down slightly, to 2.6% of household income in 2024 Q4. This level is very similar to the euro area average (2.4%) and below the historical average for Spain (3.5%), but it is still above the low of 1.6% in 2021, prior to the monetary tightening cycle (Chart 2.1).

The proportion of indebted households that spend a large part of their income on interest payments and other essential expenses is estimated to have fallen in 2024 compared with 2022, according to the latest data available.[5] The estimated share of indebted households with a high debt burden (over 40% of their income) has fallen by 1 pp since 2022, to 7.4% in 2024, more than 3 pp below the average for the period 2014-22. Among

3 Households' outstanding debt is seasonally adjusted.

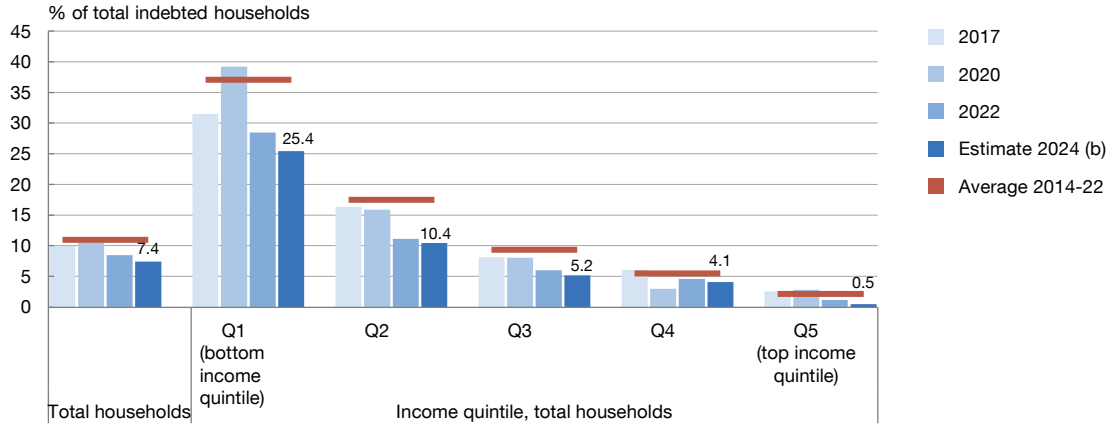
4 The wealth metric used is gross wealth (the value of all households' assets, not deducting liabilities), deflated using the private consumption deflator.

5 Estimated drawing on the latest Spanish Survey of Household Finances (EFF 2022), which is a biennial database, and the assumptions described in note b of Chart 2.2. Essential expenses include debt servicing, food and utility bills and rental of the main residence.

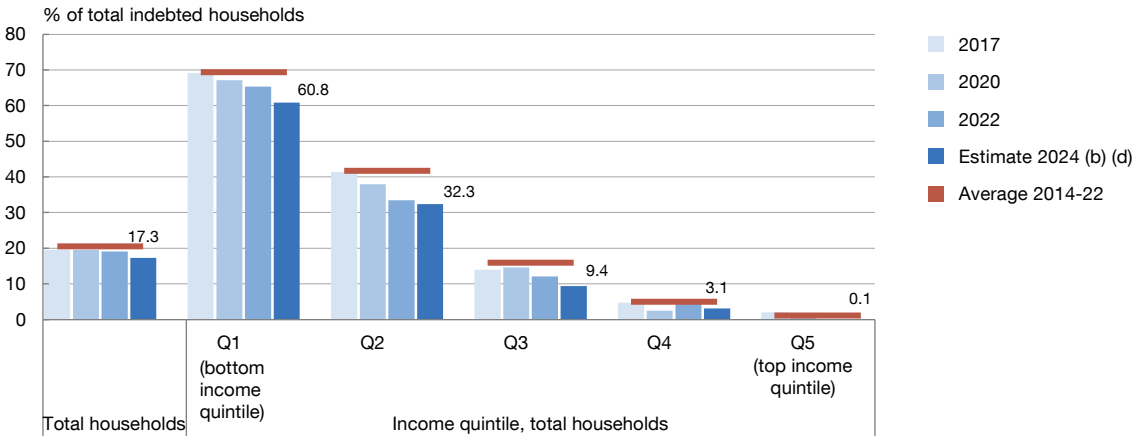
Chart 2.2

Households' debt burden is estimated to have eased in 2024 across all income levels, albeit more so among lower income households

2.2.a Indebted households whose debt burden amounts to over 40% of their income, by income quintile (a)



2.2.b Indebted households whose essential expenses amount to over 70% of their income, by income quintile (c)



SOURCE: Banco de España. Latest observation: 2022.

a The debt burden is the ratio of debt payments (interest and repayment of principal) to gross household income.
b Estimated drawing on the EFF 2022, under the assumption that the change in 1-year EURIBOR (average for the year) between 2022 and 2024 (219 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. It is also assumed that household income rises in line with the National Accounts, distributed by income quintile in accordance with the household budget survey.
c Essential expenses include debt servicing, food and utility bills and rental of the main residence.
d Adding in the impact of inflation, updating the different components of essential expenses according to the harmonised index of consumer prices (HICP).

lower income households the decline is more significant (3.1 pp), down to 25.4%, more than 10 pp below their 2014-22 average (Chart 2.2.a). Moreover, the estimated proportion of indebted households that spend more than 70% of their income on essentials has also decreased, by 1.8 pp, compared with 2022, standing at 17.3% in 2024 (Chart 2.2.b). Contributing factors include higher household incomes, easing food inflation and lower utility prices (specifically, electricity, gas and other fuels).

The interest burden is expected to continue to decline in 2025. Information from banks' balance sheets indicates that between December 2024 and February 2025 the average cost

of outstanding household debt decreased by 11 bp to 4.2%. Given current interbank market rates and interest rate expectations, it is estimated that, between April and December 2025, the cost of 25.7% of the stock of variable rate mortgages will fall by between 50 bp and 100 bp, while the cost of 39.6% will drop by more than 100 bp.[6] However, variable rate mortgage loans have decreased as a proportion of the outstanding mortgage stock with maturity over one year (from 72% in 2021 to 59% in March 2025). This pattern is expected to continue, owing to the predominance of fixed rate loans in new business, rendering households' debt burden less sensitive to future rate changes.

2.2 Non-financial corporations

Firms' gross operating profit (GOP) performed favourably in 2024 H2, albeit somewhat unevenly across sectors.[7] Nominal GOP of the non-financial corporate sector rose by 6.2% year-on-year in 2024 H2, compared with 9.1% in H1.[8] The strongest growth was in construction and real estate, wholesale and retail trade, hospitality, and other services (especially transportation and storage). By contrast, profit declined in the manufacturing sector (Chart A.2.2.2.1 in Annex 2).

Looking ahead, firms viewed the outlook positively in 2025 Q1, albeit subject to high uncertainty. According to the latest Banco de España Business Activity Survey (EBAE), firms reported steady turnover in 2025 Q1 and the outlook for Q2 was positive.[9] However, the survey reflected firms' concerns about economic policy uncertainty, labour shortages and energy costs, although the proportion of firms affected by factors related to rising financial costs continued to decline. This survey round was conducted before trade tensions and uncertainty escalated in early April and thus does not reflect the possible weaker outlook associated with these recent developments.

Although the stock of firms' debt increased in 2024, it remained stable and at low levels in relation to profits. The debt-to-GOS ratio was virtually unchanged in 2024 H2, standing at 332% (Chart 2.3).[10] This is very similar to the figure for the euro area (323%)

---

6 Estimated drawing on data from the Banco de España's Central Credit Register for March 2025 and the average April values for the interest rate futures curve. For more details on the methodology, see "Box 1. Monetary policy transmission to interest payments on the bank debt of households and firms". In Report on the Financial Situation of Households and Firms. Second half of 2023.

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 or fund investments or to remunerate shareholders and financial creditors.

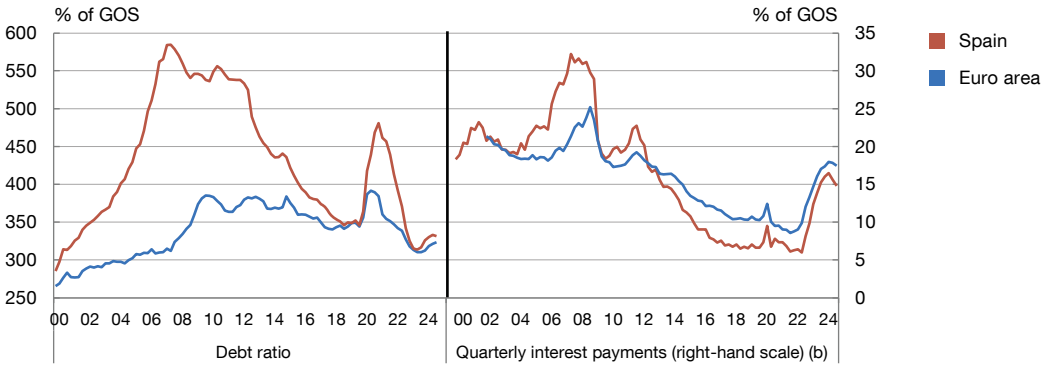
8 Combined information of the Spanish tax authorities (AEAT) and the Central Balance Sheet Data Office Quarterly Survey (CBQ).

9 Fernández Cerezo, Alejandro, and Mario Izquierdo. (2025). "The Banco de España Business Activity Survey: 2025 Q1". *Economic Bulletin - Banco de España,* 2025/Q1, 06.

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 2.3
Spanish firms' debt-to-GOS ratio steadied in late 2024 and the ratio of interest payments to GOS began to decline

2.3.a Firms' debt ratio and interest burden as a proportion of GOS (a)



SOURCES: ECB, Eurostat, INE and Banco de España. Latest observation: 2024 Q4.

a Seasonally adjusted data.
b Interest payments are quarterly cash flows (not adjusted for financial intermediation services indirectly measured) and, for consistency, the ratio is calculated using quarterly GOS.

and, from a historical perspective for Spain, is below the average since 2000 (428%). Meanwhile, Spanish firms' debt-to-GDP ratio amounted to 63.5% at end-2024, below the figure for the euro area (67.5%).

The ratio of interest payments to GOS in the business sector began to decline in 2024 H2. Interest payments decreased, down to 14.8% as a proportion of GOS in 2024 Q4, after reaching their peak for the last ten years (16.5%) in June 2024 (Chart 2.3).[11] The interest burden remained somewhat below that of the euro area (17.4%) and is close to the historical average since 2000 (16.4%), although it is still above its 2021 level of around 6%, prior to the monetary tightening cycle.

On CBQ data, the proportion of highly indebted firms fell in 2024, while that of those under high financial pressure held steady. Of all the firms in the CBQ sample, 17.4% had a high level of debt, a smaller proportion than in 2023 and below the historical average since 2007 (21.8%) (Chart 2.4).[12] Meanwhile, 14.5% of firms were under high financial pressure (i.e. with insufficient profit to meet interest payments), a very similar level to 2023 and also below the historical average (16.4%).

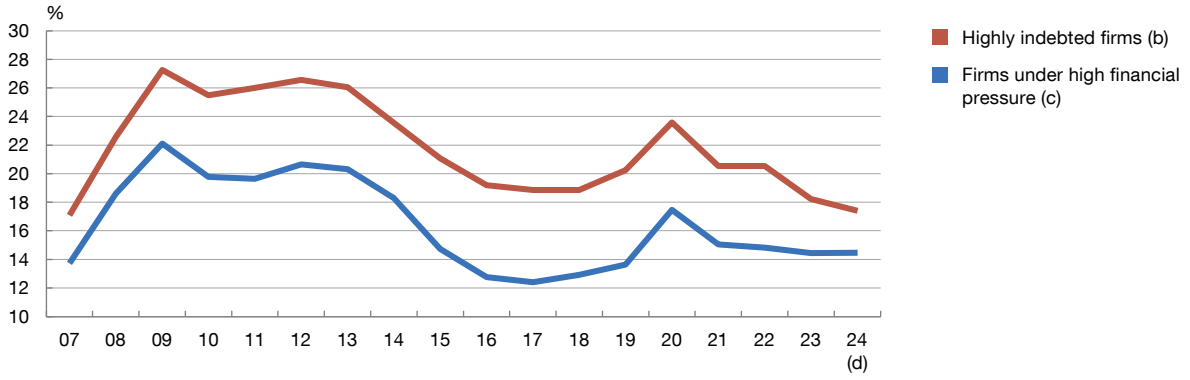
11 Given the predominance of short-term maturity and variable rate loans in firms' bank debt (76% at end-2024), interest rate changes pass through to interest payments relatively quickly.

12 Highly indebted firms are those whose net financial debt/(GOP + financial revenue) ratio is greater than 10 or that have positive net financial debt and zero or negative earnings. Net financial debt is defined as interest-bearing debt less cash and cash equivalents.

Chart 2.4

The proportion of highly indebted firms fell in 2024, while the proportion of those under high financial pressure held steady

2.4 a Proportion of highly indebted firms and of firms under high financial pressure on CBQ data (a)



SOURCE: Banco de España. Latest observation: 2024 Q4.

a Four-quarter averages. Excluding financial holding companies.
b Highly indebted firms are those whose net financial debt/(GOP + financial revenue) ratio is greater than 10 or that have positive net financial debt and zero or negative earnings. Net financial debt is defined as interest-bearing debt less cash and cash equivalents.
c Firms whose earnings (GOP + financial revenue) are not sufficient to meet interest payments.
d A common sample of firms is used for 2023 and 2024 to avoid spurious changes in the index owing to the smaller sample available for 2024.

2.3 General government

Government debt and deficit levels remain high in terms of GDP, despite having declined in recent years. In 2024 the Spanish general government debt-to-GDP ratio fell again, to 101.8%. This decline (3.3 pp) in the year – similarly to the cumulative decline since 2020 (17.5 pp) – is underpinned by highly expansionary economic activity in nominal terms (Chart 2.5.a). However, the government debt-to-GDP ratio was still high by historical standards and 4.1 pp above its pre-pandemic level. Government debt in Spain is also high by international standards (Chart 2.5.b). In 2024 the deficit decreased by 0.3 pp, to 3.2% of GDP, but it remains high. This deficit figure includes a contribution of 0.4 pp associated with the catastrophic flash floods in Spain in October 2024.

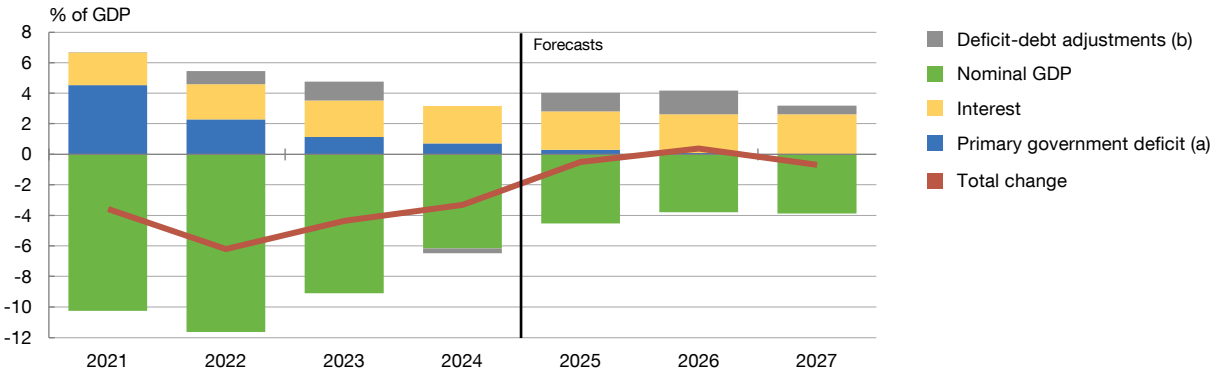
The Medium-Term Fiscal-Structural Plan 2025-2028 (MTP) submitted by the Spanish Government and approved by the Council of the EU in January lacks concrete compliance measures. According to the Progress Report presented by the Government in April, net nationally financed primary expenditure[13] rose by 4.1% in 2024, over the 2.6% limit initially recommended for Spain by the European authorities in 2023, but below the 5.3%

13 Net primary expenditure excludes interest payments, extraordinary expenditure, expenditure financed (or co-financed) by the EU and cyclical unemployment expenditure. Revenue from any new discretionary revenue measures is then subtracted from the resultant measure. For an analysis of the new European fiscal rules and the operational indicator, see Fernando López-Vicente and María de los Llanos Matea Rosa. (2024). The 2024 European Semester and the Recovery and Resilience Facility". *Economic Bulletin - Banco de España,* 2024/Q4, 01.

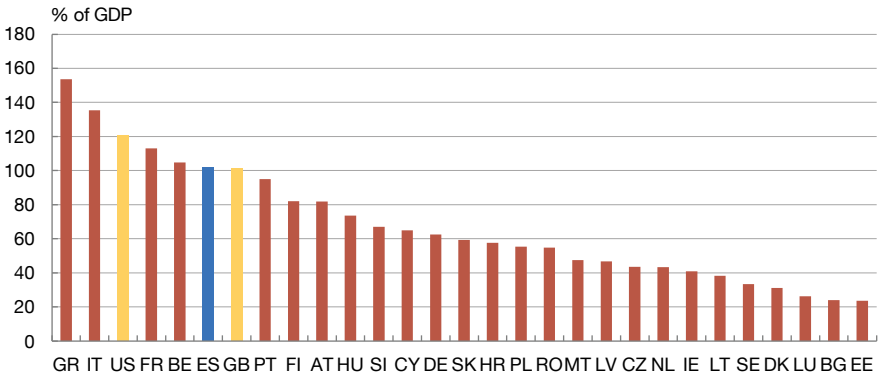
Chart 2.5

Spanish public finances are still a source of vulnerability

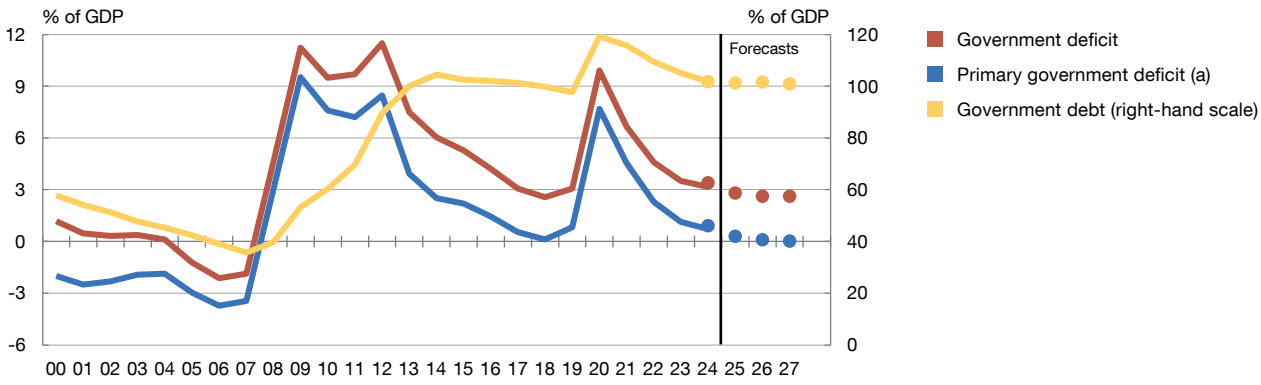
2.5.a Spanish debt-to-GDP ratio. Determinants of annual change



2.5.b Debt-to-GDP ratio. 2024



2.5.c General government. Financial position (c)



SOURCES: Eurostat, IMF, Intervención General de la Administración del Estado (IGAE) and Banco de España. Latest observation: 2024 (2.5.a and 2.5.c). In 2.5.c for 2024, the line denotes the actual data and the dot the last previous estimate available.

a Excluding interest payments.
b Change in debt not owing to financing needs stemming from the government deficit, but to other factors such as purchase of financial assets, valuation changes or reclassifications.
c The dots denote the Banco de España's projections published on 11 March.

envisaged in the MTP. With the measures already approved, the Government understands that expenditure will again grow by 4.1% in 2025, over the limit set in the MTP (3.7%) but within the margin of flexibility allowed under the new fiscal rules. However, neither the MTP nor the accompanying Progress Report include information on the expected performance of public revenue and expenditure components beyond 2025, which reduces the MTP's usefulness as a medium-term fiscal planning tool. This issue was also highlighted by Spain's Independent Authority for Fiscal Responsibility (AIReF, by its Spanish initials) in its assessment of the Plan.[14] Moreover, nor does the Progress Report provide sufficient information on the structural reforms implemented.

In the absence of fresh measures, the Banco de España considers that the government deficit-to-GDP ratio will continue to decline moderately in the coming years. The Banco de España's March projections, which were drawn up before the 2024 fiscal data were published, anticipated a deficit of 3.4% of GDP in 2024, which proved to be 0.2 pp higher than the actual figure.[15] They also expected the deficit to decline, to 2.8% in 2025 and 2.6% in the period 2026-27 (Chart 2.5.c). Most of this projected decrease (close to 0.7 pp) between 2024 and 2027 is explained by the definitive disappearance of the temporary support measures deployed in response to the energy crisis and of the extraordinary expenditure recorded in 2024 as a result of court rulings and the floods in Valencia.

According to the Banco de España's projections, the government debt-to-GDP ratio will also decline slightly in the period 2025-27, although there are significant upside risks that become more intense beyond that horizon. The forecasts point to very low primary deficits and an average cost of debt that stays below nominal GDP growth; both these factors will remain conducive to a decline in the debt-to-GDP ratio up to 2027 (Chart 2.5.a).[16] However, public expenditure pressures associated with population ageing, together with new expenditure needs for defence and for the digital and green transitions, pose a significant upside risk to debt ratios. Although some of these risks – such as those associated with population ageing – will become far more significant beyond the Banco de España's projection horizon, others, such as defence spending, could have a much more immediate impact.

Save in the event of stress episodes on sovereign debt markets, the interest burden is expected to rise marginally in the coming years. The policy rate cuts and the continuing narrow sovereign spread (see Section 4.2) have prompted a reduction in the Spanish Treasury's actual cost of financing at issue, from 3.4% in 2023 to 3.2% in 2024 (Chart A.2.2.3.1 in Annex 2). In 2025 Q1 this cost continued to fall, down to 2.9%. However, considering the upturn in euro area government debt yields in early March, the average cost of outstanding debt – which has risen from the low of 1.9% in 2019 to 2.4% in 2024 – is expected to increase further, to 2.6% in

14 Report on monitoring of 2025-2028 Medium-Term Structural-Fiscal Plan.

15 These projections are based on an inertia scenario that includes no new measures not yet approved.

16 In 2025 and 2026 this is expected to be partially offset by the increase in deficit-debt adjustments relating to loans under the Recovery, Transformation and Resilience Plan.

2027.[17] The interest burden as a percentage of GDP is also expected to grow, from 2.4% in 2024 to 2.6% in 2027.

In a high debt environment, more adverse (upward) moves by yields at issue would have a significant impact on public finances. For instance, were short and long-term interest rates to be 1 pp higher than expected in 2025-27, the interest burden would be 0.4 pp of GDP higher in 2027.

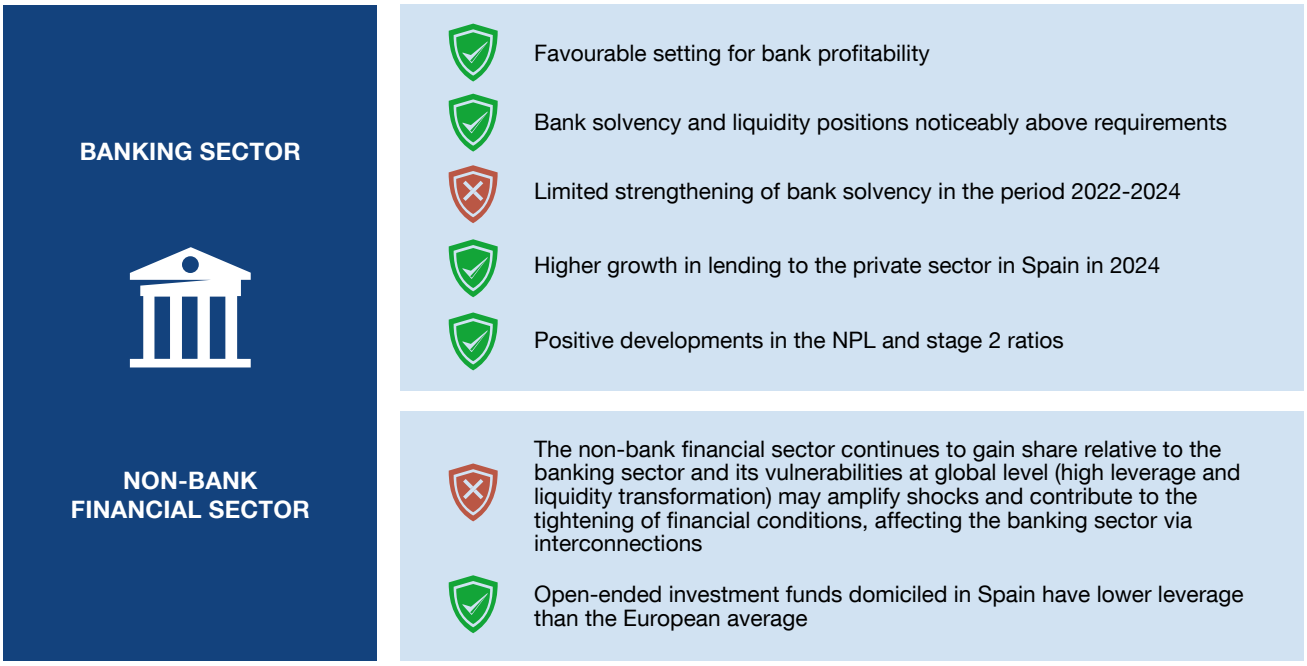
Spain's high level of government debt renders growth more fragile and entails greater sensitivity to changes in financing conditions due to the about-turn in global economic policies. Public expenditure has made a significant contribution to GDP growth in Spain in the recent period, so compliance with the EU's fiscal rules may curb growth somewhat in the coming years. However, it should also bolster the sustainability of public finances and boost investor confidence. This is important in a setting in which financing conditions may tighten and may trigger more abrupt adjustments in government expenditure for a variety of reasons, such as an uptick in risk premia or monetary and fiscal policy developments worldwide (see Chapter 5).

17 Estimate based on financial market data at 10 April 2025.

3

FINANCIAL POSITION OF 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

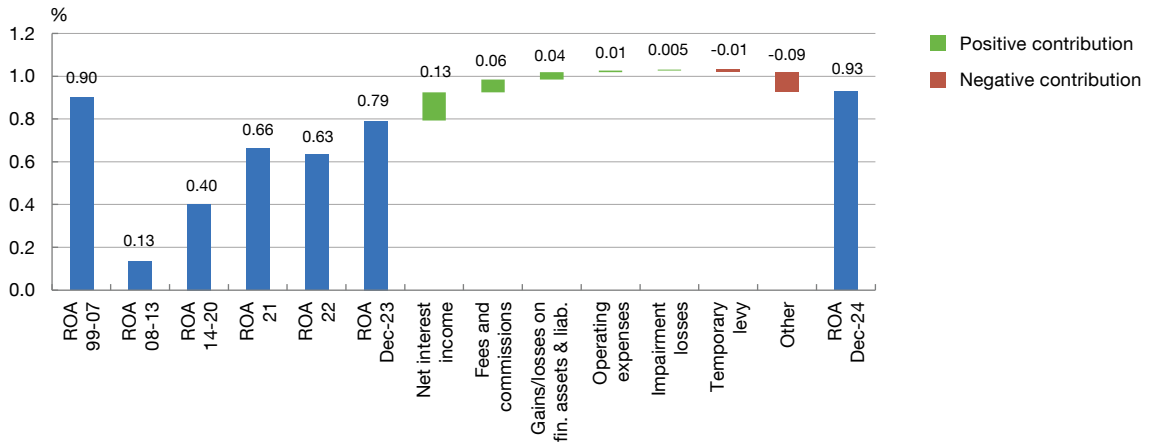
The improvement in bank profitability observed in recent years has continued, with consolidated net income growing by 21% in 2024. The return on assets (ROA) of Spanish banks was 0.93% in 2024, compared with 0.79% in 2023 (Chart 3.1.a). Similarly, the return on equity (ROE) increased by 1.7 percentage points (pp) to 14.1% (see Chart A2.3.1.1.1 in Annex 2). This improvement was seen across all banks, as demonstrated by the ROA distribution's shift to the right between 2023 and 2024 in Chart 3.1.b.

Profitability has improved in both business in Spain and business abroad. In 2024 the ordinary earnings of the three institutions with the most business abroad increased substantially in Spain, but also in the main foreign geographical regions where they operate, except the United Kingdom (Chart 3.2). Mexico remained the top foreign contributor to these institutions'

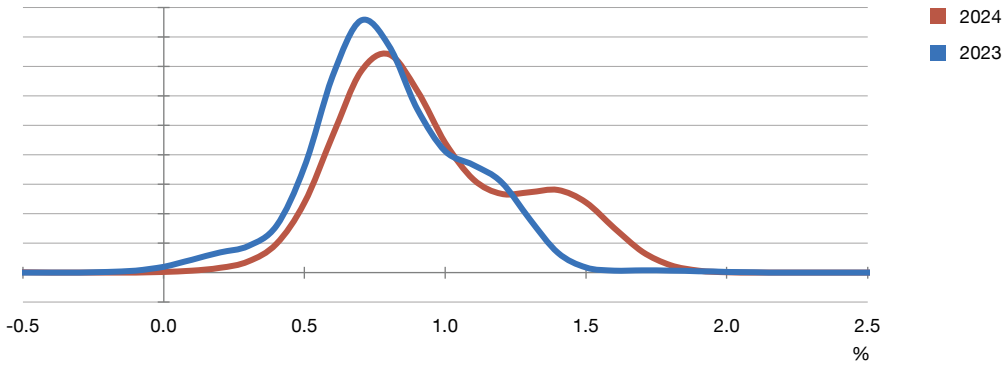
Chart 3.1

The Spanish banking sector's ROA continued to improve across the board in 2024, driven mainly by higher net interest income

3.1.a Breakdown of the change in ROA. Consolidated net income as a percentage of average total assets. Consolidated data (a)



3.1.b Distribution of ROA by bank. Consolidated data (b)



SOURCE: Banco de España. Latest observation: December 2024.

a The green (red) colour of the bars denotes a positive (negative) contribution of the corresponding item to the change in ROA at December 2024 compared with December 2023.
b The chart shows ROA density for Spanish banks (weighted by total consolidated assets). The density function is estimated using a kernel estimator, which provides a non-parametric estimate, yielding a continuous and smoothed graphical representation of that function.

DOWNLOAD

earnings (almost 30% of total earnings, a figure approaching Spain's share of 37%), followed by Brazil (10%), the United Kingdom (6%), the United States (5%) and Türkiye (2%).

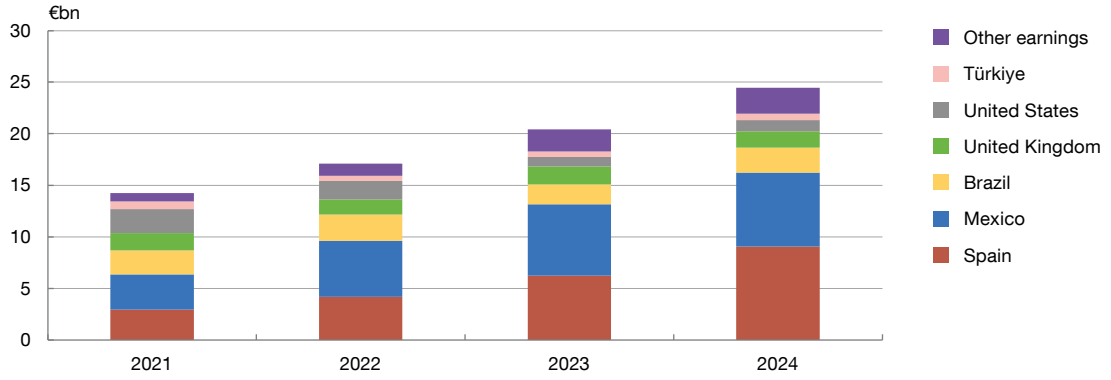
The sector's overall profitability increased mainly as a result of higher net interest income. Despite the cuts in reference interest rates, this item increased by almost 9% compared to the previous year (see Annex 1). This was due to favourable price developments (higher unit margins)[1] and quantity developments (driven by the recovery of credit). However, this growth in net interest income remained below the 22% recorded in 2023. Going forward, the anticipated reference interest rate cuts can be expected to reduce net interest income growth, with falls in unit margins, which could be partially offset by more favourable business

1 The ratio of interest income to average earning financial assets rose from 5.3% in 2023 to 6.1% in 2024. Meanwhile, the ratio of interest expenses to the same denominator (average earning financial assets) rose from 2.8% in 2023 to 3.4% in 2024. The greater increase on the interest income side led to an increase in unit margins in 2024.

Chart 3.2

The earnings of the three institutions with the most business abroad increased in the main geographical areas where they operate, except in the United Kingdom

3.2.a Geographical distribution of ordinary profit attributable to the controlling entities of the three institutions with the most business abroad (a). Consolidated data



SOURCE: Banks' financial reporting. Latest observation: December 2024.

a The group of banks with the most business abroad includes the three in which international activity is most important and longest-running. Earnings are measured excluding non-recurring items. The "Other earnings" category includes earnings in other countries and those of the banks' corporate centres.

DOWNLOAD

volume developments. The publication of the main listed Spanish banks' first quarter earnings reports shows that profitability has continued to trend upward. However, their net interest income has narrowed compared with the same quarter of last year, reinforcing expectations of a lower future contribution of this item to profit (see Table A2.3.1.1.2 in Annex 2).

Fees and commissions also increased over the past year, further contributing to the improvement in profitability. Profits from this item grew by more than 11%, a significantly higher rate than in the previous year.[2] In the same vein, the increase in gains and losses on financial assets and liabilities also helped boost profit. Thus, the combined year-on-year rise in net interest income, fees and commissions, and gains and losses on financial assets and liabilities exceeded the 2.5% increase in operating expenses, contributing to the 16.9% rise in net operating income.[3]

Although financial impairment losses rose slightly in 2024, they decreased moderately as a share of net operating income.[4] Impairment losses increased by 2%, to a lesser extent than net operating income, meaning that the ratio between them decreased (by 4 pp) (see Chart A2.3.1.1.3 in Annex 2). Were systemic risks to materialise (see Chapter 5), curbing economic growth and deteriorating credit quality, this ratio could worsen. Therefore, although it is currently at favourable levels, it should continue to be closely monitored.

2 Fees and commissions increased across all categories including payment services, securities management, currencies and, most notably, card payments, where fees and commissions grew in year-on-year terms by 19%.

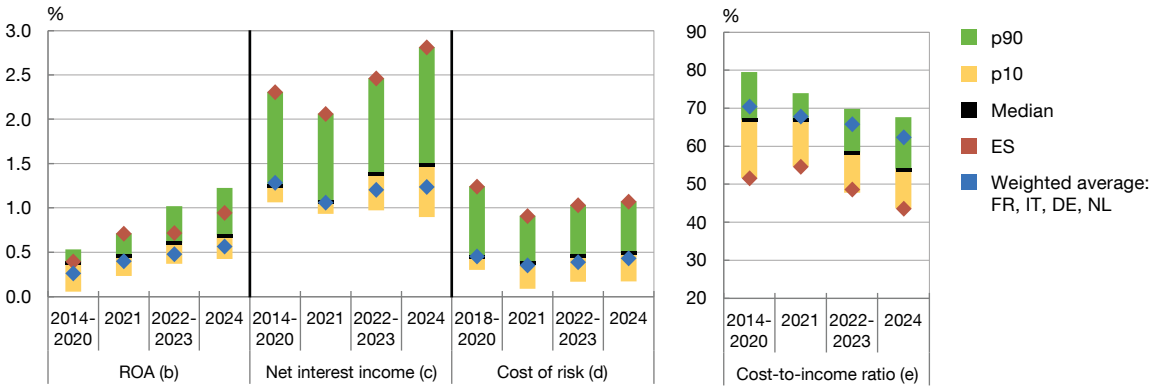
3 Net operating income is defined as gross income less operating expenses. Gross income is defined as the sum of profits or losses from the bank's ordinary activities. This mainly includes net interest income, fees and commissions, and gains and losses on financial assets and liabilities, but also other net operating income.

4 These losses are recorded to capture the lower value of financial assets in the event of defaults or, more broadly, information indicating a reduced likelihood that banks' counterparties will comply with their credit obligations.

Chart 3.3

In terms of profitability, Spanish banks outperform other banks in the main EU economies, underpinned by higher net interest income and greater operational efficiency

3.3.a European comparison of the main profitability and operational efficiency variables (a). Consolidated data



SOURCE: EBA. Latest observation: December 2024.

a For each variable and time period, the chart depicts the distribution of the variable across countries weighted by the size of their banking sectors in terms of total assets. Note that the EBA database contains aggregate data by country for each variable. For periods of several years, a single value per country is obtained by taking the simple average of the variable by country over that period. The statistics shown in the chart are calculated based on this weighted distribution. The average of the banking systems of the other four large EU economies is also weighted by size, based on the total assets of their respective banking sectors.
b ROA is defined as net profit to total assets.
c Net interest income is defined as net interest earned to total income-generating assets.
d The cost of risk is defined as provisions for financial impairments divided by gross lending. Reporting for this variable began in 2018.
e The cost-to-income ratio is defined as operating expenses divided by gross income, with lower values denoting higher efficiency.

Operational risk losses reached a five-year high in 2024. The rise in customer claims due to several unfavourable court rulings on mortgage expenses, coupled with the adoption by some banks of a new, more conservative model for calculating provisions for legal contingencies, have driven operational risk losses to a historically high value in 2024 (see Chart A2.3.1.1.4 in Annex 2).

The increased tax burden on the sector has continued to reduce profit growth slightly. Without the impact of the extraordinary levy on banks, which was applied on both their 2023 and 2024 profit, year-on-year growth in net profit would have been very similar (21.7%), ROA would have stood at 0.97% (instead of 0.93%) and ROE at 14.7% (instead of 14.1%).[5] Replacing this levy with a new tax will prolong the heightened tax burden on the sector to at least 2026 (see Box 3.1).

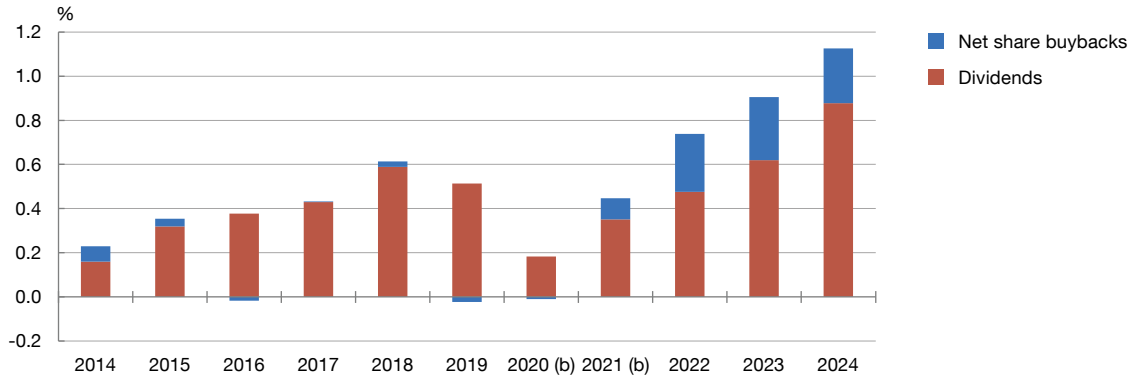
Spanish banks have consistently outperformed the other major banking systems in the European Union (EU) in terms of profitability. The profitability of all EU banks increased in the higher interest rate environment that followed the COVID-19 health crisis, with Spanish banks maintaining the positive gap they already had in 2014-2021 (Chart 3.3). Net interest

5 Based on the information provided by the Ministry of Finance in the December 2024 budget outturn, the levy paid in 2024 was €1,647 million, up 41% on that paid in 2023. At the same time, the overall corporate income tax expense recorded by credit and specialised lending institutions for their business in Spain was €6,494 million in 2024.

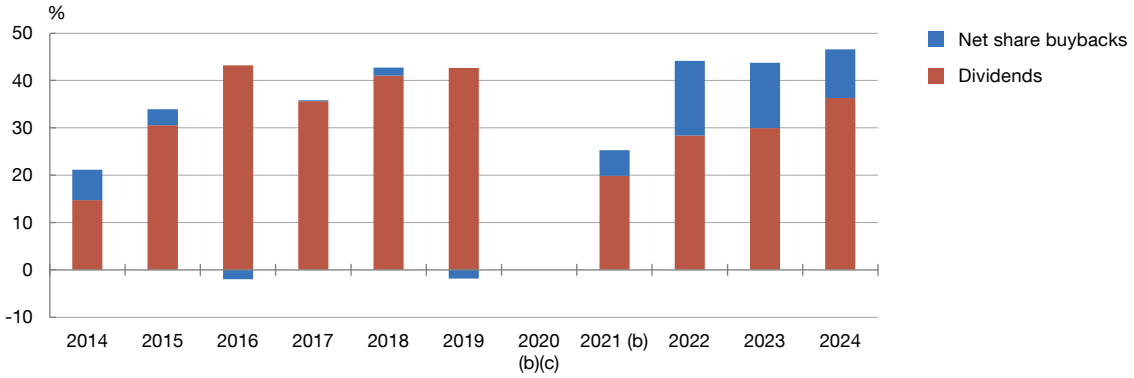
Chart 3.4

The improvement in bank profitability in recent years has led to an increase in profit distribution

3.4.a Dividends and net share buybacks as a percentage of RWAs (a). Consolidated data



3.4.b Dividends and net share buybacks as a percentage of net profit (a). Consolidated data



SOURCE: Banco de España. Latest observation: December 2024.

a The information on dividends and net share buybacks comes from statements of changes in equity. The impact of dividends recognised in a particular year may derive from profits obtained in previous years.
b An ECB recommendation to limit dividend distribution was in force in 2020 and 2021.
c Dividends and buybacks as a percentage of net profit are not calculated for 2020, given that the sector as a whole recorded losses.

income, which has risen appreciably since 2021, continues to be the main differential factor behind this higher profitability, more than offsetting the negative contribution from Spanish institutions' higher cost of risk (defined as provisions divided by gross lending), which has remained relatively stable in recent years. Meanwhile, Spanish banks maintain their comparative advantage in operational efficiency, leading to consistently lower cost-to-income ratios (measured as operating expenses divided by gross income) than at their European peers.

Profit distribution, through dividends and net purchases of own shares, increased in 2024 in absolute terms and as a percentage of both risk-weighted assets (RWAs) and profit. Profit distributed to shareholders as a share of RWAs increased in 2024 to 1.1%, the highest value in recent years (Chart 3.4.a), making the banking sector more attractive to investors. This higher shareholder remuneration is explained by both the aforementioned improvement in profit and the almost 3 pp increase in the percentage of net profit allocated to shareholder remuneration (Chart 3.4.b).

The trade-off for this higher profit distribution is reduced allocation of resources towards shoring up solvency to address less favourable profitability conditions. If market expectations bear out and lower reference interest rates take hold, net interest income could stop driving profitability growth, as mentioned above. In addition, the current climate of uncertainty poses downside risks to the banking sector's profitability under this baseline scenario, which already envisages a moderation (Chapter 5). Against this background, the current favourable cyclical position of bank profitability (see Chart 3.1.a and Chapter 6) could make it easier for banks to accumulate loss-absorbing resources against risk scenarios.

3.1.2 Solvency

The Common Equity Tier 1 (CET1) ratio and the voluntary capital buffer rose moderately in 2024 thanks to an increase in the volume of CET1 capital. At end-2024, the Spanish banking system's CET1 ratio stood at 13.5%, up 30 basis points (bp) on the previous year (Chart 3.5.a). This increase was due to the 6% growth in CET1 capital in year-on-year terms, which offset the negative contribution from the 3.6% year-on-year increase in RWAs.[6] RWA growth in the last year is mainly explained by an increase in total assets (see Section 3.1.3) and, to a lesser extent, the rising risk profile for Spanish banks (higher RWA density). The voluntary capital buffer increased by 16 bp on the previous year, to 3.6%.[7]

The Spanish banking system's leverage ratio increased slightly in 2024. At the end of last year, the leverage ratio stood at 5.7%, up 13 bp on the previous year (Chart 3.5.b).[8] This rise was due to the increase in Tier 1 capital, which grew by 5.9% in 2024 and offset the growth in the non-risk-weighted total exposure (3.6% for the same period).

Banks' distributions for these two solvency ratios remained fairly stable in 2024 and dispersion increased only marginally. Thus, Spanish banks were somewhat less clustered around the average CET1 ratio than they were in 2023 (Chart 3.6.a). Some banks have shifted to higher ratio levels. However, there is also a slight increase in the weight of institutions with lower CET1 ratio levels. A similar but less marked pattern can be seen in the leverage ratio distribution (Chart 3.6.b). Overall, these changes in the distribution are not significant from a systemic point of view.

The Spanish banking system's CET1 ratio remained below that observed for the other main European banking sectors, although the gap narrowed slightly. At end-2024 the

6 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 (TA) and RWA density. RWA density is the ratio between RWAs and TA, with higher values indicating a higher risk profile.

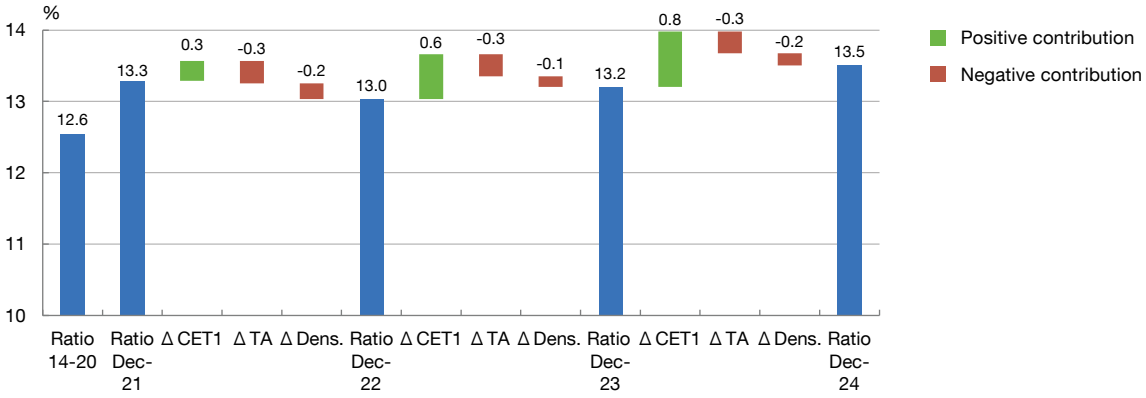
7 This voluntary buffer is calculated as the CET1 ratio minus the prudential requirements and Pillar 2 guidance, taking into account only the CET1 requirements. It can thus be compared with the European-level data published by the European Banking Authority (EBA). When the T1 and total capital requirements are also taken into account, together with the MREL and leverage ratio requirements, the voluntary buffer is 3%.

8 The leverage ratio is calculated by dividing Tier 1 capital by total exposure.

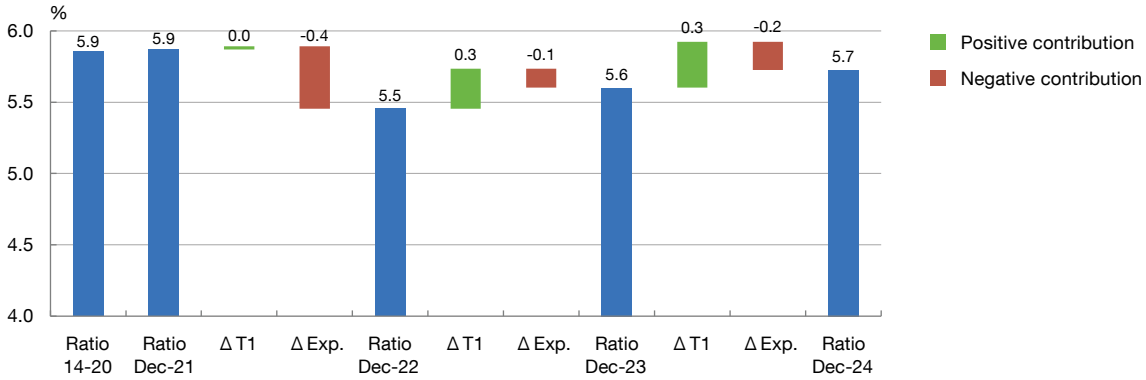
Chart 3.5

The Spanish banking system's CET1 and leverage ratios increased in 2024, driven by the growth in bank capital

3.5.a Breakdown of the change in the CET1 ratio between 2021 and 2024 (a). Consolidated data



3.5.b Breakdown of the change in the leverage ratio between 2021 and 2024 (b). Consolidated data



SOURCE: Banco de España. Latest observation: December 2024.

a The CET1 ratio is calculated as the ratio of CET1 to risk-weighted assets (RWAs). RWAs can be calculated as total assets (TA) x density (Dens.), where density is calculated as the ratio of RWAs to TA. Therefore, in the chart, the change in the CET1 ratio is broken down into the change in CET1, total assets and density. 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 (Exp.). In the chart, the change in the leverage ratio is broken down into the change in T1 and Exp. The green (red) bars denote positive (negative) contributions from components.

DOWNLOAD

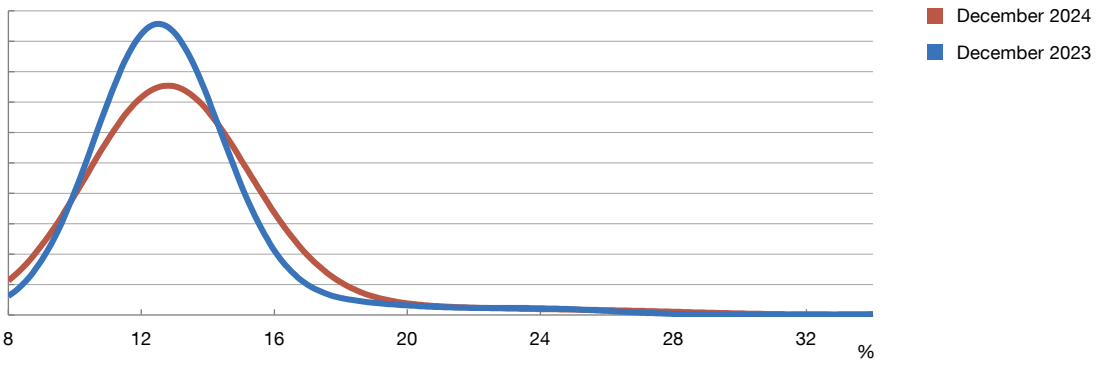
Spanish banking system's CET1 ratio was below that of countries such as Germany, France, Italy and the Netherlands (see left-hand panel of Chart 3.7).[9] It was also 3.2 pp lower than the EU average. In the last year, the gap between the Spanish banks' CET1 ratio and that of their main European peers narrowed by between 24 bp and 36 bp, with the exception of Italy, where this gap widened by 3 bp. The increase in the Spanish and Italian banking system's CET1 ratio was driven by their recent profitability growth, due to the higher share of variable rate loans in their business models.

9 The solvency ratios for the Spanish banking system used in Charts 3.5 and 3.6 differ from that in Chart 3.7. Charts 3.5 and 3.6 use national data for all banks, while Chart 3.7 uses EBA data for the main EU banks, including ten Spanish banks, for European comparison purposes.

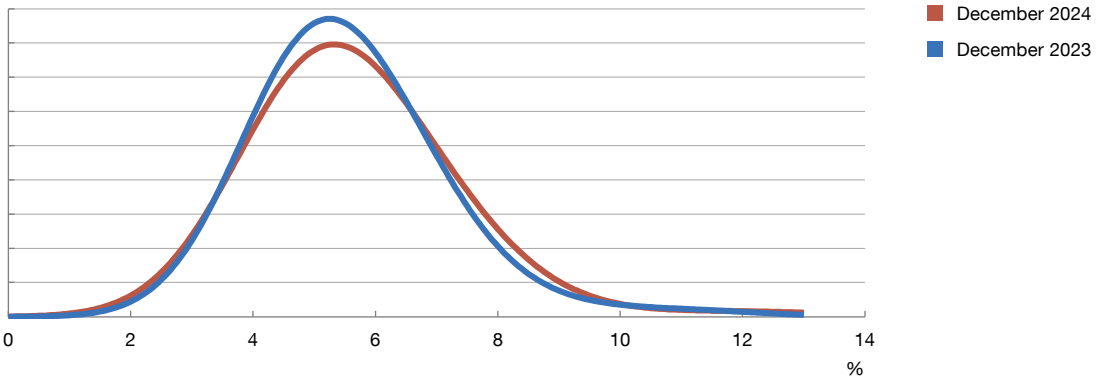
Chart 3.6

Dispersion across banks of the CET1 and leverage ratios remained relatively stable in 2024

3.6.a Distribution by bank of the CET1 ratio (a). Consolidated data



3.6.b Distribution by bank of the leverage ratio (a). Consolidated data



SOURCE: Banco de España. Latest observation: December 2024.

a The charts show CET1 ratio and leverage ratio density, respectively, for Spanish banks (weighted by total consolidated assets). The density function is estimated using a kernel estimator, which provides a non-parametric estimate, yielding a continuous and smoothed graphical representation of that function.

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. In the last period for which data is available Spain's voluntary buffer gap relative to the EU average was 1.8 pp.[10] The smaller CET1 gap in terms of the voluntary buffer reflects the Spanish banking system's lower capital requirements.[11]

The Spanish banking system's leverage ratio remained at a level comparable to that of the other major European banking sectors. At the end of last year it stood 0.4 pp below the EU average (right hand panel of Chart 3.7). The leverage ratio in Spain was somewhat higher than in France and lower than in Germany, Italy and the Netherlands. The smaller leverage

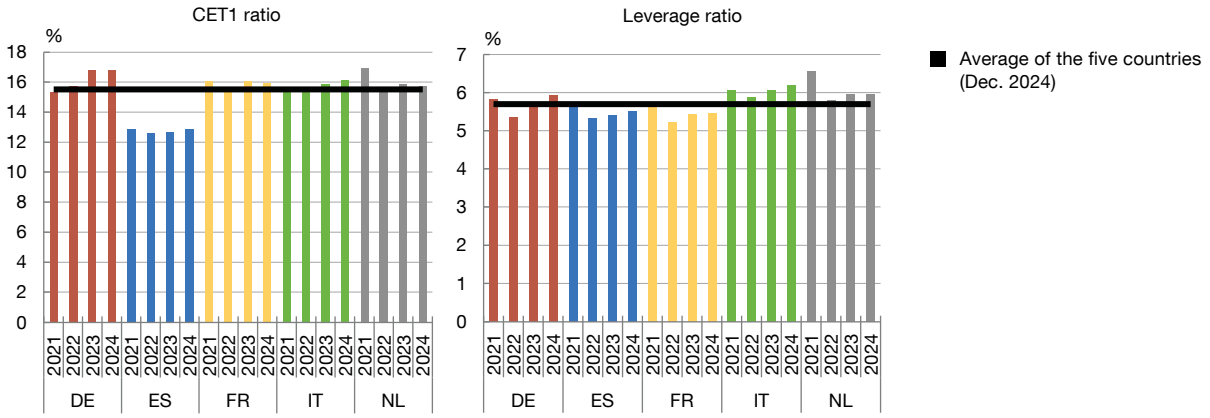
10 Data at June 2024 (the latest capital buffer figure reported by the EBA).

11 For example, lower Pillar 2 capital requirements and macroprudential buffers.

Chart 3.7

The increase in the Spanish banking system's CET1 and leverage ratios in 2024 slightly narrowed the respective gaps relative to the ratios of other major European banking sectors

3.7.a European comparison of the CET1 and leverage ratios between 2021 and 2024. Consolidated data



SOURCE: EBA. Latest observation: December 2024.

DOWNLOAD

ratio gap between the Spanish banking sector and its European peers compared with the CET1 ratio gap owes essentially to Spanish banks' higher RWA density, which is determined by their balance sheet composition and more limited use of the internal ratings-based (IRB) approach for calculating RWAs.[12]

According to the results of different stress tests, Spanish banks' current solvency levels provide considerable aggregate resilience.[13] In the dynamic stress tests, this resilience appears to be partly underpinned by a lower provision of credit to the private sector, which mitigates the consumption of available capital in the event of adverse scenarios.[14] Moreover, these exercises focus on very severe but specific scenarios. The current heightened uncertainty therefore calls for proactive analysis of macro-financial risks to identify possible alternative and significant stress scenarios, as well as carefully planning for possible unexpected losses.[15]

12 Note that the CET1 ratio can be approximated by dividing the leverage ratio by RWA density, although this calculation is not entirely accurate, as capital (the numerator of the leverage ratio) also includes AT1 capital instruments and, in addition, the leverage exposure (the denominator) may differ from total assets.

13 See the results of the 2023 EBA stress test exercise, the Banco de España's top-down 2024 Forward-Looking Exercise on Spanish Banks (FLESB) and the International Monetary Fund (IMF) stress test exercise conducted during the 2024 Financial System Assessment Program (FSAP) in Spain (see Technical Note on Systemic Risk Analysis).

14 For example, according to the latest stress test exercise for Spanish banks within the FLESB framework, lending in Spain would fall by 6% over a three-year horizon under the adverse scenario. Meanwhile, credit would fall by 1% over a three-year horizon, with a maximum year-on-year fall of 2% under the adverse scenario envisaged by the IMF in its 2024 FSAP for Spain. The Spanish banking system also shows significant loss-absorbing capacity in the 2023 EBA stress test, which assumes constant exposures under the scenarios considered.

15 The updated results of the stress test exercise for Spanish banks within the FLESB framework are expected to be published in autumn 2025, while the results of the EBA exercise are expected to be published in early August 2025.

Maintaining strict capital requirements within a sound regulatory and supervisory framework is compatible with simplifying this framework to make it clearer and more predictable. With regard to capital requirements, in 2024 the EU finalised the transposition of Basel III, which entered into force in January, with the exception of the new market risk framework. This framework will only enter into force in January 2026 and a consultation process launched by the European Commission is now under way to assess possible further delays,[16] in response to the deviations observed in the United States and the United Kingdom in the implementation of the final Basel III reforms. Despite this, the implementation of Basel III globally must remain a priority to avoid a build-up of systemic risks worldwide (see Section 5.1 and Box 5.3 for a more detailed discussion of the financial deregulation initiatives in the United States and their associated risks). This should be compatible with a review of the regulatory and supervisory framework in the European Union to make it simpler, clearer and more predictable, without compromising the resilience of the banking sector, as requested by the central banks of Spain, Germany, France and Italy in a letter to the European Commission dated February 2025.[17] The simplification process should be holistic, considering the different tiers of the regulatory and supervisory framework (for example, regulatory standards and guidelines) and its various areas (microprudential, macroprudential and resolution).

The market capitalisation of European banks has grown significantly since end-2022, contributing to the improvement of various valuation and risk metrics. During 2024 and 2025 Q1, the price-to-book (PTB) ratios of European banks remained on the upward trend that began in 2023.[18] In Q1, Spanish banks reported a higher PTB ratio than French, German and Dutch banks, but lower than that of Italian banks. In addition, the PTB ratios of Spanish and Italian banks were above one, while those of the other countries remained below that value (Chart 3.8.a), which continued to limit their incentives for growth. This improvement in the valuations of European and, in particular, Spanish banks has also helped to ease the SRISK indicator (an indicator of systemic risk in the event of stock market corrections) (see Chart A2.3.1.2.1 in Annex 2).

Despite the stock market turbulence in April 2025 (see Chapter 4), the PTB ratios of the major European banks remain high compared to recent periods. On the latest available data, these ratios stand above both the 2024 average and their average level in 2025 Q1.

Price-to-earnings (P/E) ratios for European banks are also robust despite the recent stock market volatility (see Chapter 4). The growth in the P/E ratio that began in 2024 at most European

---

16 In July 2024 the European Commission announced that the remaining Basel III reforms would be incorporated into European legislation and that these reforms would enter into force in January 2025, with the exception of some provisions on market risk, which would apply from 2026. Subsequently, a consultation process was launched on whether to further delay the application of these requirements or to amend them. More recently, the European Commission has proposed that certain liquidity requirements set out in Basel III not be implemented.

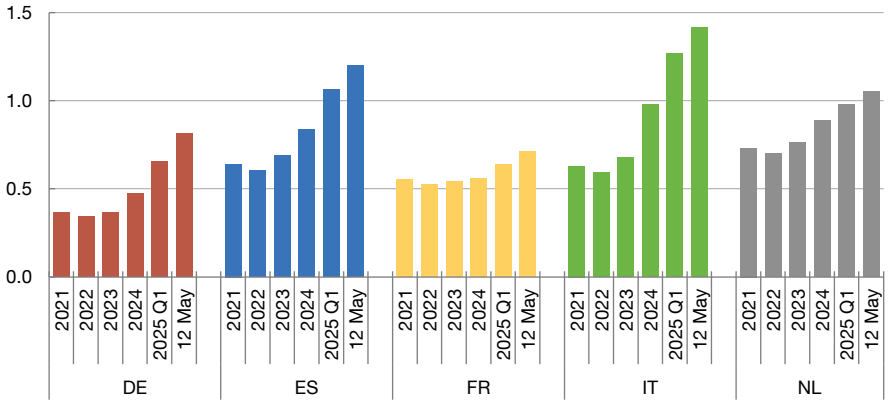
17 See the joint letter sent on 5 February by the governors of the Banco de España, Deutsche Bundesbank, Banque de France and Banca d'Italia to the European Commissioner for Financial Services and the Savings and Investment Union.

18 The PTB ratio measures the market capitalisation of listed banks relative to their book value. It is calculated by dividing the current share price by the book value per share. A value above 1 indicates that the market is valuing an institution's assets above their book value, thus reflecting confidence in its profitability, while a very low PTB ratio implicitly reflects difficulty in generating a return on capital that matches the cost of capital.

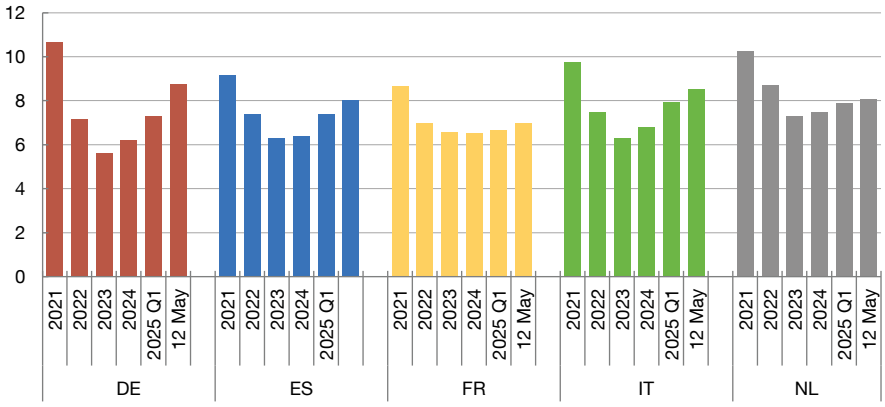
Chart 3.8

Despite the recent financial market turbulence, European banks continue to show high ratios of market capitalisation to book value and earnings compared with previous years

3.8.a European comparison of PTB ratios between 2021 and 2025 (a)



3.8.b European comparison of forward P/E ratios between 2021 and 2025 (a) (b)



SOURCES: Datastream and Banco de España. Latest observation: 12 May 2025.

a Annual averages for 2021, 2022, 2023, 2024 and 2025 Q1 drawing on daily data, weighted by each bank's market capitalisation. The sample for each country comprises listed banks. Latest observation: 12 May 2025.

b The 12-month forward P/E ratio is calculated by dividing the current share price by the estimated earnings per share for the next 12 months. Estimated earnings are obtained from investors' forecasts provided by Institutional Brokers' Estimate System (I/B/E/S).

banks strengthened markedly in 2025 Q1 (Chart 3.8.b).[19] The corrections recorded at the beginning of April have not pushed these ratios below their Q1 average levels and, furthermore, they are clearly above their 2024 average level. This suggests that the current improvement in earnings has been reflected in investors' expectations of higher returns over the medium to long term.

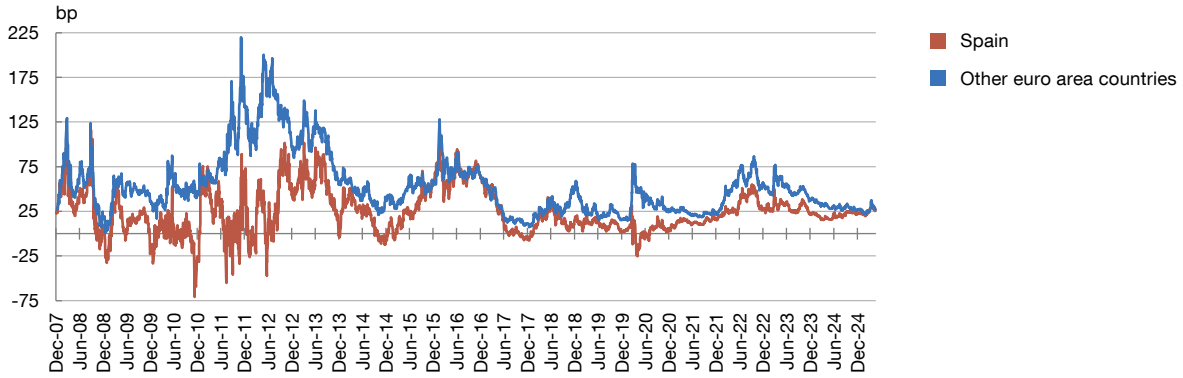
The cost differentials (relative to sovereign CDSs) of credit default swaps (CDSs) on the main Spanish banks are similar to those for their European peers, and have remained

19 This refers to the forward price-to-earnings (forward P/E) ratio. It is calculated by dividing the current share price by the estimated earnings per share for the next 12 months. Estimated earnings are obtained from investors' forecasts provided by Institutional Brokers' Estimate System (I/B/E/S). A higher forward P/E ratio indicates that investors expect significant growth in the bank's earnings.

Chart 3.9

The cost differentials relative to sovereign CDSs for CDSs on Spanish banks are at levels similar to those for their European peers

3.9.a Difference between the spreads of CDS contracts on the main European banks and those of their respective sovereign CDSs (a) (b)



SOURCES: Bloomberg and Datastream. Latest observation: 12 May 2025.

a A credit default swap (CDS) is a contract in which one party makes fixed payments for a certain period and the other makes a payment if an underlying asset (such as debt of a specific bank) defaults. Thus, the fixed payment (commonly referred to as the "spread") represents the market's estimation of the probability that the underlying asset will default.

b The chart shows the difference in cost (measured as the spread) between the five-year banking CDS and the corresponding five-year sovereign CDS, both in euro, weighted by each bank's market value. Banks with sufficiently liquid CDSs are considered. The sample includes Santander and BBVA for Spain and Deutsche Bank, Commerzbank, Crédit Agricole, Société Générale, BNP Paribas, Unicredit (from 23 October 2008) and Banca Monte dei Paschi di Siena for other euro area countries.

stable in recent times.[20] In 2024 and early 2025 the cost differentials (measured as the spread) of CDSs on the main Spanish banks relative to sovereign CDSs remained at around 20 bp on average, and experienced a temporary spike in April 2025 following the tariff announcements in the United States. This is moderate by historical standards, standing clearly below the levels reached during 2012 and somewhat below the average value for major European banks (Chart 3.9). Trading volumes for CDSs on the main European banks have increased in 2025 compared with last year. However, they have not exhibited any abnormal patterns since the April market turmoil prompted by the US tariff announcements (see Chapter 4 and Chart A2.3.1.2.2 in Annex 2).

3.1.3 Consolidated balance sheet

Assets

Spanish banks' consolidated assets grew in 2024 by 3.3%, driven by business with foreign counterparties,[21] **which accounted for 58.6% of total financial assets in 2024.** Last year financial assets with foreign counterparties increased by 7.3%, while assets with

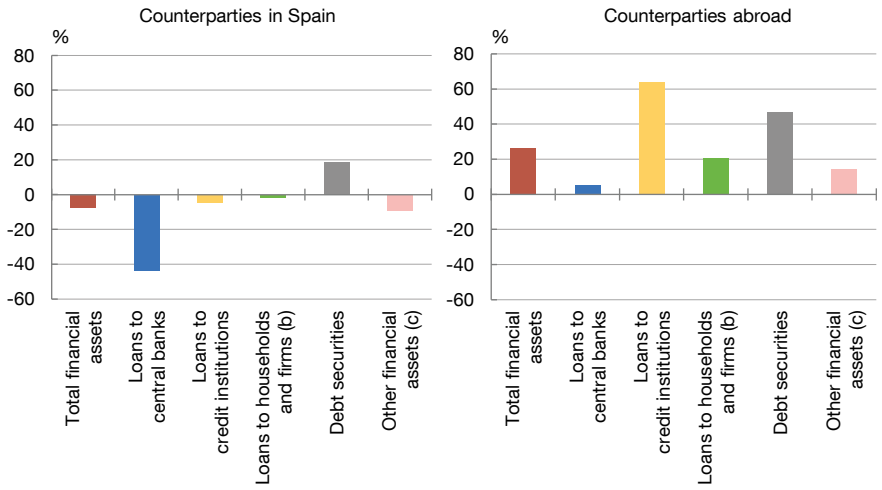
20 A credit default swap is a contract in which one party makes fixed payments for a certain period and the other makes a payment if an underlying asset (such as debt of a specific bank) defaults. Thus, the fixed payment (commonly referred to as the "spread") represents the market's estimation of the probability that the underlying asset will default.

21 Business abroad is determined based on the counterparties' residence.

Chart 3.10

Financial assets with foreign counterparties are on a rising trend, contrasting with the cumulative contraction in recent years in financial assets with counterparties in Spain

3.10.a Cumulative growth in financial assets by asset type between December 2021 and December 2024 (a). Consolidated data



SOURCE: Banco de España. Latest observation: December 2024.

a Direct counterparties are considered, using the residence criterion to identify them as Spanish or foreign.
b Includes both non-financial and financial corporations other than credit institutions.
c The "Other financial assets" item comprises loans to general government, cash balances, derivatives and holdings of equity instruments issued by other

counterparties in Spain decreased by 1.4%. These developments in 2024 are consistent with recent years' trend of higher relative growth in financial assets with foreign counterparties. For example, since 2021, amid higher interest rates than in previous years, they have grown cumulatively by 26.6%, compared with a decline of 7.8% in assets with Spanish counterparties (Chart 3.10). The available information for 2025 Q1 suggests that Spanish banks' assets have remained on their upward trend so far this year.[22]

This higher growth in financial assets with foreign counterparties can be seen across all products. Although domestic debt securities[23] have increased (by 18.6% since 2021), they have done so to a much lesser extent than debt securities with foreign counterparties (47.1% since 2021). Lending to foreign credit institutions has risen even more (by over 64% since 2021). For financial assets with domestic counterparties there was a marked contraction in credit to central banks, in line with the normalisation of monetary policy in the Eurosystem. Despite a less accommodative global monetary environment since 2022, loans to foreign households and firms[24] have recorded significant cumulative growth, compared with the sluggish growth in loans to households and firms resident in Spain (Chart 3.10). For more details on the structure of banks'

22 See for example the available information on individual balance sheets to February 2025 (see Table 4.51 of the Banco de España's Statistical Bulletin) and the 2025 Q1 earnings reports published by the main listed banks. The consolidated balance sheet data at end-2025 Q1 will be published as part of the Banco de España's supervisory statistics series in June.

23 Includes debt securities with various types of debtor counterparties: central banks, public administrations, credit institutions, other financial corporations and non-financial corporations.

24 Includes both non-financial corporations and financial corporations other than credit institutions.

consolidated balance sheets, see Annex 1 and Chart A2.3.1.3.1 in Annex 2. Credit in Spain and with counterparties abroad is analysed in more detail in Section 3.1.4.

Liabilities

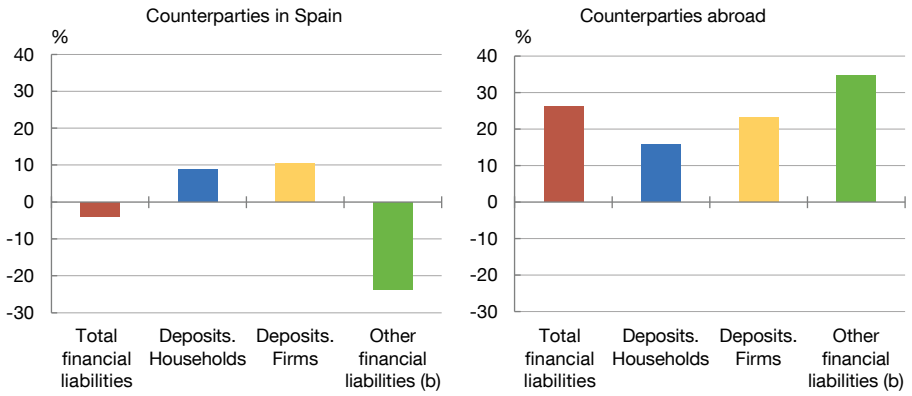
Financial liabilities[25] (excluding own funds) grew by 3.2% in 2024, driven by transactions with counterparties both in Spain and abroad. In 2024 the decline in central bank funding (-41.3%) was more than offset by the growth in deposits by households, firms and general government (4.9%) and in funding via debt instruments (4%) and from other credit institutions (2.6%) (see Annex 1). By geographical area, financial liabilities with Spanish counterparties grew by 4.6% in 2024, while those with foreign counterparties increased by 1.7%.[26] Looking at a broader time frame, since December 2021 financial liabilities have accumulated a decline of close to 5% in transactions with Spanish counterparties and an increase of over 25% in transactions with foreign counterparties (Chart 3.11), with the latter significantly increasing their share in total funding.

Deposits by households and firms grew in cumulative terms in the period 2021-2024, with a more pronounced rise in those from counterparties resident abroad. In that period liabilities with counterparties resident in Spain grew by close to 10%, while those with foreign

Chart 3.11

Financial liabilities with foreign counterparties have grown robustly in recent years, while there has been a moderate decrease in those with Spanish counterparties despite the growth in deposits by households and firms

3.11.a Cumulative growth in total financial liabilities and deposits by households and firms with Spanish and foreign counterparties between December 2021 and December 2024 (a). Consolidated data



SOURCE: Banco de España. Latest observation: December 2024.

a Direct counterparties are considered, using the residence criterion to identify them as Spanish or foreign.
b "Other financial liabilities" includes central bank funding, financial sector and general government deposits, debt securities and other interest-bearing items.

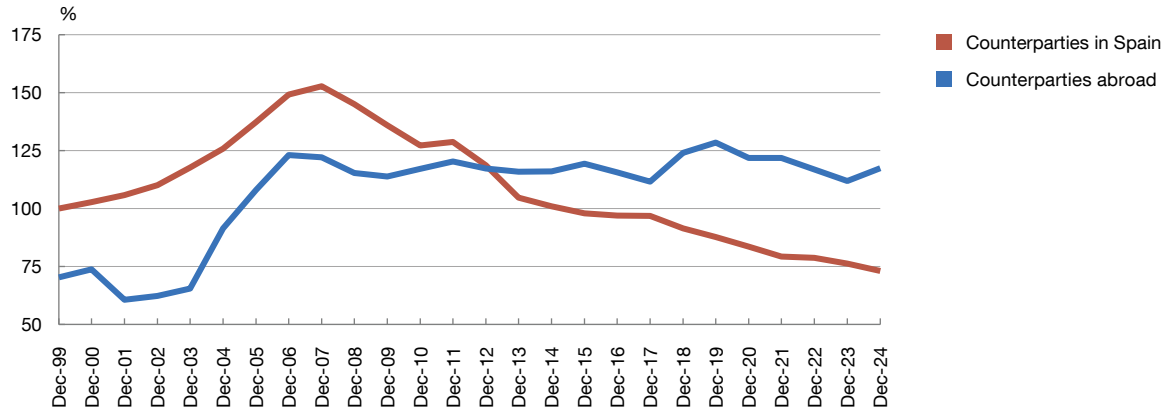
25 Interest-bearing financial liabilities (the subject of this section) are differentiated from equity and other liabilities (e.g. certain kinds of provisions or fiscal liabilities).

26 Financial liabilities are contractual obligations to deliver cash or other financial assets to a third party. These include deposits, bonds issued by the bank, derivatives and short positions in financial instruments, among others.

Chart 3.12

Since the global financial crisis, the loan-to-deposit ratio has declined markedly for the resident private sector in Spain, while holding stable in business with foreign counterparties

3.12.a Private sector loan-to-deposit ratio (a) (b). Consolidated data



SOURCE: Banco de España. Latest observation: December 2024.

a The private sector includes households, NFCs, the self-employed (also referred to as sole proprietors) and non-bank financial institutions (e.g. insurance companies). At December 2024 the loan-to-deposit ratio considering only households and firms stood at 75.7% for business in Spain and 122.6% for business abroad.
b Direct counterparties are considered, using the residence criterion to identify them as Spanish or foreign.

counterparties grew by between 15.9% (households) and 23.3% (firms) (Chart 3.11). In December 2024 deposits by households and firms accounted for 68.3% of total financial liabilities in business in Spain and 49.4% in business abroad. In both cases, they represented the main form of funding (see Annex 1 and Chart A2.3.1.3.2 in Annex 2).

Since the global financial crisis, the loan-to-deposit ratio for the private sector in Spain has steadily declined. In December 2024 it stood at 73%, down from more than 150% in 2007. During the global financial crisis the drop in this ratio was mainly driven by falling credit, while the declines in the last five years are essentially attributable to growth in deposits. In business with foreign counterparties the ratio has been relatively stable since 2005, although it grew slightly in 2024 (Chart 3.12).

Bank debt issuance remained strong in 2024 H2, surpassing the volume issued in 2023 H2. Senior unsecured debt[27] (eligible for MREL purposes)[28] and senior non-preferred (SNP)[29] debt

27 Secured debt (including covered bonds) comes with additional collateral, typically a pool of mortgage loans, 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.

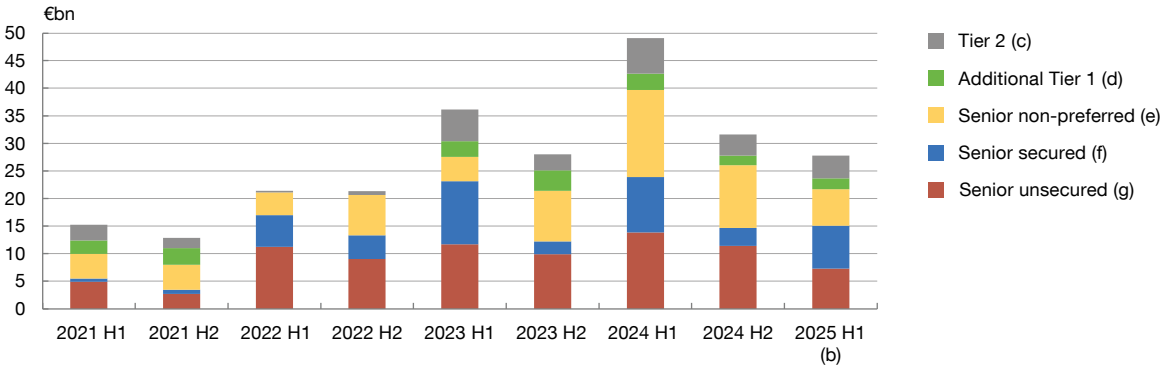
28 The minimum requirement for own funds and eligible liabilities (MREL) is a requirement aimed at ensuring that banks have sufficient own funds and eligible liabilities to support the application of resolution tools and make sure that shareholders and certain creditors are the first to bear losses should the bank fail.

29 Senior non-preferred (SNP) 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.

Chart 3.13

Debt issuance by Spanish banks remained robust in 2024 H2 and in the initial months of 2025, albeit below the high levels seen in the same period of 2024

3.13.a Half-yearly primary market issuance volume (a)



SOURCES: Dealogic and Banco de España. Latest observation: 12 May 2025.

a Half-yearly cumulative issuance volumes. 2025 H1 includes data for issuances up to the latest observation date.
b Includes issuances up to the latest observation date.
c Subordinated debt instruments eligible as Tier 2 capital are less risky for investors and differ from Additional Tier 1 (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 AT1-eligible instruments are contingent convertible bonds (CoCos), instruments that 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.
e 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.
f Senior secured debt (including covered bonds) comes with additional collateral, typically a pool of mortgage loans (as is the case for Spain's *cédulas hipotecarias)*, providing the holder with dual recourse: a claim on the issuing bank itself and a preferential claim against the cover pool.
g 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.

(eligible for MREL and TLAC purposes)[30] accounted for most of the issues in 2024 H2. During the initial months of 2025 the volume of secured senior debt increased markedly, bringing it into line with the issuance levels of the other categories of senior debt (Chart 3.13). The strong momentum in new issues, coupled with the maturity structure of bank debt, has allowed banks to keep debt refinancing risks at contained levels (Chart A2.3.1.3.3 in Annex 2).

3.1.4 Credit

Credit developments

After several years in decline, lending to the resident private sector in Spain grew moderately in 2024.[31] This increase was underpinned by the Spanish economy's favourable

30 Total loss-absorbing capacity (TLAC) is a requirement that must be met by institutions classified as global systemically important banks (G-SIBs). It is similar to and in addition to the MREL, as it seeks to ensure that G-SIBs have sufficient own funds and eligible liabilities that can be used in the event of resolution.

31 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).

performance, coupled with the downward trajectory of interest rates. The recovery in the growth of the stock of credit has been supported by lending both to households and to firms and the self-employed. Taken together, these sectors grew by 0.8% in 2024 (Chart 3.14.a), with contributions of 0.6 pp and 0.2 pp, respectively, contrasting with the declines observed in 2023. For more information on the rates of change in credit in Spain over a broader time scale, see Chart A2.3.1.4.1 in Annex 2.

The growth in corporate credit was driven by large firms, while that in lending to households was led by both consumer lending and housing loans (Charts A2.3.1.4.2 and A2.3.1.4.3 in Annex 2). In the case of firms and the self-employed, the stock of credit increased by 0.4% in 2024 thanks to the 3.1% increase in lending to large firms. Meanwhile, lending to SMEs and the self-employed continued to decline (by 2.2%, a much smaller drop than the 8.8% recorded in 2023). In the case of households, credit grew by 1.2% in 2024, contrasting with the decline of 2.4% in 2023, underpinned by the accelerating growth in the consumer segment (7.3% versus 2.1% in 2023) that has been observed for some quarters, and also by growth in lending for house purchase (0.5% versus -3.2% in 2023).[32]

The stronger credit growth in 2024 was widespread among banks, although developments remain uneven. The dispersion range among banks of growth in the stock of credit to households, firms and the self-employed in Spain shifted significantly towards more positive values than in 2023 (Chart 3.14.b). Both increases and decreases in the stock of credit were observed within the distribution of banks.

Survey data point to strong credit demand in Spain, stable lending standards and some easing in access conditions. The Bank Lending Survey (BLS) points to an upturn in loan demand from households and firms in Spain in 2024 H2 and 2025 Q1 (data prior to the US tariff policy announcements), especially in loans for house purchase.[33] Demand from households for house purchase also increased in the euro area aggregate, while demand from firms appeared to decline slightly in 2025 Q1 (Chart A2.3.1.4.4 in Annex 2).[34] According to the BLS, in 2024 H2 credit standards for both households and firms remained largely stable, with moderate tightening only in housing loans. In the initial months of 2025 there have been no signs either of easing or tightening in any segment.[35] Euro area credit standards moved in opposing directions across sectors, softening in lending to households but tightening in business loans

32 In December 2024, loans for house purchase accounted for 80.3% of total lending to households, while consumer and other lending represent 13.6% and 6.1%, respectively. Given that lending for house purchase makes up the bulk of overall loans to households, developments in such lending have a substantial impact on credit to this sector (Chart A2.3.1.4.2 in Annex 2).

33 See Banco de España press release of 28 January 2025 (available only in Spanish) on the results of the 2024 Q4 Banco de España BLS and Banco de España press release of 15 April 2025 (available only in Spanish) on the results of the 2025 Q1 Banco de España BLS.

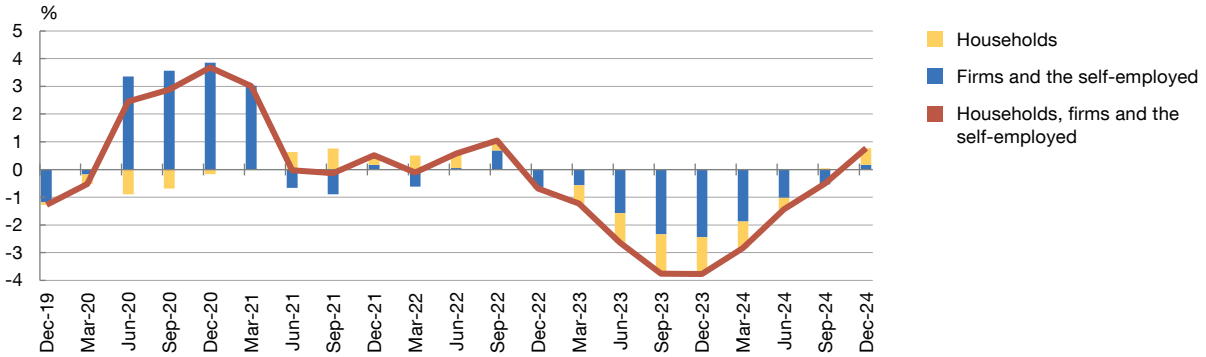
34 See "The euro area bank lending survey – Second quarter of 2025", ECB.

35 However, the stability indicated by the BLS could be influenced by the tightening bias that has been identified in such surveys, which suggests that credit standards may actually have eased somewhat (P. Köhler-Ulbrich, H. S. Hempell and S. Scopel. (2016). "The euro area bank lending survey". ECB Occasional Paper Series, 179; W. Bassett and M. Rezende. (2015). "Relation between Levels and Changes in Lending Standards Reported by Banks in the Senior Loan Officer Opinion Survey on Bank "Lending Practices". FEDS Notes, Board of Governors of the Federal Reserve System).

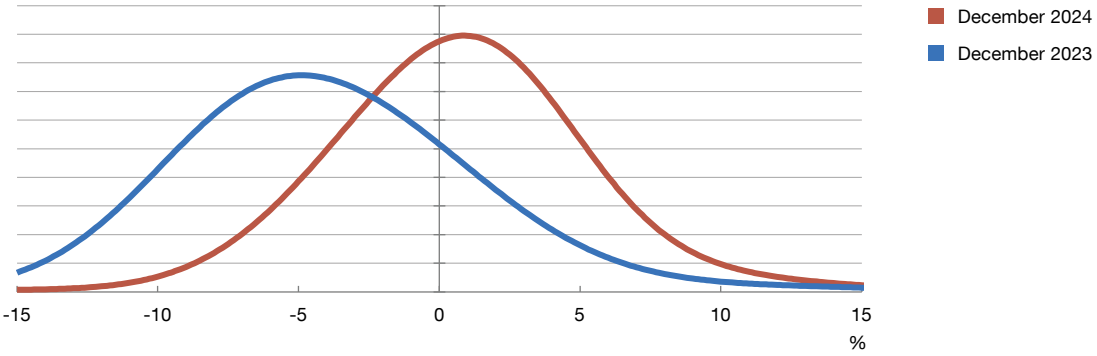
Chart 3.14

The stock of loans to the resident private sector in Spain grew in 2024, driven by lending both to households and to firms and the self-employed (a)

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



3.14.b Distribution by bank of the year-on-year rate of change in loans to households, firms and the self-employed resident in Spain (c). Business in Spain. Individual data (b)



SOURCE: Banco de España. Latest observation: December 2024.

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 chart shows the density function for the year-on-year rate of change in Spanish banks' lending, weighted by total assets. The density function is estimated using a kernel estimator, which provides a non-parametric estimate, yielding a continuous and smoothed graphical representation of that function.

DOWNLOAD

(Chart A2.3.1.4.5 in Annex 2). Regarding the conditions applied in Spain to loans to both households and firms, the BLS reflects an easing during 2024 H2 and 2025 Q1. This easing appears to have been more pronounced in loans to households for house purchase. The Survey on the Access to Finance of Enterprises (SAFE) indicates an improvement in firms' perception of the availability of bank financing.[36]

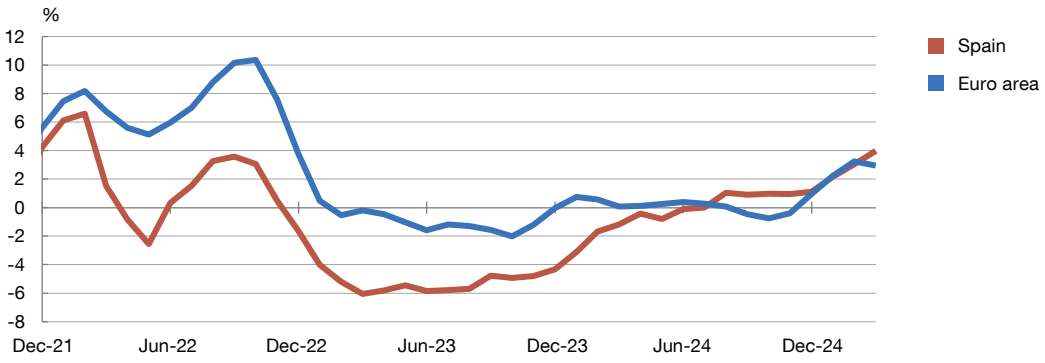
The latest figures available, for the initial months of 2025, indicate continued credit growth. The momentum indicator, which measures recent developments in the stock of loans

36 See Banco de España press release of 13 February 2025 (available only in Spanish) on the 2024 Q4 SAFE results.

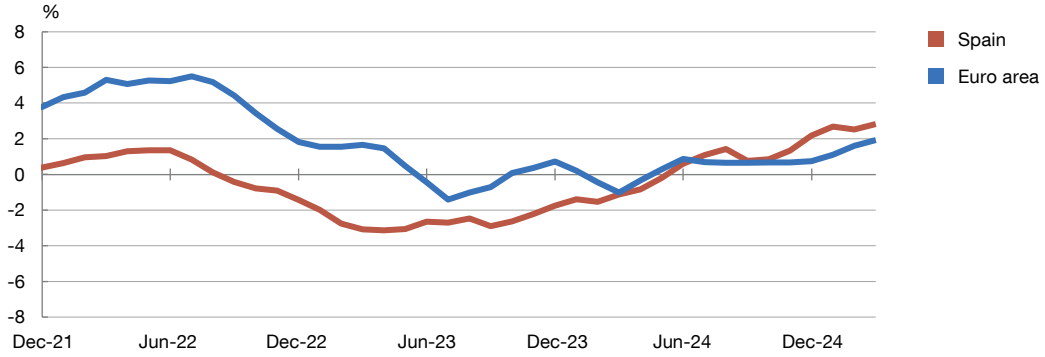
Chart 3.15

Household and business lending in Spain has maintained positive growth rates in the early months of 2025, extending the trend seen since mid-2024 (a)

3.15.a Momentum indicator for the stock of loans to resident firms. Business in Spain. Individual data (b)



3.15.b Momentum indicator for the stock of loans to resident households and the self-employed. Business in Spain. Individual data (b)



SOURCE: ECB. Latest observation: March 2025.

a "Firms" and "self-employed" denote the institutional sectors of NFCs and sole proprietors, respectively.
b The data considered are Spanish banks' lending to the resident private sectors in Spain and the euro area.

to households, firms and the self-employed, showed a quarterly increase of 1.5 pp (in annualised terms) in March 2025, consolidating the rising trend since mid-2024.[37] In the case of firms (Chart 3.15.a), the annualised indicator stood at 4% in March 2025, 1 pp higher than for the euro area as a whole. In lending to households (Chart 3.15.b) the indicator stood at 2.8% at the same date, 0.9 pp above the euro area average.

In 2024 the growth in total credit with foreign private counterparties outpaced that in business with Spanish private counterparties, but unevenly across regions.[38] At

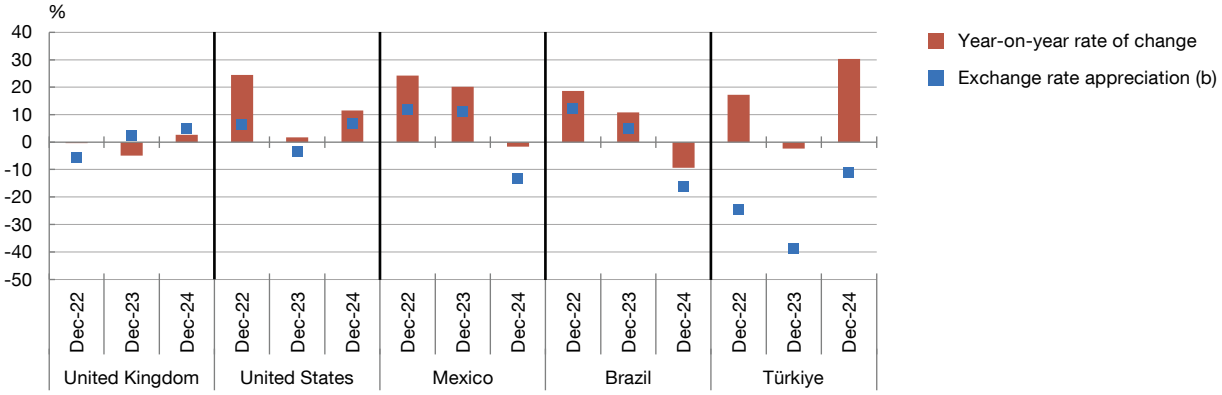
37 The momentum indicator shows the quarter-on-quarter rate of change in the three-month moving average of the seasonally adjusted credit stock. To facilitate a comparison with year-on-year rates of change, the momentum indicator is presented in annualised terms. Annualisation is calculated assuming that the rate of change over the past three months remained unchanged over a 12-month period.

38 The private sector includes households, firms (NFCs), the self-employed (also referred to as sole proprietors) and non-bank financial institutions (e.g. insurance companies). Counterparties are classified as Spanish or foreign based on their residence.

Chart 3.16

In 2024 Spanish banks' lending to foreign households and firms grew unevenly by counterparty country and was influenced by exchange rate developments

3.16.a Year-on-year rate of change in credit to the foreign private sector (a) (expressed in euro) and appreciation of the local currency vis-à-vis the euro. Consolidated data



SOURCE: Banco de España. Latest observation: December 2024.

a The private sector includes households, firms (NFCs), the self-employed (also referred to as sole proprietors) and non-bank financial institutions (e.g. insurance companies). Total credit granted to residents in each of the jurisdictions represented in the chart is considered, irrespective of whether it is local or cross-border business.

b A positive (negative) value indicates appreciation (depreciation) of the local currency vis-à-vis the euro.

consolidated level, lending by Spanish banks to foreign private counterparties recorded a year-on-year rate of change of 6% in 2024. This was driven by developments in some of the main jurisdictions where Spanish banks operate (Chart 3.16). Growth in the United States reached 11.6%, partly due to the appreciation of the dollar against the euro, while in Türkiye growth exceeded 30% despite the depreciation of its currency. In the United Kingdom, which accounts for more than 25% of total business abroad, growth was more subdued, while Mexico and Brazil saw declines, partly because their currencies depreciated against the euro.

Credit quality

In credit to the resident private sector in Spain, both non-performing loans (NPLs) and stage 2 loans declined in 2024. NPLs to this sector were down by 5.6% in 2024, accentuating the falls observed in 2023. However, in the case of households, NPLs were up somewhat in consumer credit during 2024 (3.9%). For their part, stage 2[39] loans decreased significantly, by 15.6% year-on-year. This improvement was broad-based across sectors of activity and

39 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 event of default has occurred.

loan purposes, consistent with the healthy economic momentum and the decline in the debt-to-income ratio (see Chapter 2).

NPL and stage 2 ratios in lending to the resident private sector also declined in 2024. This was influenced both by the aforementioned reduction in non-performing and stage 2 loans and by the increase in the total stock of loans to this sector. For overall loans to the resident private sector, the NPL ratio stood at 3.2% at end-2024 (down 0.2 pp on 2023) and the stage 2 ratio stood at 6.4% (down 1.2 pp on 2023). The declines were more pronounced in the stage 2 ratio than in the NPL ratio, for both loans to households and loans to firms and the self-employed (Chart 3.17.a and 3.17.b). According to the latest data available (March 2025), the NPL ratio for the resident private sector has continued its downward trend, falling to 3.1%.

With respect to loans backed by ICO COVID-19 guarantees,[40] in 2024 there was a notable decline in those classified as stage 2. These were down by almost 37% year-on-year, contrasting with a 7.5% increase in NPLs. Similarly, the stage 2 ratio for these loans fell by 2 pp in 2024 to 20.9%, while the NPL ratio rose to 21.5% in December, up 7.6 pp on a year earlier. As this is a closed portfolio (no new loans will be granted, but repayments will continue), the decrease in the denominator mechanically exerts upward pressure on these ratios.[41] Relative to the peak level of loans backed by ICO COVID-19 guarantees observed since 2020, the NPLs at March 2025 would amount to around 9% and the stage 2 loans at that date would represent a somewhat smaller share. In addition, loans backed by ICO COVID-19 guarantees continue to represent a significant, albeit declining, proportion[42] of the NPL and stage 2 ratios for overall corporate lending (Chart 3.17.b), and therefore continued monitoring is warranted.

The flash floods that hit Spain in late October 2024 have not significantly disrupted credit quality trends at the national level, although they do have systemic implications at the local level. The disaster, which struck the Valencia region particularly hard, resulted in a tragic loss of life and devastating destruction in the affected municipalities. Because the catastrophe was localised, its impact on credit risk at the national level remains limited. For instance, loans to households and firms with ties to the affected municipalities represent approximately 2% of the national total. However, such credit represented more than 40% of the stock of lending to these segments in the Valencia region at September 2024, prior to the disaster, and roughly 50% of dwellings and firms linked to loans in the affected municipalities

---

40 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 the amount of the loans guaranteed by these facilities exceeded €90 billion.

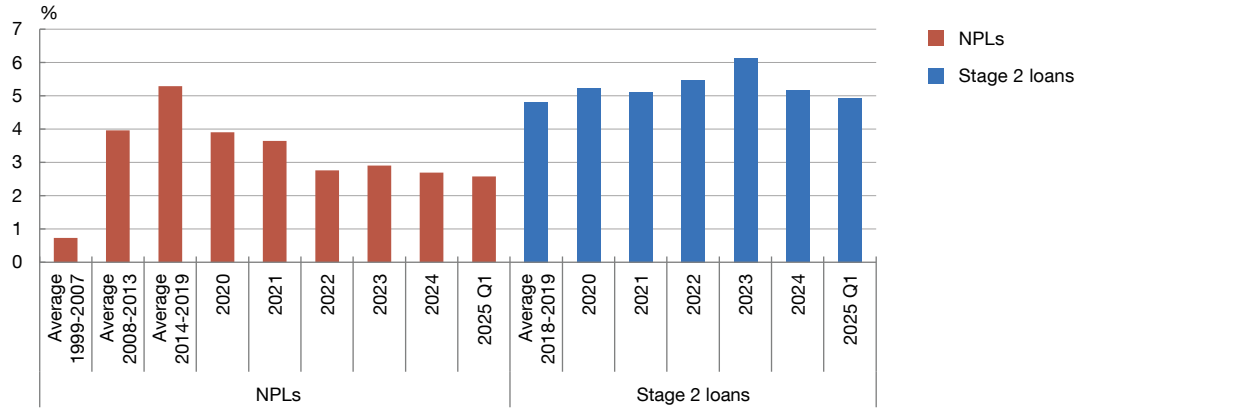
41 Had the amount of these loans (the ratio's denominator) remained constant at its December 2023 level, NPLs as a share the total would have increased by just 1 pp to 14.9%. Under the same assumption, the stage 2 loan ratio would have declined by 8.4 pp to 14.5%.

42 In December 2024 NPLs backed by ICO COVID-19 guarantees accounted for just over 40% of total NPLs to NFCs and sole proprietors, thus contributing 1.8 pp to the total NPL ratio of for these sectors (4.3%). As for stage 2 loans, those backed by ICO COVID-19 guarantees represented around 21% of total stage 2 loans with corporate counterparties, meaning a contribution of 1.8 pp to the total stage 2 ratio for these sectors (8.5%).

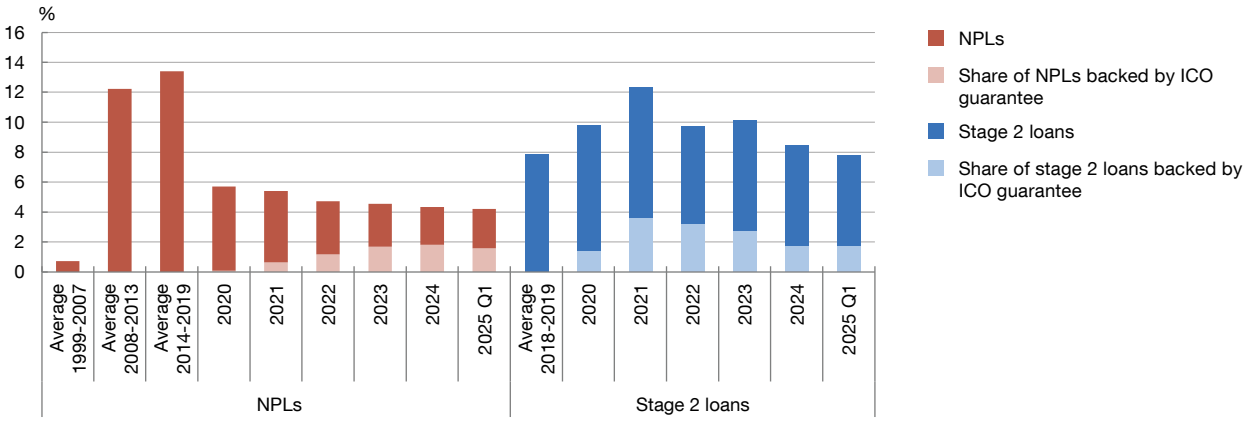
Chart 3.17

NPL and stage 2 ratios declined in 2024 for loans to both households and firms, with some cross-bank heterogeneity

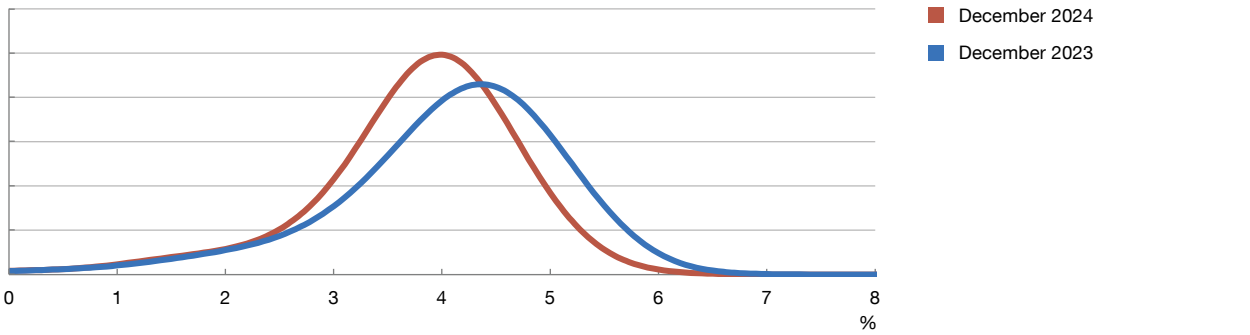
3.17.a NPLs and stage 2 loans as a share of loans to households resident in Spain. December of each year and 2025 Q1. Business in Spain. Individual data (a)



3.17.b NPLs and stage 2 loans as a share of loans to firms and the self-employed resident in Spain. December of each year and 2025 Q1. Business in Spain. Individual data (a) (b)



3.17.c Distribution by bank of the NPL ratio for households, firms and the self-employed resident in Spain. Business in Spain. Individual data (a) (c)



SOURCE: Banco de España. Latest observation: March 2025 (panels a and b) and December 2024 (panel c).

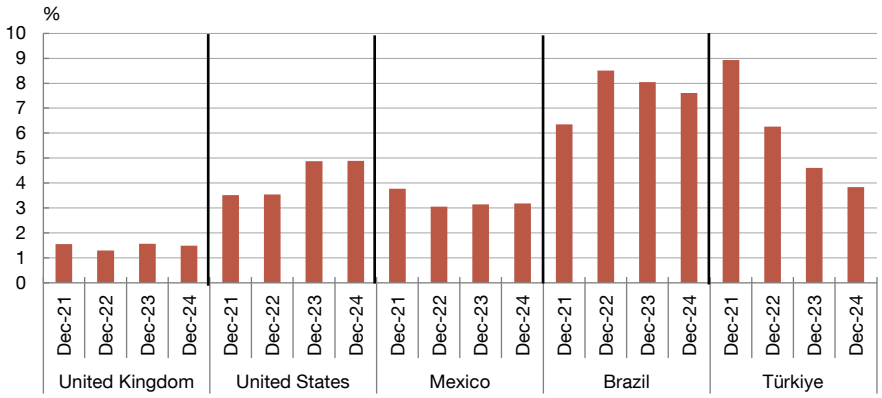
a Lending by deposit institutions' branches in Spain.
b The figures for firms and the self-employed correspond to data reported for NFCs and sole proprietors. Lighter colours show the contribution to the ratio of ICO-backed loans to NFCs and sole proprietors.
c The chart shows the density function of the troubled loans ratio for Spanish deposit institutions, weighted by total assets. The density function is approximated using a kernel estimator, which enables non-parametric estimation and provides a continuous, smoothed graphic representation of the function.

DOWNLOAD

Chart 3.18

The credit quality of lending to foreign households and firms held stable in 2024

3.18.a NPL ratio for Spanish bank lending to the resident private sector, by country. Consolidated data (a)



SOURCE: Banco de España. Latest observation: December 2024.

a The resident private sector includes households, firms (NFCs), the self-employed (also referred to as sole proprietors) and non-bank financial institutions (e.g. insurance companies). Total credit granted to residents in each of the jurisdictions represented in the chart is considered, irrespective of whether it is local or cross-border business.

were located in or nearby the flooded areas.[43] On data available to February 2025, there was only a modest increase in NPLs at local level from December 2024, along with a temporary uptick in loans classified as stage 2. The broad public support measures deployed and sustained lending to the affected areas, partly backed by ICO guarantees and moratorium schemes, could help to contain any further adverse effects.[44] However, past experience with natural disasters suggest that impacts on credit quality may emerge with a delay, and therefore continued monitoring is required.[45]

The distribution of NPL ratios across banks shifted towards lower levels in 2024. At the same time, the heterogeneity has diminished somewhat, resulting in a rather more concentrated pattern around a lower average (Chart 3.17.c). These developments show that the improvement in credit quality has been broad-based.

The credit quality of loans to foreign households and firms remained stable at 2024. NPL ratios for this type of counterparty have held close to 2023 levels in most material countries for Spanish banks, with additional declines observed in Türkiye and Brazil (Chart 3.18).

43 The proportion of homes and firms linked to loans that are situated in or close to (within 500 metres) the flooded areas is estimated using mapping data from the Copernicus database and the Banco de España Central Credit Register.

44 For an overview of the measures adopted by the Council of Ministers, see La Moncloa (2025) (in Spanish). For more information on the State measures and those adopted by the Valencia regional government, see the "Afectados por la DANA" section of the latter's website (in Spanish).

45 For a detailed analysis of the effects of the October 2024 flash floods on lending to households and firms, see Pérez Montes, C., García Villasur, J., Gutiérrez de Rozas, L., Jiménez, G., Lavín, N., Matyunina, A. and R. Vegas (2025), *El impacto de la DANA de octubre de 2024 desde una perspectiva de estabilidad financiera.* Revista de Estabilidad Financiera - Banco de España. Forthcoming.

3.1.5 Financing conditions and liquidity

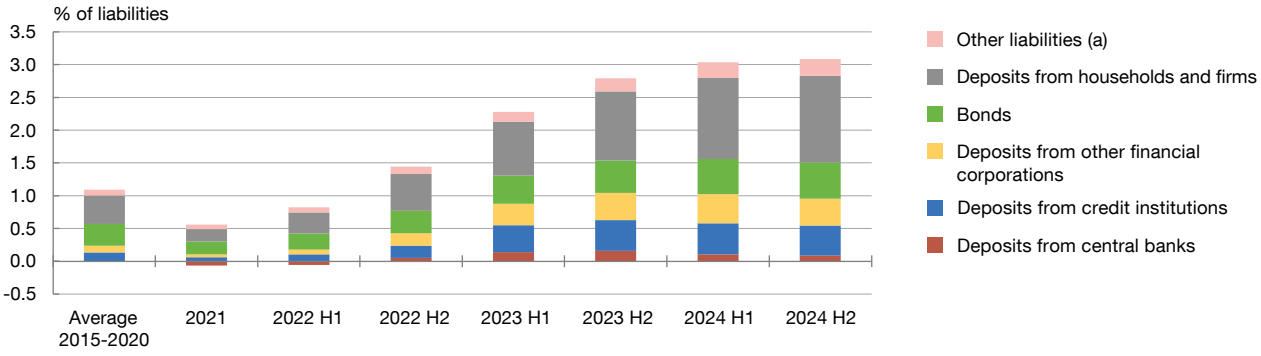
Cost of liabilities

The average cost of bank liabilities was steady at around 3.1% in 2024 H2, amid declining reference interest rates.[46] Relative to 2024 H1, the contributions of the various liability items to the average cost of liabilities held relatively stable. The contribution of deposits by households and firms (Chart 3.19.a) was notable due to their high volume (Annex 1 and Chart A2.3.1.3.2 in Annex 2), despite unit costs remaining contained, as discussed below. The stability in the average cost of liabilities, coupled with the decline in reference rates during this period (in the case of the 12-month EURIBOR the reduction reached 79 bp) has closed the positive spread that Spanish banks had maintained in recent years (Chart 3.19.b). This spread owed largely to their retail funding model, which was conducive to a limited pass-through of

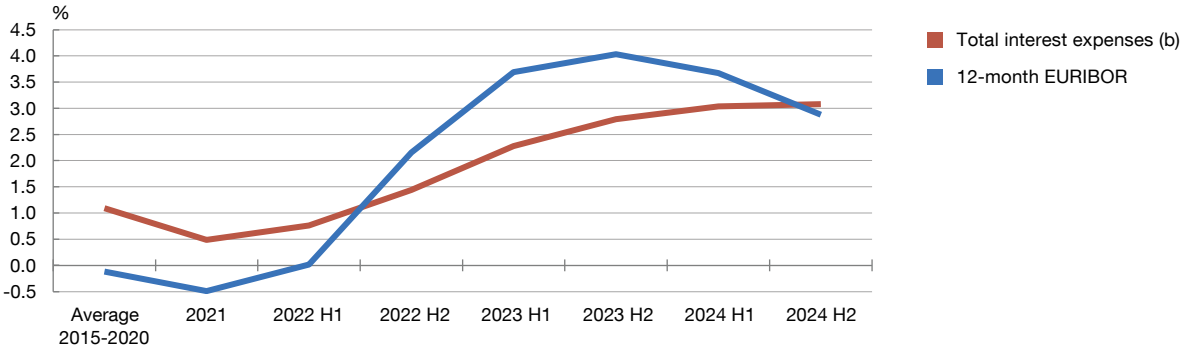
Chart 3.19

Against a background of declining reference interest rates, the average cost of liabilities held stable in 2024 H2

3.19.a Interest expenses on liabilities. Consolidated data



3.19.b Interest expenses on liabilities and 12-month EURIBOR. Consolidated data



SOURCE: Banco de España. Latest observation: December 2024.

a Includes interest paid on general government deposits 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.

DOWNLOAD

46 For these purposes, the average cost of liabilities is defined as interest expenses (net of income) associated with all liabilities, in annualised terms and divided by average total liabilities.

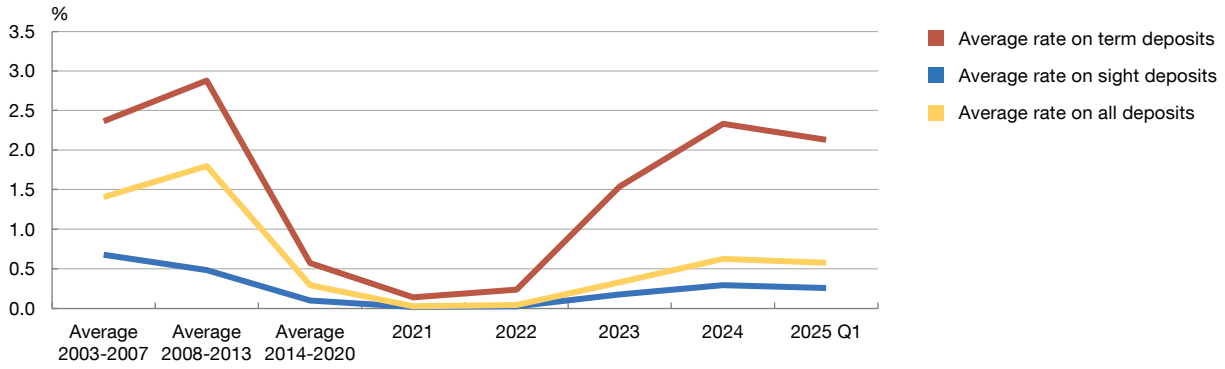
policy rate hikes to the cost of funding, but may now also contribute to a slower adjustment in the short term as policy rates decline. In any event, earnings reports from the main listed banks indicate that the share of interest expenses in liabilities declined year-on-year during 2025 Q1, and can be expected to shrink further over the rest of the year (Table A2.3.1.1.2 in Annex 2).

At consolidated level, the average cost of deposits by households and firms increased slightly in 2024 H2. This growth partly owed to the shift from sight deposits to longer-term maturities, with the latter accounting for 24% of the total at end-2024 (up 1.6 pp on December 2023). Thus, the average cost of deposits by households and firms reached 2.3% in 2024 H2, up 0.1 pp on six months earlier. The inertia linked to the cost of these deposits might explain why the reduction in policy rates in most jurisdictions where the banks operate has not yet been reflected in the average cost of liabilities. However, bank deposits are a substantially cheaper source of funding than other alternatives and continue to help keep the average cost of liabilities contained.

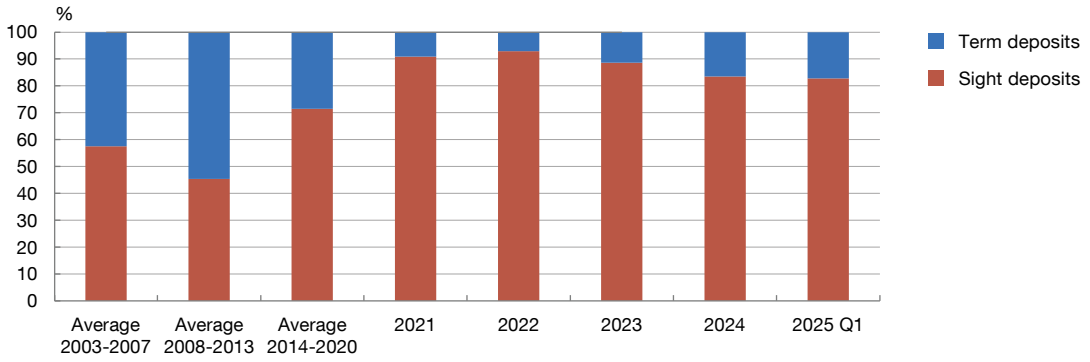
Chart 3.20

In business in Spain, the predominance of sight deposits has continued to contain the average cost of deposits

3.20.a Average rates for household and NFC deposits. Business in Spain. Individual data (a) (b)



3.20.b Share of sight and time deposits of the non-financial private sector. Business in Spain. Individual data (a)



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

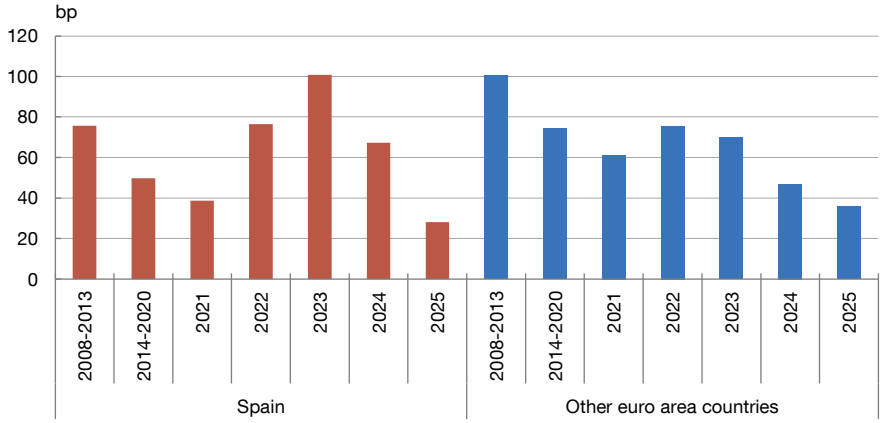
a Transactions carried out by deposit institutions' branches in Spain are considered.
b The interest rate in each period is the average of monthly interest rates. Monthly interest rates, in turn, are calculated as the average of the sight and term deposit rates weighted by the respective deposit volumes.

DOWNLOAD

Chart 3.21

The spread between the issuance cost of senior unsecured debt and sovereign bonds declined in 2024 and in 2025 Q1, for both Spanish and other European banks

3.21.a 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: March 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 are considered.

In business in Spain,[47] the average remuneration of households' and firms' deposits remained low in 2024 (0.6%), below that at consolidated level (2.2%). In 2024 the average remuneration of term deposits reached 2.4% in Spain, a level close to that observed in comparable past episodes of reference interest rate hikes. However, these deposits still account for a small fraction of all households' and firms' deposits, limiting their impact on the average cost of such liabilities (Chart 3.20.a). In particular, the share of term deposits stood at 16.9% at December 2024, 10.3 pp more than at the beginning of the monetary tightening, but still far from average historical values. The latest available data show that the average remuneration of deposits began to decrease in 2025 Q1 and now stands below the 2024 average (Chart 3.20.b).

The average cost of the stock of bank debt issuances increased slightly in 2024 H2. As older debt issued at lower interest rates matured and was replaced by new issuances in a setting of still high interest rates, the average cost of the stock of debt issued by Spanish banks rose to 4.3% in 2024 H2, 11 bp above the cost observed six months earlier.

In new issues of senior unsecured debt during 2024 and 2025 Q1, the spread between issuance costs and equivalent-maturity sovereign debt narrowed across the board at major European banks. In 2024 as a whole this spread was 67 bp for the main Spanish institutions, 34 bp lower than that observed in 2023. Among the other major European institutions, the spread declined by 23 bp, with the average spread standing at 47 bp (Chart 3.21). These spreads have narrowed even further in 2025 Q1, particularly in the case of

47 Considering transactions carried out by deposit institutions' branches in Spain.

Spanish institutions. This downward trend was also observed for senior non-preferred debt (SNP) issuances (Chart A2.3.1.5.1 in Annex 2), which, together with senior unsecured issuances, represent the bulk of new issuance in recent years. Considering a longer time horizon, the spreads at Spanish and other European institutions are currently at record-low levels since the global financial crisis.

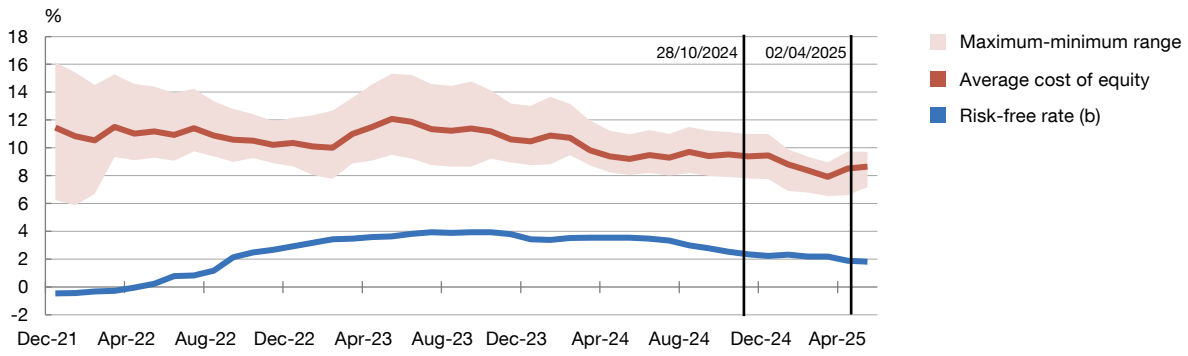
Cost of equity

The cost of equity (COE) remained stable during 2024 H2, dropped in the early months of 2025 and rebounded slightly in April. Spanish banks' COE has decreased by around 0.8 pp since the publication of the last Financial Stability Report, to between 6.7% and 9.8%. Most of the fall took place between January and March 2025, with a slight pick-up of around 0.7 pp in April following the tariff announcement in the United States. The current level is moderate by historical standards and lower than that observed in December 2023 (Chart 3.22).[48] The range of COE estimates is clearly below the Spanish banking system's ROE (14.1% in 2024, see Section 3.1.1). This drop in the COE contributes to containing the Spanish banking sector's aggregate funding cost.

Chart 3.22

Despite a slight uptick in April, the cost of equity declined moderately in the opening months of 2025, helping to contain aggregate financing costs in the Spanish banking sector

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



SOURCES: Banco de España, Refinitiv Eikon, Datastream and Consensus Economics. 28/10/2024 is the cut-off date of the latest Financial Stability Report; 02/04/2025 is the date when the tariff war escalated. Latest observation: 12 May 2025.

a The average and maximum-minimum range of the cost of equity are based on four dividend discount models: Ohlson and Juettner-Nauroth (2005), Ohlson and Juettner-Nauroth (2005) simplified, 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. 25-46.
b The 1-year overnight index swap (OIS) in euro is used as the risk-free rate.

48 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. 24-41.

Liquidity

Spanish institutions' liquidity and net stable funding ratios remain at comfortable levels. In December 2024 the liquidity coverage ratio (LCR) of the main Spanish banks stood at 167.9%, 10.5 pp lower than a year earlier, but well above the regulatory minimum required (100%) and also above the average LCR of the main European banking institutions (163.4% at December 2024). In March 2025 (the latest data available), this ratio declined slightly to 161%. The net stable funding ratio (NSFR) – which measures banks' longer-term financing capacity – rose slightly, to 132.9% in 2024 (from 131.2% six months earlier), thus increasing the headroom over the required minimum threshold of 100% and over the average ratio for the main European banks (127.1% in December 2024) (Chart 3.23.a). In 2025 Q1 this ratio increased slightly to 133.3%.

Spanish banks hold liquid assets and stable funding, in the various significant currencies with which they operate, above potential funding needs. On the available information to March 2025, LCRs, both in euro and in other significant currencies, have consistently remained above 100%. The NSFR has also remained above 100% over time in the various currencies, particularly euro and US dollars.

Risk-taking in terms of dollar-denominated funding is greater in other European banking systems than in Spain. According to a comparative study conducted by the EBA using data for December 2023, Spanish banks had an NSFR in US dollars of 116%, compared to levels below 100% in France, Italy, the Netherlands and Germany.[49] These last two countries had NSFRs below 80%. In the EU as a whole, NSFRs for positions in euro are generally higher than for positions in US dollars (Chart 3.23.b). According to this study, at end-2023 66% of EU/EEA banks' available stable funding was denominated in euro, 20% in US dollars and 3% in pound sterling, with no other significant currency exceeding 2.5%. In the case of Spanish banks, 69.3% of stable funding at that date was denominated in euro and the rest in foreign currencies, the main ones being the pound sterling, the US dollar, the Mexican peso, the Brazilian real, the Chilean peso and the Turkish lira. None of these currencies accounted for more than 11% of Spanish banks' total stable funding. This structure by currency of Spanish banks' stable funding has remained largely unchanged to March 2025 (the latest data available).

From a financial stability perspective, the monitoring of the aggregate level of liquidity needs to be supplemented by a more granular analysis that also considers its interaction with risks to solvency. Box 3.2 presents the Banco de España's latest analytical developments on liquidity risk in the field of financial stability. First it studies the distribution over time and across currencies of the impacts of liquidity outflow scenarios. It also analyses the extent to which selling liquid assets or pledging them to the central bank during a liquidity crisis can lead to solvency pressures.

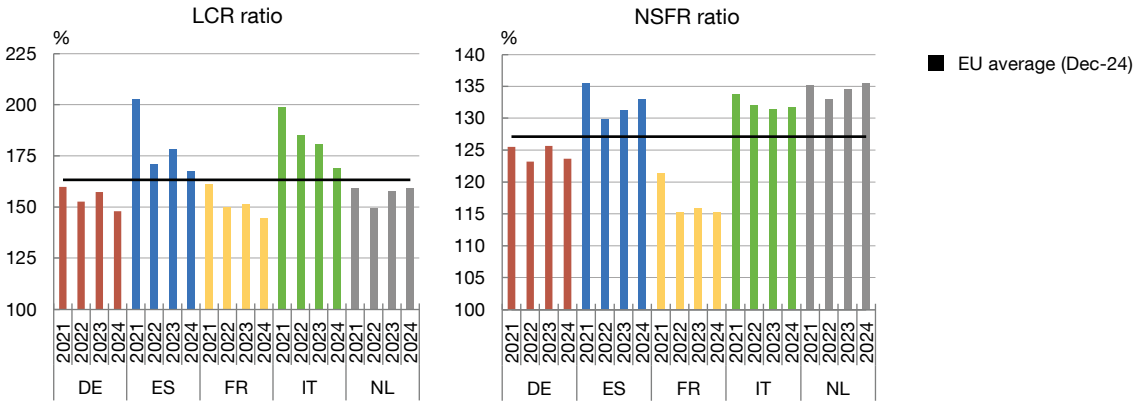
---

49 See EBA. (2025). "EBA report – Analysis on EU/EEA banks funding structure and their dependence on asset and liability exposures in foreign currency".

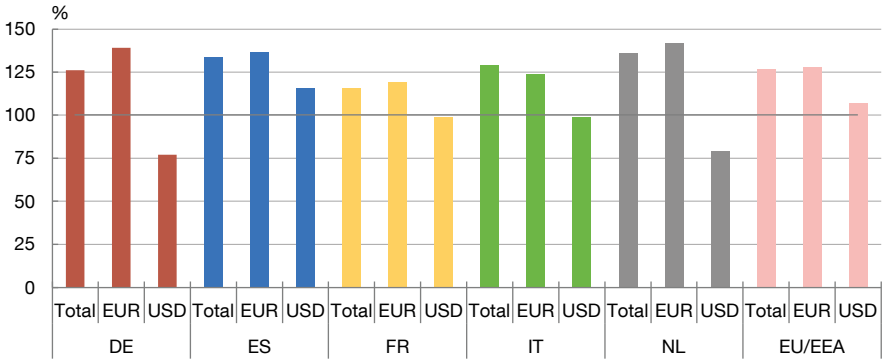
Gráfico 3.23

Spanish banks' liquidity and stable funding ratios remained at comfortable levels in aggregate terms and by currency, and generally stood above those of the main European banking sectors

3.23.a European comparison of the LCR and NSFR ratios between 2021 and 2024. Consolidated data (a)



3.23.b European comparison of the NSFR ratio, breakdown by currency. December 2023. Consolidated data (b)



SOURCE: European Banking Authority. Latest observation: December 2024 (panel a) and December 2023 (panel b).

a Data from a sample of the main banks of each country. The minimum regulatory requirement for these ratios at consolidated level is 100%.
b Data on all the banks of each country.

DOWNLOAD

3.2 Non-bank financial sector

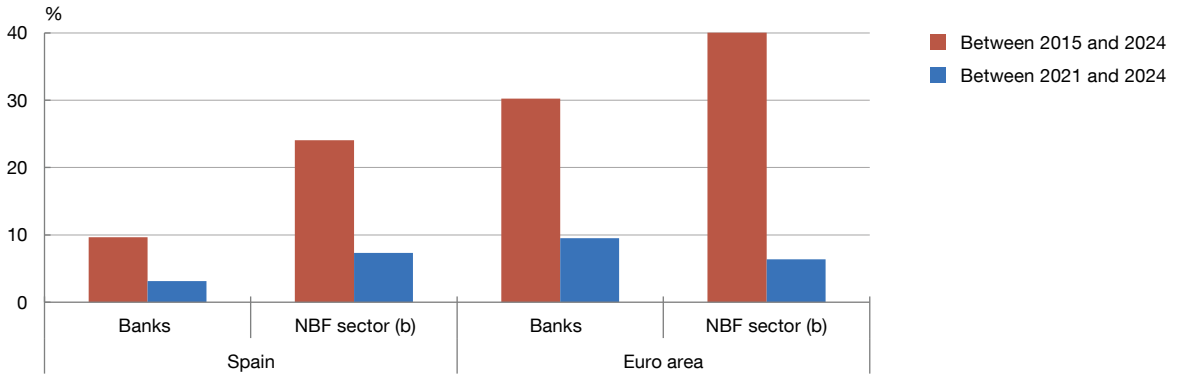
Overall non-bank financial sector developments

Over the last decade, the non-bank financial (NBF) sector has grown more than the banking sector, both in Spain and, especially, in the euro area as a whole. More recently, the NBF sector's total assets have also grown in both Spain and the euro area (by 7.4% and 6.4%, respectively) since end-2021 (Chart 3.24). Meanwhile, since 2021, the size of the banking sector has increased more moderately in Spain (by 3.1%) than in the euro area (by 9.5%). At end-2024 Q4 the NBF sector accounted for 33.8% of the Spanish financial system's total assets, 26 pp below the equivalent figure for the euro area (59.9%) (Chart A2.3.2.1 in Annex 2). In general, NBF sector growth has been spearheaded by investment funds, whose total assets increased in Spain and the euro area by 23% and 11.6%, respectively, from end-2021. These

Chart 3.24

Over the last decade, the non-bank financial sector has grown more than the banking sector, both in Spain and, particularly, in the euro area as a whole

3.24.a Total asset growth in the banking and non-bank financial sectors in Spain and the euro area. Non-consolidated data (a)



SOURCES: Banco de España and ECB. Latest observation: December 2024.

a In 2024 Q4 total non-consolidated assets of banks and the non-bank financial (NBF) sector in Spain amounted to €3,093 billion and €1,579 billion, respectively. The corresponding values for the euro area as a whole were €38,559 billion and €57,498 billion, respectively.

b The NBF sector includes money market funds, non-monetary investment funds, insurance companies, pension funds and other non-bank financial intermediaries. Other non-bank financial intermediaries include specialised lending institutions (SLIs), venture capital companies, securities dealer companies, special-purpose vehicles, 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.

trends are similar to those observed at the global level.[50] Chart A2.3.2.2 in Annex 2 provides more information about growth by type of non-bank financial intermediary for both Spain and the euro area as a whole.

Investment funds

The total assets of Spanish investment funds increased notably in 2024. Specifically, between 2023 Q4 and 2024 Q4, the total assets of both monetary and non-monetary investment funds domiciled in Spain increased by 16.3%, continuing the upward trend already observed in 2023.

Over 2024, among investment funds domiciled in Spain, the weight of equities continued to decline in favour of fixed income, albeit at a slower pace than in the previous year.[51] Thus, the share of equity holdings in total assets decreased by 1.1 pp year-on-year to December 2024, compared with a 3.6 pp drop in the same period a year earlier. The share of fixed-income holdings grew, but at a slower pace (0.1 pp versus 5.3 pp in 2023).[52] The share of other assets also increased slightly. Thus, in 2024 Q4 fixed-income and equity securities

50 See the Financial Stability Board's December 2024 *Global Monitoring Report on Non-Bank Financial Intermediation* and Chapter 1 of the IMF's October 2024 Global Financial Stability Report.

51 Equities include listed and unlisted shares, other equity and other investment fund shares or units.

52 Fixed-income securities include short and long-term debt securities.

holdings and other investments accounted for 46.8%, 43.7% and 9.5%, respectively, of the total assets of investment funds domiciled in Spain.

The growth of fixed-income investments in 2024 has been uneven by issuing sector. While in 2023 the increase in the share of fixed income was spearheaded by the growth in government debt holdings, in 2024 the main growth factor was the increase in holdings of securities issued by banks (1.5 pp) and non-financial corporations (NFCs) (1.0 pp), with the share of government debt declining (-3.1 pp).

This slowdown in the rebalancing of investment fund portfolios towards debt securities coincides with recent downward movements in the remuneration of these instruments. In particular, following the strong growth after mid-2022, the remuneration of debt securities stabilised towards the end of 2023 and started to decline from mid-2024, reflecting changes in monetary policy interest rates.

Investment funds may have to face valuation adjustments in both fixed income and equity assets. This risk for the sector arises from the compressed risk premia in both the fixed income and, particularly, the equity markets (Chapter 4) and the high overall risk level in the market (Chapter 5). From the analysis in Chapter 4 it can be inferred that the corrections will be uneven across asset classes, with US equities and high-yield US and European corporate bonds facing greater risk. These corrections could, in turn, lead to asset sales in both segments. Based on the information available to date, the sector appears to have absorbed in an orderly manner the impact of the April financial market turbulence, and these risk scenarios have not materialised.

Open-ended investment funds[53] domiciled in Spain have lower leverage than those domiciled in the EU as a whole.[54] According to the latest available data, in 2023 this metric stood at 1.13 for Spanish open-ended funds, with the EU total standing at 1.44.[55] Leverage was lower for US open-ended investment funds (1.08 in 2023).

Spanish fixed-income open-ended investment funds and mixed open-ended funds are exposed to liquidity risk at a level comparable to that of their global peers. In particular, in the case of fixed-income open-ended funds, the median of the Spanish distribution of the liquidity indicator stood at 1.958 in 2023, 0.77% above the median of the global distribution (1.943) (Chart 3.25).[56] This difference was only slightly bigger (0.98%) in the case of mixed

53 Open-ended investment funds can be redeemed at sight and, except where exceptions have been established, investors can realise their ownership interest at any time.

54 The leverage measure used is defined as the sum of the entire portfolio plus the notional value of all derivatives contracts, relative to the net asset value of the investment fund, i.e. to the total value of its assets less its liabilities.

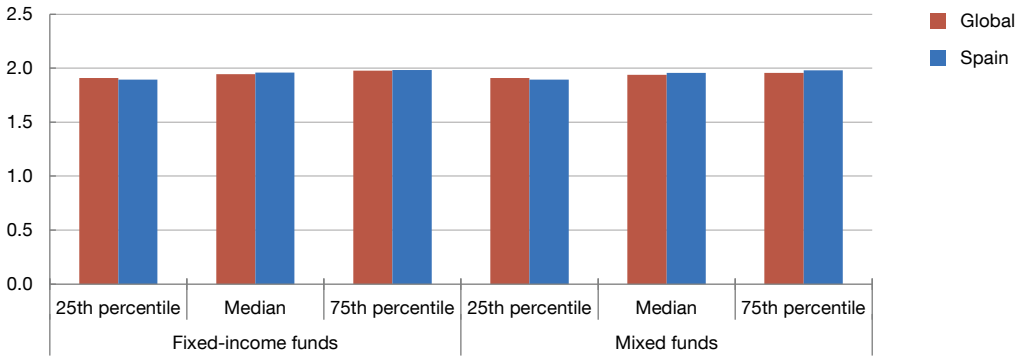
55 Open-ended investment funds account for 97% of the total assets of the non-monetary investment fund sector in Spain.

56 The liquidity indicator is defined as the ratio of (i) total financial assets less liquid assets plus short-term liabilities plus redeemable shares to (ii) total financial assets. This indicator takes a value of 1 when there is no liquidity transformation (all the short-term liquidity demands are backed by liquid assets) and a value of 2 when the assets are illiquid and are fully funded by short-term liabilities.

Chart 3.25

Spanish fixed-income open-ended investment funds and mixed open-ended funds have liquidity risk exposure levels similar to those of their global peers

3.25.a Percentiles of the liquidity indicator for global and Spanish open-ended investment funds (a)



SOURCES: CNMV and FSB. Latest observation: 2023.

a The liquidity indicator is calculated as the ratio of (i) total financial assets less liquid assets plus short-term liabilities plus shares and redeemable shares to (ii) total financial assets. This indicator takes a value of 1 when there is no liquidity transformation (all the short-term liquidity demands are backed by liquid assets) and a value of 2 when the assets are illiquid and are fully funded by short-term liabilities. Within this range a higher value indicates greater exposure to liquidity risk. The global values are percentiles of the distribution across 18 jurisdictions, with an aggregate figure by jurisdiction. The values for Spain are percentiles of the distribution across individual funds domiciled in Spain.

open-ended funds, with a median of 1.956 and 1.937 for the Spanish and global distributions, respectively. The differences in the 25th and 75th percentiles of the distribution are also minimal.

Pension funds

Both contributions to pension funds and their total assets increased notably in 2024. Gross contributions to pension funds increased by nearly 13% in 2024, despite the lower tax incentives since 2021.[57] Total pension scheme assets increased by more than 7% at December 2024, compared with the same month a year earlier.

Profitability remained stable. One-year and long-term (25-year) returns stood at 8.8% and 2.3%, respectively, as of December 2024 (unchanged from 2023), cementing the recovery in short-term profitability in this sector.

The favourable situation in the financial markets has driven the expansionary behaviour and return to profitability of pension funds since end-2022. Should the identified risk of financial market corrections (see Chapter 4 and Chapter 5) materialise to

57 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).

a greater extent than in April, the performance of this sector would likely be less favourable. On the available data, in March 2025 the total assets of pension funds domiciled in Spain grew by 2.8% relative to the same period of last year, and their one-year profitability declined to 3.5%.

Specialised lending institutions

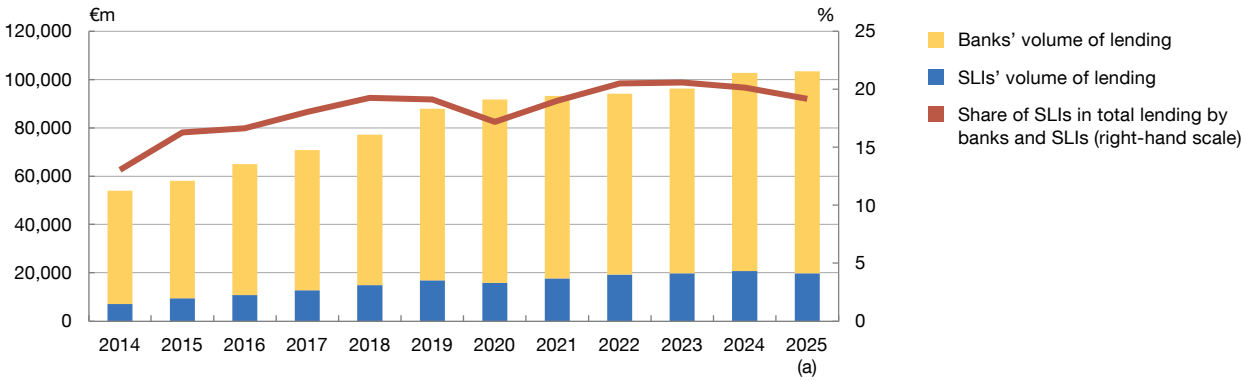
The market share of specialised lending institutions (SLIs) in the consumer credit segment decreased moderately in 2024, in contrast to the generally rising trend of the past decade. In 2024 the share of total consumer lending by SLIs and banks accounted for by SLIs stood at 20.1%, half a percentage point lower than in 2023 (Chart 3.26). This fall in SLIs' share took place in a setting of consumer credit growth in the overall system, which was stronger for banks (7.3% in 2024) than for SLIs (4.4%). The difference in growth between the two groups in 2024 was partly influenced by some banks' absorption of the consumer lending activity carried out until then by SLIs consolidated in them. This effect also explains the sharp fall in SLIs' share observed in 2020. In 2025 Q1 SLIs' share has continued to trend downward, standing at 19.2%.

As regards this segment's credit quality, SLIs' non-performing loan (NPL) ratio increased minimally in 2024. The ratio rose by 0.1 pp to 3.5%, still below that of the banking sector in this product segment (4.3%). The strong performance in the second half of the year contributed to the moderate increase in this ratio. Meanwhile, the share of SLIs' consumer credit classified as stage 2 decreased by 1 pp, to 6.2% (7.3% for banks as a whole). Meanwhile, credit quality worsened somewhat in this credit segment in 2025 Q1, with an increase in NPL and stage 2 ratios, which rose by 0.4 pp to 3.9% and 0.5 pp to 6.7%, respectively.

Chart 3.26

The share of lending by SLIs in consumer lending to households trended upwards in first half of the last decade, but has stabilised in recent years

3.26.a Outstanding balance of banks' and SLIs' consumer lending to households and share of SLIs in the sum of both. Business in Spain. Individual data.



SOURCE: Banco de España. Latest observation: March 2025 (all the dates refer to December except for the last date which is March 2025).

3.3 Systemic interconnections

Spanish banks' participation in the interbank market has increased coinciding with the monetary normalisation process, as the liquidity obtained from the Eurosystem declined.[58] Between December 2021 and December 2024 funding granted in the interbank market by the main Spanish institutions grew by 40.9%, accounting for 5.2% of banks' total assets at end-2024. For its part, funding obtained increased by 60.2% over this period, and its share in total assets stood at 5.8% at December 2024. As a result, the main Spanish banks as a whole shifted from a balanced position between debtor and creditor interbank balances in 2021 to a moderate debtor position at end-2024 (Chart 3.27).

These increases have led to greater interconnectedness, through the interbank market, with foreign banks in both the euro area and other jurisdictions. Spanish banks' interconnections with other euro area banks, especially French and German ones, have strengthened. At end-2024 financing extended to French and German banks accounted for 0.9% and 0.3%, respectively, of Spanish banks' total consolidated assets and the funding obtained from them accounted for 1.1% and 0.7%, respectively. Interconnections between Spanish institutions remained stable during this period. Outside the euro area, the funding granted in the interbank markets in countries with Spanish bank subsidiaries was noteworthy.

T**he rest of the euro area's financial sector plays a significant role as holder of securities issued to finance Spain's public and banking sectors.**[59] Specifically, financial institutions in the rest of the euro area own almost one-fourth (24.6%) of Spanish government debt holdings and somewhat more than one-third (33.8%) of the securities issued by Spanish banking institutions (Chart 3.28). In the case of securities issued by the Spanish NBF sector (e.g. investment fund shares or units), holdings by other financial institutions in the euro area are much less significant, accounting for only 4.3% of the volume issued.

Holdings of securities issued by the public and banking sectors in Spain show some degree of geographical concentration. Among the banks in other European countries with holdings of these securities, the banks domiciled in Germany, France and Italy account for the highest share of these holdings (19.4% for bank debt securities and 15.1% for government debt), followed by those domiciled in Luxembourg, Ireland and the Netherlands. The latter jurisdictions' role as financial hubs means that ultimate holders may be located in other geographical areas, suggesting a potentially greater geographical diversification than implied by the available data.[60] Holdings by financial institutions in other euro area countries are only somewhat relevant in the case of sovereign debt, where they account for 3.8%.

---

58 Data for the eight significant institutions reporting the geographical breakdown of liabilities by residence of the counterparty template.

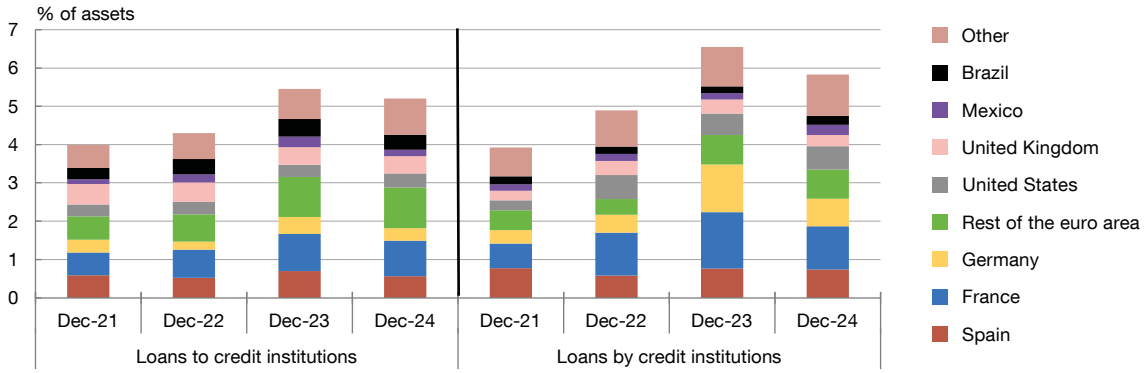
59 Securities issued include both short-term and long-term debt, listed shares and investment fund shares or units.

60 A financial hub is a jurisdiction with a high concentration of different institutions that provide financial services to both domestic banks and banks domiciled in other countries.

Chart 3.27

Spanish banks' participation in the interbank market has increased and, accordingly, so has their interconnectedness with other, essentially foreign, credit institutions

3.27.a Spanish banks' exposure to the interbank market by residence of the counterparty. Consolidated data. Significant institutions (a)



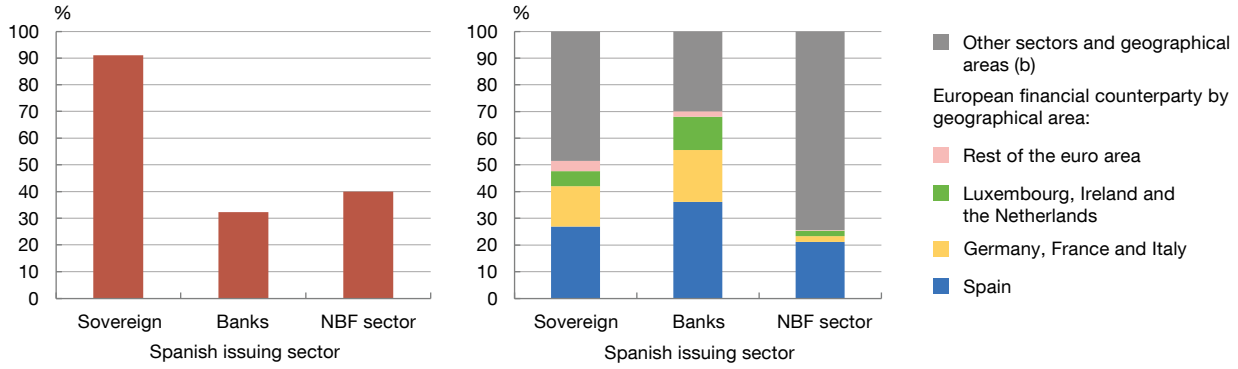
SOURCE: Banco de España. Latest observation: December 2024.

a Data for the eight significant institutions reporting the template "Geographical breakdown of liabilities by residence of the counterparty". At December 2024, the assets of banks reporting this template represented 97.1% of the assets of all significant institutions.

Chart 3.28

The financial sector in the rest of the euro area holds almost one-quarter of Spanish sovereign debt and one-third of the securities issued by Spanish banks

3.28.a Total issuance of securities by each Spanish sector as a percentage of GDP (left-hand panel) and share of these securities holdings in total issuance by geographical area of the holding financial institution (right-hand panel) (a)



SOURCES: ECB and Banco de España. Latest observation: December 2024.

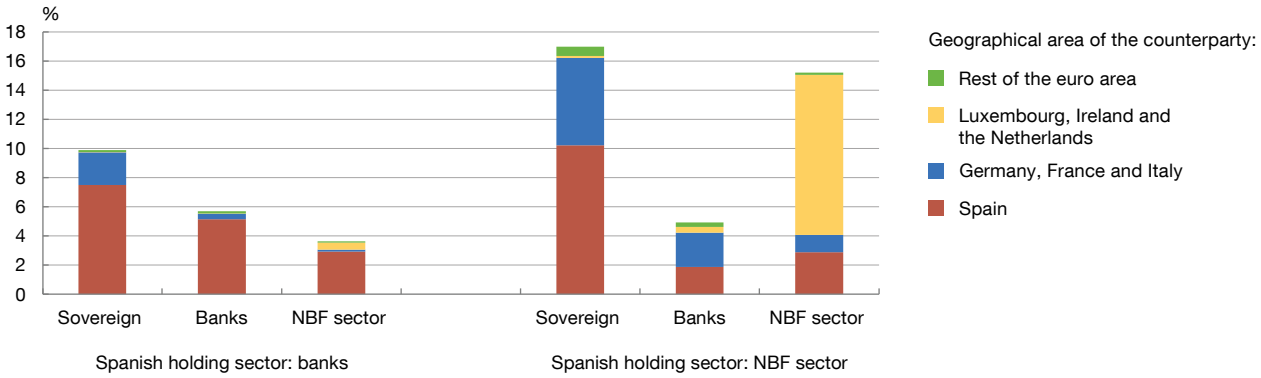
a Includes short-term and long-term debt, listed shares and investment fund shares or units. Securities issued and held by the issuer are not included. Non-consolidated data.
b Includes holders in other geographical areas outside the euro area, Eurosystem holdings and holdings of the euro area's non-financial sector.

The Spanish NBF sector's exposure to securities issued by the public and financial sectors in the rest of the euro area is also important. Overall, at end-2024 22.2% of the Spanish NBF sector's total assets were holdings of securities issued by these sectors in other euro area countries (Chart 3.29). In particular, holdings of securities issued by NBF sector entities domiciled in Luxembourg, Ireland and the Netherlands accounted for 11% of the

Chart 3.29

Securities issued by financial institutions and governments of other euro area countries account for a larger share of Spain's NBF sector portfolio than of its banking sector portfolio

3.29.a Holdings of securities as a percentage of Spanish financial sectors' total assets, by geographical area and sector of issuing institution (a)



SOURCES: ECB and Banco de España. Latest observation: December 2024.

a Includes short-term and long-term debt, listed shares and investment fund shares or units. Non-consolidated data.

Spanish NBF sector's total assets.[61] Also significant are the holdings of German, French and Italian government debt and securities issued by banks in these countries, with a share of 6.0% and 2.4%, respectively, of the sector's total assets. These exposures are lower in the case of the Spanish banking sector, for which holdings of securities issued in other euro area countries account for less than 3.7% of its total assets and are mainly concentrated in German, French and Italian government debt holdings (almost 2.3%).

Direct interconnections with other euro area countries in the interbank and securities markets generate both diversification gains and risk transmission channels for the Spanish financial sector. In an environment of significant risks in the financial markets and where the slowdown in activity in some European countries poses certain macroeconomic risks (Chapter 5), these interconnections should be monitored.

As regards the overall financial position of Spanish residents vis-à-vis the rest of the world, the decline in the negative net international investment position (IIP) continued in 2024 H2.[62] The negative net IIP fell by 2.2 pp to 44% of GDP at end-2024. This decline reflected the positive impact of the high current and capital account surplus, which reached record highs in 2024, and of nominal GDP growth, partly mitigated by the negative effect of changes in the value of financial instruments, mainly as a result of the increase in the price of Spanish debt.[63]

61 Once again, the role played by these jurisdictions as a financial hub means that these positions include exposures to financial assets with a set of potentially more diverse geographical counterparties.

62 The negative net IIP is defined as the negative difference between Spain's external financial assets and its external financial liabilities.

63 The current and capital account balance reflects the net lending (+) or net borrowing (–) of the economy vis-à-vis the rest of the world. A large surplus is associated with high net lending.

Spain's gross external debt as a percentage of GDP increased slightly in the second half of the year.[64] Thus, a 0.2 pp increase raised this ratio to 163.1% of GDP, against a backdrop of growth in non-residents' holdings of general government securities and a rise in funding received by the banking sector, amid the normalisation of the Eurosystem's balance sheet.

64 The gross external debt includes liabilities issued by the sectors resident in Spain held by the rest of the world, excluding equity instruments and financial derivatives.

Box. 3.1

THE NEW TAX ON FINANCIAL INSTITUTIONS

Law 7/2024[1] created a new tax on the net interest and fee and commission income of certain financial institutions. This new tax can be considered, to some extent, a continuation of the temporary levy established by Law 38/2022,[2] since Article 2.12 of that law already envisaged the possibility of making it permanent and, subsequently, Royal Decree-Law 8/2023[3] reiterated this issue, by recalling that the form of the temporary levy had to be revised to include it in the tax system in the 2024 fiscal year.

The temporary levy stipulated by Law 38/2022 was justified by the legislator on the basis of a backdrop of high inflation. The legislator argued that the ensuing costs had to be distributed through the so-called "national income pact", which refers to the mechanism for distributing the cost of inflation among economic agents. This is why the temporary levy was created, with the legal form of a non-tax public levy (i.e. strictly speaking, it was not a tax) which institutions had to pay in 2023 and 2024. The net interest and fee and commission income[4] from these institutions' business in Spain in the previous year were subject to this 4.8% levy.

In late 2022, the European Central Bank (ECB), at the request of the Spanish Parliament, adopted an advisory and non-binding opinion[5] on the draft law on temporary levies. Most notably, it recommended a thorough analysis of the potential negative consequences for the banking sector to ensure that the application of the temporary levy did not pose risks to financial stability, banking sector resilience and the provision of credit.

The preamble of Royal Decree-Law 9/2024,[6] alluded to the results of the temporary levy and its inclusion in the tax system warranting the introduction of a new non-extraordinary tax on the banking sector.[7] Thus, the new tax, laid down in Law 7/2024, is a direct tax, with the following basic characteristics:

- Taxpayers: banks, savings banks, credit cooperatives, specialised lending institutions and branches in Spain of foreign credit institutions.

- Tax base: the positive balance resulting from the sum of net interest income plus the difference between fee and commission income and expenses of the business in Spain. As with the temporary levy, it is not banks' profit for the year that is taxed, but rather an intermediate step in their income statement. This can potentially generate distortionary effects, since the tax is partially insensitive to falling profits and may discourage business models based on taking on higher credit risk and, accordingly, higher impairment provision costs (not deductible from the tax base).

- Net tax base: the tax base less €100 million. It cannot be negative.

- Gross tax payable: the result of applying the tax brackets shown in Table 1.[8]

- Net tax payable: the result of subtracting 25% of the net corporate income tax payable from the gross tax payable.

---

1 Ninth final provision of Law 7/2024 of 20 December 2024 establishing a top-up tax to ensure a global minimum level of taxation for multinational groups and large-scale domestic groups, a tax on the net interest and fee and commission income of certain financial institutions and a tax on liquids for electronic cigarettes and other tobacco-related products and amending other tax rules.

2 Article 2 of Law 38/2022 of 27 December 2022 establishing temporary levies on energy and on credit institutions and specialised lending institutions and creating the temporary solidarity wealth tax and amending certain tax rules.

3 Fifth additional provision of Royal Decree-Law 8/2023 of 27 December 2023 adopting measures to address the economic and social consequences of the conflicts in Ukraine and the Middle East and to mitigate the effects of the drought.

4 Namely, the difference between interest, fee and commission income and interest, fee and commission expenses.

5 Opinion of the European Central Bank of 2 November 2022 on the imposition of temporary levies on certain credit institutions (CON/2022/36).

6 Royal Decree-Law 9/2004 of 23 December 2024 adopting urgent measures on economic, tax, transportation and social security matters and extending certain measures to address social vulnerability. Although this Royal Decree-Law was repealed by the Spanish Parliament's decision of 22 January 2025, its preamble remains useful for understanding the rationale behind the new tax, which was not explained in Law 7/2024.

7 A charge is commonly defined as an obligation to pay a certain amount of money to the public administration to support public spending in general. A tax is a type of charge in which the tax authority does not directly provide anything in return (unlike, for example, a specific charge for a public service) and is generally payable based on the existence of economic capacity.

8 The total gross tax payable relating to a specific tax base is obtained from the corresponding row (the first one where it is lower than the sum of "Net tax base, up to" and "Remaining net tax base, up to"), adding the "Gross tax payable" of that row to the amount resulting from applying the "Tax rate" to the portion of the tax base exceeding "Net tax base, up to". For example, for a net tax base of €3,300 million, gross tax payable would be €123.75 million, i.e. €105.75 million + 18, where 18 equals 6% of 300.

Table 1
Tax brackets for the new bank tax

€m

Net tax base up to	Gross tax payable	Remaining net tax base up to	Tax rate (%)
0	0	750	1
750	7.50	750	3.5
1,500	33.75	1,500	4.8
3,000	105.75	2,000	6
5,000	225.75	Over 5,000	7

SOURCE: Law 7/2024.

- Extraordinary deduction (due to low profitability): a deduction is applied to the net tax payable when the taxpayer's profitability, calculated by dividing the accounting profit by total assets, falls below 0.7%.

- The amount resulting from the self-assessment: the net tax payable less the extraordinary deduction. It cannot be negative.

- Non-deductibility: as with the temporary levy, the new tax is non-deductible for corporate income tax purposes.

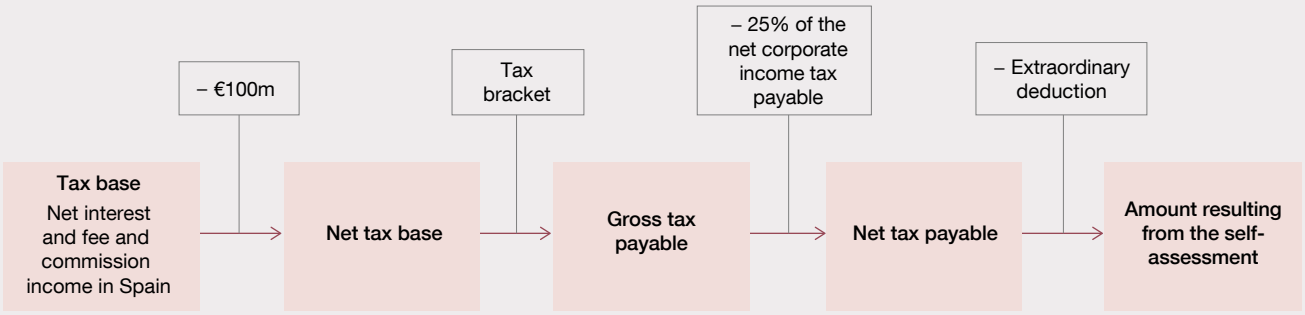
- Period in effect: the tax will be applicable during the first three consecutive tax periods starting on 1 January 2024.

Figure 1 shows, in simplified form, the steps required to calculate the new tax.

The law also provides for the distribution of these tax receipts among the ordinary-regime regions, based on their regional GDP.

At end-2024, the ECB adopted an opinion[9] on the draft tax law, which focused on the consequences of the tax from a financial stability, prudential supervision and monetary policy perspective. Specifically, the ECB stresses that its imposition may reduce the banking sector's resilience to shocks, and could have adverse economic effects by limiting banks' ability to grant credit and potentially contributing to less favourable terms for customers on loans and other services.

Figure 1
Calculation of the new tax on financial institutions



SOURCE: Banco de España.

9 Opinion of the European Central Bank of 17 December 2024 on a tax on the net interest and commission income of certain financial institutions (CON/2024/41).

Box 3.1
THE NEW TAX ON FINANCIAL INSTITUTIONS (cont'd)

The ECB recognises that the extraordinary deduction mechanism based on profitability mitigates the potential negative effects of the tax. However, this mitigation only occurs in the case of negative or low profitability, and only partially in the latter case. This means that the tax may lead to a decrease in banks' ability to build capital in these circumstances. Moreover, in periods of high profitability, the deduction would not operate and thus the tax would limit the capacity of financial institutions to build capital preventively against future shocks.

The ECB also considers that the tax, similarly to others of this kind established by other national authorities of the European Union, may lead to fragmentation in the European financial system and impair the level playing field across the banking union. Furthermore, the application of a progressive scale may give rise to competitive asymmetries based on bank size.

In the ECB's opinion, the foregoing considerations advise that the tax be continuously monitored from a financial stability perspective. The Banco de España shares the conclusions and recommendations of the ECB Opinion.

Box 3.2

DEVELOPMENT OF THE LIQUIDITY RISK ANALYSIS FRAMEWORK FOR MACROPRUDENTIAL PURPOSES

The crisis that affected several medium-sized US banks and Credit Suisse in March 2023 stemmed from structural and governance factors that led to significant liquidity outflows, compelling the banks to rapidly monetise assets to cover these outflows. This situation ultimately affected their solvency and caused turbulence in the global financial system.[1] The euro area banking sector and, in particular, the Spanish banking sector faced this turmoil with high capital and liquidity positions, significantly limiting its impact.[2]

Despite this favourable precedent, the lessons from the 2023 crisis highlight the need for a more thorough analysis of banks' liquidity risk and how it relates to various aspects of their financial position. Consequently, the Banco de España has supplemented the regular monitoring for financial stability purposes of the liquidity coverage ratio (LCR)[3] and the net stable funding ratio (NSFR)[4] with new macroprudential tools to: (i) analyse liquidity flows more granularly by maturity and currency and (ii) assess the impact of a potential liquidity crisis on banks' solvency.

Liquidity analysis by maturity and currency

Regulatory reporting information[5] provides a detailed overview of each financial institution's liquidity flows – breaking them down into liquidity inflows and outflows at different maturities (of both less and more than the 30 days covered by the LCR) and in different currencies – and their counter-balancing capacity (CBC).[6] Chart 1 shows Spanish significant institutions' overall asset and liability items that could generate liquidity inflows and outflows[7] at different maturities, as a percentage of total assets. These maturities range from one week, one week to one month, one month to three months, and so on, to more than five years. The chart also shows the CBC at the same maturities.

Given the maturity mismatch prevalent in the banking business, potential liquidity inflows are concentrated in maturities of five years or more, both in euro and in other currencies. Meanwhile, potential outflows are concentrated in items with very short-term maturities, generally of up to one week (including sight deposits), with this maturity accounting for 47.5% of total assets in the case of euro-denominated items and 29% for items denominated in other currencies.[7] The CBC remains at around 20% of total assets for maturities of up to one year in euro and at around 10% for those same maturities in non-euro currencies. The CBC decreases for longer maturities, in tandem with potential outflows. For maturities above five years, a CBC of around 10% (combining euro and non-euro-denominated funds) would still be available.

In the case of inflows (Chart 2), the largest flows correspond to loans and advances. However, at one week, which is a relevant maturity for short-term liquidity management, the main items subject to inflows are secured loans and capital market flows. The liquidity from maturing currency swaps is also noteworthy at short maturities.

Meanwhile, among items subject to outflows (Chart 3), retail deposits stand out at the one-week horizon. With the caveats noted in footnote 7 (which affect various categories including retail sight deposits, which are highly stable under normal circumstances), prudent liquidity management and stress testing requires considering adverse scenarios and ensuring that short-term assets

1 For a detailed analysis of the causes of this crisis, see, for example, José Alonso, Rebeca Anguren, Mª Cruz Manzano and Joaquín Mochón. (2023). "The 2023 banking crises: the causes and the role played by bank management, supervisors and regulators". *Financial Stability Review - Banco de España,* 45, Autumn.

2 It should also be noted that the worst liquidity crises in Spain in the last decade (for example, the resolution of Banco Popular in June 2017 and the political crisis in Catalonia in October 2017) have not been systemic but only affected specific institutions.

3 The LCR is a regulatory measure that assesses a credit institution's ability to cover its short-term liquidity needs, ensuring that it has sufficient high-quality liquid assets to meet net cash outflows over a stress period of 30 days. Prudential regulations require banks to have an LCR of 100% or more.

4 The NSFR considers institutions' available funds to finance their activity over a one-year time horizon. It is defined as the ratio of a bank's available stable funding to the stable funding it needs over one year. Prudential regulations require banks to have an NSFR of 100% or more.

5 Template C 66 - Maturity ladder. This template is available on the Banco de España website and the instructions for completing it can be found in Annex XXIII to Regulation (EU) 2021/451.

6 The CBC represents the stock of unencumbered assets or other funding sources which are available to the banks at the reporting date to cover potential liquidity gaps.

7 The maturity of items subject to inflows or outflows does not imply their full realisation. For example, sight deposits are included under the first maturity horizon (up to one week), but under normal circumstances only a small percentage will actually be withdrawn by customers.

are able to cope with behavioural changes and unexpected outflows. At longer maturities, potential liquidity outflows due to maturing currency swaps, outflows of liabilities resulting from securities issued, guaranteed loans and capital market flows become more relevant.

An illustrative liquidity stress test has been developed on the basis of this information for Spanish banks. These types of exercises can include different volume channels (for example, an acceleration of outflows) and price channels (for example, changes in interest or exchange rates, which affect the value of liquid assets), as summarised in Figure 1.

As an initial approach to explore the application of stress scenarios to this type of data, an exercise focused on the volume channel was carried out, considering an increase in the percentages of liquidity outflows. To this end, the exercise uses two scenarios: one using the LCR regulatory outflow coefficients (which already assume a somewhat stressed level of outflows) and an alternative scenario in which certain items are subject to additional outflows based on those observed in recent liquidity episodes in Spain.[8] The outflow coefficients assumed for each source of funding are applied homogeneously across all maturities and currencies.

Given the prevalence of short-term funding in the banking sector, the results presented focus on maturities from one week to three months. Despite the outflows applied in both adverse scenarios, the CBC at the end of the exercise is positive for all the maturities analysed (Chart 4). Therefore, Spain's significant institutions would have sufficient overall liquidity to cover net funding outflows in the stressed scenarios envisaged.

Chart 5 details the cascade of cash flows with a one-month maturity under the alternative stressed outflow scenario, as these are the scenario and maturity with the lowest residual CBC. Under these assumptions, the liquidity outflows obtained represent 25.3% of significant institutions' overall assets, with wholesale funding seeing the largest outflows (9.5% of assets).[9] Outflows linked to derivatives to manage the exchange rate are also notable (5.2%), exceeding those linked to retail products. Liquidity inflows (10.3% of assets) and the initial CBC after the haircut (27.4% of assets) would absorb the impact, leading to a final CBC of 12.3%.

Future exercises will be extended to consider the effects of additional risk factors (Figure 1) and explore asymmetric shocks by maturity and currency.

Interaction between liquidity and solvency

As already mentioned, the March 2023 crisis involving various US banks and Credit Suisse showed that a liquidity crisis can force institutions to rapidly monetise assets, and that this can affect their financial position and, therefore, their solvency.

The existence of unrealised losses[10] on investments in debt securities held at amortised cost is one of the most significant channels through which this impact can occur in scenarios of rising interest rates and heightened liquidity stress. Unrealised losses typically stem from interest rate rises, which result in asset impairment. Under a scenario of severe liquidity stress, the unrealised losses may be realised, if the bank chooses to sell the associated asset, or may limit access to funding, if these assets are used as collateral.

8 Namely, the resolution of Banco Popular in June 2017 (the "resolution crisis") and the political crisis in Catalonia in October 2017. The outflow percentages are calculated as the difference between the liabilities positions reported to calculate the LCR in the month of the crisis and those of the previous month. In the case of the resolution crisis, the last full month with a reported LCR is used, meaning that the exercise does not consider the total outflows up to the resolution date. For each source of funding, the outflow coefficient applied is the higher of the percentage used to calculate the LCR and the outflow percentage observed during the crisis episodes. Specifically, the outflow coefficient assumed in the LCR is not relaxed for those items for which a lower outflow rate was observed during the crises. The haircuts on the liquid assets comprising the CBC and the inflows are consistent with the LCR regulatory parameters under both scenarios.

9 This includes deposits, secured lending and capital market flows, liabilities resulting from securities issued and derivatives.

10 Unrealised losses are impairments in the market value of an asset that the bank does not record as losses because the asset is classified in the amortised cost portfolio. Assets in this portfolio are recorded at acquisition cost, adjusted over time for the interest accrued, coupons paid and principal repaid, as well as for potential changes in their credit quality, but not for changes in their market value. It should be noted that an asset classified at amortised cost could also accumulate unrealised gains in the event of an increase in its market value. Conversely, the book value of an asset classified at fair value will be updated to reflect changes in its market value.

Chart 1
Items subject to inflows or outflows, by currency (a) and term, and CBC - Significant institutions

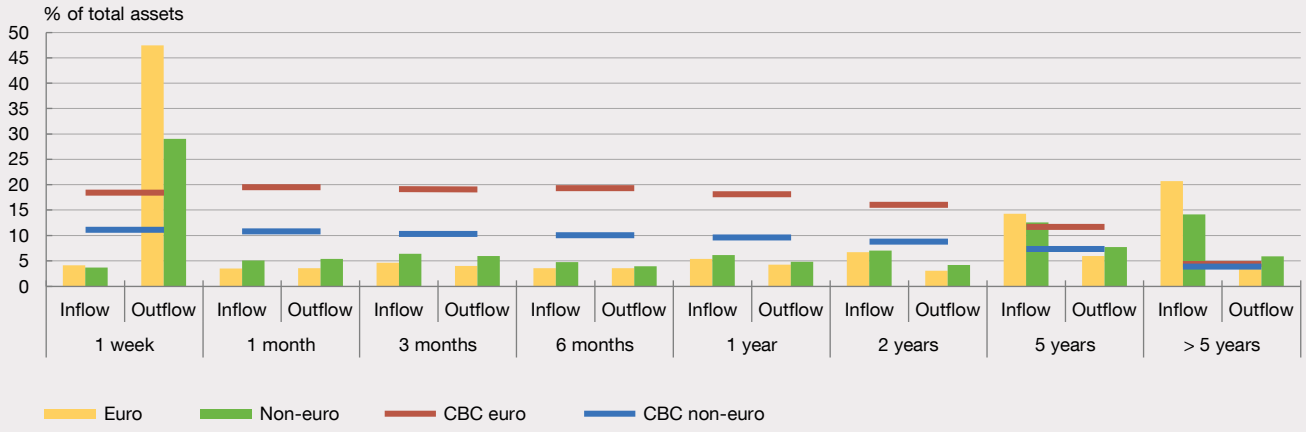


Chart 2
Items subject to inflows at various maturities (a)

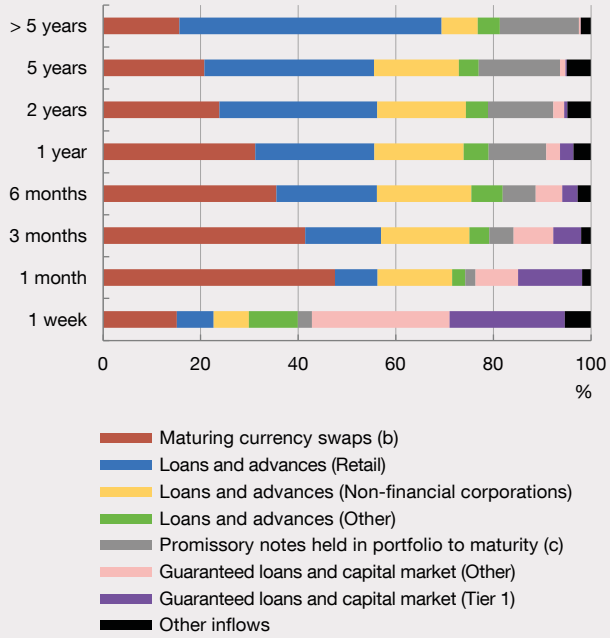
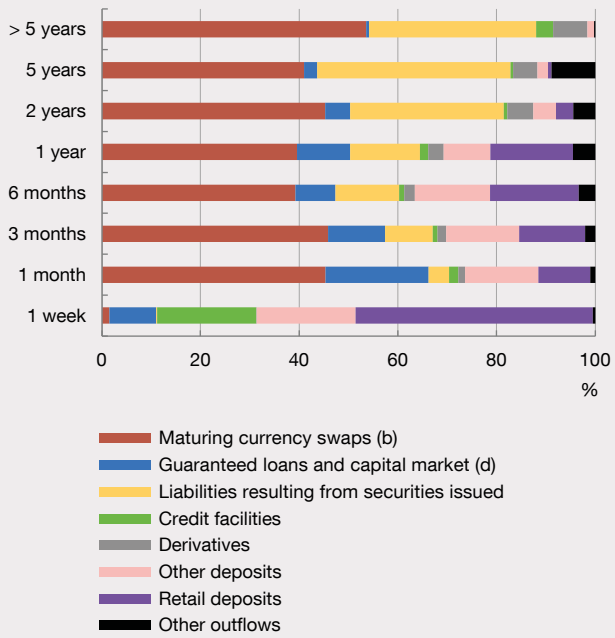


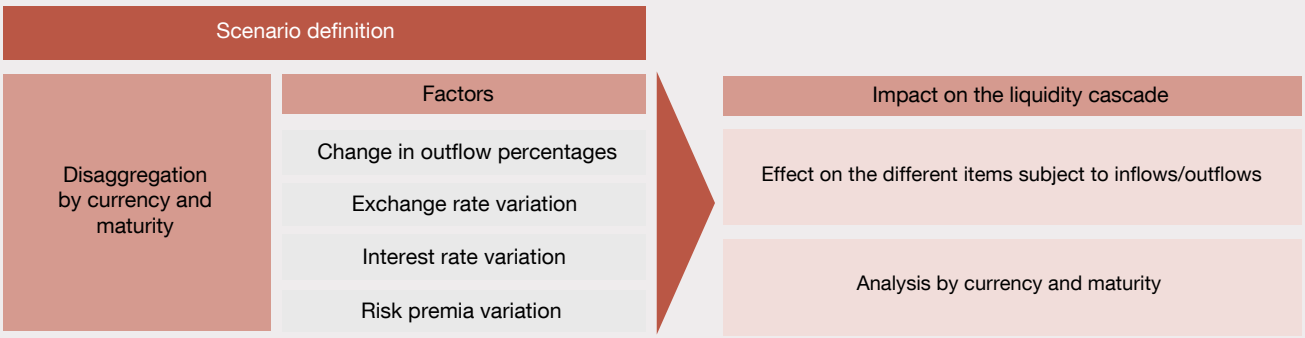
Chart 3
Items subject to outflows at various maturities (a)



SOURCE: Banco de España. Latest observation: December 2024.

a Template C66 includes the significant currencies, meaning that non-euro items are representative, but do not fully represent the balance sheet.
b Maturing currency swaps are a subgroup of derivatives, but are shown separately given their share of the total. These currency swaps allow banks to hedge against exchange rate fluctuations.
c This item includes cash inflows from the maturity of own investments in bonds. This same amount is also accounted for as a debt security outflow in the CBC.
d Includes, among other assets, shares, various types of bonds (guaranteed, corporate, asset-backed) and central bank and government sector marketable assets.

Figure 1
Potential elements of a liquidity stress framework



SOURCE: Banco de España.

Chart 4
Impact of the scenarios (a). Significant institutions.
All currencies. LCR and adverse scenarios. Horizons up to 3 months

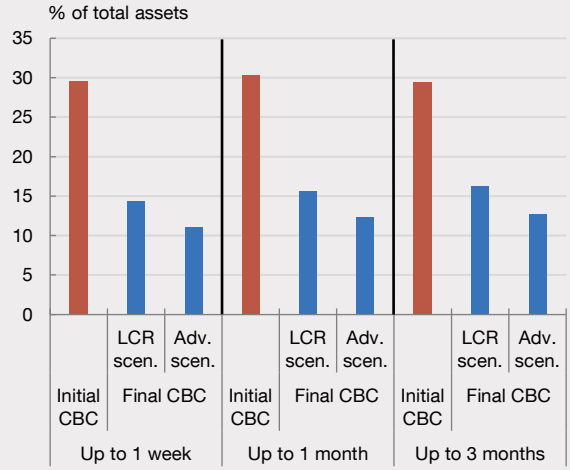
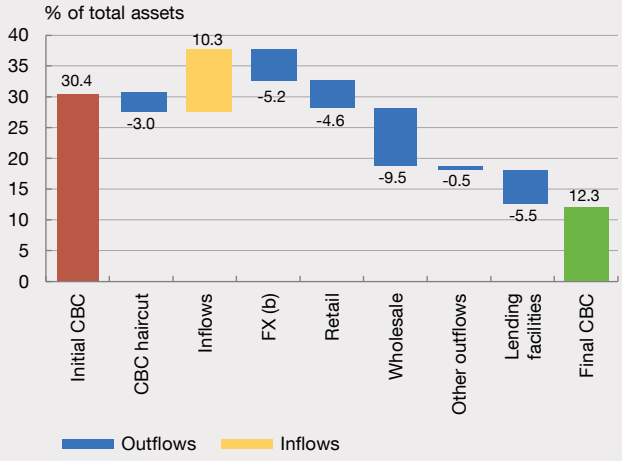


Chart 5
Impact of the scenarios (a). Significant institutions.
All currencies. Adverse scenario and 1-month horizon



SOURCE: Banco de España. Latest observation: December 2024.

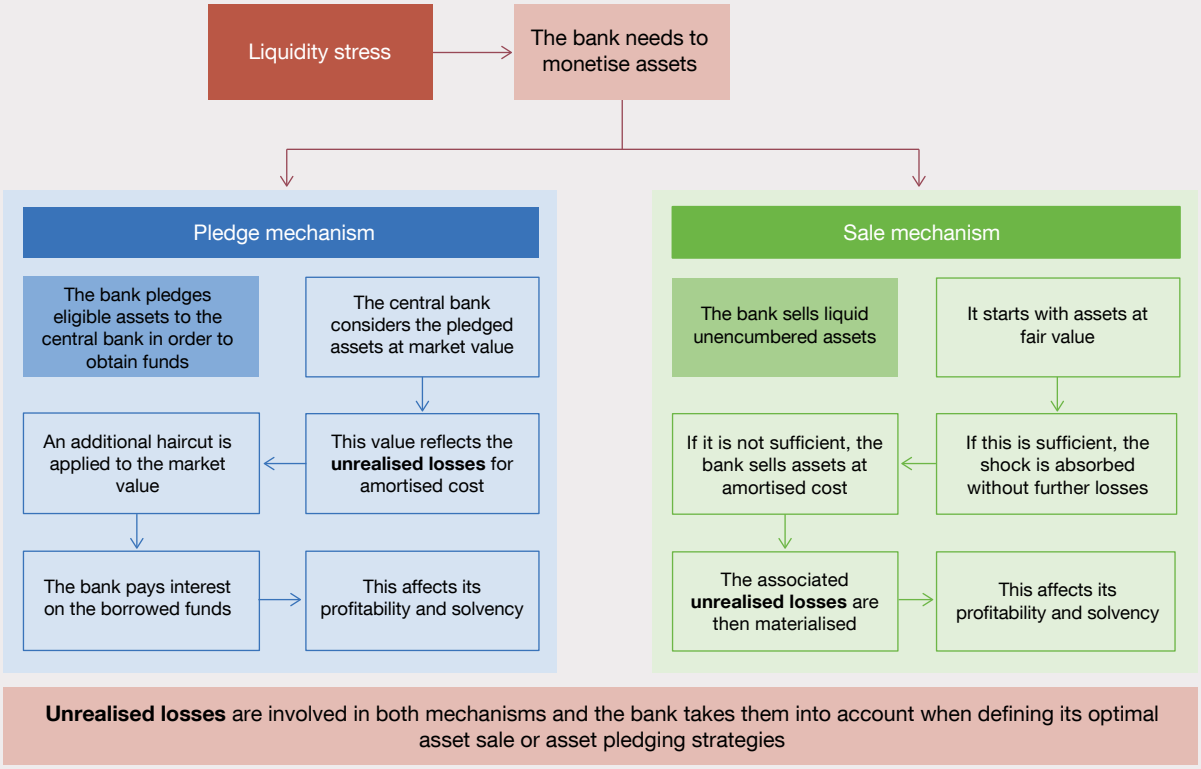
a The LCR scenario applies inflow and outflow coefficients in line with the regulatory assumptions for the calculation of the LCR ratio. Compared with the LCR scenario, the adverse scenario increases the outflow coefficients applied to some liabilities in line with the experience of recent idiosyncratic liquidity crises in the Spanish banking system. The final CBC for each scenario is the result of subtracting from the initial CBC the net outflows calculated according to each scenario's assumptions.
b Corresponding to outflows associated with currency swap contracts.

In this setting,[11] an analytical tool has been developed to assess the financial stability implications of this urgent asset monetisation under two liquidity-raising mechanisms: sale of assets on the secondary market and pledge of assets in loan transactions with the Eurosystem.[12] Figure 2 illustrates both mechanisms.

11 For more in-depth analysis of the link between liquidity and solvency through urgent asset monetisation, see A. Ferrer and A. Molina. (2025). "The interaction of liquidity risk and bank solvency via asset monetisation mechanisms". Documentos Ocasionales, 2509, Banco de España.

12 Although the option of pledging assets with a private counterparty through a repurchase agreement could also be considered, in practice, in a severe liquidity stress scenario, the repo market can be expected to become less effective as a competitive source of funding. The experience of the global financial crisis and, more recently, the more contained financial turmoil in March 2023 mentioned above, points in this direction. This mechanism is therefore not included in this analysis.

Figure 2
Mechanisms for obtaining liquidity under stress scenarios



SOURCE: Banco de España.

The first strategy allows banks to raise liquidity by selling some of the assets they hold on their balance sheets. Although it entails the materialisation of any unrealised losses on debt holdings classified at amortised cost, there are arguments in its favour. These include the need to wind down assets in the case of sudden outflows of funds that are unlikely to be recovered, avoidance of the stigma associated with the use of funding facilities outside the market, or the lack of operational readiness to be able to resort quickly to Eurosystem funding.

Pledging assets to the Eurosystem enables banks to raise liquidity using assets as collateral in refinancing operations.[13] To obtain liquidity by this means banks must deliver unencumbered assets (such as sovereign bonds), which are then valued at market value, reflecting any unrealised loss. Moreover, the central bank applies additional valuation haircuts, with the level of such haircuts (which indicates the cost of the funding) being determined according to the liquidity and residual maturity of the instrument, the solvency of the bank and the issuer of the instrument. This mechanism prevents the sale of assets and, therefore, the potential materialisation of unrealised losses, although it requires payment of interest on the funding obtained, which also has a negative financial impact on the bank.

The stylised simulation exercise presented below illustrates the impact on solvency of urgent asset monetisation through these channels. The reference date for the exercise is December 2023.[14]

13 These operations may include the marginal lending facility, the main refinancing operations (MROs) and longer-term operations (LTROs).

14 This date was chosen to best reflect the role of unrealised losses in urgent asset monetisation. At December 2023, the balance sheets of Spain's significant institutions still contained a small but not negligible volume of unrealised losses, as a result of the interest rate hikes that began in 2022. At December 2024 these unrealised losses were significantly smaller, owing to debt portfolio turnover and the shift in the monetary policy stance.

The exercise compares the two liquidity-raising mechanisms described above. In each case, an order of preference is defined, determining which assets would be sold or pledged first.[15] This criterion aims to reflect the optimality decisions that banks would tend to follow under a liquidity stress scenario. For asset sales, the order of preference seeks to minimise the total loss realised (for instance, by first selling assets held at market value, followed by those held at amortised cost that entail lower unrealised losses). In the case of assets pledged, the order of preference seeks to optimise the funding obtained (that is, to minimise the volume of assets pledged).

Under the liquidity stress scenario considered, a volume of net outflows of funds is considered separately for each bank, based on their position at December 2023, taking into account the make-up of their sources of funding and different outflow rates for each. These rates are calibrated based on the experience of the above-mentioned liquidity stress episodes that affected certain Spanish banks in the past.[16]

On aggregate for all banks, this methodology leads to net outflows of €506 billion. To meet these outflows, banks would first use the cash and excess reserves held at the central bank, which would cover up to €362 billion. To meet the remaining liquidity outflows, they would rely on the asset monetisation mechanisms described.

Before presenting the results of the exercise, and to set Spanish banks' sovereign debt holdings on the reference date in context, Chart 6 shows the important role they play in covering possible liquidity outflows, measured by their contribution to the LCR. Although the rate of coverage has changed somewhat in recent years, as these assets have been used as collateral in Eurosystem refinancing operations, unencumbered sovereign debt holdings cover up to 89% of these outflows.

Chart 7 shows that unrealised losses in Spanish banks' amortised cost portfolios at December 2024 were low, amounting to barely 2.6% of the carrying amount. By contrast, during the rate hike cycle, these unrealised losses were higher, accounting for 7.2% and 5.3% of the portfolio carying amount on average at December 2022 and 2023, respectively. Considerable heterogeneity across banks is also observed.

The main results of the simulation exercise are displayed in Chart 8. To study the potential impact of unrealised losses on the deterioration of solvency, three scenarios in addition to the above-mentioned liquidity stress scenario are considered. These add further interest rate rises in the form of parallel rate hikes at all terms of 2 pp (percentage points), 3 pp and 4 pp,[17] which would reduce the value of government debt holdings classified at amortised cost (thereby driving up the unrealised losses) and of those classified at fair value.

Under the baseline scenario, the cost of funding obtained from the Eurosystem to meet liquidity needs is estimated at more than €1.5 billion per quarter, equivalent to 10 bp (basis points) of banks' CET1 solvency ratios. In the (unlikely) event that this scenario were to last for one year, the cost of funding would reach €6 billion, with an impact equivalent to 42 bp of the average CET1 ratio for the banking sector. In the case of sale of debt instruments, banks would obtain gains amounting to €100 million. This is attributable to the existence of a significant volume of debt classified at amortised cost, whose market value at December 2023 exceeded its carrying amount, and which would be sold first, generating this gain.

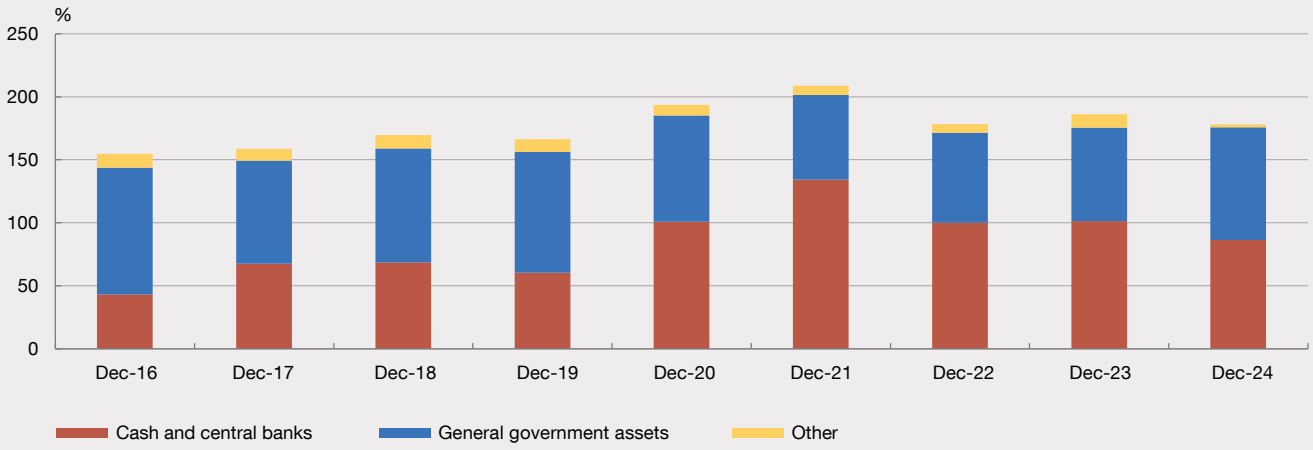
Under scenarios of a further increase in interest rates, there would first be a fall in the market value of bonds recorded at fair value on banks' balance sheets. This loss in bond value would give rise to an initial impact on banks' solvency (the brown bars in Chart 8) amounting to

15 For these purposes, only sovereign debt held by Spanish banks is considered, as it constitutes the bulk of banks' investment in debt instruments.

16 Considering a more severe scenario of outflows of funds than that defined in the LCR is a common component of this exercise and of that presented in the previous section, although it plays a slightly different role. In the case of the maturity analysis exercise, two outflow scenarios are considered: the scenario defined for the LCR ratio and the above-mentioned scenario with stressed outflows. The urgent asset monetisation exercise considers different scenarios for the interest rate curve used to determine the present value of government debt, all of which take into account the outflows of funds stress scenario. Moreover, the exercises presented are anchored to different time periods (December 2024 the first, December 2023 the second), so the total outflow volume differs as a result of the different composition of the balance sheet in those years.

17 At December 2023 monetary policy rates stood at their highest level of the monetary policy tightening period, at around 4% to 4.5%. However, owing to the turnover and growth of sovereign debt portfolios in the previous years, the percentage of unrealised losses built up at that date was not at its highest for the recent period. For this reason, the exercise considers the effect of additional interest rate rises, to analyse the impact of more severe unrealised loss scenarios.

Chart 6
Composition of the LCR by liquid asset class. Consolidated data



SOURCE: Banco de España. Latest observation: December 2024.

Chart 7
Distribution by bank of the percentage of unrealised losses in sovereign debt portfolios held at amortised cost. Consolidated data (a) (b)

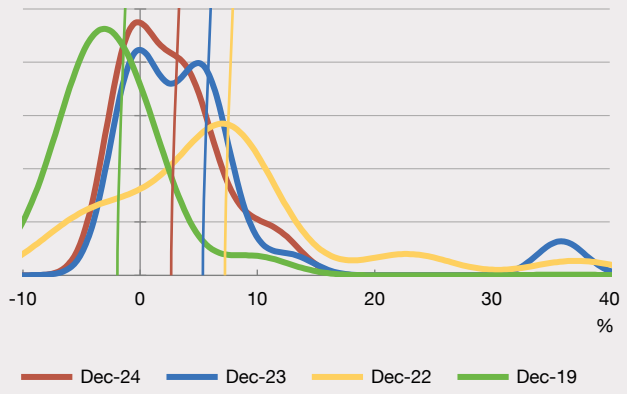
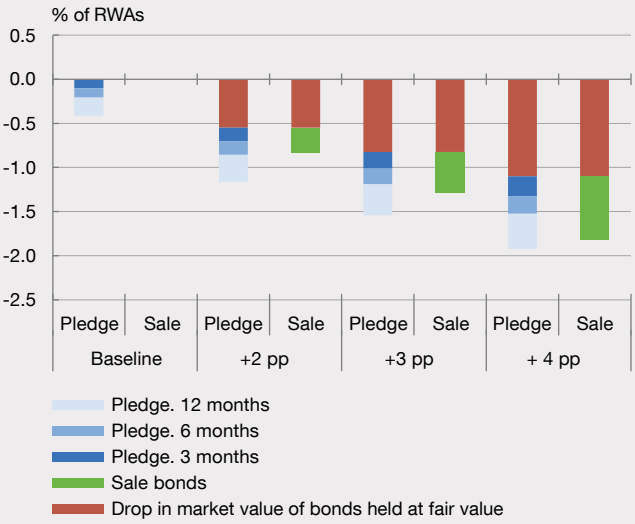


Chart 8
Solvency impact of the pledge and sale mechanisms under liquidity stress and interest rate hike scenarios. Significant institutions. Consolidated data (c)



SOURCE: Banco de España. Latest observation: December 2024 (Chart 7) and December 2023 (Chart 8).

a Negative unrealised losses are accumulated gains on the overall sovereign debt portfolio held at amortised cost.
b The chart shows the density functions of the percentage of accumulated unrealised losses in Spanish deposit institutions' sovereign debt portfolios classified at amortised cost, weighted by each one's total volume of such sovereign debt holdings. These density functions are proxied by a kernel estimator, which enables a non-parametric estimation of the density functions and provides a continuous and smoothed graphic representation of such functions. The vertical lines denote the weighted average percentage of the Spanish banking system overall on each of the dates considered.
c The chart shows the impact on solvency of both mechanisms under the baseline scenario (based on the balance sheet position at December 2023) and under scenarios of additional 2 pp, 3 pp and 4 pp interest rate hikes.

€4 billion and to almost 30 bp in terms of risk-weighted assets (RWAs) for each percentage point increase in interest rates.[18] This impact is not due to the interaction of liquidity and solvency risks.

In addition to these losses, the liquidity stress scenario considered would cause the CET1 solvency ratio to decline, potentially by up to an additional 72 bp in terms of RWAs in the case of asset sales (the green bar in the +4 pp class on the horizontal axis) under the most severe interest rate rise scenario. Under lower interest rate rise scenarios (for instance, 2 pp) the losses are considerably more moderate, up to 28 bp (the green bar in the +2 pp class on the horizontal axis).

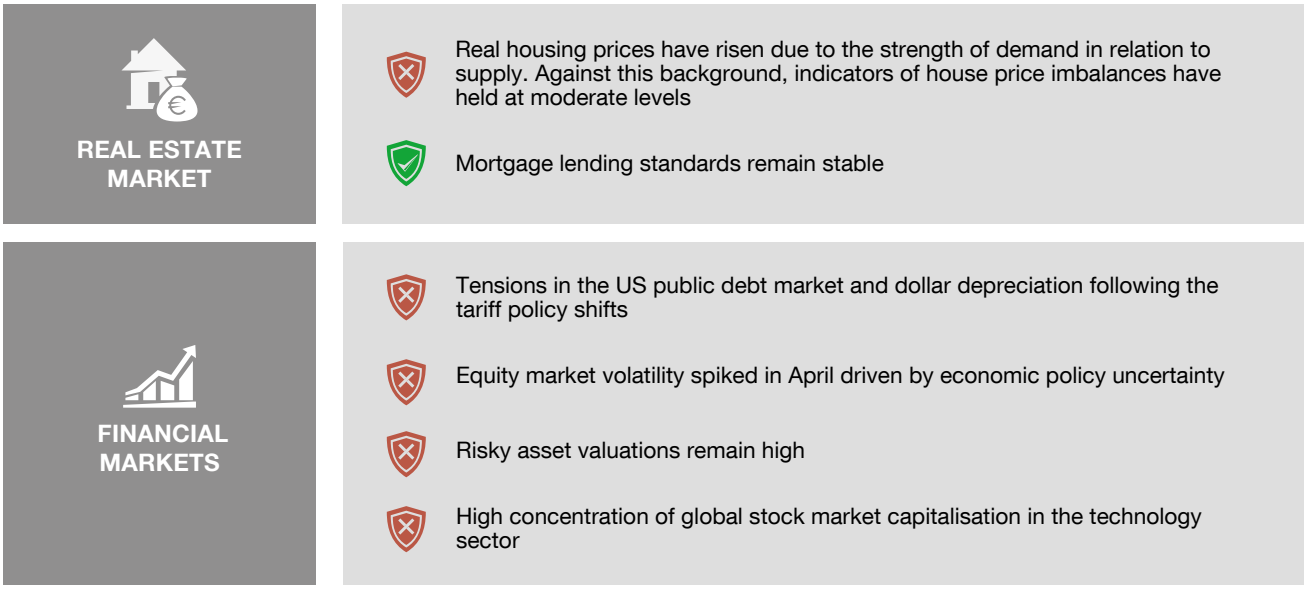
To conclude, when unrealised losses are low, as was the case in December 2023, the asset sale option is the least burdensome as gains are obtained on part of the bond portfolio held at amortised cost. In periods of monetary tightening, when banks build up higher unrealised losses on their balance sheets, obtaining liquidity by pledging assets at the central bank could be a less damaging option, especially considering that liquidity crises are generally short-lived. In any event, given the severity of the assumptions used in the simulation (for instance, high interest rate rises or no account taken of the beneficial effect of interest rate risk hedges), the cost of the liquidity stress scenarios in terms of solvency for the main Spanish banks is remarkably low.

18 Interest rate risk hedging can help offset these losses, at least in part. However, in order to focus the analysis on the mechanics of the monetisation channels available in a liquidity crisis, the additional impact channel through hedging instruments is not considered here.

4

MARKETS AND ASSET PRICES

Figure 4.1
Markets and asset prices (a)



SOURCE: Banco de España.

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

4.1 The real estate market

4.1.1 Prices and activity

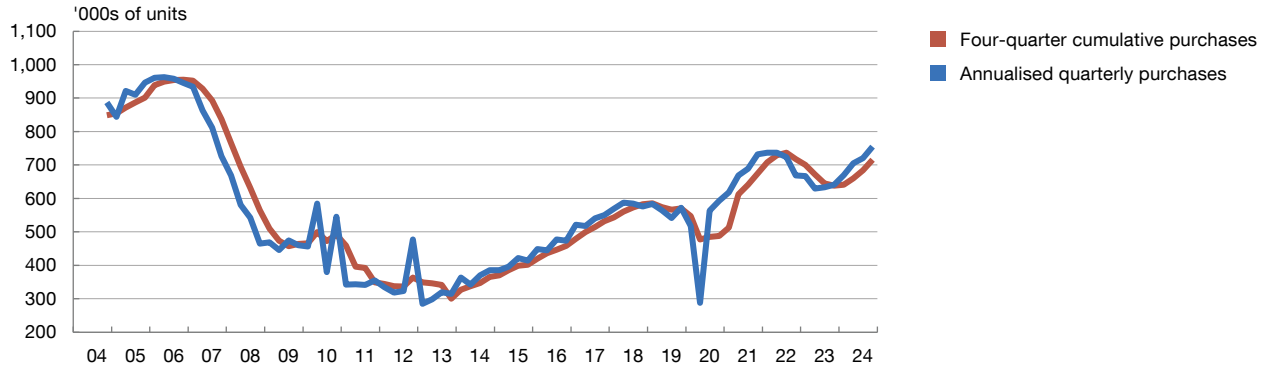
Activity in the housing market remained very strong in 2024 H2. In seasonally adjusted terms, 367,000 house purchases were signed before a notary, up 2.3% on 2024 H1 and 16.6% on 2023 H2 (Chart 4.1.a). House purchases by foreign nationals remained high (18.0% in 2024, compared with 16.9% in 2019), although their share in total purchases declined in Q4 (to 16.7%).

House prices continue to be pushed higher amid robust demand and relatively more rigid supply. By segment, the sharpest price growth again came in new housing, up 11% year-on-year in 2024 H2, the sharpest rise since 2007. Second-hand house prices grew by 9.5% in the same period. Price developments varied across regions, albeit with relatively strong momentum in all of them. The pressure on house prices in 2024 again reflected strong demand, driven in particular by net household formation (180,000) and lower borrowing costs,[1]

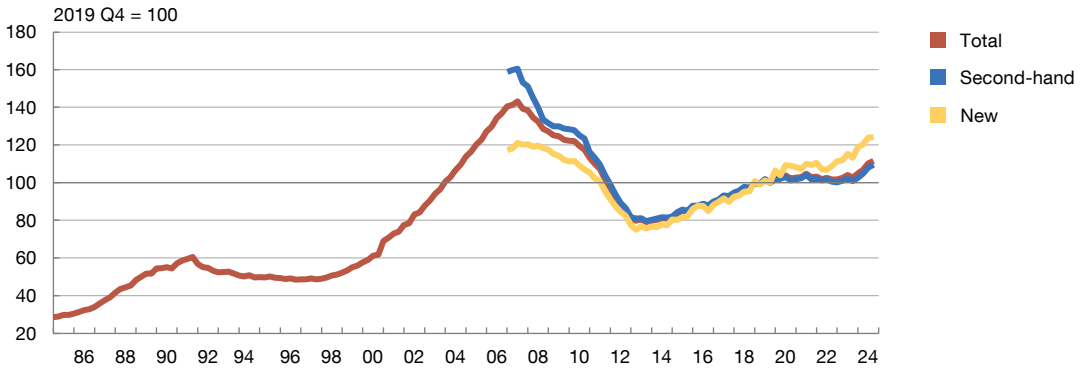
1 This demand is compounded by demand from non-residents, alternative uses of housing (e.g. holiday or seasonal rentals) and, more broadly, unmet demand from resident young people who have delayed leaving the family home.

Chart 4.1
Strong demand and relatively more rigid supply continued to exert upward pressure on house prices

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 Vivienda y Agenda Urbana (MIVAU). Latest observation: December 2024.

a Purchases signed before a notary.

while supply was relatively more rigid.[2] At end-2024, house prices in real terms stood 11.5% above pre-COVID-19 levels and close to 2004 figures, albeit 22% down on the previous peak reached during the global financial crisis (2007 Q3) (Chart 4.1.b).[3]

On the estimates available, at end-2024 the average house price in Spain was somewhat above the long-term equilibrium level. Specifically, according to various models, this imbalance stood between 1.1% and 8.5%, compared with an estimated range of 0.8% to 4.8% six months earlier (Chart 4.2).

Commercial property prices increased in 2024 Q4, while transactions in the segment declined slightly. The overall price index rose by 3.3% year-on-year in 2024 Q4, contrasting with the negative year-on-year change recorded in 2023 Q4 (-0.4%). This was driven by rising prices for industrial and commercial premises and the prime segment, while office prices

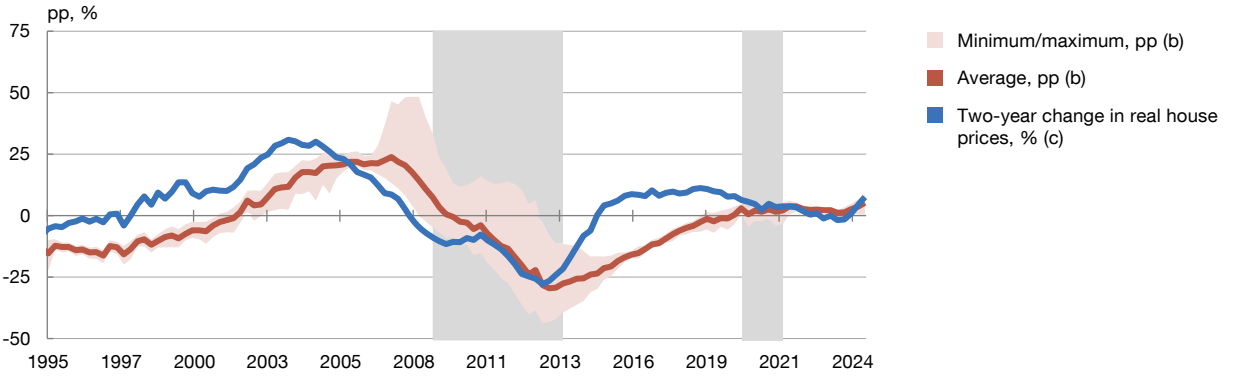
2 The supply of new housing, proxied by housing completions, grew by around 100,000 units in 2024. For further details, see Box 4 of the Banco de España Annual Report 2024.

3 In real terms, new house prices exceeded their previous high by 2.6%.

Chart 4.2

Indicators of house price imbalances rose in 2024, but remain at moderate levels

4.2.a Indicators of house price imbalances (a)



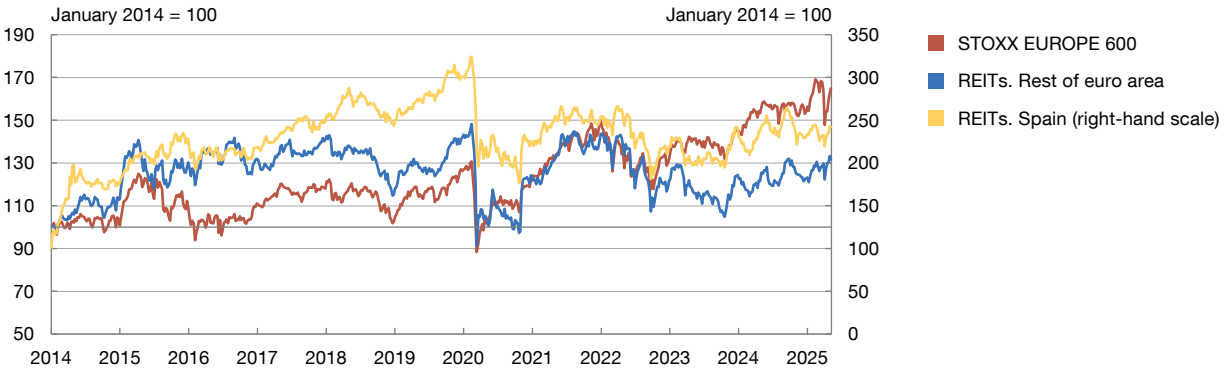
SOURCES: Banco de España and INE. Latest observation: December 2024.

a 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.
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 Two-year cumulative house price growth also holds some predictive power for price imbalances and is used as an additional simple indicator.

Chart 4.3

Listed REIT share prices fell moderately over the course of 2024, but have recovered in 2025 so far, albeit with some volatility

4.3.a REIT share prices (a)



SOURCES: LSEG Datastream and Banco de España. Latest observation: 12 May 2025.

a REIT indices comprising a selection of listed REITs that trade with a certain frequency and have been listed since 2014. Most REITs in the "REITs. Rest of euro area" group are based in France. The Spanish REITs included under "REITs. Spain" represent around 10% of the stock market capitalisation of euro area listed REITs.

remained largely unchanged. The year-on-year change in transactions was -0.5% in 2024 Q4, down 6 pp on 2023 Q4. This owed to the slowdown in the commercial premises and office segments, and a decline in industrial premises transactions.

Share prices of listed real estate investment trusts (REITs) fell moderately over the course of 2024, before rising so far this year, albeit with volatility. In 2024 European REIT share

prices declined year-on-year by between 0.9% (other European REITs) and 4.8% (Spanish REITs) (Chart 4.3). REIT share prices have fluctuated so far in 2025 both in Spain and other European countries. However, the upside movements have dominated and in early May prices stood above end-2024 levels by between 4.2% (Spanish REITS) and 6.8% (other European REITs).

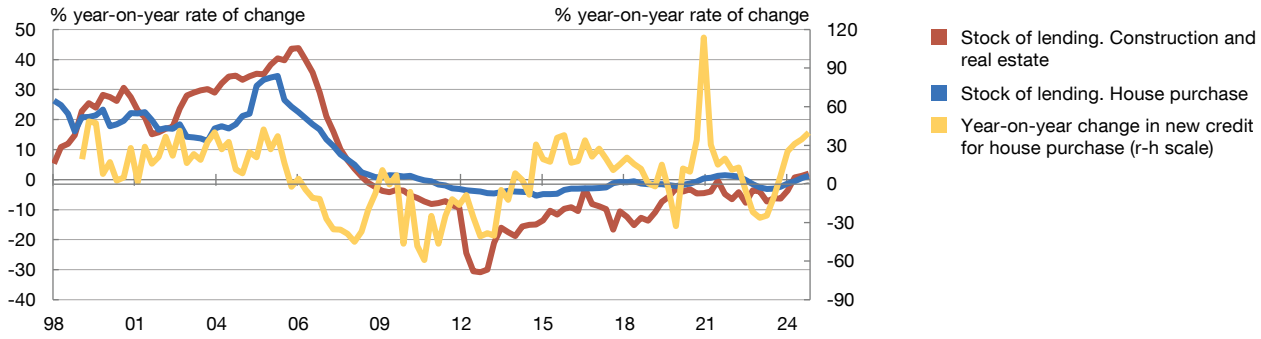
4.1.2 Financing

The flow of new lending for house purchase continued to rise in 2024. In 2024 Q4 the year-on-year growth rate was 34.6% (Chart 4.4.a). In 2025 Q1 that year-on-year growth rate accelerated to 39.9%. Despite this increase being sizeable, the share of new lending in GDP and total credit remains well below the peak levels seen in 2006, before the global financial crisis, and towards the end of the 1990s (Chart 4.4.b).

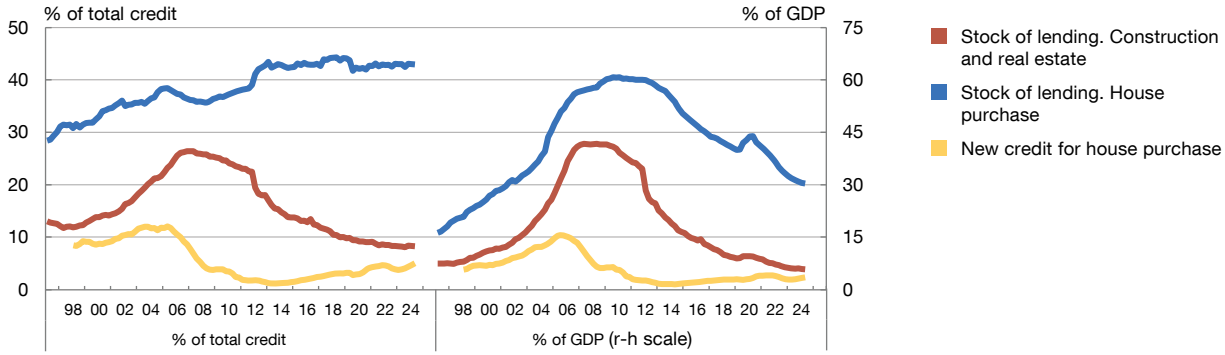
The stock of loans for house purchase increased moderately in 2024, contrasting with the near continuous declines since the end of the global financial crisis. Specifically, it grew by

Chart 4.4
Growth in lending to the real estate sector quickened in 2024, but the stock of loans expanded more moderately and lending as a share of GDP remained subdued

4.4.a Year-on-year change in lending to the real estate sector (a)



4.4.b Lending to the real estate sector as a share of GDP and of total credit to the resident private sector



SOURCES: Association of Registrars and Banco de España. Latest observation: March 2025.

a The rise in the year-on-year change in new loans for house purchase in June 2021 is attributable to the post-pandemic credit recovery.

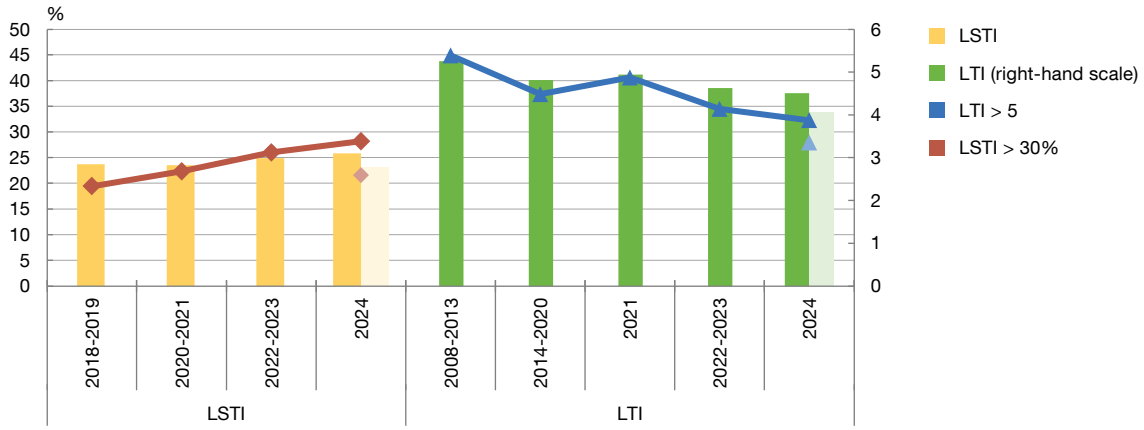
0.5% year-on-year in 2024 Q4, following two years of decreases coinciding with the monetary policy tightening cycle. Since 2014 higher year-on-year growth has only been recorded in the period from mid-2021 to mid-2022. In GDP terms, the stock of housing credit has been in steady decline for approximately a decade, although its share in total credit increased in 2024 due to a larger relative drop in the stock of other lending (Chart 4.4.b). The increasing trend accelerated in 2025 Q1, with year-on-year growth of 1.3%.

Bank lending to the construction and real estate sector also grew moderately. The stock of such lending increased by 1% year-on-year on average in 2024 H2, the first positive rate in 15 years. However, its level in terms of GDP and credit to the private sector is currently lower

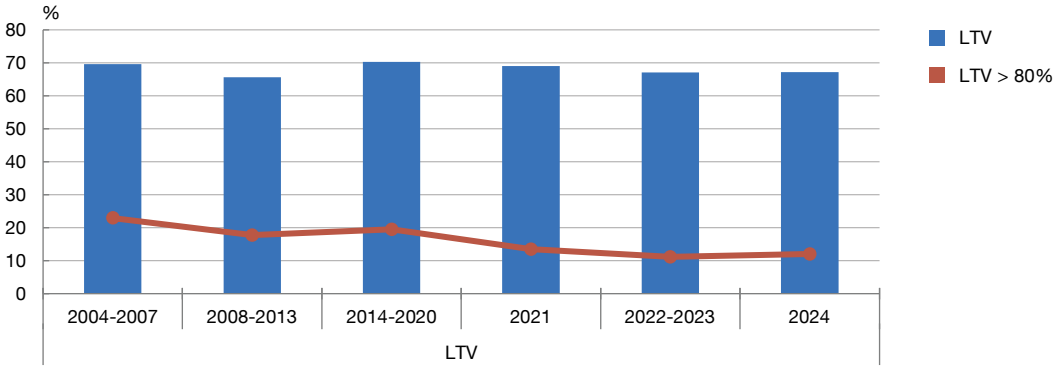
Chart 4.5

Credit standards for new mortgage loans to households for house purchase held relatively stable in 2024

4.5.a Credit standards (income-related) for new mortgage loans to households (a) (b) (c)



4.5.b Credit standards (collateral value-related) for new mortgage loans to households (d)



SOURCES: Association of Registrars, INE and Banco de España. Latest observation: December 2024.

a The LTI ratio is estimated for each mortgage as the ratio of the 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 (maturity, outstanding principal, interest rate type and interest rate spread), to the household's net annual income. For more details see A2.4.1.1 in Annex 2.

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 stock of mortgage loans for which the information to calculate the ratio is available.

c The darker bars and markers denote the LTI and LSTI ratios calculated using net income information by postcode. The lighter bars and markers denote the LTI and LSTI ratios calculated using net income information at transaction level (only available from 2024). For more details see A2.4.1.1 in Annex 2.

d The LTV ratio is the amount of the mortgage principal relative to the collateral value when the property is purchased, based on Association of Registrars information. The average LTV values are weighted by the principal of each mortgage.

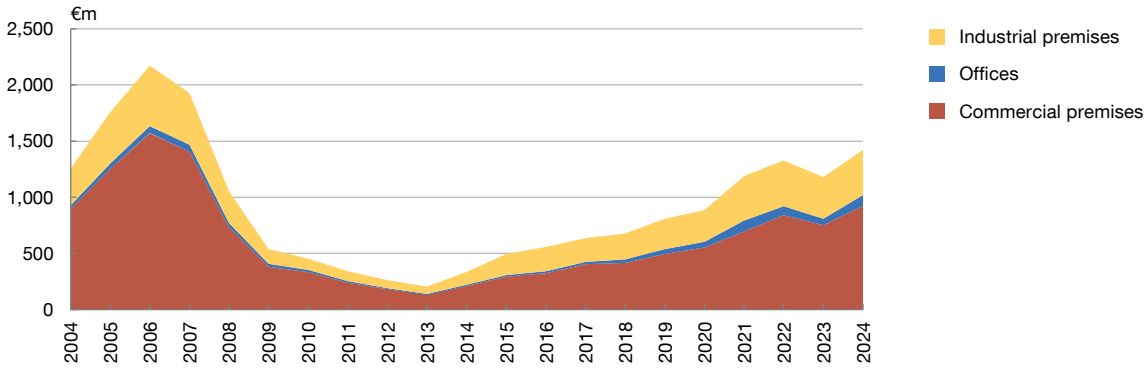
than at the turn of the century, prior to the boom cycle that preceded the global financial crisis (Chart 4.4.b). The stock of loans to the construction and real estate sector grew 2% year-on-year in 2025 Q1, accelerating its expansion.

The loan-to-income (LTI) and loan service-to-income (LSTI) ratios for residential mortgage lending to households held relatively stable in 2024.[4] This despite the expansionary price and volume dynamics in the housing market. Generally speaking, on the historical information available, these ratios stood at contained levels in 2024 (Chart 4.5.a).

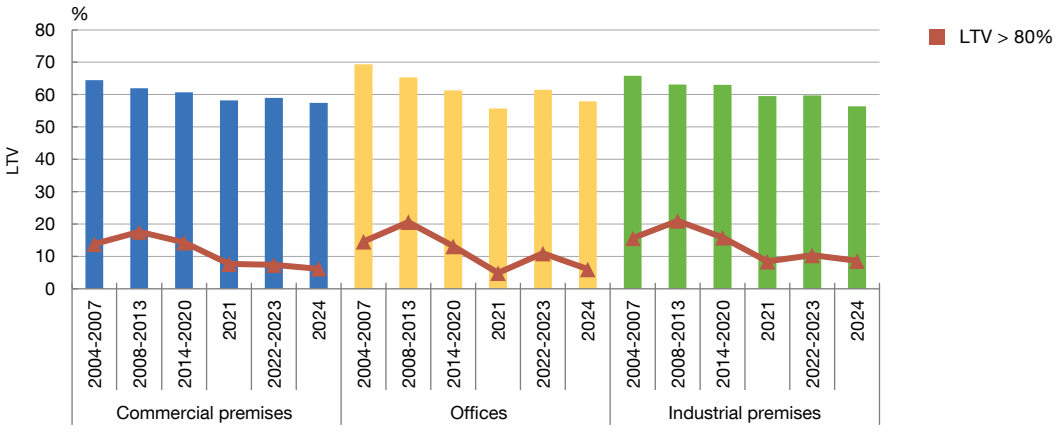
Chart 4.6

The volume of commercial real estate mortgage loans grew markedly in 2024, while credit standards in this segment held stable

4.6.a Volume of new mortgage lending to the commercial real estate sector (a)



4.6.b Credit standards for new mortgage lending to the commercial real estate sector (b)



SOURCES: Colegio de Registradores and Banco de España. Latest observation: December 2024.

a Values adjusted in real terms using the GDP deflator.
b The LTV ratio is the amount of the mortgage principal relative to the appraisal value of the property, based on Association of Registrars information. The average LTV values are weighted by the principal of each mortgage.

4 Mortgage loans for house purchase make up the bulk of lending to households (around 59% of new loans to households in 2024). However, it is important to monitor mortgage loans associated with commercial real estate to identify any build-up of risks (see Recommendation ESRB/2016/14 on closing real estate data gaps). These considerations justify the differentiated analysis of lending standards and conditions in these segments.

In 2024 the average amount of new residential mortgage loans to households decreased slightly relative to the purchase price of the financed properties and held stable relative to the appraisal value. The average loan-to-price (LTP) ratio for these new loans remained fairly stable over 2024 at around 76.6%, slightly below the average for the period 2022-2023. Moreover, the relative share of new mortgage loans with an LTP ratio higher than 80% stood at 41.3% in 2024, marginally higher than in the period 2022-2023 and below the levels reached in 2020-2021 (Chart A2.4.1.2. in Annex 2). The amount of new mortgage loans to households relative to the appraised value of the mortgaged residence (loan-to-value, or LTV, ratio) held relatively stable, at around 67.2% on average in 2024. The relative share of new mortgage loans with LTV ratios of over 80% was 12.0% in 2024, barely higher than in the period 2022-23 and below the levels reached in 2021 (Chart 4.5.b).

Loan maturities for new mortgage lending to households increased slightly in 2024. The average maturity of new mortgage loans to households increased by more than three months in 2024 to 26 years.

In 2024 the volume of new commercial real estate mortgage loans grew, while their lending standards remained stable. New lending to this sector grew by 20.4% year-on-year in 2024 Q4 and a sustained recovery since the low of 2013 has been observed, but levels remain far from their historical highs (Chart 4.6.a). Meanwhile, lending standards for these loans remained stable in 2024 after having improved over the course of the previous decade (Chart 4.6.b and Chart A2.4.1.3 in Annex 2).

4.2 Financial markets[5]

Monetary policy and government debt

Monetary policies in the main advanced economies have continued to ease, albeit at differing rates. In the United States, the Federal Reserve has left the policy rate unchanged in 2025 to date, after having cut it by 100 bp in the last four months of 2024, to between 4.25% and 4.50%. However, the European Central Bank (ECB) continued to reduce its key interest rates in 2025. The deposit facility rate was lowered to 2.25% in April, meaning a cumulative decline of 175 bp since June 2024.[6] Moreover, in contrast to the United States, in the euro area the escalation of the tariff war in early April led to heightened expectations of further policy rate cuts. Subsequent trade negotiations resulted in an upward revision of the expected path of policy interest rates in both areas (Chart 4.7). The ECB also continued to reduce excess

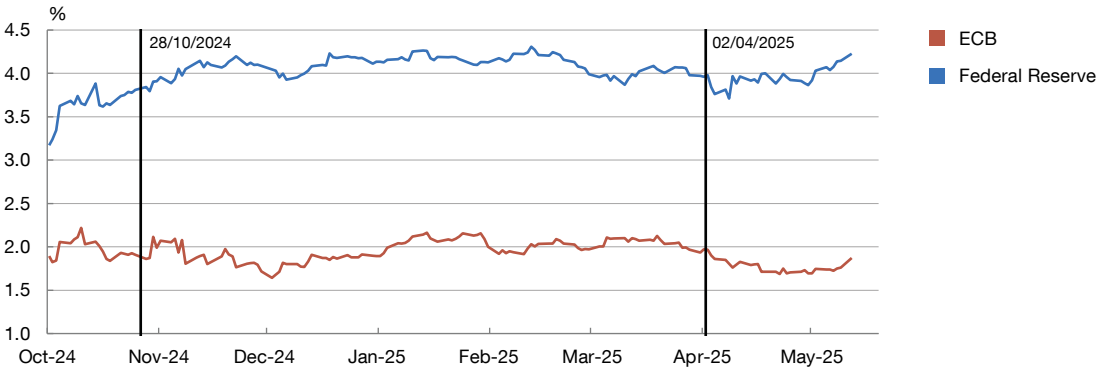
5 Cut-off date: 12 May 2025. The cut-off date for the Autumn 2024 FSR was 28 October.

6 The deposit facility enables banks to make overnight deposits at the national central banks of the Eurosystem. The deposit facility rate is currently used to steer the ECB's monetary policy stance. See the Banco de España blogpost "Which ECB interest rate affects my loan or mortgage?", published on 25 October 2023.

Chart 4.7

Monetary policy expectations have been revised differently for the United States and the euro area

4.7.a Policy rate expectations in the euro area and the United States for September 2025



SOURCES: Banco de España and Bloomberg Data License. Latest observation: 12 May 2025. 28/10/2024 was the cut-off date for the last FSR. 02/04/2025 is when the tariff war escalated.

liquidity, spurring increased activity in money markets, where, at the latest available date, the traded volumes of secured funding almost double those of 2019 (Chart A2.4.2.1 in Annex 2).[7,8]

Against this background, interbank interest rates in the euro area have prolonged their decline. The one-year EURIBOR stood at 2.0% on average in May to date, down from 2.5% in October 2024. This decrease has been concentrated in the recent period, in line with the ECB's revision of monetary policy expectations (Chart A2.4.2.2 in Annex 2).

The escalation of the tariff war in early April negatively impacted the US government bond market. Until mid-January, US government bond yields were pushed up by expectations of higher policy rates than anticipated in late 2024. This rising path was then reversed on the back of weaker than expected macroeconomic data, which led to expectations of monetary policy loosening (Chart 4.8.a). In early April, however, the announcement by the United States of an aggressive increase in tariffs triggered an episode of tensions in global financial markets. In contrast to previous bouts of financial turmoil, US government bonds did not act as a safe-haven asset. For instance, there was an upturn in yields – especially in the longer tranches – and a loss of liquidity (Chart 4.8.b). These tensions have eased following the temporary postponement of some of the additional tariffs. At the cut-off date for this report, the US 10-year bond yield stood at 4.5%, slightly higher than that at the cut-off date for the October 2024 FSR.

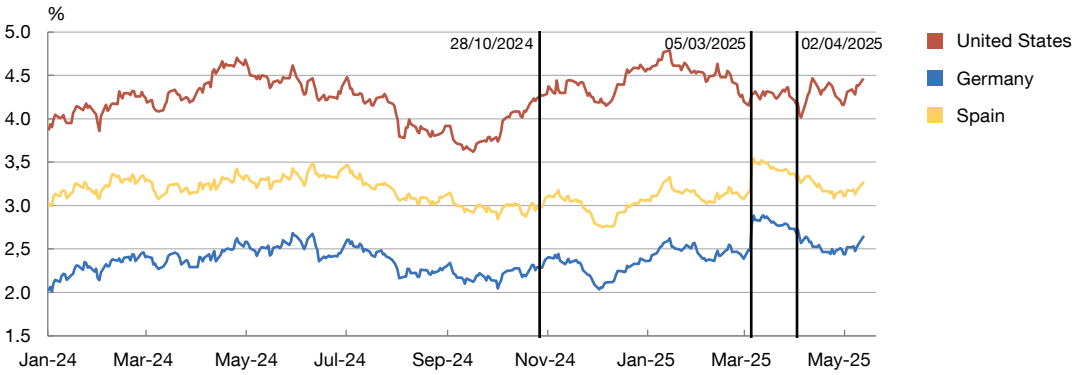
7 Excess liquidity is the sum of a commercial bank's holdings at the central bank in excess of the reserve requirements (whether on the current account or in the deposit facility). Its fall mainly reflects the maturity of the final series of targeted longer-term refinancing operations (TLTROs) and the reduction of the asset purchase programme (APP) and the pandemic emergency purchase programme (PEPP) portfolios.

8 The money markets provide short-term, wholesale funding; its secured funding segment, instrumented through repurchase agreements (repos), is particularly important. In these agreements, banks and other financial intermediaries lend or borrow cash against collateral, mainly government bonds, to manage liquidity efficiently, obtain short-term funding and acquire specific securities. Repos offer a safe form of funding and of making use of cash deposits, and are essential for the smooth functioning of the government bond market.

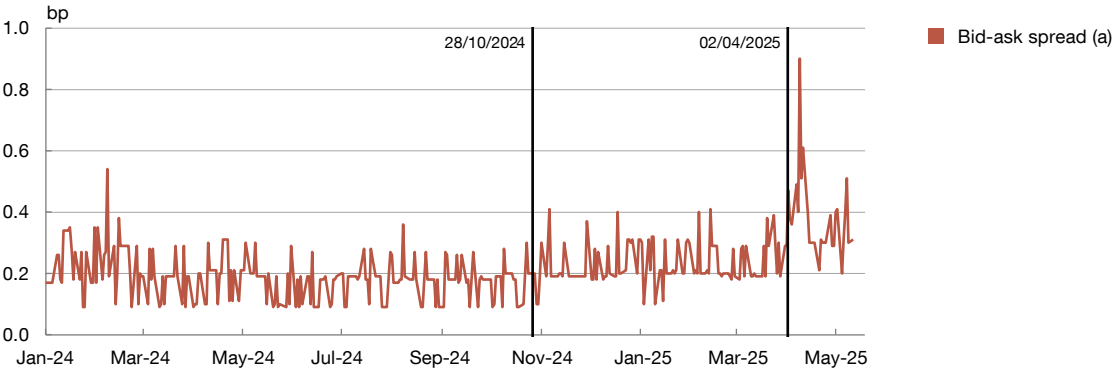
Chart 4.8

Government debt markets were significantly influenced by expectations of higher public spending in Europe and the tariff war

4.8.a 10-year government bond yield



4.8.b US government bond liquidity. 30-year bond



SOURCES: Bloomberg data License, LSEG Datastream and Banco de España. Latest observation: 12 May 2025. 28/10/2024 was the cut-off date for the last FSR. 05/03/2025 marks the market reaction to Germany's fiscal announcement. 02/04/2025 is when the trade war escalated.

a Difference between the highest price a buyer is willing to pay and the lowest price at which the seller is willing to sell. A higher level indicates lower liquidity.

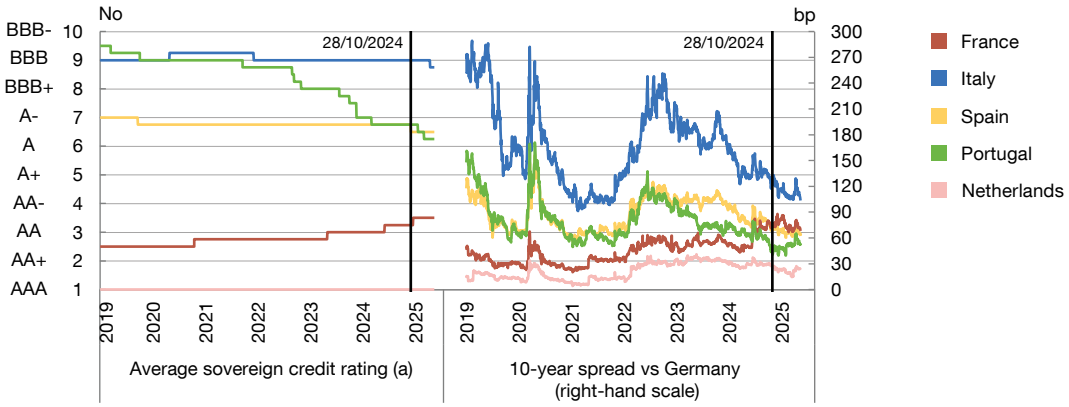
In the euro area, long-term government bond yields rose after higher public spending was announced in March 2025, but this increase was largely reversed following the financial turmoil in April. Long-term sovereign yields in the euro area rose sharply in early March amid the prospect of increased defence and infrastructure spending in the EU, particularly after the German fiscal plan was announced. However, the role of European government debt as a safe-haven asset during the turmoil, along with the potential consequences of tighter trade policies on the real economy, have brought yields down, returning them to levels close to those prior to the fiscal expansion announcements. More recently, trade negotiations have generated more optimism, reflected in a slight rise in long-term sovereign rates. However, since the previous report, 10-year government bond yields increased by 36 bp in Germany (to 2.6%) and 29 bp in Spain (to 3.3%). The German Bund yield spread over the overnight indexed swap (OIS) rate is now positive, in contrast with the negative levels recorded for over ten years[9].

9 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). Accordingly, the OIS rate reflects the expected path of the €STR throughout the duration of the contract (although it includes term premia). The OIS is the benchmark generally used to proxy risk-free rates in the euro area.

Chart 4.9

Amid uneven credit rating developments, euro area sovereign spreads experienced a broad-based, albeit temporary and moderate, widening during the April financial turbulence

4.9.a Sovereign debt: credit rating and spread vs German Bund



SOURCES: Banco de España and LSEG Datastream. Latest observation: 12 May 2025. 28/10/2024 is the cut-off date for the last 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.

The financial turmoil in April led to a moderate and temporary rebound in various euro area sovereign spreads against the German Bund. In some countries, such as Portugal and Spain, the better economic and fiscal outlook has led to an improvement in their credit rating.[10] The Spanish sovereign bond spread against the German Bund narrowed slightly between the cut-off date for the last FSR and 2 April 2025, while for France there was sustained upward pressure in the latter stages of 2024 due to an unfavourable fiscal position. The beginning of the tariff war, however, generally caused spreads to widen slightly as investors turned to the German Bund as a safe-haven asset, causing its yield to fall. More recently, the progress in trade negotiations has contributed to moderating euro area sovereign spreads relative to the levels reached in April. Against this backdrop, Spain's 10-year spread against the German Bund stood at around 62 bp in May 2025, somewhat lower than the level observed at the cut-off date for the previous FSR (Chart 4.9).

Equities and corporate bonds

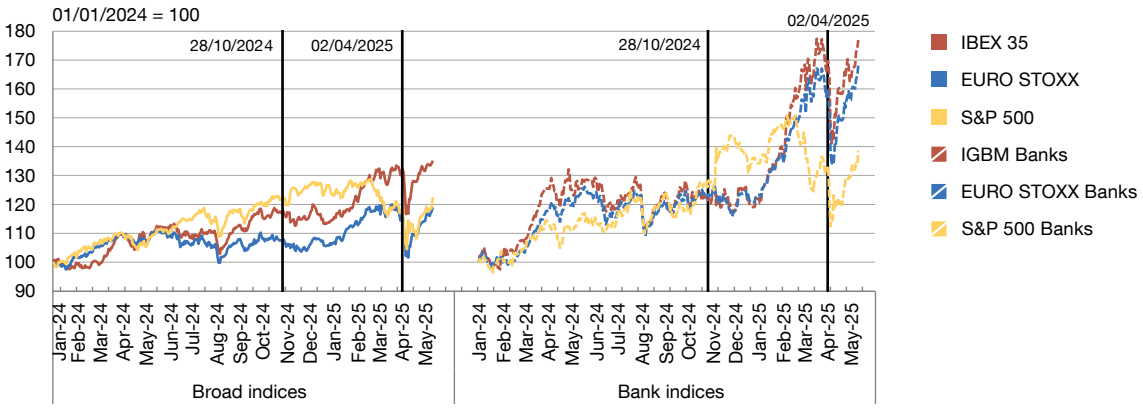
The stock market indices, which were trading at high valuations, dropped sharply in response to the aggressive tariff announcements. Up to mid-February, positive macroeconomic data for the United States, expectations of more favourable fiscal and regulatory policies for firms following the presidential elections, and better than expected corporate earnings had pushed US stock indices up to record highs (Chart 4.10). Thereafter,

10 Spain's debt credit rating from DBRS was upgraded one step to Aa on 29 October 2024 and is the highest of the four agencies considered here. Fitch rates Spain two steps lower (A-), Moody's three steps lower (Baa1) and S&P one step lower (A).

Chart 4.10

The escalation of the tariff war in early April triggered a sharp drop in equity prices, which subsequently reversed

4.10.a Stock market indices: broad and banks



SOURCE: LSEG Datastream. Latest observation: 12 May 2025. 28/10/2024 was the cut-off date for the last FSR. 02/04/2025 is when the tariff war escalated.

a downward correction started as the perception of the US economy's resilience weakened. This correction intensified sharply and spread to other international stock markets following the announcement of the tariff measures on 2 April and the retaliatory measures adopted by some countries. Falling indices and increased volatility reflected investors' concerns about the adverse impact of the tariff war on economic growth. This was reflected in an increase in the put/call ratio, as trading in put options increased, possibly indicating growing investor demand for strategies to protect the value of their portfolios against possible falls in asset prices (Chart 4.11).[11]

Corporate debt risk premia rose sharply during the financial turmoil triggered by the escalation of the tariff war. Increases were observed in both the investment grade segment and, to a greater extent, the high-yield segment.[12] These increases compounded the upward trend since February 2025 in these lower-rated instruments (Chart 4.12). Thus, the spreads relative to the swap curve grew from mid-February, peaking in April at around 150 bp and 190 bp for high-yield corporate bonds in the euro area and the United States, respectively.

A pause in the implementation of some tariffs and the trade negotiations have helped markets stabilise. In particular, stock market indices have returned to the levels prior to the escalation of the tariff war on 2 April. (Chart 4.10). Thus, European stock market indices have accumulated gains since the start of 2025, supported in particular by the strong earnings in the banking sector – which has a large share in the capitalisation of European stock exchanges – and the prospect of increased investment in defence. So far this year, the EURO STOXX

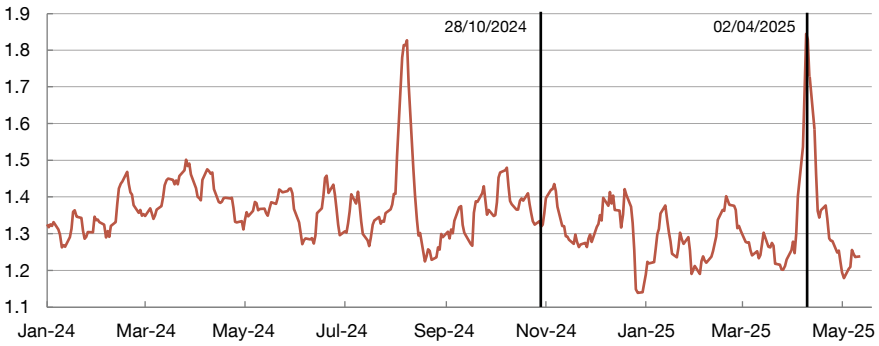
11 The increase (decrease) in the put/call ratio, i.e. the traded volume of put options relative to the traded volume of call options, is indicative of the need for investors to protect their portfolios against possible decreases (increases) in asset prices.

12 The investment-grade segment refers to lower-risk corporate bonds, specifically those with a credit rating equal to or higher than BBB- (Standard & Poor's and Fitch) or Baa3 (Moody's). High-yield bond ratings are below that level.

Chart 4.11

The bout of stock market instability that began in April also prompted investors to seek greater protection against falling asset prices

4.11.a S&P 500 put/call ratio (a)



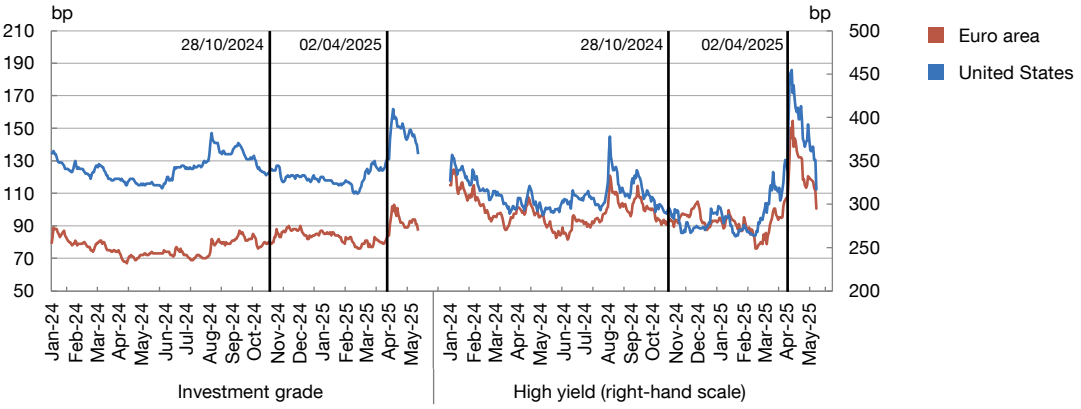
SOURCE: Bloomberg Data License. Latest observation: 12 May 2025. 28/10/2024 was the cut-off date for the last FSR. 02/04/2025 is when the tariff war escalated.

a Five-day moving average.

Chart 4.12

Corporate debt risk premia rose sharply following the escalation of the tariff war and, despite declining recently, remain higher than at the cut-off date for the previous FSR

4.12.a Corporate spreads over the swap curve (a) (b)



SOURCE: LSEG Datastream. Latest observation: 12 May 2025. 28/10/2024 was the cut-off date for the last FSR. 02/04/2025 is when the tariff war escalated.

a The swap curve refers to the ICE Bank of America Merrill Lynch indices and represents 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.

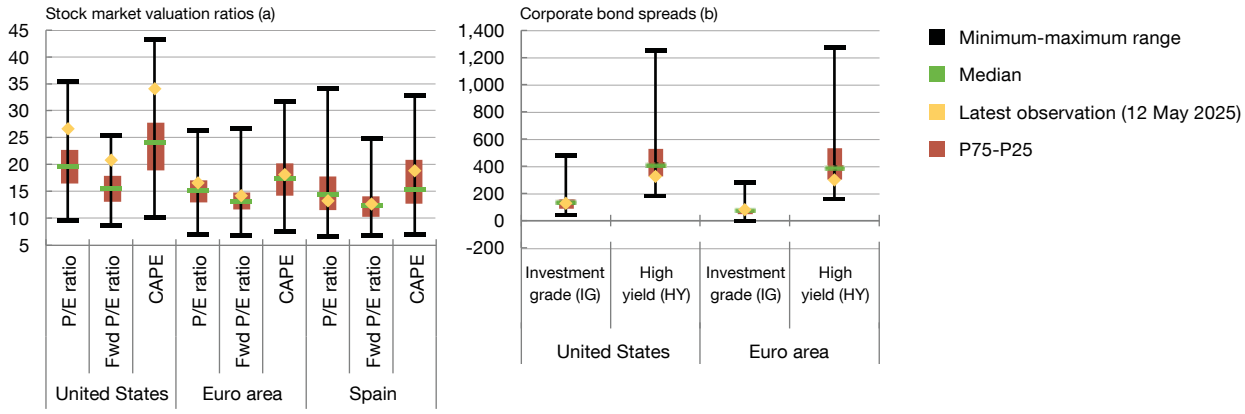
b In April 2025 the high-yield bond segment accounted for approximately 14% of the total outstanding debt of euro area non-financial corporations (according to Dealogic estimates based on historical issues) and 19% in the United States. In relative terms, the euro area high-yield market was 25% the size of its US counterpart.

index has risen by 11.6% (with the banking sector appreciating by over 36%), while the US S&P 500 index has fallen slightly (with its banking sector down by around 3.3%). In the bond markets, high-yield corporate bond spreads have reversed the increase experienced following 2 April and now stand at levels slightly lower than at that date. The investment-grade segment has seen a near full reversal (Chart 4.12). In any event, corporate spreads in both segments stand above the levels at the cut-off date for the previous FSR.

Chart 4.13

A time-based comparison shows that risk-bearing financial asset valuation metrics remain high for US stock market assets and for high-yield corporate bonds in the United States and the euro area

4.13.a Stock market (left-hand panel) and corporate bond (right-hand panel) metrics



SOURCES: Banco de España and LSEG Datastream. Latest observation: 12 May 2025.

a Drawing on monthly stock market index series constructed by Datastream since 1985 for the euro area and the United States and since 1987 for Spain. The sample is somewhat smaller for Spain's cyclically adjusted price-to-earnings (CAPE) ratio and the euro area 1-year forward P/E (Fwd P/E) ratio. The CAPE ratio is calculated as the value of the stock market index in real terms (adjusted for CPI) divided by a 10-year moving average of the index firms' earnings in real terms. The P/E ratio and 1-year fwd P/E ratio capture the relationship between the stock price and earnings per share (observed or expected). These ratios are provided by Datastream.

b 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 1998.

Risky asset prices remain high from a historical perspective, especially in the United States. Equity risk premia have risen, although they remain well below their historical average in both the United States and Europe (see Section 5.2). Price-to-earnings (P/E) ratios are well above their historical average in the United States, in fact exceeding the 75th percentile of their historical distribution (Chart 4.13, left-hand panel). In the corporate bond markets, spreads in both the US and euro area investment-grade segments have remained close to their historical median (Chart 4.13, right-hand panel). However, in the high-yield segment they still remain below their historical median in both areas.

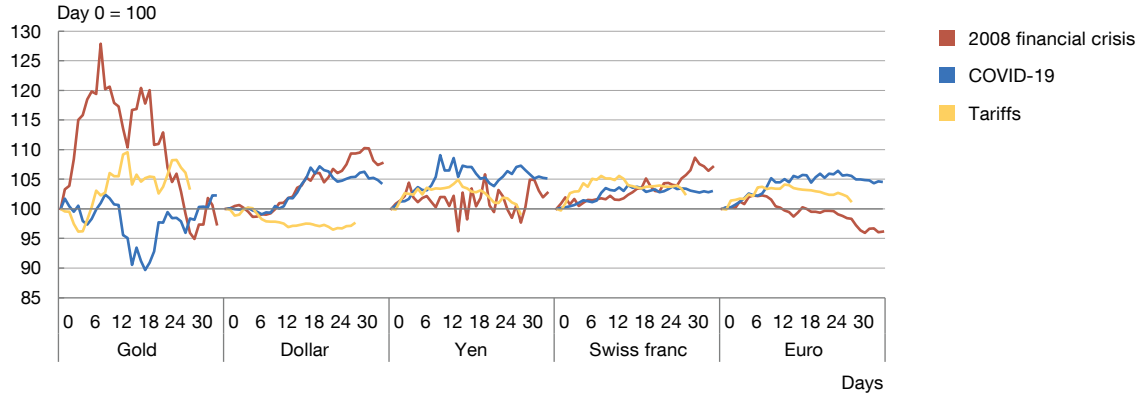
Foreign exchange markets and gold

The tensions associated with the tariff war have led to a broad-based depreciation of the US dollar. After depreciating noticeably against the US dollar up to end-2024, the euro has appreciated by 6.9% in 2025 to date, exceeding $1.14 per euro in April, a level not seen since early 2022. During the current crisis US dollar assets have not played their traditional role as a safe haven during episodes of turmoil. By contrast, the search for safe-haven assets has prompted gold prices to rise and the appreciation of the Japanese yen and the Swiss franc, in a pattern similar to that of previous periods of turmoil (Chart 4.14). Recently, the progress in trade negotiations has led to a slight appreciation of the dollar against the main currencies.

Chart 4.14

The April 2 tariff announcement prompted a depreciation of the dollar, unlike in past periods of financial turmoil and also in contrast to the response of other traditional safe-haven assets

4.14.a Price of gold and exchange rates during periods of stock market instability (a)



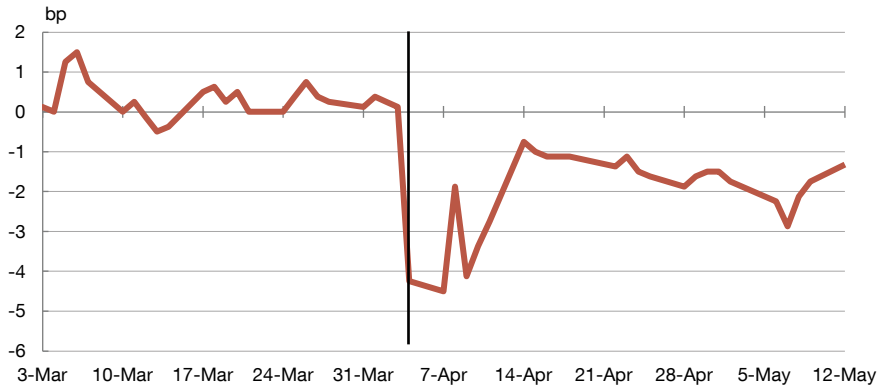
SOURCE: LSEG Datastream.

a Changes in the price of gold and the nominal effective exchange rates for the dollar, the yen, the Swiss franc and the euro during 36 working days of the COVID-19 crisis (from 21/02/2020 to 10/04/2020) and the 2008 financial crisis (from 12/09/2008 to 31/10/2008) and during 30 working days of the tariff episode (from 01/04/2025 to 12/05/2025).

Chart 4.15

Following the tariff escalation, some increases in the cost of obtaining dollars through 3-month EUR/USD cross-currency basis swaps were observed

4.15.a 3-month EUR/USD cross-currency basis since March 2025 (a)



SOURCES: LSEG Datastream and ECB. The vertical line denotes 02/04/2025 (escalation of the trade conflict). Latest observation: 12 May 2025.

a The cross-currency basis is calculated based on the difference between the interest paid for borrowing US dollars in exchange for euro in the swap market and the cost of borrowing that currency directly in the cash market. A non-zero basis denotes a divergence in covered interest rate parity. Negative values indicate that obtaining US dollars in exchange for euro in the swap market is more expensive than borrowing dollars directly in the cash market (i.e. if negative, the investor pays a premium over the interest rate spread between euro and US dollars).

The escalation of the trade war in April had a moderate impact on the differentials associated with euro/dollar cross-currency basis swap contracts.[13] The relative cost of obtaining dollars through 3-month euro/dollar cross-currency basis swap contracts increased

13 A currency swap involves the exchange of a specific amount of two currencies at the outset and on a pre-agreed date, typically maturing in less than one year. Cross-currency basis swap contracts can have long-term maturities and, as well as the exchange of currencies, include interest payments in the two currencies.

moderately in response to the tariff announcements of 2 April.[14] This increase reversed partially after the 90-day pause on the additional tariffs (Chart 4.15). The information available on other types of euro/dollar swap contracts involving European banks has not shown any abnormal patterns in trading volumes after 2 April (Chart A2.4.2.3 in Annex 2).

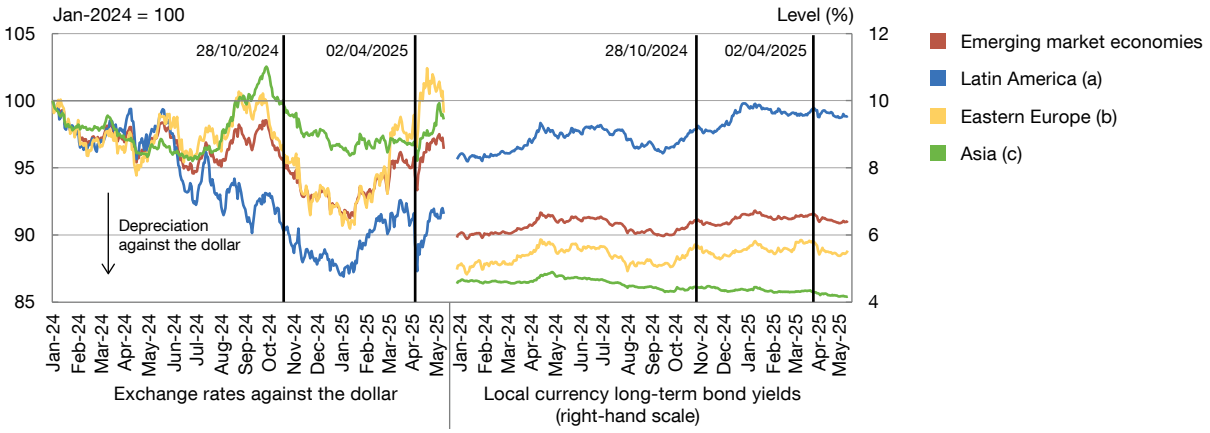
Emerging financial markets

Financial markets in emerging market economies have shown some resilience during the current turbulence. In most of these economies exchange rates against the dollar depreciated very briefly following the US tariff announcement but subsequently appreciated. Long-term yields on emerging government bonds remained contained (Chart 4.16). Further, stock market indices posted gains, while the widening of sovereign spreads was modest and short-lived (Chart A2.4.2.4 in Annex 2). Latin American financial markets have been performing less favourably since the summer as a result of local risk factors.[15] Compared with other emerging market economies, the region's currencies also reacted more adversely to the crisis that began on 2 April, with a more pronounced depreciation. While the latest available data shows a full reversal, the comparison remains unfavourable relative to the appreciation seen from other emerging market currencies.

Chart 4.16

Emerging market economies demonstrated resilience during the April turmoil, albeit with Latin America faring worse

4.16.a Exchange rates and local currency long-term bond yields



SOURCES: Banco de España and LSEG Datastream. 28/10/2024 was the cut-off date for the last FSR. 02/04/2025 is when the tariff war escalated. Latest observation: 12 May 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.

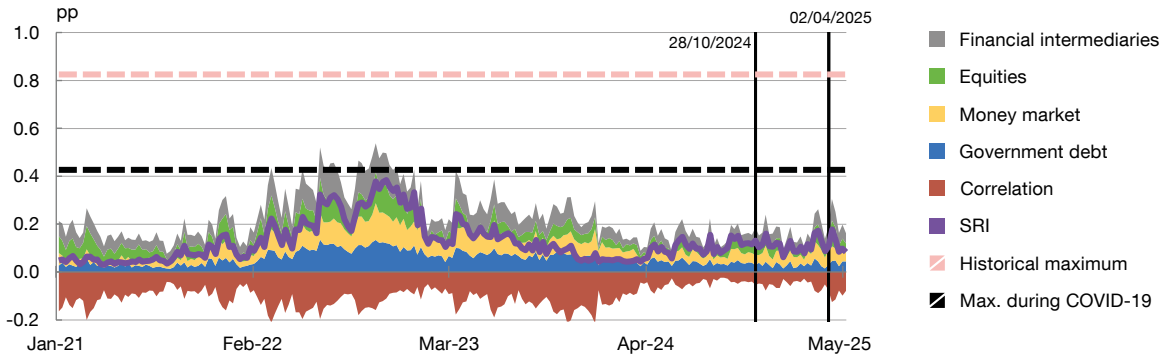
14 The cross-currency basis (or relative cost) is calculated based on the difference between the interest paid for borrowing US dollars in exchange for euro in the swap market and the cost of borrowing that currency directly in the cash market. A non-zero spread denotes a divergence in the covered interest rate parity. Negative values indicate that obtaining US dollars in exchange for euro in the swap market is more expensive than borrowing dollars directly in the cash market (i.e. if negative, the investor pays a premium over the interest rate spread between euro and US dollars).

15 For more details, see Banco de España. International Economics and Euro Area Department. (2025). Report on the Latin American economy. Second half of 2024.

Chart 4.17

Spanish financial markets rebounded quickly from the adverse effects of the April turbulence, although this revealed their sensitivity to negative economic policy news

4.17.a Systemic risk indicator (SRI). Spain (a)



SOURCES: LSEG Datastream and Banco de España. 28/10/2024 was the cut-off date for the last FSR. 02/04/2025 is when the tariff war escalated. Latest observation: 7 May 2025.

a The SRI aggregates 12 individual stress indicators (including volatilities, interest rate spreads and maximum historical losses) from four segments of the Spanish financial system. The effect of cross-correlations is taken into account to calculate the SRI, such that it registers higher values when the correlation between the markets is high and lower values when the correlation is low or negative. For a detailed explanation of this indicator, see Box 1.1 of the May 2013 FSR.

Systemic risk indicator for the Spanish financial markets

In Spain, the systemic risk indicator (SRI)[16] showed volatility due to the April turbulence, but remains at moderate levels. Following an increase in August 2024, the SRI had held relatively stable until the turmoil that began in early April 2025 (Chart 4.17), which triggered a jump in the index that was swiftly corrected. The components with the sharpest fluctuations were the stock markets and bank finance markets. The SRI currently stands at relative low levels in historical terms, comparable to those of 2024 H2. These SRI fluctuations reveal financial markets' significant sensitivity to positive and negative news amid the current high trade and economic policy uncertainty.

Crypto-assets

The price correlation between the main crypto-assets and equity has declined since end-2024, but remains high. Historically, the correlation between crypto-asset and equity prices has fluctuated.[17] For instance, in 2024 crypto-asset prices displayed a strong positive correlation with the US and European stock market indices, as well as with the banking sub-indices of both regions. However, since late 2024 this correlation has weakened (Chart 4.18). The correlation briefly strengthened following the US tariff announcement

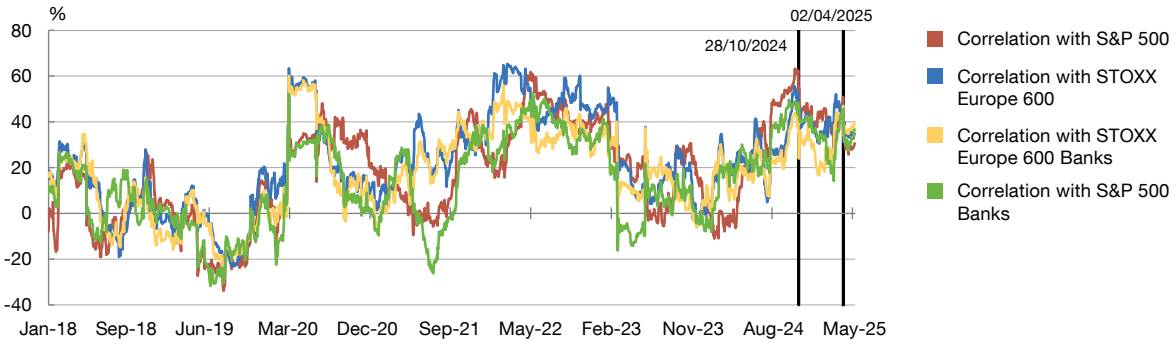
16 The SRI gauges the materialisation of systemic risks and rises when simultaneous losses occur across different segments of the financial markets. For more details, see Box 1.1 of the May 2013 FSR.

17 For instance, during periods of high market stress the MVIS crypto-asset index has moved in line with equities, demonstrating that it is not a safe-haven asset.

Chart 4.18

The price correlation between equity and the main crypto-assets has declined since end-2024, but remains high

4.18.a Correlation between the daily returns of a crypto-asset index and of traditional assets (a)



SOURCES: LSEG Datastream and MVIS Investable Indices. 28/10/2024 was the cut-off date for the last FSR. 02/04/2025 is when the tariff war escalated. Latest observation: 12 May 2025.

a The MVIS CryptoCompare Digital Assets 100 Index is used, which comprises the top 100 (backed and unbacked) crypto-assets. Correlations calculated using three-month rolling windows of each index's daily returns.

before subsequently declining, although it remains high compared with the same period a year earlier.

The capitalisation of crypto-assets has declined since early 2025, but remains high by historical standards. The market capitalisation of crypto-assets increased over 2024, driven by events such as the regulatory approval of exchange-traded funds (ETFs) that invest in such instruments, as well as the crypto-friendly stance of the new US Administration. However, having initially surged after the US election, the crypto-assets market has posted falls. Further, the April turbulence caused a slight and short-lived additional correction, mirroring that seen on financial markets. Crypto-assets still make up a small fraction of financial markets, which limits the current risks to financial stability. However, they could contribute more significantly to systemic risk if their expansion continues, hence the need for in-depth analysis (see Box 4.1).

Box 4.1

ANALYSIS OF THE EVOLUTION OF THE CRYPTO-ASSET MARKETS AND ITS FINANCIAL STABILITY IMPLICATIONS

This box describes the changes in crypto-asset market valuations and in the degree of market concentration by asset type. It also presents some recent developments that are likely to shape their future performance, such as the difficulties of monitoring activity in this market, the authorisation of crypto exchange-traded funds (ETFs) and crypto-friendly regulatory and supervisory changes in the United States. Taking all this into consideration, the box concludes with an updated assessment of the financial stability implications of crypto-assets, which have already been examined in previous Financial Stability Reports (FSRs).[1]

Crypto-asset prices and market concentration

The global crypto-asset market has grown considerably over the last five years. The market capitalisation of the MVIS crypto-asset index[2] grew exponentially between early 2020 and late 2021, recording what was then the index's all-time high (Chart 1). This index corrected sharply in 2022, affected by the fall in the price of the main unbacked crypto-assets, such as bitcoin, against a background of monetary policy tightening that reduced the incentives to hold these assets. The MVIS index recovered in 2023, albeit without returning to its pre-2022 correction level. However, since early 2024, the index has recovered sharply and, like bitcoin, its predominant component, reached new all-time highs.

The gains in 2024 were driven, first, by the approval of spot bitcoin exchange-traded products (ETPs) in the United States early that year (bitcoin futures ETFs already existed in the United States and spot ETFs in other jurisdictions). This helps to broaden the investor base for these assets, as ETFs simplify the investment process and make it more accessible.[3]

Second, expectations that the monetary policy tightening cycle was nearing its end may have increased the appetite for certain risky assets, such as crypto-assets. In addition, the next peak recorded by both the MVIS Index and bitcoin coincided with Donald Trump's re-election as President of the United States. The new US Administration has announced its intention to boost the development of this type of asset and has already approved a number of crypto-friendly measures. In particular, the Executive Order "Establishment of the Strategic Bitcoin Reserve and United States Digital Asset Stockpile" of 6 March 2025.[4] In early 2025 crypto-asset prices had been suffering a sizeable downward correction, which has reversed since the approval of this Executive Order.

The crypto-asset market is highly concentrated among a handful of assets. For example, six of the main assets (bitcoin, ethereum, Cardano, Tether, USD Coin, BNB) accounted for over 90% of the capitalisation of the MVIS in early May 2025. At that date, three unbacked crypto-assets (bitcoin, ethereum, Cardano) represented 82.5% of the capitalisation of the MVIS and bitcoin dominated with a market share of 71% (Chart 2). Meanwhile, the three main backed crypto-assets (Tether, USD Coin, BNB) accounted overall for a small percentage of the capitalisation of the MVIS (10.6%), with Tether standing out among them.[5] Use of these backed assets is currently mainly aimed at supporting operations in the unbacked segment, thereby fulfilling an ancillary function.

The price volatility on the crypto-asset market essentially owes to asset prices in the unbacked segment. In particular, bitcoin's price has fluctuated sharply. In 2024, its market capitalisation rose by 124%, while that of ethereum and Cardano increased by 46% and 41%, respectively. By

1 See, for example, the special chapter on crypto-assets of the Banco de España's Spring 2022 FSR.

2 The MVIS CryptoCompare Digital Assets 100 Index tracks the top 100 (backed and unbacked) crypto-assets by market value.

3 For more details, see this Statement of the U.S. Securities and Exchange Commission.

4 This Executive Order created, first, a Strategic Bitcoin Reserve that will treat bitcoin as a reserve asset. Under the Executive Order, the Strategic Bitcoin Reserve will be capitalised with bitcoin owned by the Department of Treasury that was forfeited as part of criminal or civil asset forfeiture proceedings. Other agencies will evaluate their legal authority to transfer any bitcoin owned by those agencies to the Strategic Bitcoin Reserve. The United States will not sell bitcoin deposited into this Strategic Bitcoin Reserve. Lastly, the Secretaries of Treasury and Commerce are authorised to develop budget-neutral strategies for acquiring additional bitcoin, provided that those strategies impose no incremental costs on American taxpayers. Second, the Executive Order also established the U.S. Digital Asset Stockpile, consisting of digital assets other than bitcoin owned by the Department of Treasury that were forfeited in criminal or civil asset forfeiture proceedings. The US Government will not acquire additional assets for the U.S. Digital Asset Stockpile beyond those obtained through forfeiture proceedings. The Secretary of the Treasury may determine strategies for responsible stewardship, including potential sales from the U.S. Digital Asset Stockpile. For more details, see White House. (2025). "Fact Sheet: President Donald J. Trump Establishes the Strategic Bitcoin Reserve and U.S. Digital Asset Stockpile".

5 Tether is a stablecoin whose value is pegged 1:1 with the US dollar, enabling swift and stable transactions through multiple blockchains. What sets it apart from other stablecoins is, among other things, its wide adoption around the world and lower transparency than other alternatives such as USD Coin.

Chart 1
Market value of the main crypto-assets (a)

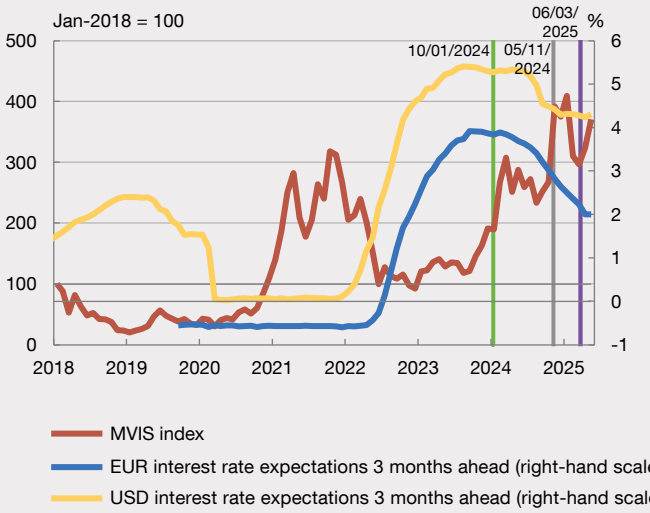
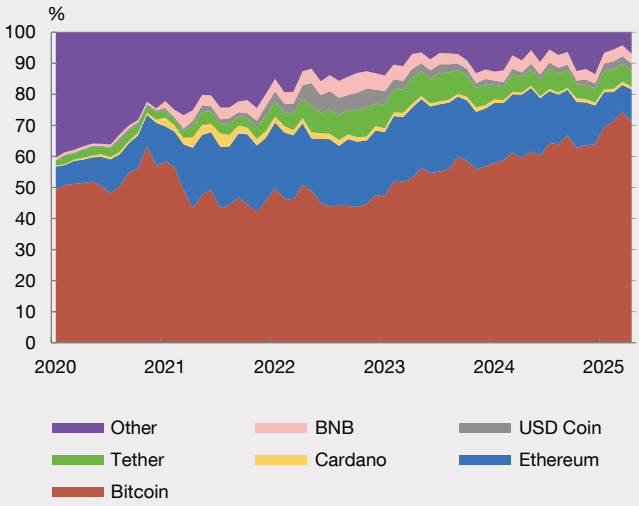


Chart 2
Share of MVIS capitalisation of different crypto-assets (b)



SOURCES: LSEG Datastream, MVIS, CoinMarketCap and Banco de España. Latest observation: 12 May 2025.

a The crypto-asset index is the MVIS CryptoCompare Digital Assets 100 Index, which comprises the top 100 (backed and unbacked) crypto-assets by market value. Interest rate expectations are proxied by overnight index swap (OIS) rates three months ahead. The green vertical line denotes 10 January 2024 (spot bitcoin ETPs approved in the United States), the grey vertical line denotes 5 November 2024 (President Trump's re-election) and the purple vertical line denotes 6 March 2025 (Executive Order establishing the Strategic Bitcoin Reserve).
b The market shares are calculated using the percentage of the capitalisation corresponding to each crypto-asset, according to MVIS index data. The unbacked crypto-assets are bitcoin, ethereum and Cardano. The backed crypto-assets are Tether, USD Coin and BNB.

contrast, in 2025 Q1 bitcoin depreciated by 11.5%, ethereum by 45.2% and Cardano by 21.3.%. This was followed by a significant rally in April and May. This performance is influenced by economic, technology and investor attention factors. Carbó and Gorjón (2022) show that, in the case of bitcoin, the impact of these factors varies over time.[6]

The paper uses long short-term memory[7] neural network techniques and SHapley Additive exPlanations[8] machine learning interpretability techniques to approximately replicate bitcoin price developments between 2015 and 2023. Up to 2018 bitcoin's growth was predominantly driven by technological factors, such as mining difficulty.[9] However, since 2018, the influence of public attention – measured by Google Trends searches and Twitter mentions – has become more prominent. By contrast, economic variables, such as the S&P 500 index and gold prices have not proven to be stable determinants of bitcoin's price.

Carbó and Gorjón (2022) also identify the emergence of new determinants of bitcoin's price over time, such as institutional adoption and the emergence of new, large-scale investors. The surge in this asset's price in 2024 that coincided with the approval of spot bitcoin ETPs in the United States cannot be explained by the model in this paper, as it is a new factor that did not apply when the

6 J. M. Carbó and S. Gorjón. (2022). "Application of machine learning models and interpretability techniques to identify the determinants of the price of bitcoin", Documentos de Trabajo, 2215, Banco de España.

7 A deep learning model capable of working with time series and capturing both short and long-term dependencies. S. Hochreiter and J. Schmidhuber. (1997). "Long short-term memory". *Neural Computation,* 9(8), pp. 1735-1780.

8 A game theory-based interpretability method that assigns each variable a clear contribution to a machine learning model's prediction. S. M. Lundberg and Su-In Lee. (2017). "A Unified Approach to Interpreting Model Predictions". *Advances in Neural Information Processing Systems,* Vol. 30.

9 Mining difficulty is a parameter that adjusts automatically to keep the average block creation rate consistent. To validate transactions on the bitcoin network miners must solve mathematical puzzles whose complexity increases or decreases based on total computational power, thereby ensuring that blocks are produced at a stable rate.

analysis was conducted. However, the emergence of new explanatory variables is unsurprising in view of past trends.

The challenge of monitoring market activity

Monitoring the market value of crypto-assets is difficult. The advantages of bitcoin blockchain[10] data include their immutability and transparency. This means that transactions can be analysed, addresses can be clustered and the concentration of balances and the activity of the most important miners[11] can be estimated.[12] However, these data have certain limitations when it comes to monitoring cross-border transactions, assessing risks to financial stability and detecting unlawful activity, such as money laundering.

First, blockchain data do not include information on the location or identity of the agents. This makes it difficult to segment crypto market activity by country. While clustering techniques and the identification of addresses associated with exchange platforms can partially reduce anonymity, they do not suffice to accurately identify transactions. In addition, blockchain transactions exclude transactions within centralised exchanges,[13] where assets can change hands without being reflected in the chain.

Lastly, the fragmentation of data sources and the lack of reporting standards limit consistent monitoring. This makes it necessary to supplement the analysis with external data or data provided by third parties (with no connection to prudential financial authorities), with the risks this entails.

Crypto-assets and ETFs

Crypto-asset investors prefer to operate on the spot market[14] for its immediacy and simplicity, among other reasons. This market currently has a capitalisation of around $3 trillion, with unbacked crypto-assets, especially bitcoin and ethereum, being the most frequently traded assets.[15]

However, despite the spot market's success, the market for crypto ETFs shows significant growth potential. In particular, bitcoin ETFs (spot and futures) already represent around 6% of bitcoin's total market capitalisation (3.1% in the case of ethereum)[16] (Chart 3). This is a significant figure considering that the first bitcoin ETF (BTCC) was launched in 2021 and spot bitcoin ETFs were not authorised in the United States until 2024.[17]

Crypto ETFs are predominantly traded in the United States, although trading levels in Europe can be expected to grow in the coming years.[18] The European Union (EU) introduced a regulatory framework for crypto-assets in 2024. The Markets in Crypto-Assets (MiCA)[19] Regulation governs the issuance of stablecoins and other crypto-asset classes, the provision of crypto-asset services in the EU, the protection of crypto-asset holders and customers of crypto-asset services, measures to prevent crypto-related insider trading and market manipulation (to ensure the integrity of crypto-asset markets) and other disclosure obligations, which could help bridge some of the aforementioned gaps.

The MiCA regulatory framework is applied to all crypto-assets not regulated by EU legislation on financial instruments. The aim is to provide security and guarantees

10 Blockchain is a distributed ledger technology that stores data in chronologically chained and cryptographically secured blocks, ensuring that the data are immutable and enabling the decentralised verification of transactions.

11 A miner is a participant in a blockchain network who validates and groups transactions in blocks by solving computational puzzles in exchange for a reward in the form of a crypto-asset.

12 J. M. Carbó, H. Jahanshahloo and J. C. Piqueras. (2024). *Análisis de fuentes de datos para seguir la evolución de Bitcoin*, Documentos Ocasionales, 2411, Banco de España.

13 Centralised exchanges are platforms that intermediate in the sale and purchase of crypto-assets and manage their users' balances internally. Transfers between accounts on the same platform are not recorded on the public blockchain.

14 In the spot market, investors buy and sell digital assets directly rather than using an intermediate vehicle such as an ETF.

15 According to real-time data from CoinMarketCap.

16 According to real-time data from CoinMarketCap.

17 BTCC, the first spot crypto-asset ETF, was launched in Canada in 2021. The first bitcoin futures ETF (BITO) was launched in the United States in 2021. The first spot bitcoin ETF in the United States was launched in 2024.

18 See link.

19 Regulation (EU) 2023/1114 of the European Parliament and of the Council of 31 May 2023 on markets in crypto-assets (MiCA) aims to create a harmonised, pan-EU regulatory framework for markets in crypto-assets. For more information on this regulation, see the CNMV website (in Spanish).

Chart 3
Market capitalisation of assets under management in cryptoasset ETFs as a percentage of each asset's total market capitalisation (a)

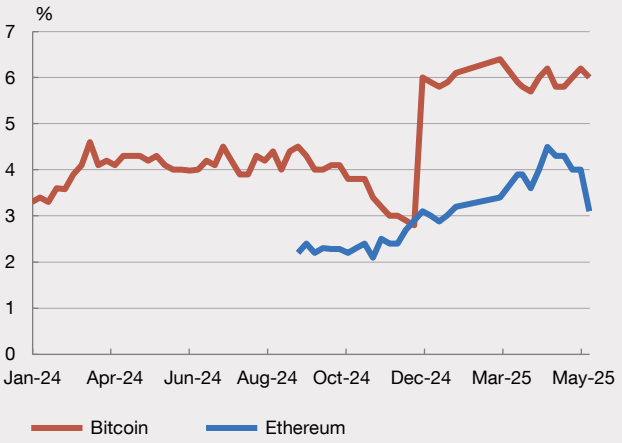


Chart 4
MVIS capitalisation as a percentage of S&P 500 capitalisation (b)

SOURCES: LSEG Datastream, MVIS, CoinMarketCap and Banco de España. Latest observation: 12 May 2024.

a Weekly data. Includes both bitcoin spot and futures ETFs.
b Monthly data.

for crypto-asset holders. This regulation could make it easier for banks and investment funds to market crypto-based financial products, such as ETFs. The framework may also reduce the likelihood of disorderly market conditions developing, which could otherwise pose greater risks to the financial system.

Much of the success of crypto ETFs owes to the straightforward access they offer investors – both retail and institutional – to crypto-asset trading and investment in various blockchain-related companies. By holding ETF shares, investors can invest in several assets at the same time.

In short, crypto ETFs have helped lower transaction and entry costs in the sector within a regulated trading environment, thus fostering market liquidity, particularly when conditions are favourable. However, despite the growth and development of such products, they pose considerable challenges for investors given the significant market price risk and potential cyber security issues.

Key US regulatory and supervisory developments for the digitalisation of finances and crypto-assets

Several of the Executive Orders implemented by the new US Administration since taking office affect the technology sector and the digitalisation of finances. On 23 January it issued the *"Strengthening American Leadership in Digital Financial Technology"* Executive Order, aimed at promoting the ability of individual citizens and private-sector entities to access and use public blockchain networks, maintain custody of digital assets and develop dollar-backed stablecoins. At the same time, the Securities and Exchange Commission (SEC) issued *Staff Accounting Bulletin 122*, providing greater flexibility to traditional financial institutions interested in providing crypto-custody services.

On 6 March the *"Establishment of the Strategic Bitcoin Reserve and United States Digital Asset Stockpile"* Executive Order was issued, creating the Strategic Bitcoin Reserve and the United States Digital Assets Stockpile (the latter for assets other than bitcoin). Under this Executive Order, assets may be added to the Strategic Bitcoin Reserve through criminal or civil asset forfeiture proceedings or acquisitions by the Department of the Treasury, while the US Digital Asset Reserve may only be expanded by forfeitures.[20]

Further, the *GENIUS Act* and *STABLE Act* are in passage through the House of Representatives and seek to define "payment stablecoins" as a digital asset redeemable at a

20 For more information on these crypto-asset reserves, see footnote 4.

predetermined fixed amount and that hold assets in reserve that can be liquidated only to redeem the stablecoins. For dollar-denominated stablecoins, issuers would be required to hold at least one dollar of permitted reserve assets for every dollar worth of stablecoins issued, and reserve assets would be restricted to insured deposits, central bank reserves and short-dated Treasury bills approved by regulators.

The bill would also exempt payment stablecoin issuers from the regulatory capital standards applied to traditional banks, as well as imposing tailored capital, liquidity and risk management rules, along with requirements to disclose redemption procedures and report on reserve composition, which would be certified by executives of the stablecoin issuer and "examined" (but not necessarily audited) by auditors.

In any event, given the differing regulatory demands placed on crypto issuers in the EU and the United States, closer monitoring and oversight may be warranted. For instance, stablecoins may be based on the multi-issuance model, where they are issued by both EU and non-EU entities. In such cases, one of the two may be subject to more stringent regulatory obligations vis-à-vis holders of the stablecoin. That issuer may be required to meet those obligations not only towards holders of its own issues of that stablecoin, but also towards holders of those issued by the other issuer that is subject to looser requirements.

Such a scenario might warrant close supervision, insofar as it could compromise the financial standing of the issuer subject to more stringent requirements and – depending on the eventual systemic importance of such multi-issuance models – ultimately, financial stability.

Lastly, in late April 2025 the Federal Reserve Board eased supervisory guidance for banks related to their crypto-asset activities. First, it rescinded its 2022 supervisory letter on crypto-related risk management, which established an expectation that banks under its authority provide advance notification of planned or current crypto-asset activities. Instead, it will monitor banks' crypto-asset activities through the normal supervisory process.

The Board also rescinded its 2023 supervisory letter regarding the supervisory non-objection process for state member bank engagement in blockchain-based dollar token activities. Previously, under this procedure banks needed to demonstrate to the supervisor their ability to conduct these activities in a safe and sound manner and receive written authorisation before engaging in them.

Finally, the Board, together with the other US regulatory agencies, withdrew two 2023 statements regarding banks' crypto-asset exposures. The Board announced that it will work with other agencies to consider whether additional guidance to support innovation, including crypto-asset activities, is appropriate.[21]

Financial stability implications

The special chapter of the Spring 2022 FSR highlighted several crypto-related risks which remain applicable today,[22] including the above-mentioned market and cyber security risks. At present, the systemic importance of these risks is limited by the market's relatively small size. For instance, in early 2025 the market capitalisation of the MVIS index represented 6.2% of the S&P 500 (5.8% on the last data available following the April turbulence) (Chart 4). However, if crypto-asset markets continue to grow, so too could their systemic importance.

The apparent resilience of the crypto-asset market since 2018 (despite fluctuations and several corrections), along with the development of ETFs and the regulatory reforms in the United States, appear to reinforce the growth expectations. The notion that blockchain technology on its own will lead to new and sound forms of money, payment media or investment remains prevalent among participants in this market. The new US Administration's interest in the crypto market heightens the risk of these ideas becoming entrenched.

These perceptions have emerged despite the significant limitations of crypto-assets. Unbacked crypto-assets, such as bitcoin, lack a price anchor, making them impractical as deposit or payment instruments. Their acceptance as investment assets has been driven by

21 For a more complete description of the changes to the supervisory guidance on crypto-assets by the US Federal Reserve Board, see the press release of 25 April 2025.

22 See footnote 1 of this box.

social contexts, fostering the proliferation of "manias".[23] The personal and social risks of these assets, such as fraud, pyramid schemes and the reallocation of funds away from productive uses, tend to be underestimated against a backdrop of high short-term returns.

Other fundamental drawbacks of these assets include the high energy cost of validating transactions for the more decentralised crypto-assets and concentration risk in the market (e.g. operational risk in less decentralised networks). In addition, instances of market fraud can emerge, as illustrated by the FTX case.[24]

Stablecoins might be viewed more favourably from a risk perspective, provided that their characteristics and use are regulated according to sound prudential standards. In Europe, the aforementioned MiCA has enhanced the security of these assets, which could eventually lead to new payment channels. However, such use of stablecoins remains highly limited compared with their role as a vehicle for value accumulation or as an ancillary payment media for trading unbacked crypto-assets.

The recent escalation in geopolitical tensions has created a unique new environment that has fuelled the adoption of crypto-assets and raised concerns. Countries not aligned with the United States may turn to crypto-assets as an alternative to the dollar, although such usage remains limited. The geopolitical caution behind this shift is also evident in initiatives geared towards replacing international payment networks such as Swift.

These geopolitical distortions could result in public policies on crypto-assets that have potentially adverse effects on financial stability. For instance, bitcoin being included among a central bank's reserve assets. The central bank's ability to stabilise the exchange rate would be restricted given bitcoin's limitations as a payment instrument. Likewise, crypto-assets' price volatility suggests it would be unwise to use them to accumulate public wealth. Lastly, some countries may seek to establish a dominant position in the stablecoin segment (predominately hedged by the national currency), which might provide an incentive to ease security standards for these assets to encourage their rapid expansion.[25]

Against this background, central bank digital currencies (CBDCs) may provide an alternative means of delivering modern payment services with comparable security levels to cash. CBDCs offer the technological benefits of crypto-assets (e.g. transaction immediacy) while reducing operational risks for users and – if appropriately designed – replicating the key features of fiat money (whose value is conferred by law) as a means of payment, unit of account and store of value. CBDCs could therefore be an appealing alternative to certain types of crypto-assets (such as stablecoins), thus limiting their growth and the associated risks.

In view of this, the prohibition, set out in the US Administration's Executive Order of 23 January 2025, of any progress towards the establishment of a dollar CBDC could have undesired adverse effects on the global monetary system.

In any event, the introduction of a CBDC demands a thorough cost-benefit analysis, a public interest-orientated implementation strategy and alignment with price and financial stability objectives. With respect to financial stability, the potential impact of a CBDC on bank deposits – and the subsequent effects for liquidity, funding costs, profitability and solvency – require particular analysis. For instance, in developing its own CBDC (the digital euro), the European Central Bank has envisaged two specific design features (the non-remuneration of and limits on holdings) explicitly with a view to mitigating risks to financial stability.[26]

23 The term "mania" denotes an irrational and collective disconnect between market value and intrinsic value. Charles P. Kindleberger and Robert Z. Albier. (2005). "Manias, Panics and Crashes", Ariel Economía.

24 FTX was a crypto-asset exchange platform. It is now under insolvency proceedings and is accused of defrauding customers. See CoinLedger.

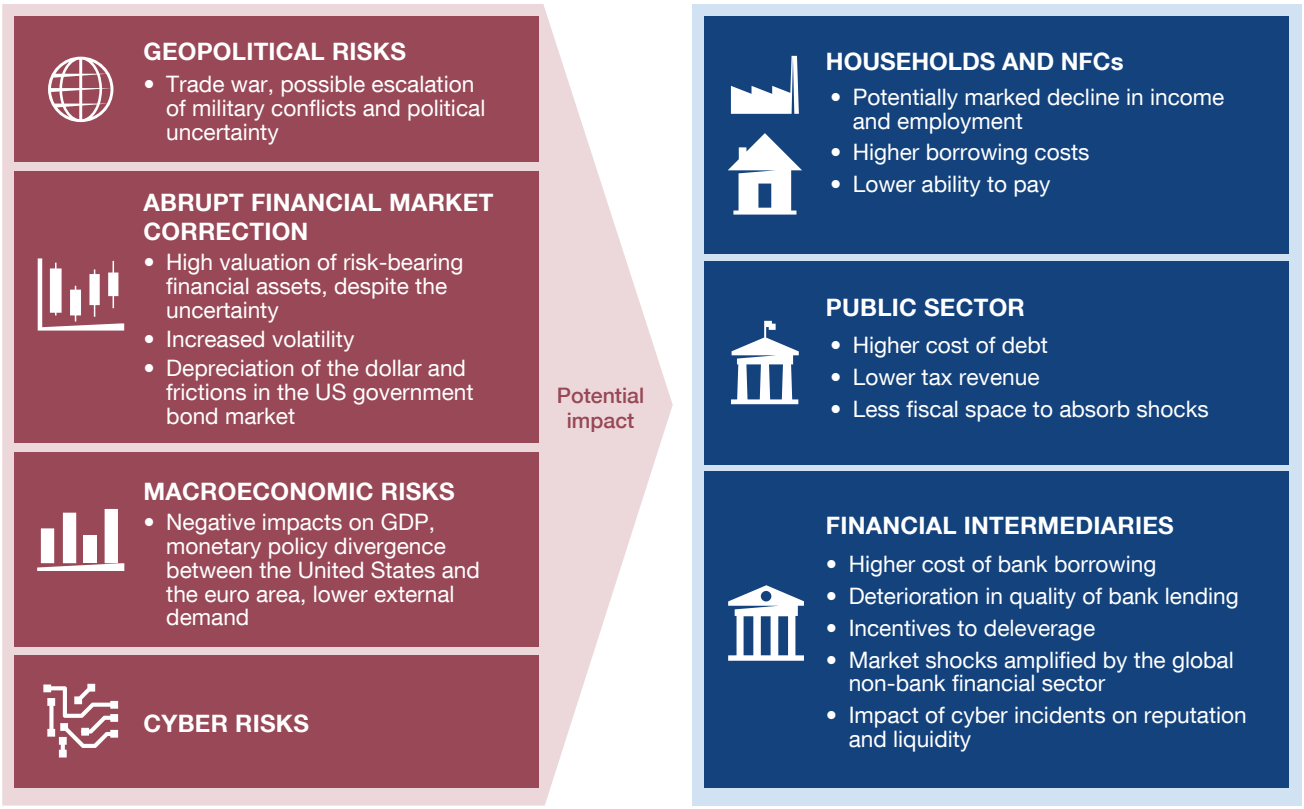
25 See the US Presidential Executive Order of 23 January 2025, "Strengthening American Leadership in Digital Financial Technology".

26 See ECB Opinion of 31 October 2023 (CON/2023/34).

5

RISK ANALYSIS

Figure 5.1
Risk analysis (a)



SOURCE: Banco de España.

a Risks to financial stability are defined as 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 examined in previous chapters. This risk analysis is underpinned by the discussions that the Banco de España has held with various external experts (see Box 5.1) and by its own analysis.

5.1 Geopolitical risks

Geopolitical risks have increased since the Autumn 2024 *Financial Stability Report* (FSR) was published. The deteriorating geopolitical setting has been identified as the main risk to financial stability in the Banco de España's own analysis and by most of the external experts consulted (see Box 5.1).

Trade war and US policy uncertainty

The new US Administration's policies, which remain surrounded by high uncertainty, have begun to exert an adverse impact on global financial conditions and activity. The shift towards a more protectionist US trade policy in the form of tariff hikes has triggered downward revisions to the outlook for global economic growth (see Section 5.3) and unleashed significant turmoil on the financial markets (see Section 4.2 and Section 5.2). Since the tariffs were announced on 2 April, the uncertainty about US policies and the potential global response has increased markedly, from already high levels (Chart 5.1). Should the tariff escalation with the rest of the world and, in particular, a trade war with China crystallise or expand, the impact on global economic activity and the international financial markets could become more adverse than it has been so far.

The economic consequences of the US protectionist measures crucially depend on the response from other countries and any future negotiations. The shock represents a major shift in long-standing trade relations, and its very scale makes it difficult to assess, as it could impact global value chains and prompt significant trade diversion. In any event, the US tariffs will have a mixed effect across countries, depending on their different trade networks and the specific measures applied in each case. Moreover, at this point it is difficult to predict the final outcome of the trade negotiations between the United States and other countries (such as China), and how strongly the effects of the deals reached will be felt through trade and financial channels. The recently announced agreements on trade between the United States and China ease the tensions, but they do not fully resolve the existing uncertainty.[1] In this respect, Box 5.2 analyses different hypothetical scenarios and their impact on activity and inflation in various geographical areas.

For the European Union (EU), the negative impact of these policies on economic activity could potentially be significant, as its economy is highly exposed to international trade. The effect would vary across countries, with Spain expected to be one of the least affected on account of its lower direct trade exposure to the United States. The impact of higher US tariffs on EU inflation is uncertain and difficult to quantify at present. On the one hand, they could put upward pressure on prices (due to higher production input prices on the international markets, for instance), but on the other, they could have deflationary effects (for example, owing to a fall in spending prompted by subdued household and business confidence, a decline in external demand from the United States or a diversion of China's trade flows towards the EU).

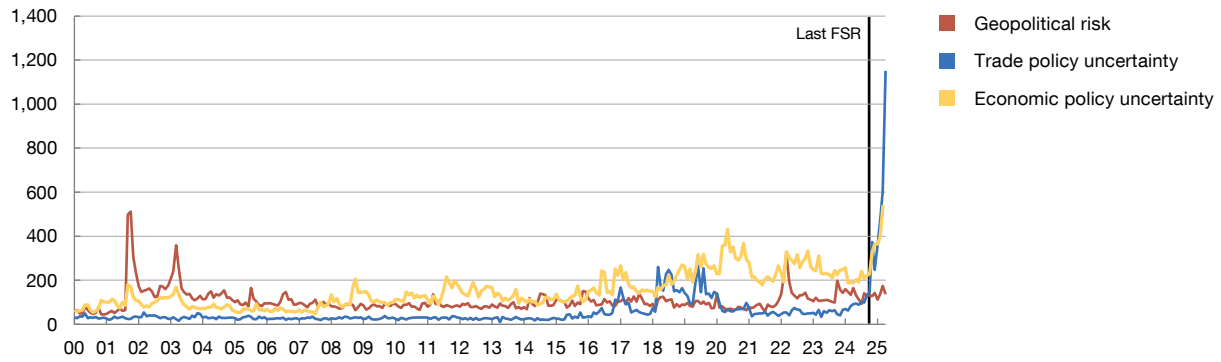
The continued expansionary fiscal stance in the United States poses significant risks to global macro-financial conditions. In the short term, it could initially foster growth in US GDP and global economic activity as a whole, operating in the opposite direction to other policies, such as the tariff increases. However, it would also heighten

1 On 12 May 2025 the United States and China announced they would de-escalate the trade war, including a partial suspension of tariffs for 90 days.

Chart 5.1

The indices measuring trade and economic policy uncertainty have risen considerably since the US tariff hikes were announced

5.1.a Indices of geopolitical risk and of trade and economic policy uncertainty (a)



SOURCE: Economic Policy Uncertainty. Latest observations: April 2025 (geopolitical risk index and trade policy uncertainty index) and March 2025 (economic policy uncertainty index).

a The geopolitical risk index is drawn from Dario Caldara and Matteo Iacoviello. (2021). "Measuring Geopolitical Risk". *American Economic Review,* 112(4), pp. 1194-1225. The trade policy uncertainty index is taken from Dario Caldara, Matteo Iacoviello, Patrick Molligo, Andrea Prestipino and Andrea Raffo. (2020). "The economic effects of trade policy uncertainty". *Journal of Monetary Economics,* 109, pp. 38-59. The economic policy uncertainty index is drawn from Steven J. Davis. (2016). "An Index of Global Economic Policy Uncertainty". NBER Working Paper Series, 22740, National Bureau of Economic Research.

upside inflation risks, which could prompt a tightening of both US monetary policy and global financing conditions. In addition, a loose fiscal policy could increase the risk profile of US government bonds, eroding their value as a safe-haven asset and impacting investor confidence worldwide.

This US policy uncertainty also extends to financial regulation. Relaxing regulation could stimulate global economic activity in the short term and put competitive pressure on financial institutions in other jurisdictions, where short-term incentives to follow a similar path of deregulation may emerge. Statements by Federal Reserve System board members and some of the Executive Orders enacted by President Trump in his first few months of office reinforce the expectation of more lax financial regulation in the United States (see Box 5.3). The pivotal role played by the US financial system and the dollar in international financial transactions means that any weakening of the country's financial regulation could lead to a greater build-up of systemic risks at global level.

The high uncertainty surrounding US economic policy and rising protectionism could weaken the role of dollar-denominated assets in smoothing international trade and financial flows. In this respect, any loss of confidence in these assets would have significant adverse consequences for the global financial system, where the US dollar plays a central role, on account of the depth and liquidity of the US financial markets and its institutional strength and macroeconomic stability (Charts A.2.5.1.1 and A.2.5.1.2 in Annex 2). The recent changes in US economic policy could ultimately erode confidence in its economy, diminishing the appeal of its government bonds and encouraging an international shift towards the use of

other currencies. This would represent a major change in the international monetary system and contributes to the current high level of uncertainty. However, given the present lack of an alternative to the dollar among the main currencies, it may drive financial fragmentation, which in turn would lead to efficiency losses and higher intermediation costs on the global financial markets.[2]

Military conflicts and increased defence spending

Meanwhile, there is still a possibility that the conflicts in the Middle East and the war between Russia and Ukraine could escalate, despite diplomatic efforts to the contrary. If this were to happen, economic conditions worldwide would be adversely affected by global supply chain disruptions, impacting energy commodities in particular, and a widespread increase in risk aversion. Added to this are the renewed military tensions between India and Pakistan, which had been dormant in recent years.

In this new geopolitical setting, the EU has announced extensive programmes to raise military spending to address the greater defence needs. This increase in government spending could provide something of a boost to activity in the future, but it has a high budgetary cost. The use of debt issuance to finance at least part of this spending could drive up long-term interest rates and tighten financing conditions within the EU. It would also reduce fiscal resilience and could crowd out financing to the private sector. Raising the tax burden to fund this spending would avoid the need to increase public debt, but it would have a more immediate negative impact on activity.

Political uncertainty in Europe

The political uncertainty in Europe makes economic policy developments less predictable, particularly in the fiscal realm. In France, the political situation generates uncertainty in key policies, not least its fiscal policy where it is running a high deficit of 5.8% of GDP. In Germany, the formation of a coalition government could ease the country's political uncertainty, although the loss of the new Chancellor's first investiture vote on 6 May seems indicative of some fragility. Moreover, the underlying issues of adapting the economy to an environment of heightened geopolitical tensions (linked, for example, to its energy supply, trade competitiveness and increased defence spending) will likely continue to pose major political challenges in Germany. Turning to Spain, the parliamentary situation again makes it less easy to predict economic policy developments, in particular with respect to the fiscal consolidation plans. Spanish firms identify this uncertainty as one of the main potential constraints on their activity (see Section 2.1).

2 Financial fragmentation refers to the break-up or division of a financial market into a number of submarkets with limited or no interconnections.

Possible impacts of geopolitical risks

With its high degree of external openness, the Spanish economy could be affected by unfavourable developments in global activity in the event of a geopolitical crisis. Specifically, a slowdown in global GDP growth due to rising protectionism and the uncertainty surrounding the scale of such policies could curb activity in Spain through various trade and financial channels. As already mentioned, one factor mitigating the risks to external demand would be the fact that Spain has a lower direct trade exposure to the United States than other European countries.

The financial position of all economic sectors in Spain would be significantly affected by the materialisation of geopolitical risks. A cooling of global economic activity would have an adverse impact on the income of households and non-financial corporations (NFCs), eroding their ability to meet their payment obligations. This in turn would push up the cost of loan loss provisions for the banking sector. Moreover, higher borrowing costs would exert further pressure on the interest burden and credit quality of households and NFCs, and the banking sector would also face higher funding costs, especially for financial market funding. The impact on banks' net interest income generation is unclear and will depend on which yield curve segments are most affected in these scenarios. In any event, the risks to bank profitability are tilted to the downside due to the possibility of a significant deterioration in credit quality.

Nevertheless, the degree of sectoral vulnerability to these risks is mixed. Such concerns are partially mitigated by the low level of indebtedness among households and NFCs, along with the availability of extensive retail financing from the banking sector. However, general government, which is in a more vulnerable starting position, could face greater financial constraints in the event of an increase in its borrowing costs.

5.2 Risk of an abrupt financial market correction

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

The possibility of sudden, sharp corrections in the global financial markets continues to pose a high risk to financial stability. As described in Chapter 4, risk-bearing financial asset valuations remain high, despite the geopolitical uncertainty and the market correction after the tariff measures were announced by the new US Administration in April. By historical standards, equity risk premia[3] and high-yield corporate debt spreads[4] are low. Indeed, despite the corrections observed since early April, both in the United States and Europe equity risk

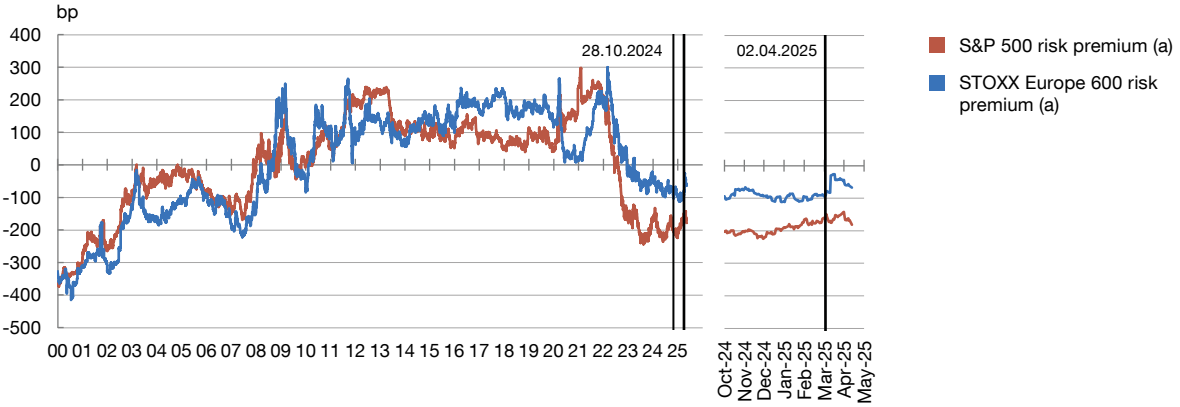
3 The equity risk premium is the difference between the return required of a stock market investment and the risk-free rate. A low (high) premium suggests that stock market investors are more (less) willing to take risks and will thus demand a lower (higher) return.

4 Corporate debt spreads are defined as the difference between the return required of corporate debt securities and the risk-free rate at the same term. For more information, see Chart 4.12.

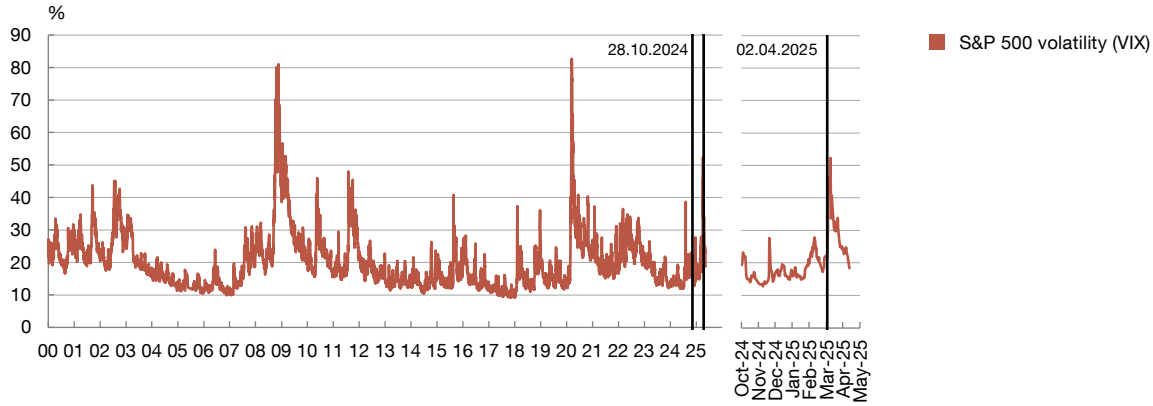
Chart 5.2

Equity risk premia are low by historical standards, despite marked geopolitical uncertainty and the recent increase in volatility

5.2.a Equity risk premia



5.2.b Stock market volatility



SOURCES: Banco de España, Bloomberg Data License and LSEG Datastream. 28.10.2024 is the cut-off date for the last report. 02.04.2025 is the date of the tariff war escalation. Latest observation: 12 May 2025.

a The data reflect deviation from the 2000-25 average. 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). The average in the period 2000-25 is 449 bp for the S&P 500 and 560 bp for the STOXX Europe 600.

premia are at low levels not seen on a sustained basis since 2008 (Chart 5.2.a). Stock market volatility, meanwhile, has returned to levels in line with its historical average (Chart 5.2.b).

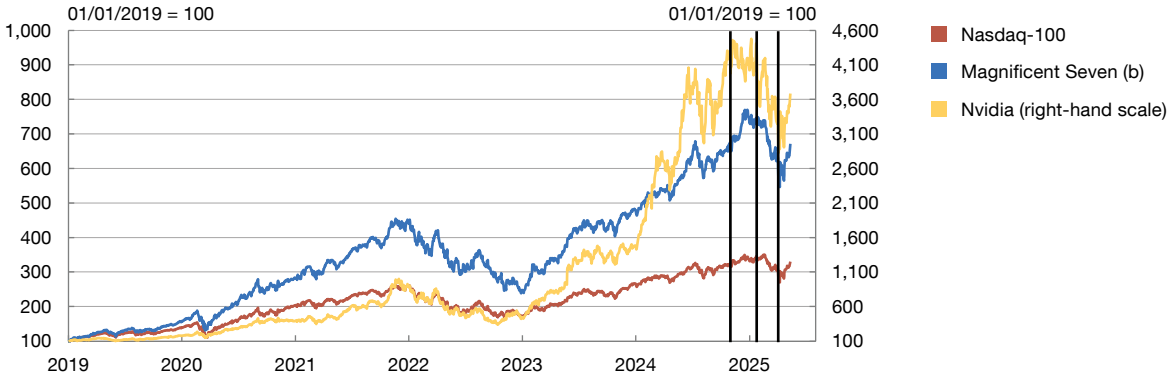
These valuations could be fragile, as they continue to be based on highly favourable macroeconomic and corporate earnings forecasts. A shift in the investor outlook caused by the materialisation of adverse shocks (such as unexpected changes in economic and trade policies or fresh adverse geopolitical events) could trigger sudden stock price corrections, which could in turn be amplified if illiquid or highly leveraged financial intermediaries were to engage in fire sales of their assets. Against this background, the spike in volatility observed in April points to an increased fragility of stock valuations (Chart 5.2.b).

Systemic importance of the tech sector

A possible correction in tech firms' capitalisation adds a further market risk factor. As indicated in Section 4.2 and in the previous edition of this report,[5] market capitalisation is highly concentrated among a small number of tech firms. This opens up the possibility of abrupt, far-reaching market corrections, should there be a change in expectations about the profits of technological innovation or these firms' ability to retain them. The arrival of Deepseek and its negative effect on the valuation of firms linked to the manufacture of advanced artificial intelligence (AI) hardware illustrate the uncertainty surrounding such expectations (Chart 5.3). Despite this correction and the subsequent tariff-induced adjustment, tech sector valuations remain at high levels.

Chart 5.3
Since 2023 the increase in stock market valuations has been concentrated among a small group of US tech firms, exposing the entire stock market to their business risks

5.3.a US stock market (a)



SOURCES: Banco de España and LSEG Datastream. Latest observation: 12 May 2025.

a The vertical lines correspond to 28 October 2024 (cut-off date for the last FSR), 27 January 2025 (announcement of the R1 model by Chinese tech firm DeepSeek) and 2 April 2025 (tariff war escalation).
b The Magnificent Seven are Apple, Nvidia, Microsoft, Amazon, Meta, Google and Tesla.

Possible impacts of the financial market risks

Although the risks of a financial market correction largely stem from exogenous factors, they are nonetheless relevant to the Spanish economy owing to international interconnectedness. For example, potential shocks to the value of US tech firms or to long-term Treasury yields would result in tighter global financial conditions owing to the pivotal position of the US financial system in the global markets. In this respect, the frictions in the US government bond market and the depreciation of the dollar – described in the previous section and in Chapter 4 – underscore the significance of financial market risks in the United States. Against this backdrop, the fact that Spain has a high level of public debt could make the cost

5 See Box 1.2 of *Financial Stability Report. Autumn 2024.*

of such debt more sensitive to shocks. Spain's banking sector, households and NFCs could also see a rise in their borrowing costs, albeit from a stronger initial position. In such a scenario, at the international level some highly leveraged non-bank financial intermediaries with tight liquidity positions (such as open-ended international investment funds and hedge funds) could amplify the valuation corrections and transmit market tensions through their interconnections with other intermediaries.

5.3 Macroeconomic risks

Lower global growth

The global economy continued on its growth path in 2024 H2. However, as 2025 has progressed, the indicators have shown signs of a considerable downturn in the global economic outlook (Chart 5.4.a). Increasing uncertainty about US economic policies and the trade restrictions discussed above has prompted a considerable deterioration in business and consumer confidence indicators. As noted earlier, the latest IMF forecasts point to a widespread economic slowdown across most economies. The outlook for the United States and China is adversely impacted by the tariff escalation, while growth projections have also been revised down for the euro area. The modest GDP growth forecast for the euro area is underpinned by services and private consumption, and by the anticipated fiscal expansion in Germany.

In Spain, growth is expected to continue in the coming quarters, albeit at a more moderate pace, despite the evident downside risks posed by the highly complex international situation. In 2024 the improvement in activity in Spain was driven, in particular, by government and private consumption and strong services exports. The growth projections published in March – revised up compared with those available when the Autumn 2024 FSR was published – expected growth to be underpinned mainly by domestic demand, especially private consumption, and stronger gross capital formation, with the external sector's contribution turning negative.[6] The most recent economic, trade and geopolitical developments reflect the materialisation of some of the downside risks considered in those projections, which were based on assumptions set before the new US tariff policy was announced (Banco de España *Annual Report 2024*).

Monetary policy divergence in the main advanced economies

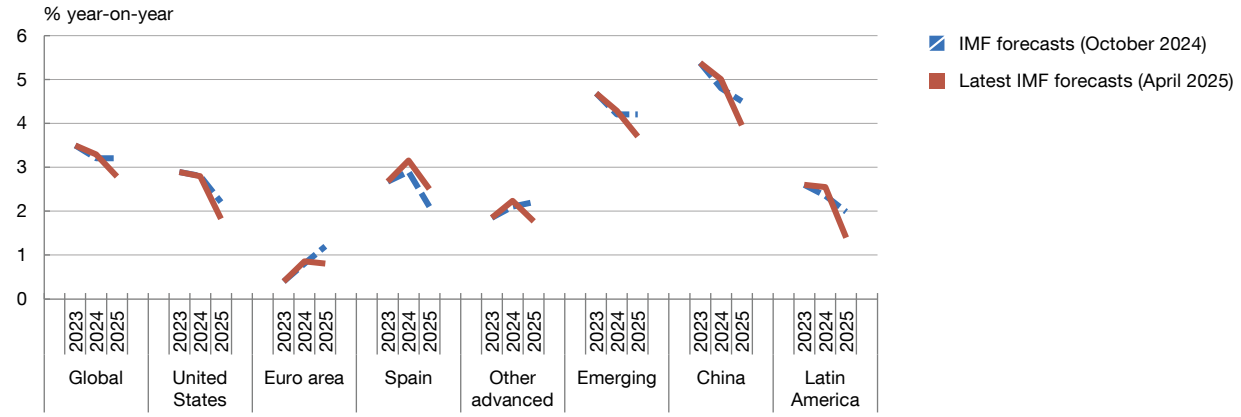
The normalisation of inflation has decelerated worldwide in the recent period. Inflation rates have stopped falling in most regions in recent months, owing to downward stickiness in services inflation and rising energy prices. Short-term inflation expectations have risen, particularly in economies such as the United States, amid growing protectionist tensions.

6 Macroeconomic projections and quarterly report on the Spanish economy. March 2025.

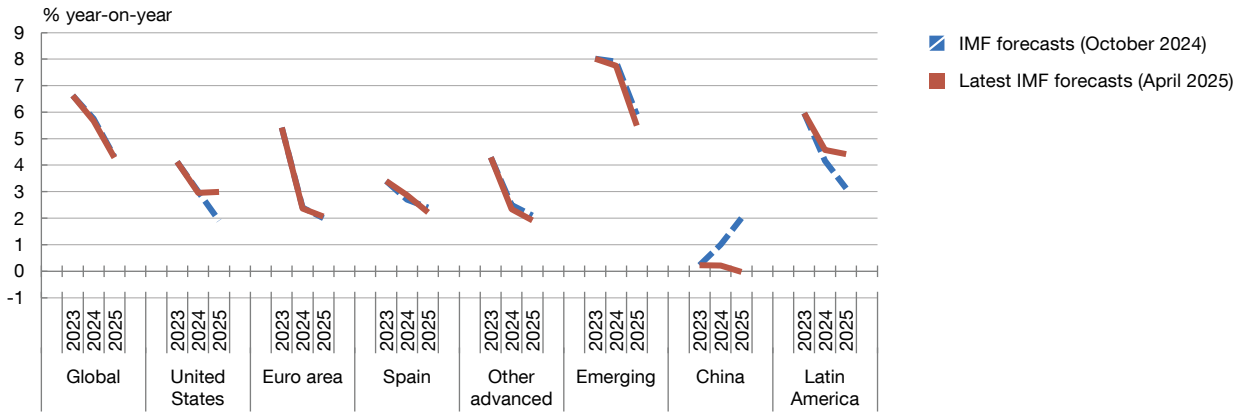
Chart 5.4

The global growth outlook has been revised down amid high geopolitical and trade uncertainty

5.4.a Actual and forecast GDP growth (a)



5.4.b Actual and forecast inflation (a)



SOURCE: IMF.

a WEO aggregates except Latin America (Brazil, Chile, Colombia, Mexico and Peru).

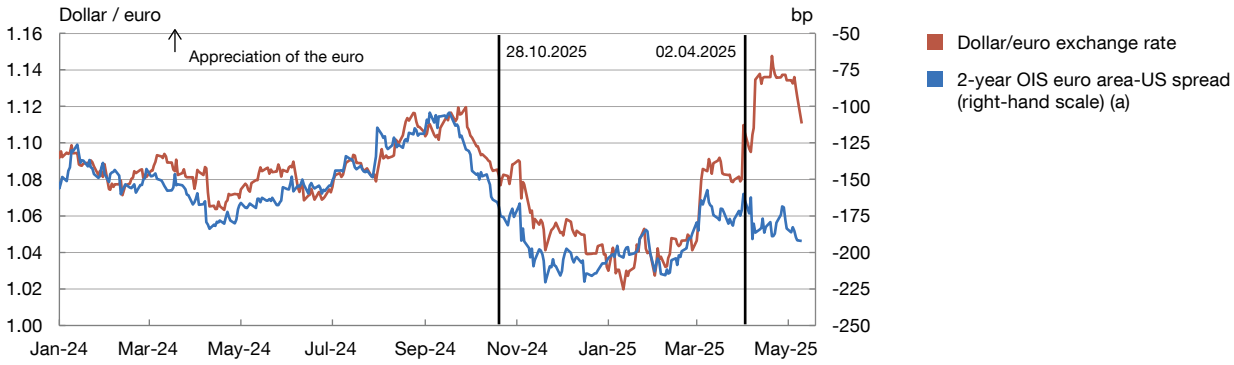
However, looking ahead to the coming quarters, under the baseline scenario for the euro area, inflation is still expected to gradually converge towards the 2% target level over the projection horizon (Chart 5.4.b).

Against this backdrop, monetary policies in the main advanced economies have begun to diverge. While the European Central Bank has continued to cut policy interest rates and markets and analysts have maintained their expectations of further rate cuts throughout 2025, in the United States the Federal Reserve halted monetary easing in January. This divergence and the different growth outlooks have been reflected in foreign exchange market developments, with the dollar appreciating up to end-2024 and exchange rate volatility in 2025 (Chart 5.5). In recent months, the depreciation of the dollar is associated more with the uncertainty surrounding other US economic policies than with standard monetary policy considerations.

Chart 5.5

Despite the deeper monetary policy rate cuts in the euro area, the dollar has depreciated against the euro of late, influenced by trade tensions

5.5.a Interest rate spread and bilateral exchange rate. United States vis-à-vis the euro area



SOURCES: Banco de España, Bloomberg Data License and LSEG Datastream. 28.10.2024 is the cut-off date for the last report. 02.04.2025 is the date of the tariff war escalation. Latest observation: 12 May 2025.

a The OIS rate approximates the risk-free interest rate.

Emerging market economies are particularly vulnerable to the monetary policy uncertainty in the United States and the value of the dollar. This uncertainty could give rise to tensions in international financial markets and abrupt shifts in capital flows and global financial conditions that would likely have a greater impact on these economies.[7] In turn, this could lead to many of them adopting a more restrictive monetary policy stance and, consequently, to a decrease in bank credit. The emerging economies potentially most vulnerable to global financial tensions are those that have a higher share of foreign currency-denominated debt or a higher presence of foreign investors in their local debt markets (Chart 5.6.a). So far, these economies have proved resilient to the uncertain environment (see, for example, Chart 4.14), but the identified risks remain.

Other macroeconomic risks

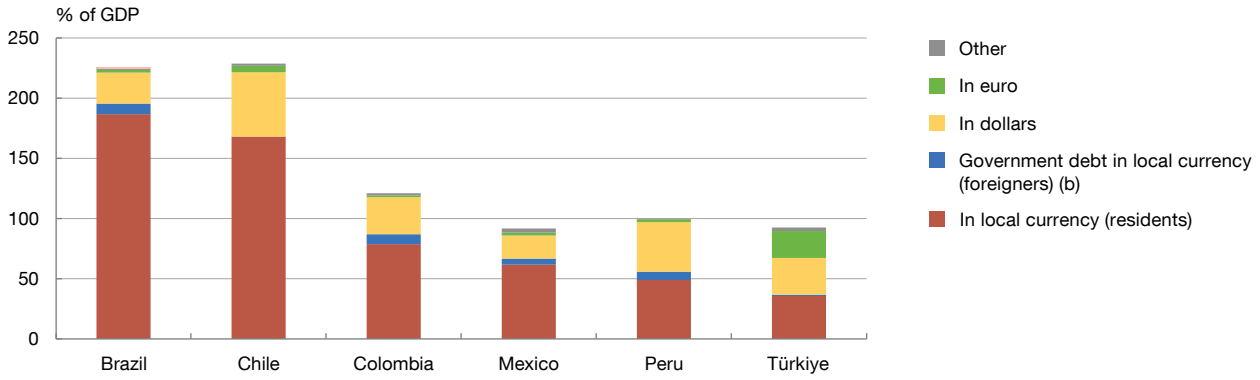
The Spanish banking system conducts business in emerging economies where additional risks linked to fiscal imbalances and their external position are identified. In some of these economies, such as Mexico or Brazil, the most significant risks relate to fiscal vulnerabilities (Chart 5.6.b). Meanwhile, Türkiye continues to gradually correct its macro-financial imbalances, although reducing inflation is proving to be a very slow process and this could limit the monetary easing cycle initiated by the Turkish central bank.

7 Report on the Latin American economy. First half of 2024 (p.18).

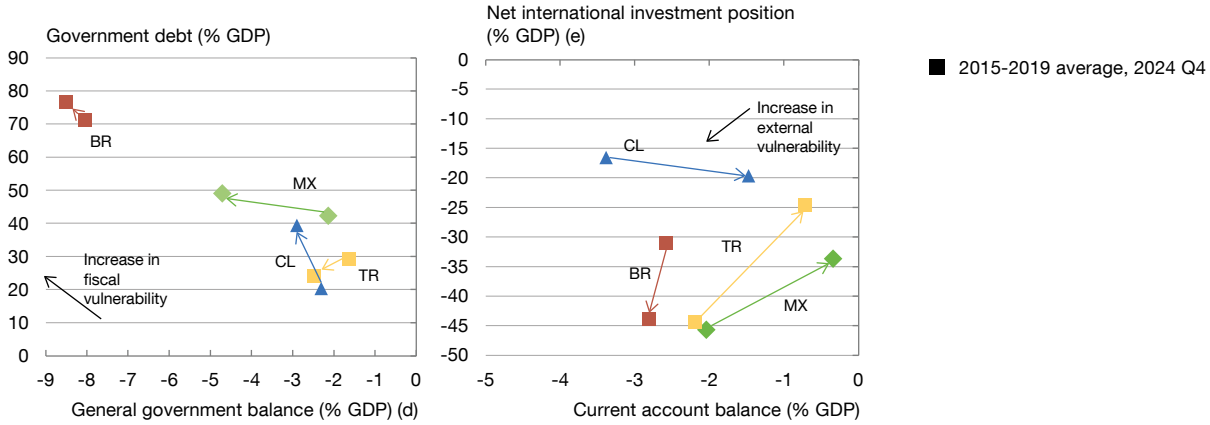
Chart 5.6

Emerging market economies with higher foreign currency-denominated debt and a worse fiscal position are more financially vulnerable to the current risk environment

5.6.a Composition of debt by currency (a)



5.6.b Vulnerability indicators (c)



SOURCES: Refinitiv and national statistics. Latest observation: 2024 Q4.

a Breakdown by currency of the debt of NFCs, households, banks and the public sector.
b Government debt in local currency held by non-residents.
c The value pairs for each variable are the average for the period 2015-19 (starting point, tail of the arrow) and 2024 Q4 (end point, tip of the arrow). BR: Brazil, CL: Chile, MX: Mexico and TR: Türkiye.
d General government surplus (+) or deficit (-) as a percentage of GDP.
e External assets less external liabilities (stocks) as a percentage of GDP.

The Spanish economy faces additional risks to growth, linked to employment, immigration and housing. Growth could be dampened if job creation were to underperform expectations or migratory flows were to slow, considering that both have been key drivers of Spanish economic growth in the recent period. Moreover, should housing affordability problems worsen, they could become a bottleneck for growth, as it would mean that more resources are allocated to housing and fewer to other goods and services. Such difficulties could also restrict labour mobility and the associated greater competitiveness and productivity gains, hampering potential growth.

5.4 Cyber risks

Managing cyber risks is a priority for the financial sector. After declining in the wake of the pandemic, over the last two years the number of significant cyber incidents at European banks – especially denial-of-service (DoS) and ransomware attacks on service providers[8] – has escalated (Chart 5.7). Indeed, in 2024, they reached an all-time high in the historical series available.[9] Discussions with external analysts (again, see Box 5.1) and the supervisory information available show that Spanish banks are addressing these risks as a matter of priority, as they constitute one of their largest emerging threats. This perception is also shared at the European level.[10]

Although cyber risks can potentially have a highly disruptive impact on banks' operations, it is not apparent how they might feed into a financial stability crisis. The most plausible way in which cyber risks could ultimately trigger a systemic crisis would be by causing a widespread liquidity crisis, stemming from a bank run by customers in response to news about a serious operational incident. For this to happen, first the incident would have to be sufficiently severe and long-lasting so as to erode customer confidence in the recovery of their funds, Second, it would have to affect all, or at least much, of the banking system, which would mean impacting a large number of banks with different operational frameworks. Lastly, even in such a scenario (an attack with severe, long-lasting and widespread impact), supervisory bodies could use the specific liquidity facilities at their disposal to contain the impact.

Strengthening cyber resilience is a priority for government authorities and financial supervisors both at the European level and nationally. The disruptive capacity of cyber risks warrants the broad spectrum of general and sector-level policies deployed. Transposition of the NIS2 Directive[11] will strengthen the existing framework of best cybersecurity practices across the board. In the banking arena, the authorities have defined their supervisory expectations for banks in this regard. In addition, significant progress has been made to operationalise the European Digital Operational Resilience Act (DORA), coordinate the response to cyber incidents through the European Systemic Risk Board (ESRB) and prioritise cyber risks in the work programme of the Single Supervisory Mechanism (SSM). Using controlled trials to identify vulnerabilities and responsiveness to cyber incidents at banks

8 A DoS attack is an attack on a system, application or device that aims to put it out of service by flooding it with requests. A ransomware attack consists of malware that is used to "hijack" either a device upon start-up or the information it contains, preventing the victim from accessing the device or information unless a ransom is paid.

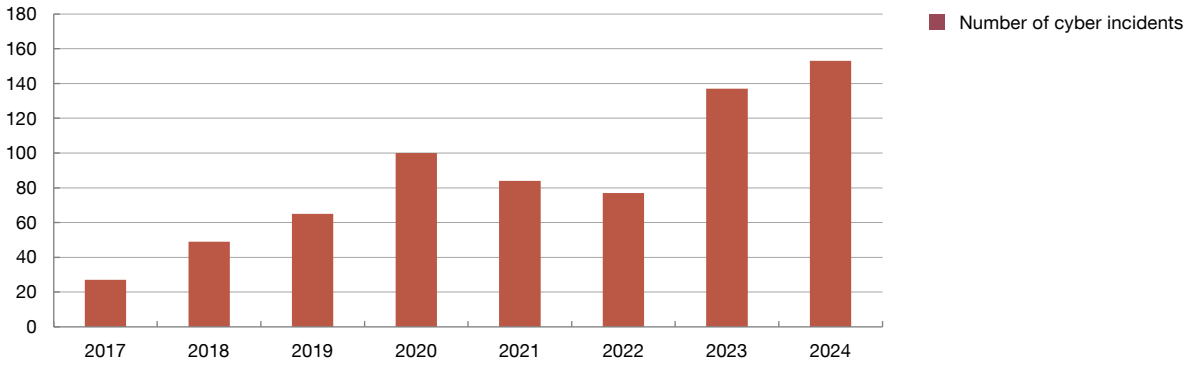
9 Other indicators also point to a higher incidence of cyberattacks in 2024. For example, according to information from the private provider Chainalysis, cryptocurrency thefts by hackers linked to the North Korean government amounted to $1.34 billion in 2024, more than double the previous year's figure and the highest annual total so far. Moreover, on 21 February 2025 the Lazarus Group, allegedly linked to the North Korean government, carried out the largest cryptocurrency theft in history, taking Ethereum worth almost $1.5 billion from the crypto exchange ByBit (surpassing, in one single attack, the total amount stolen in 2024).

10 As shown in banks' responses to the European Banking Authority's risk assessment survey, published as part of its *Risk Assessment Report,* in both July 2024 and November 2024.

11 The NIS2 Directive establishes a unified legal framework to uphold cybersecurity in 18 critical sectors across the EU.

Chart 5.7
Strengthening cyber resilience is essential amid a surge of significant cyber incidents at European banks

5.7.a Significant cyber incidents reported to the SSM by significant institutions. Number of events



SOURCE: ECB. Latest observation: 2024.

(TIBER, Threat Intelligence-Based Ethical Red-teaming) also adds to the tools available to strengthen cyber resilience.[12]

Despite the mitigating factors in place, applying technological innovation to develop new forms of cyberattacks generates uncertainties. For instance, AI and quantum computing can pose new threats, but they also provide new forms of defence against them. In this setting, overconfidence in the resilience to known scenarios must be avoided and robust systems (for instance, redundancy and offline repositories) must be in place to withstand extreme scenarios.

Lastly, global bloc dynamics may increase the number of geopolitically motivated cyberattacks. Such attacks have more disruptive potential than cybercrime attacks, on account of the resources available to national defence systems.

12 The Financial Stability Board's Cyber Lexicon defines cyber resilience as the ability of an organisation to continue to carry out its mission by anticipating and adapting to cyber threats and other relevant changes in the environment and by withstanding, containing and rapidly recovering from cyber incidents.

Box 5.1

EXTERNAL INFORMATION ON FINANCIAL STABILITY RISKS AND VULNERABILITIES

The Banco de España has undertaken a process to compile external information, to better identify the main financial stability risks and vulnerabilities that could affect the Spanish economy.

As part of this initiative, between February and March 2025 the Banco de España engaged with a number of geopolitical and banking sector experts. In some cases, a survey was circulated before the meeting with questions on financial stability risks and vulnerabilities, which served as a guideline for structuring the discussion.

This box provides a summary of the views of the different groups. It should not under any circumstance be interpreted as the Banco de España's analysis of the risks and vulnerabilities examined in this report, although it does make a valuable contribution in this respect.

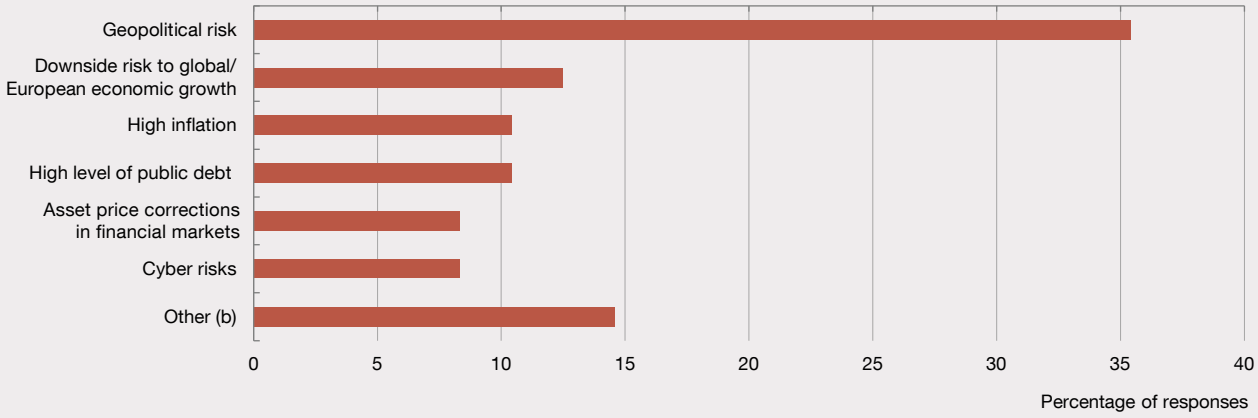
During the meetings with the experts, they provided their perception of the main risks that could impact financial stability (Chart 1). The chief risk they cited was geopolitical risk, with trade tensions (protectionism) and the situation of the European Union (EU) being their primary concerns in this respect. The participants underscored the importance of properly identifying the various facets of geopolitical risks and how they materialise in inherently financial risks (such as credit, market and operational risk).

The second risk identified was the downside risk to global and European economic growth, against a backdrop of heightened uncertainty. In third place was the risk associated with high and persistent inflation, stemming from both economic policies and energy price fluctuations. The other significant sources of risk identified included the high levels of public debt in Spain, other large European economies and the United States, and the risk associated with the high valuations of some financial assets, which could be exposed to abrupt corrections in the event of a downward revision to the market outlook.

Lastly, the experts named cyber risk as a significant risk factor, citing specifically attacks on common infrastructures, which could propagate the disruption of activity to multiple entities and operators across the world.

The geopolitical researchers, meanwhile, underlined that, in the current setting, geopolitical interests prevail over their immediate economic consequences. These participants also discussed the obstacles facing the EU in increasing its strategic autonomy and capacity to influence on the global stage, and emphasised the need to reduce

Chart 1
Main risks to financial stability (a)



SOURCE: Banco de España survey of chief risk officers and market analysts, sent in February and March 2025.

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 fragmentation, the real estate sector, climate change, demographics, the increase in taxes on banks, the deterioration in the Spanish banking sector's liquidity position and the leverage of non-bank financial institutions.

any political or economic fragmentation, including for the purpose of strengthening the defence industry.[1]

They pointed out that the conflicts in the Middle East and Ukraine are, by themselves, still hotspots of instability, capable of giving rise to macro-financial shocks in the short and medium term.[2] Turning to Latin America, the region faces a period of heightened uncertainty marked by turmoil in international trade, and the participants cited the high level of foreign currency debt among some economies as a major source of financial vulnerability.[3] Lastly, they highlighted the Sahel region's capacity to affect the Spanish economy in terms of trade, energy and migration.

1 For a more in-depth analysis of this issue, see Félix Arteaga, Daniel Fiott and Luis Simón. (2025). "All in? The revival of the Spanish and European defence industry", Realinstitutoelcano.org.

2 See Mira Milosevich-Juaristi. (2025). "Guerra y paz en Ucrania: entre Múnich, Doha y Yalta", Realinstitutoelcano.org, for an analysis of the potential consequences of the peace negotiations undertaken in relation to the war in Ukraine.

3 See Judith Arnal, José Juan Ruiz and Ernesto Talvi. (2023). "Narrative vs data: the SVB crisis and the resilience of Latin American banks", Realinstitutoelcano.org, for an analysis of how financial turmoil in the United States can ultimately spread to the Latin American banking sector, in this case in the context of the Silicon Valley Bank crisis in 2023.

Box 5.2

MACROECONOMIC IMPACT OF ALTERNATIVE HYPOTHETICAL TRADE SCENARIOS

In the light of the trade policy announcements made by the new US administration, the Banco de España *Annual Report 2024* analyses how different hypothetical scenarios regarding future tariff developments across economic areas and their various transmission channels might affect growth and inflation worldwide and in Spain.

To this end, two multi-country general equilibrium models were used: the NiGEM model, which includes most of the major economies, but lacks a sectoral breakdown, and the Banco de España's multi-country, multi-sectoral model.[1] The latter covers a smaller number of countries or blocs (8 in total), but takes into account intermediate consumption and provides a detailed sectoral breakdown. This allows for an analysis of how the output of different sectors is affected, based on their position in production chains.

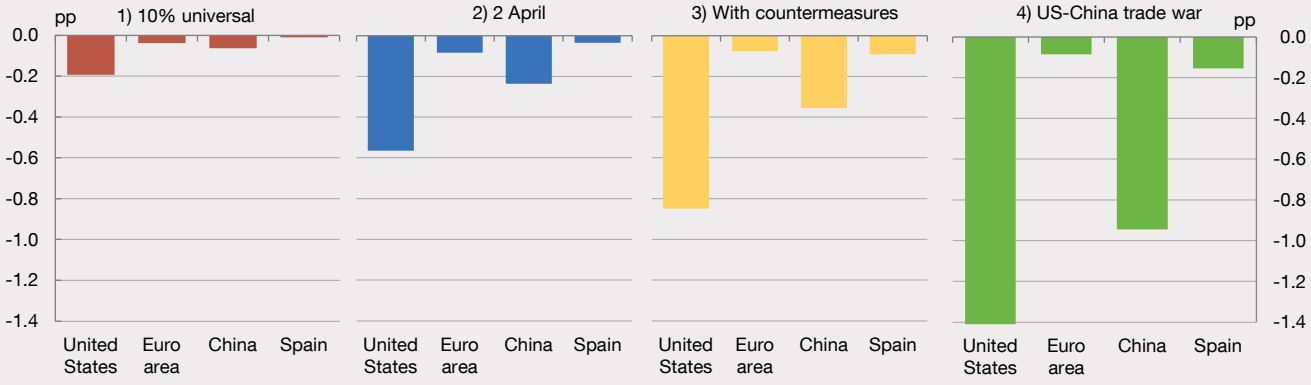
Tariff scenarios

The analysis considered the effects transmitted through trade channels under four alternative scenarios:

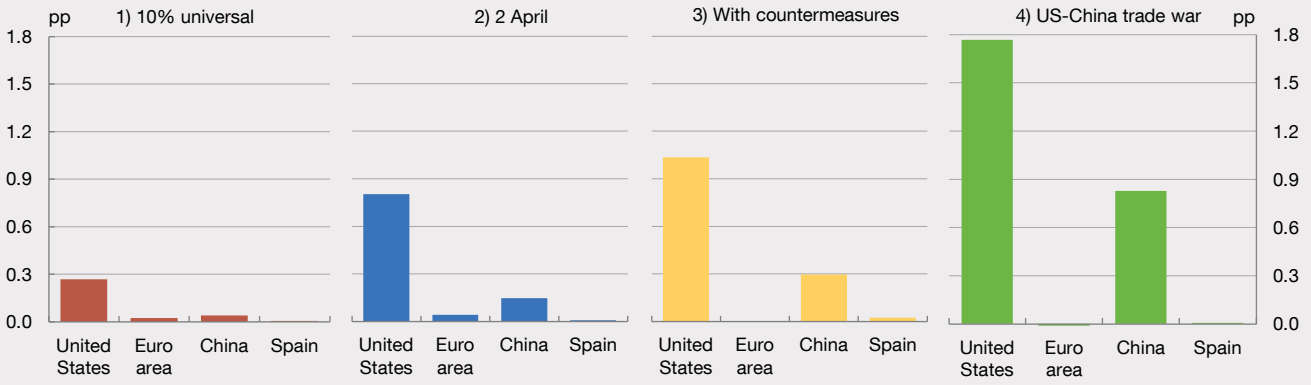
1. **Universal 10% tariff:** the United States imposes a 10% tariff on all imports of goods, except energy products.

Chart 1
Impact on activity and inflation through trade channels (a)

1.a Impact on GDP (percentage deviation from baseline)



1.b Impact on inflation (percentage deviation from baseline)



SOURCE: Banco de España, using NiGEM and the multi-sectoral model (Aguilar, Domínguez-Díaz, Gallegos and Quintana, 2025).

a The figures correspond to the average annual impacts according to the two models considered during the first three years following the tariff hike.

1 See Pablo Aguilar, Rubén Domínguez-Díaz, José Elías Gallegos and Javier Quintana (2025), "The Transmission of Foreign Shocks in a Networked Economy", Documentos de Trabajo - Banco de España. Forthcoming.

2. **2 April tariffs:** the United States imposes specific tariffs on US imports from China, the EU and other countries, in line with President Trump's announcements on 2 April.

3. **Countermeasures:** in response to the US tariffs, the rest of the world raises its tariffs on US exports symmetrically.

4. **US-China trade war:** escalation of the tariff conflict between the United States and China, with high reciprocal tariffs.

Impact on economic activity and inflation through trade channels

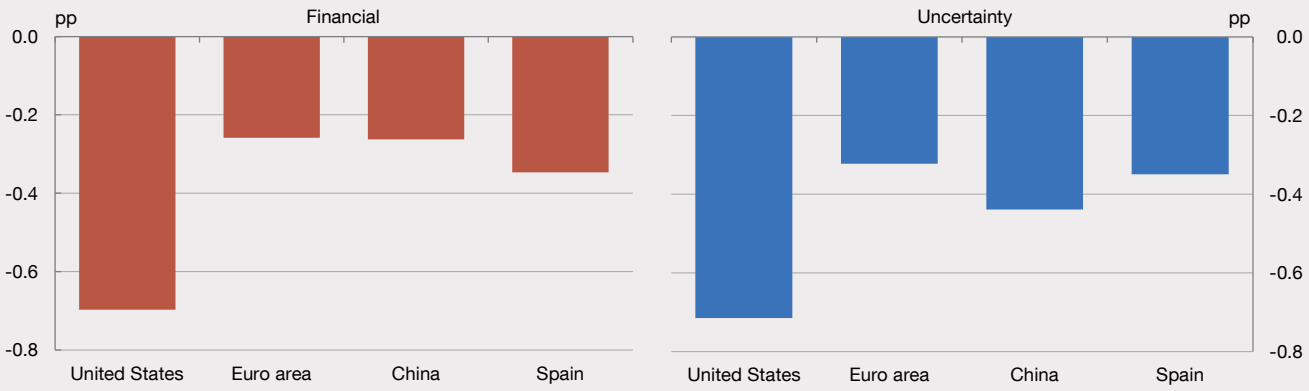
The rise in tariffs reduces global economic growth under all the scenarios simulated (Chart 1). The higher the general tariff rate, the larger the impact, so that growth is reduced most under the countermeasures and trade war scenarios.

By geographical area, the negative impact is considerably stronger in the United States than in the rest of the world. Under the US-China trade war scenario, China would also experience a significant contraction in GDP. Conversely, the effects are very moderate in the euro area and Spain.

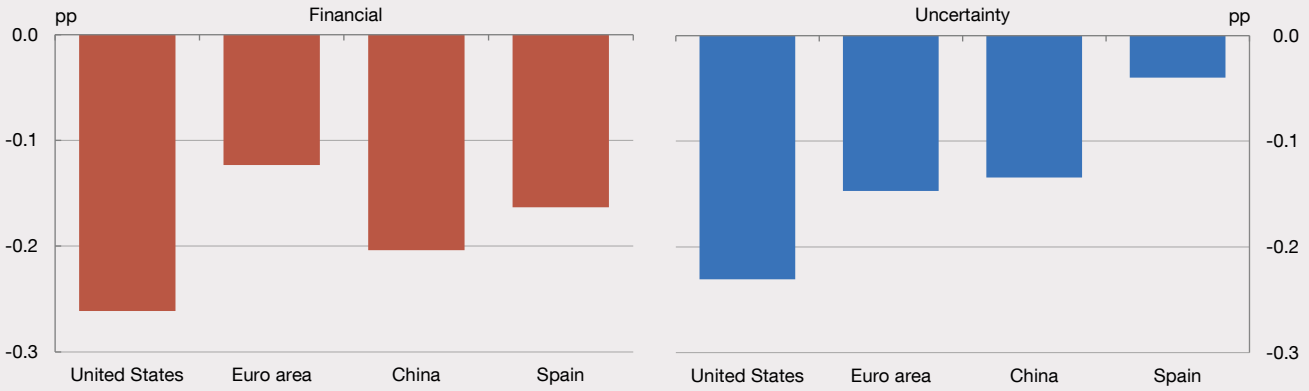
This pattern is also seen in the analysis of the effects of tariff measures on prices. The United States would face greater inflationary pressures under all the scenarios considered. Meanwhile, in the euro area and in Spain, inflationary pressures would arise, mainly as a result of the depreciation of the nominal effective exchange rate of

Chart 2
Importance of the financial and uncertainty channels (a)

2.a Impact on GDP (percentage deviation from the baseline)



2.b Impact on inflation (percentage deviation from the baseline)



SOURCE: Banco de España, using NiGEM.

a The figures represent the average annual impacts during the first three years following the tariff hike.

the euro, but they would be much more limited owing to certain offsetting factors: lower activity and trade diversion effects (which involve a shift to the euro area of exports from other countries that would otherwise have gone to the United States).

Under the 2 April tariffs scenario, the sectors most affected in the euro area and in Spain are pharmaceuticals, chemicals and basic metals, in the latter case owing to their prominent role as inputs in many goods exporting sectors. At the same time, the most indirectly exposed services sectors are those that provide intermediate services for goods exports, such as transport or professional services, while tourism exports may benefit from a possible depreciation of the euro.

Amplifying effects

The above simulations show that, when only pure trade channels are considered, the increase in tariffs would only have significant effects in the United States and, possibly, in China. However, other channels potentially amplifying such effects should also be considered.

In this regard, the Banco de España *Annual Report 2024* explores two of these channels, the impact of which has become visible following the various announcements by the new US administration of policy changes in a number of fields, particularly in trade:

- Financial channel: this operates through the deterioration in financial conditions owing to the increases in sovereign bond yields and corporate spreads, and the declines in stock market indices.

- Uncertainty channel: this has been calibrated in the analysis on the basis of the surge observed in April in the economic policy uncertainty (EPU) index.

In line with the extensive empirical evidence available, simulations using the NiGEM model confirm that these channels may have significant negative effects on domestic demand (consumption and investment) and, therefore, on economic activity (Chart 2). As a result, deflationary pressures would tend to predominate in the euro area and in the Spanish economy, while the rise in inflation would be partially mitigated in the United States and China.

Box 5.3

THE NEW US ADMINISTRATION'S FINANCIAL REGULATION MEASURES

As stated in the main text of this report, the uncertainty surrounding the financial regulation stance of the new US Administration and agencies threatens to become a further factor within the set of growing geopolitical risks. In addition to the measures adopted domestically in the United States, the country is also withdrawing from some global initiatives and there are doubts over the implementation of international agreements, such as Basel III, which could drag other jurisdictions into a race to the bottom on regulatory standards.

Implementation of Basel III in the United States

On 27 July 2023, US agencies published their proposal for implementation of the final Basel III reforms (dubbed "Basel III endgame").[1] The proposal entailed an estimated increase of around 19% in common equity tier 1 (CET1) capital requirements for the US banking sector and, in some respects, was even more stringent than those final Basel III reforms.[2] It also extended requirements for smaller banks.

In September 2024 Michael Barr, then Vice Chair for Supervision of the Board of Governors of the Federal Reserve System, gave a speech that anticipated several revisions to the initial Basel III endgame proposal, reducing the estimated impact on the CET1 requirements to a rise of 9% by eliminating several of the prior proposals and including deviations from Basel III's credit risk, operational risk and market risk frameworks.[3]

In March 2025 Michelle Bowman replaced Michael Barr as Vice Chair for Supervision of the Board of Governors of the Federal Reserve System. Bowman had already demonstrated her rejection of the initial Basel III endgame proposal championed by her predecessor, and made no mention of Basel III implementation in her nomination hearing before the US Senate on 10 April.[4]

However, prior to stepping down as Vice Chair for Supervision, in February 2025 Barr warned of the risks of the United States not following through on its commitment to adopt the Basel III capital reforms, which could result in an uneven playing field across the globe, a race to the bottom on prudential requirements and more stringent requirements for US banks operating abroad.[5] In an appearance before the US Senate in the same month, Jerome Powell, Chair of the Board of Governors of the Federal Reserve System, was also in favour of completing implementation of Basel III.[6] In his testimony, he repeated the Federal Reserve's commitment to working with US agencies such as the Federal Deposit Insurance Corporation (FDIC)[7] and the Office of the Comptroller of the Currency (OCC)[8] to complete implementation of Basel III endgame and reiterated that he expected the impact on capital requirements to be neutral.

The uncertainty surrounding the stance that the United States will ultimately adopt is already affecting other jurisdictions, such as the United Kingdom, Canada and the European Union. The former has announced a delay to implementation of Basel III until January 2027.[9] Canada has limited the output floor to 67.5% of risk-weighted

---

1 Board of Governors of the Federal Reserve System. (2023). "Agencies request comment on proposed rules to strengthen capital requirements for large banks".

2 For example, Basel III endgame: (i) prohibited the use of internal models to calculate regulatory capital for credit risk and, in certain cases, for market risk; (ii) raised the risk weights under the standardised approach for credit risk above the Basel III requirements for the retail and residential mortgage portfolios, and did not accept other lower weights, e.g. those envisaged for small and medium-sized enterprises; and (iii) for operational risk, considered historical losses only where they contributed to raising the requirements.

3 M. Barr. (2024). "The Next Steps on Capital", Vice Chair for Supervision of the Board of Governors of the Federal Reserve System.

4 See M. Bowman's nomination hearing as Vice Chair for Supervision of the Board of Governors of the Federal Reserve System.

5 M. Barr. (2025). "Risks and Challenges for Bank Regulation and Supervision", Vice Chair for Supervision of the Board of Governors of the Federal Reserve System.

6 J. Powell. (2025). "The Semiannual Monetary Policy Report to the Congress", Chair of the Board of Governors of the Federal Reserve System.

7 The FDIC is an independent agency created by the US Congress to maintain stability and public confidence in the US financial system. To accomplish this mission, the FDIC insures deposits; examines and supervises financial institutions for safety, soundness and consumer protection; makes large and complex financial institutions resolvable; and manages receiverships.

8 The OCC charters, regulates and supervises all US banks, federal savings associations and federal branches and agencies of foreign banks. The OCC is an independent bureau of the US Department of the Treasury.

9 Prudential Regulation Authority. (2025). "The PRA announces a delay to the implementation of Basel 3.1".

assets, as opposed to the 72.5% floor under Basel III.[10] Meanwhile, the European Commission has launched a consultation on possible revisions to the market risk framework (Fundamental Review of the Trading Book), which could delay its implementation by a further year, to January 2027, and introduce amendments during the following three years.

By contrast, the Group of Central Bank Governors and Heads of Supervision (GHOS)[11] reaffirmed their expectation to implement Basel III in full and consistently. GHOS members consider that the series of shocks to financial markets over the past few years have highlighted the importance of having a prudent global regulatory framework in place for the banking sector. The GHOS thus tasked the Basel Committee on Banking Supervision (BCBS) with continuing to monitor and assess the full and consistent implementation of Basel III. At the same time, the BCBS will continue the analytical and supervisory work related to the 2023 banking turmoil, for example, on topics such as liquidity risk and interest rate risk.

US regulatory and supervisory measures

In her nomination hearing before the Senate,[12] Bowman spoke of supervision being refocused on core financial risks.[13] This is already resulting in specific measures: for instance, on 20 March[14] the OCC announced that it would no longer examine its regulated institutions for reputational risk[15] and that it was removing references to reputational risk from its Comptroller's Handbook booklets and guidance issuances. Meanwhile, the Republican wing of the United States House Committee on Financial Services (of the House of Representatives of the United States) has come out in favour of eliminating the management component from CAMELS, the supervisory rating system, and prohibiting the use of reputational risk as a supervisory factor.[16]

Bowman is in favour of a pragmatic and innovative regulatory approach that takes into account institutions and markets and removes unnecessary burdens: she specifically referred to those which could affect the US government bond market, hinting at Treasury bills being once again excluded from the denominator of banks' supplementary leverage ratio, as they were during the turmoil of March 2020. She also proposed a proportional approach, with fewer requirements for community and regional banks, and criticised the size and complexity of the current regulatory system, which in her opinion is overly redundant and imposes unnecessary costs on banks and their customers.

Bowman has also rejected a further stress test on US banks – similar to that performed as a result of the pandemic – in relation to the tariff escalation.[17]

Executive Orders with an impact on financial regulation

Since his inauguration on 20 January, President Trump has signed numerous Executive Orders affecting the regulation of the financial system to a greater or lesser degree. First, he established a "regulatory freeze"[18] on all rules being drawn up or implemented until new regulatory agency

10 Statement from the Superintendent of Financial Institutions on the Basel III standardized capital floor level, 12 February 2025. Basel III introduces an output floor that requires that risk-weighted assets generated by banks' internal ratings-based capital models cannot fall below 72.5% of risk-weighted assets computed under the standardised approach.

11 The GHOS is the Basel Committee on Banking Supervision's oversight body. See the press release of May 2025.

12 See footnote 4.

13 Even before being proposed for her current office, in her speech "Brief Remarks on the Economy and Accountability in Supervision, Applications, and Regulation" of 17 February 2025 Bowman alluded to what she considered was an over-emphasis on IT and operational risk, internal controls and governance.

14 "OCC Ceases Examinations for Reputation Risk", 20 March 2025.

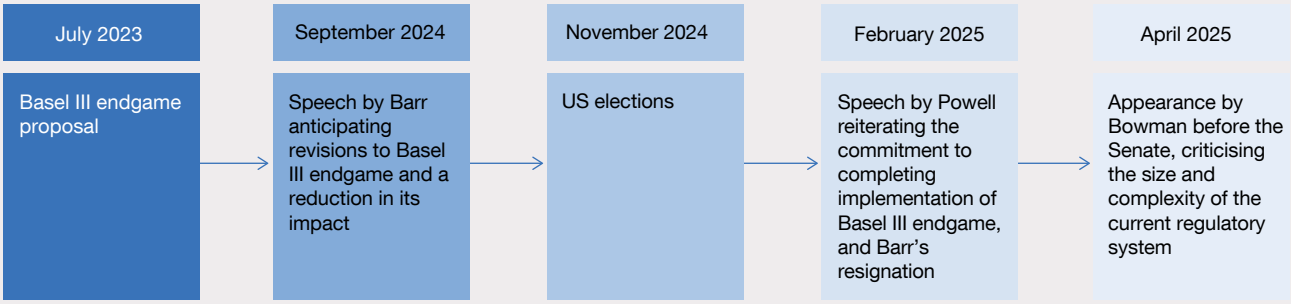
15 Reputational risk is the risk stemming from a negative opinion among market participants that can adversely affect a bank's ability to maintain existing business relationships or establish new ones and its ongoing access to sources of funding.

16 CAMELS is an international rating system for banks used by banking supervisors, comprising six categories: capital adequacy, asset quality, management, earnings, liquidity and sensitivity. The management component entails an assessment by the supervisor of bank managers' ability to manage risk and comply with supervisory and regulatory requirements.

17 Hearing of 10 April 2025 of the US Senate Banking Committee.

18 Executive Order of 20 January 2025.

Figure 1
Timeline of addresses by key members of the Board of Governors of the Federal Reserve System on implementation of the Basel III endgame measures



SOURCES: Board of Governors of the Federal Reserve System and Congress of the United States.

heads had been appointed.[19] Consequently, all banking regulations proposed by the previous Administration that had not yet taken effect were postponed, including the proposed revisions to Basel III endgame.

Furthermore, the Executive Order *"Unleashing Prosperity Through Deregulation"*[20] of 31 January 2025 stressed the need to significantly cut the costs of regulatory compliance, requiring at least ten existing regulations to be repealed for each new regulation promulgated.

The Executive Order *"Ensuring Accountability for All Agencies"*[21] of 18 February 2025 makes the independent regulatory agencies accountable to the Executive in all matters concerning the supervision and regulation of financial institutions. Agencies will be required to submit any new regulation to the White House for review. In addition, the Director of the Office of Management and Budget of the White House will review independent regulatory agencies' obligations for consistency with the President's policies and priorities, adjusting them if necessary. Furthermore, independent regulatory agency chairmen shall regularly consult and coordinate policies and priorities with the White House. No agency employee may advance an interpretation of the law that contravenes the US President's or Attorney General's opinion on a matter of law, regulations and positions advanced in litigation. The Executive Order does not affect monetary policy conduct.

With regard to the financial risks from climate change, 20 January saw the issuance of the Executive Order *"Putting America First in International Environmental Agreements"*,[22] which formally withdrew the United States from the Paris Agreement under the United Nations Framework Convention on Climate Change. Around this time, the US Treasury, the Federal Reserve and the FDIC abandoned the Network of Central Banks and Supervisors for Greening the Financial System (NGFS).[23]

It is important to highlight that several of these regulatory and supervisory developments have also targeted the tech sector and the digitalisation of finances. These

19 In addition to Bowman, the following agency heads have been nominated, although some have yet to be confirmed: Paul Atkins (Securities and Exchange Commission), Brian Quintenz (Commodity Futures Trading Commission) and Jonathan Gould (OCC). Travis Hill continues as acting Chairman of the FDIC Board of Directors.

20 Executive Order of 31 January 2025.

21 Executive Order of 18 February 2025.

22 Executive Order of 20 January 2025.

23 The NGFS is a group of Central Banks and Supervisors launched in 2017 to improve the financial sector's role in environment and climate risk management and to mobilise finance to support the transition toward a sustainable economy. Before and after the new US Administration was sworn in, several banks from the United States (Bank of America, Citigroup, Morgan Stanley, Wells Fargo, Goldman Sachs and JP Morgan) and Canada (Bank of Montreal, National Bank, Toronto Dominion Bank Group, CIBC and Scotiabank) withdrew from the Net Zero Banking Alliance (part of the Glasgow Financial Alliance for Net Zero).

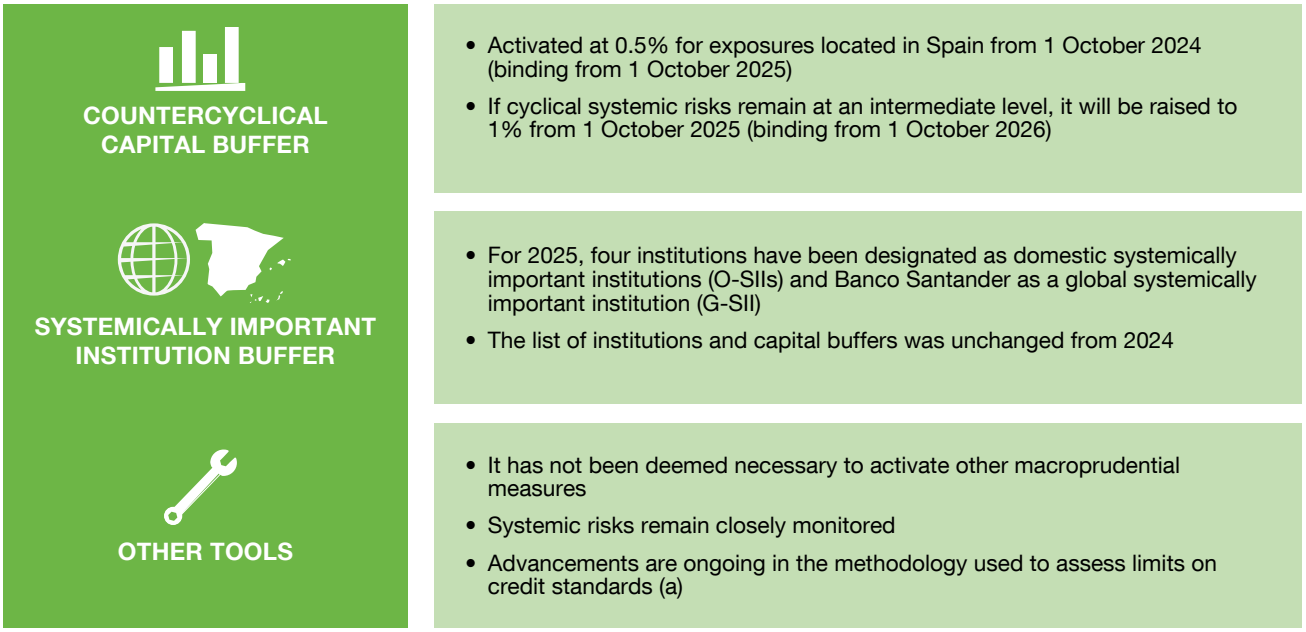
measures seek to boost the use of crypto-assets and stablecoins, providing greater flexibility for their use. See Box 4.1 for more details.

To date, the Executive Orders issued by the new Trump Administration have had a significant impact on various areas of financial regulation. It is highly likely that the initiatives targeting greater financial deregulation in the United States will continue in the future, but this is subject to a high degree of uncertainty. In particular, initiatives in this area could to some degree be decided by the US authorities depending on the outcome of others, such as the tariffs, and more generally, the current global geopolitical tug of war.

6

MACROPRUDENTIAL POLICY

Figure 6.1
Macroprudential policy



SOURCE: Banco de España.

a Limits on credit standards refer to regulatory constraints on the characteristics of loans permitted in a given jurisdiction. For instance, maximum repayment periods or caps on loan-to-income (LTI) or loan-to-value (LTV) ratios.

6.1 Countercyclical capital buffer

Macroprudential policy can help mitigate the effects of potential systemic shocks associated with the risks identified in this report. Several studies by the Banco de España show that the availability of the countercyclical capital buffer (CCyB) and its release in crisis situations can mitigate the effects of such crises on the provision of credit to the economy.[1] Accordingly, the activation of the CCyB, under the framework established by the Banco de España in 2024, represents a crucial macroprudential policy contribution to the stability of the Spanish financial system.[2]

The analysis of the CCyB monitoring framework's aggregated key indicators found cyclical systemic risk in Spain to stand at an intermediate level at end-2024. The key

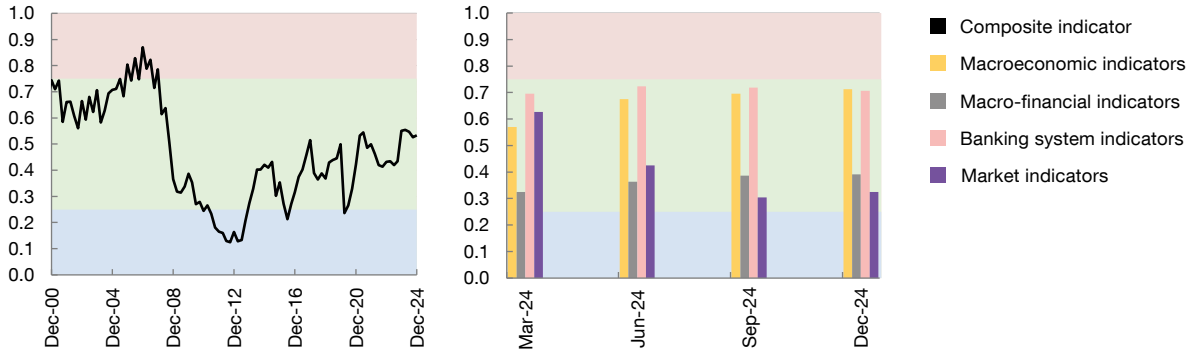
1 See Estrada et al. (2024). "Analysis of cyclical systemic risks in Spain and of their mitigation through countercyclical bank capital requirements".

2 For further details on the new framework for setting the countercyclical capital buffer in Spain, see the Banco de España's briefing note.

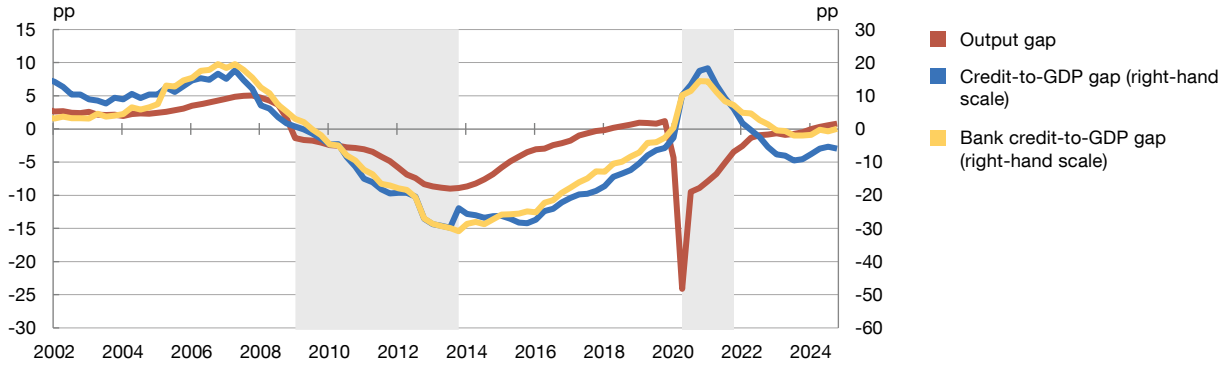
Chart 6.1

The cyclical systemic risks in Spain remained at an intermediate level in 2024, while the output gap and credit-to-GDP gap grew in the year as a whole

6.1.a Composite indicators (a)



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



SOURCES: Banco de España, INE and Datastream. Latest observation: December 2024.

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 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 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.

indicators are grouped into four blocks: (i) macroeconomic, (ii) macro-financial, (iii) Spanish financial markets and (iv) the Spanish banking system.[3] In December 2024 these four dimensions of cyclical systemic risk stood at an intermediate level in terms of their historical distribution (Chart 6.1.a). The most notable change since mid-2024 was the shift in the financial market indicators towards levels that are somewhat tighter and, therefore, less conducive to the build-up of risk. Nonetheless, they also held at an intermediate level. Of the remaining indicators, the

3 The (i) macroeconomic indicators track economic activity and the labour market; the (ii) macro-financial indicators reflect developments in credit and the gap to equilibrium levels, along with real estate market imbalances; the (iii) financial market indicators gauge the degree of systemic tensions in these markets; and the (iv) Spanish banking system indicators aggregate information on levels of capital, profitability and non-performance.

macroeconomic and banking sector indicators presented the highest levels. In aggregate terms, at end-2024 the composite indicator, which combines information from all of the indicators, was similarly at a standard level, just above the 50th percentile.

At end-2024 the indicators of risk associated with the real business cycle were higher than those linked to the credit and real estate cycles, although all were trending towards stronger expansion. Among the main indicator categories, the rise in the macroeconomic indicators was driven by GDP growth and the widening of the output gap (Chart 6.1.b). Despite recording positive year-on-year growth, the credit-to-GDP gap remained in negative territory. If the credit-to-GDP gap were calculated for bank lending only (i.e. excluding other forms of debt), it would show positive values approaching equilibrium in December 2024, thus demonstrating the contribution made by non-bank finance to the negative gap. The indicators used to monitor the sectoral credit cycles of households and non-financial corporations (NFCs) generally showed no signs of imbalances, with some maintaining a slight growth trend (A2.6.1 in Annex 2).[4] Meanwhile, the real estate sector indicators stood in a more expansionary position (see Section 4.1).

The intermediate level of cyclical systemic risk supports maintaining a CCyB rate of 0.5% applicable to exposures in Spain. The Banco de España will continue to review quarterly developments in cyclical systemic risks. The information available for 2025 Q1 (e.g. growth in credit to households and firms, high financial market valuations, bank earnings and GDP growth expectations) point to cyclical systemic risk remaining at an intermediate level. Should this situation persist, the CCyB for exposures in Spain will foreseeably rise to 1% from 1 October 2025, with binding effect for institutions 12 months later.

An increasing number of European countries have established macroprudential capital buffers releasable at standard levels of cyclical systemic risk. The latest countries to announce the activation of a CCyB rate are Portugal (0.75%) and Poland (1%). In the case of Poland, the 1% rate will ultimately be raised to the target rate of 2%.[5] Furthermore, Cyprus has lifted its CCyB rate from 1% to 1.5%. These decisions are in addition to previous activations of the CCyB and the systemic risk buffer (SyRB) in other European countries.

4 These imbalances are estimated based on the gap between the sectoral credit levels and long-run sustainable values according to various econometric techniques. For a detailed description of the indicators used to monitor sectoral credit cycles, see Carmen Broto, Esther Cáceres and Mariya Melnychuk. (2022). "Sectoral indicators for applying the Banco de España's new macroprudential tools". *Financial Stability Review - Banco de España*, 42. Also, Box 3.1, *Financial Stability Report*. Spring 2022.

5 For more information, see Narodowy Bank Polski, Ministerstwo Finansów, Komisja Nadzoru Finansowego and Bankowy Fundusz Gwarancyjny. (2024). "Strategy on the application of the countercyclical capital buffer in Poland".

6.2 Capital buffers for systemic institutions

The Banco de España announced in late 2024 the designation of four institutions as other systemically important institutions (O-SIIs) for 2025, and of Banco Santander, S.A. as a global systemically important institution (G-SII) in 2026.[6] These institutions (BBVA, CaixaBank, Banco Sabadell and Banco Santander as O-SIIs, the latter also as a G-SII) are subject to additional capital requirements to shore up their solvency, mitigate any potential adverse systemic effects they may have on the financial system as a whole, and correct their potential competitive advantage in the funding market stemming from their systemic nature.

As a result, the existing macroprudential capital requirements for systemic institutions are maintained. The list of four banks designated as O-SIIs (i.e. domestic systemically important banks) for 2025 has not changed with respect to 2024. The capital requirements for O-SIIs have also remained unchanged in both years (Table 6.1). The O-SII requirements for 2026 shall be set by the Banco de España over the course of 2025. The decision to identify Banco Santander, S.A. as a G-SII for 2026 (two years in advance as required under current regulations) and set a macroprudential capital buffer of 1 percentage point of CET1 means the continuation of the regulatory requirements in place for 2024 and 2025.[7] Under current regulations, as in previous years, the effective capital buffer rate applicable to Banco Santander, S.A. in 2026 as a systemically important institution shall be the higher of: (i) the aforementioned G-SII buffer rate and (ii) the buffer rate for O-SIIs.

Table 6.1
Systemically important institutions and associated capital buffers

LEI	Institution	Designation (a)	Capital buffer required in 2024 (%)	Capital buffer required in 2025 (%)
5493006QMFDDMYWIAM13	Banco Santander, S.A. (b)	G-SII and O-SII	1.25	1.25
K8MS7FD7N5Z2WQ51AZ71	Banco Bilbao Vizcaya Argentaria, SA	O-SII	1.00	1.00
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, S.A. as a systemically important instituton is the higher of the G-SII buffer rate (1%) and the O-SII buffer rate (1.25%).

6 See "The Banco de España updates the list of other systemically important institutions and sets their macroprudential capital buffer rates for 2025", press release of 22 November 2024, and "The Banco de España designates a Global Systemically Important Institution and sets its macroprudential capital buffer rate for 2026", press release of 5 December 2024.

7 This decision by the Banco de España is a macroprudential measure envisaged in the prevailing EU and Spanish legislation, formalising the prior designation of this bank as a global systemically important bank (G-SIB) by the Financial Stability Board (FSB). See 2024 List of Global Systemically Important Banks (G-SIBs), FSB press release of 26 November 2024.

6.3 Other macroprudential tools

The Banco de España may set limits on credit standards (borrower-based measures, BBMs). Royal Decree-Law 22/2018 and Royal Decree-Law 102/2019 provide for the Banco de España to set limits on the standards applied by banks in new lending to both households and non-financial corporations.[8] For instance, for mortgages, the Banco de España could set limits on LTP, LTI or LSTI ratios, which are examined in Chapter 4, and establish the maximum terms for new mortgages, among other measures.

There is growing international consensus about the need to activate structural macroprudential limits on mortgage lending standards. Specifically, supervisory authorities in different international jurisdictions support setting these limits structurally, so that they remain activated throughout all stages of economic and financial cycles.[9] Under this approach, during downturns financial institutions would, in practice, have incentives to apply credit standards that are stricter than these limits, which would therefore serve as a latent barrier, rather than an effective restriction. However, during upturns, particularly in real estate booms, these limits would generally prove restrictive, preventing excessive easing of credit standards. Most countries that make up the banking union have already activated such limits. Spain, however, is one of the three countries that has not yet done so, as no systemic risks or vulnerabilities have been identified in the real estate sector (see Chapter 4).[10] In an assessment of the European real estate market published in early 2024, the European Systemic Risk Board (ESRB) found that the macroprudential stance in Spain was adequate given the level of risk identified up until then in the domestic real estate market. Nonetheless, the ESRB recommended that the Banco de España consider introducing such limits in the future to ensure sound credit standards.[11]

The Banco de España is making headway in developing the framework for monitoring and calibrating the limits on lending standards and is evaluating whether to activate them. In the short term, an analytical work programme is in place to enhance the monitoring of lending standards for households and non-financial corporations.[12] In addition, analysis of the potential costs and benefits of macroprudential limits for these standards has also been

---

8 Circular 5/2021 of 22 December describes these tools in detail, along with the other macroprudential tools provided for in these legislative texts.

9 See, for example, "Macroprudential policies to mitigate housing market risks", Committee on the Global Financial System, December 2023.

10 Of the 21 countries making up the banking union, only Germany, Spain and Italy have not activated these tools. For Germany, the ESRB issued a recommendation on the vulnerabilities of its residential real estate sector, in which it proposed activating limits on the LTV, among other measures (see Recommendation ESRB/2021/10 of February 2022.

11 See "Follow-up report on vulnerabilities in the residential real estate sectors of the EEA countries", ESRB, February 2024.

12 As part of its work programmes, the Banco de España's has published studies assessing the impact of lending standards on bank credit supply and the probability of default, as regards both mortgage loans (see Box 1.3. "Credit standards and mortgage default risk", *Financial Stability Report*, Autumn 2019, Banco de España; Box 3.1. "The effect of credit standards for mortgage loans on credit growth and on default risks assumed", *Financial Stability Report*, Autumn 2022, Banco de España; and Box 3.1. "Impact of the macroeconomic cyclical position and credit standards on mortgage defaults", *Financial Stability Report*, Spring 2023, Banco de España) and loans to non-financial corporations (Box 3.1. "The impact of credit standards on the quality of lending to non-financial corporations", *Financial Stability Report*, Autumn 2024, Banco de España).

strengthened.[13] Activation of the limits on lending standards will depend on the risks to financial stability, the result of the cost-benefit analysis and the Banco de España's decision regarding the advisability of setting such limits structurally, in keeping with the above-mentioned international consensus. In any event, the development of a framework for calibrating the limits on lending standards is not in response to any existing signs that institutions are easing their standards (see Chapter 4).

To date, it has not been deemed necessary to activate any other macroprudential tools available to the Banco de España. All the same, the Banco de España continues to closely monitor the macro-financial environment and any systemic risks that may potentially jeopardise financial stability, and can, within its mandate, adopt additional measures.

13 For earlier references, see Box 3.2. "Cost-benefit analysis of macroprudential policy", *Financial Stability Report*, Spring 2020, Banco de España; Box 4.2. "An analysis of alternative public policies to reduce the problems of housing affordability", *Annual Report* 2023, Banco de España; Carro, Adrián. (2023). "Taming the housing roller coaster: The impact of macroprudential policy on the house price cycle", *Journal of Economic Dynamics and Control*, 156, 104753.

Annex 1 CONSOLIDATED BALANCE SHEET AND INCOME STATEMENT

Table A1.1

Consolidated balance sheet. Deposit institutions

Assets	Dec-24	Change Dec-24/Dec-23	% of total assets Dec-23	% of total assets Dec-24
	€m	%	%	%
Cash and balances at central banks	412,532	-11.9	11.3	9.6
Loans and advances to credit institutions	325,306	12.9	6.9	7.6
General government	106,605	0.9	2.5	2.5
Other private sectors	2,395,859	3.7	55.5	55.7
Debt securities	655,834	10.4	14.3	15.2
Other equity instruments	42,845	21.7	0.8	1.0
Investments	20,694	-7.0	0.5	0.5
Derivatives	134,942	3.7	3.1	3.1
Tangible assets	56,828	-1.1	1.4	1.3
Other	150,292	-0.5	3.6	3.5
Total assets	**4,301,738**	**3.3**	**100.0**	**100.0**
MEMORANDUM ITEMS				
Financing to private sector	2,465,072	3.8	57.1	57.3
Financing to general government	647,250	10.0	14.1	15.0
Total NPLs	81,494	-3.0	2.0	1.9
Total NPL ratio	2.2	-15 (b)		

Liabilities and equity	Dec-24	Change Dec-24/Dec-23	% of total assets Dec-23	% of total assets Dec-24
	€m	%	%	%
Balances from central banks	59,817	-41.3	2.4	1.4
Deposits from credit institutions	329,946	2.6	7.7	7.7
General government	175,600	31.1	3.2	4.1
Other private sectors	2,604,542	3.5	60.4	60.5
Marketable debt securities and subordinated debt	519,615	4.0	12.0	12.1
Derivatives	119,530	-0.7	2.9	2.8
Provisions (including provisions for pensions)	21,600	-1.2	0.5	0.5
Other	183,923	4.9	4.2	4.3
Total liabilities	**4,014,573**	**3.2**	**93.5**	**93.3**
MEMORANDUM ITEM				
Eurosystem net lending (a)	103	-99.6	0.7	0.0
Own funds	328,225	4.8	7.5	7.6
Minority interests	13,110	5.1	0.3	0.3
Valuation adjustments	-54,169	0.9	-1.3	-1.3
Total equity	**287,165**	**5.6**	**6.5**	**6.7**
Total liabilities and equity	**4,301,738**	**3.3**	**100.0**	**100.0**

SOURCE: Banco de España.

a Difference between funds received in liquidity-providing operations and funds delivered in liquidity-absorbing operations. December 2024 data.
b Difference calculated in basis points.

Table A1.2

Consolidated income statement. Deposit institutions (a)

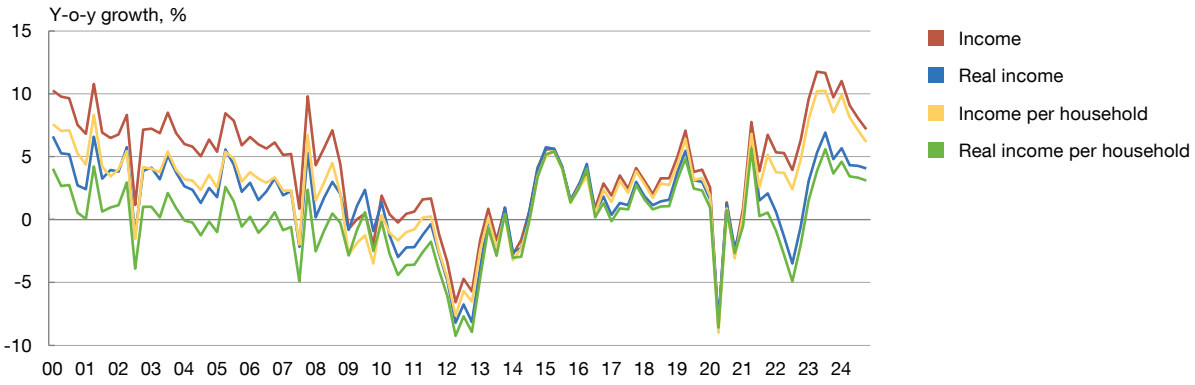
	Dec-24		Dec-23	Dec-24
	€m	% change Dec-24/Dec-23	% ATA	% ATA
Interest income	235,675	15.4	4.97	5.57
Interest expense	131,294	21.4	2.63	3.10
Net interest income	104,381	8.8	2.33	2.47
Return on equity instruments	1,361	10.1	0.03	0.03
Net financial income	105,742	8.8	2.36	2.50
Net fees and commissions	33,598	11.3	0.73	0.79
Gains and losses on financial assets and liabilities	6,906	31.4	0.13	0.16
Other operating income (net)	-4,612	—	-0.09	-0.11
Gross income	141,634	10.0	3.13	3.35
Operating expenses	63,027	2.5	1.50	1.49
Net operating income	78,607	16.9	1.64	1.86
Impairment losses on financial assets	21,478	2.0	0.51	0.51
Other provisioning expense (net)	5,629	49.2	0.09	0.13
Other gains or losses (net)	2,945	21.6	0.06	0.07
Profit before tax (including discontinued operations)	54,444	21.5	1.09	1.29
Net profit	39,373	20.9	0.79	0.93
MEMORANDUM ITEM				
Profit attributable to the controlling entity	37,672	21.3	0.76	0.89

SOURCE: Banco de España.

a Compared with the income statement of the Autumn 2024 FSR, the definition of operating expenses has been changed to now also include "Cash contributions to resolution funds and deposit guarantee schemes" (previously included in "Other gains or losses (net)"). Likewise, "Share of profit or loss of entities accounted for using the equity method" is now included in "Other gains or losses (net)", rather than in gross income. As a result, these definitions are in line with those used by the EBA in its *Risk Dashboard*.

A2.2.1 Households

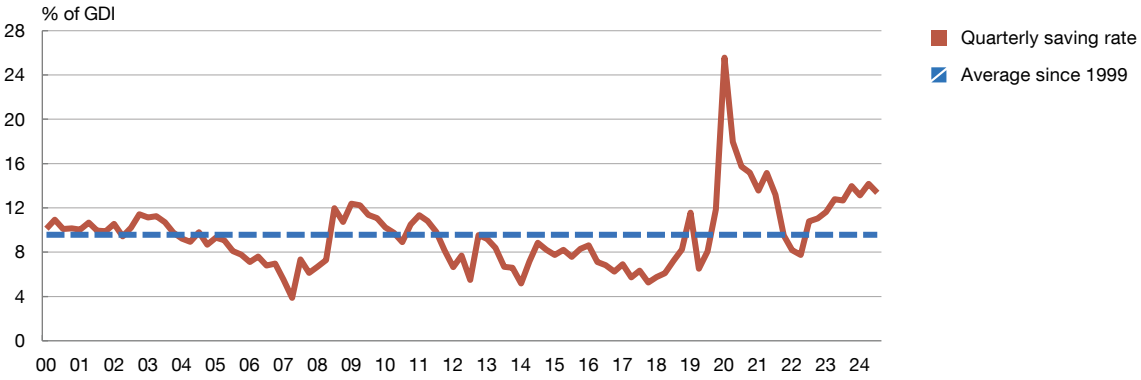
Chart A2.2.1.1
Spanish household income (a)



SOURCES: INE and Banco de España. Latest observation: 2024 Q4.

a Gross disposable income of 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 (a)

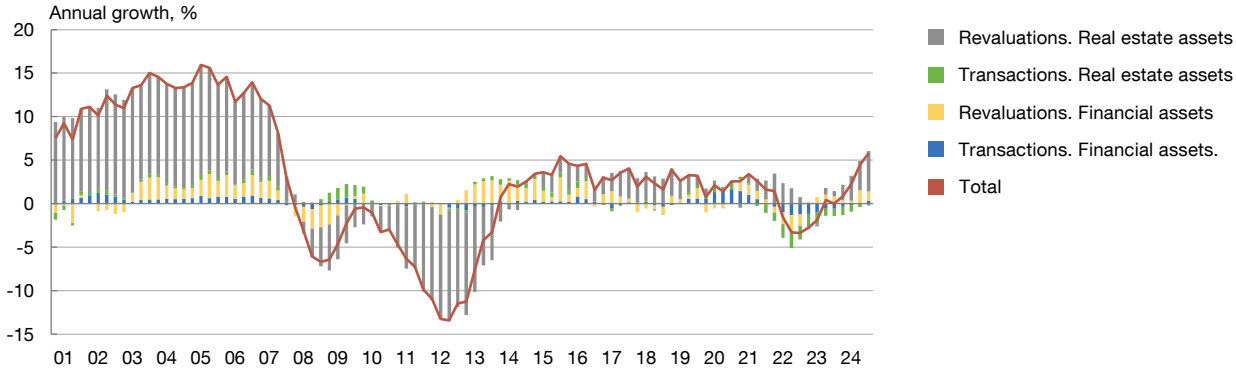


SOURCES: Eurostat, INE and Banco de España. Latest observation: 2024 Q4.

a Quarterly data seasonally adjusted.

Chart A2.2.1.3

Real gross household wealth in Spain (a)



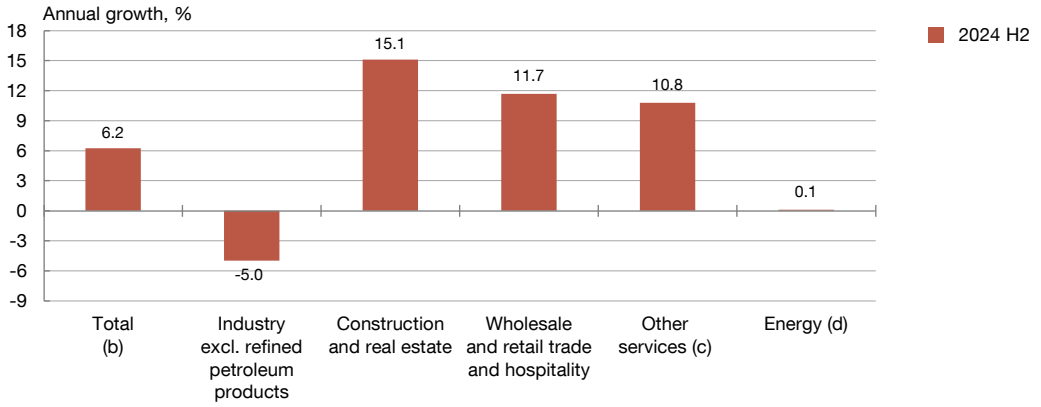
SOURCES: INE and Banco de España. Latest observation: 2024 Q4.

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 are indicative of changes in households' wealth due to e.g. asset sales, and revaluation series due to changes in the value of households' asset holdings.

A2.2.2 Non-financial corporations

Chart A2.2.2.1

Gross operating profit of non-financial corporations in Spain (a)



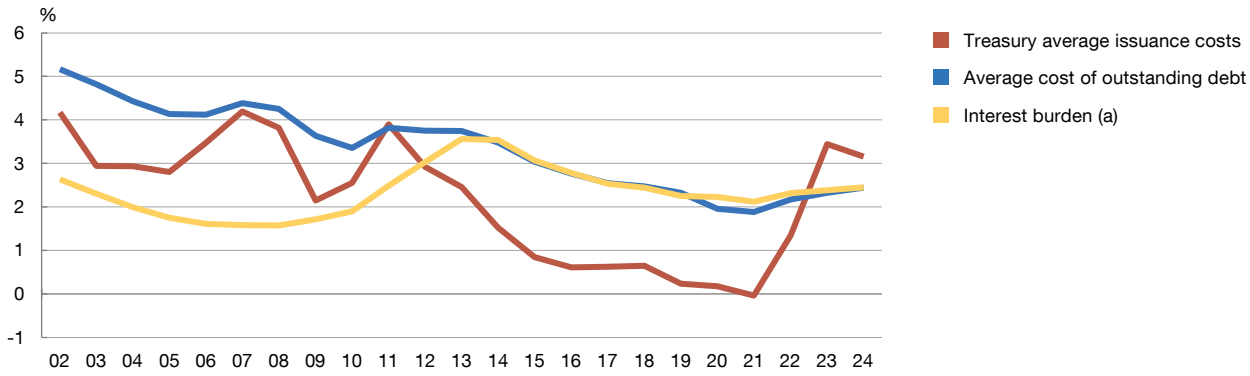
SOURCES: AEAT and Banco de España. Latest observation: 2024 H2.

a GOP is calculated as turnover - procurement - 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.

A2.2.3 Spanish general government

Chart A2.2.3.1

Change in Spanish general government financing costs



SOURCES: IGAE, Tesoro Público and Banco de España. Latest observation: 2024.

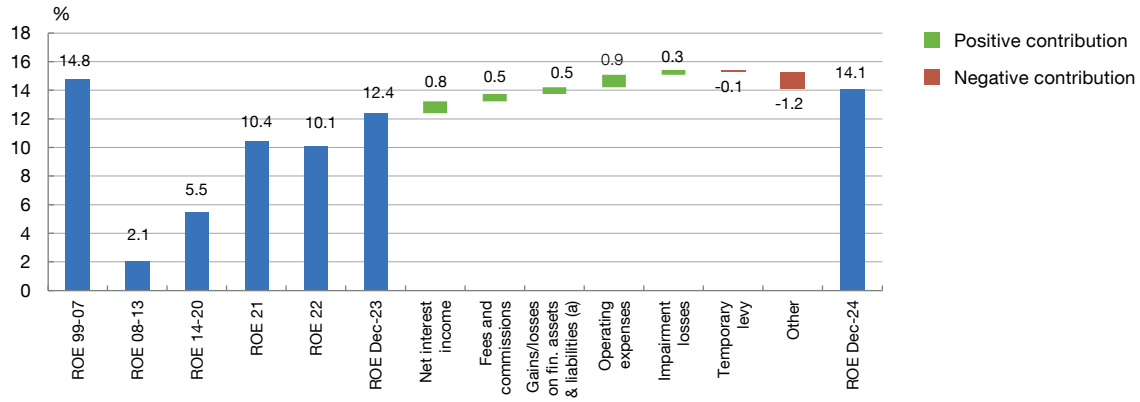
a Ratio of debt interest payments in the year (according to National Accounts) to nominal GDP.

A2.3.1 Banking sector

A2.3.1.1 Profitability

Chart A2.3.1.1.1

Breakdown of change in ROE. Consolidated net income as a percentage of net average equity. Consolidated data (a) (b)



SOURCE: Banco de España. Latest observation: December 2024.

a The green (red) colour of the bars denotes a positive (negative) contribution of the corresponding item to the change in ROE at December 2024 compared with December 2023. Although the sign (positive or negative) of these contributions is the same as in Chart 3.1a, their size varies due to the diverging developments in the denominators in 2024 (for ROE: 6.4% increase in net average equity and for ROA: 2.9% increase in average total assets).

b Of the 1.7 pp ROE change in 2024, the increase in net income contributed 2.6 pp (effect for constant average net equity) and net equity growth -0.75 pp (effect for constant profit). The residual mixed effect was -0.16 pp. The increase in net equity contributed 0.14 pp to the increase in the leverage ratio (net equity over total assets) in that same year.

Table A2.3.1.1.1

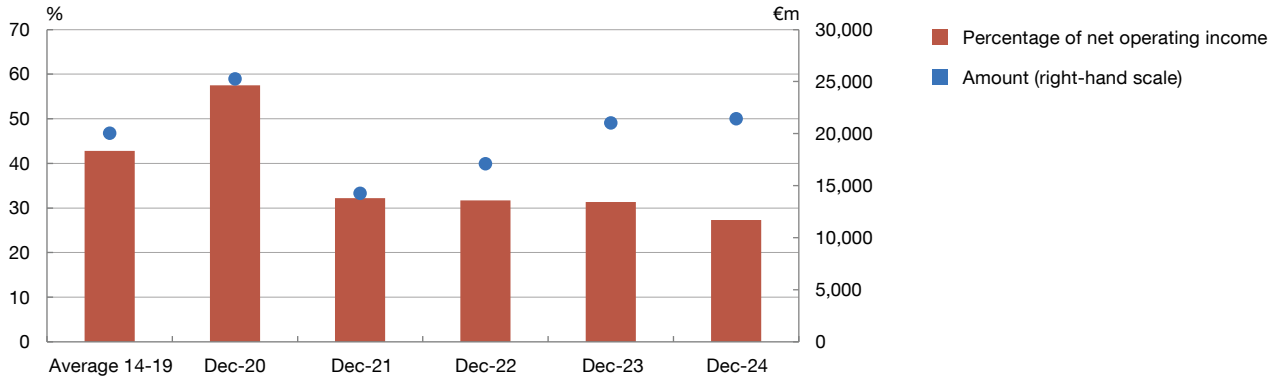
Summary profit and loss account (margins and main items) of listed Spanish significant banking groups. January-March 2025

	January-March 2024 (€m)	January-March 2025 (€m)	% change Mar-24/Mar-25	January-March 2024 (% ATA)	January-March 2025 (% ATA)
Net interest income	23,475	22,548	-3.9	2.6	2.4
Net fees and comissions	6,665	7,055	5.9	0.7	0.8
Gains (losses) on financial assets and liabilities	1,514	1,738	14.8	0.2	0.2
Gross income	29,324	31,760	8.3	3.2	3.4
Operating expenses	12,646	12,892	1.9	1.4	1.4
Net operating income	16,677	18,867	13.1	1.8	2.0
Impairment losses on financial assets	5,069	4,940	-2.5	0.6	0.5
Other gains or losses	-953	-877	—	-0.1	-0.1
Profit before tax	10,656	13,050	22.5	1.2	1.4
Net profit	7,048	9,011	27.9	0.8	1.0
Profit attributable to the controlling entity	6,677	8,487	27.1	0.7	0.9
MEMORANDUM ITEM					
Cost of liabilities	3.5	3.2			
ROE	13.1	15.8			
Cost-to-income ratio	43.1	40.6			

SOURCE: Financial reports of significant listed institutions.

Chart A2.3.1.1.2

Impairment losses on financial assets. Consolidated data (a)

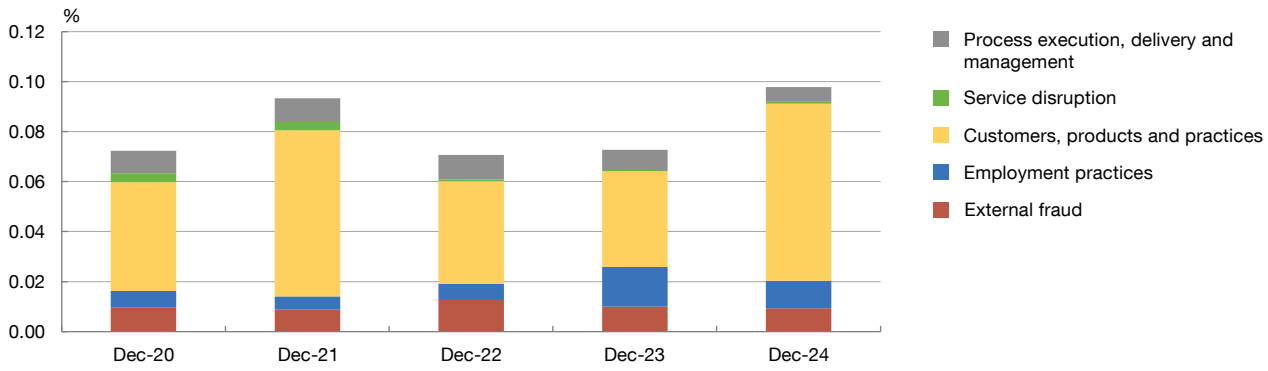


SOURCE: Banco de España. Latest observation: December 2024.

a In 2020, due to the COVID-19 pandemic, impairment losses (both in volume and as a percentage of net operating income) increased significantly.

Chart A2.3.1.1.3

Weight of operational risk losses over ATAs. All events. Consolidated data

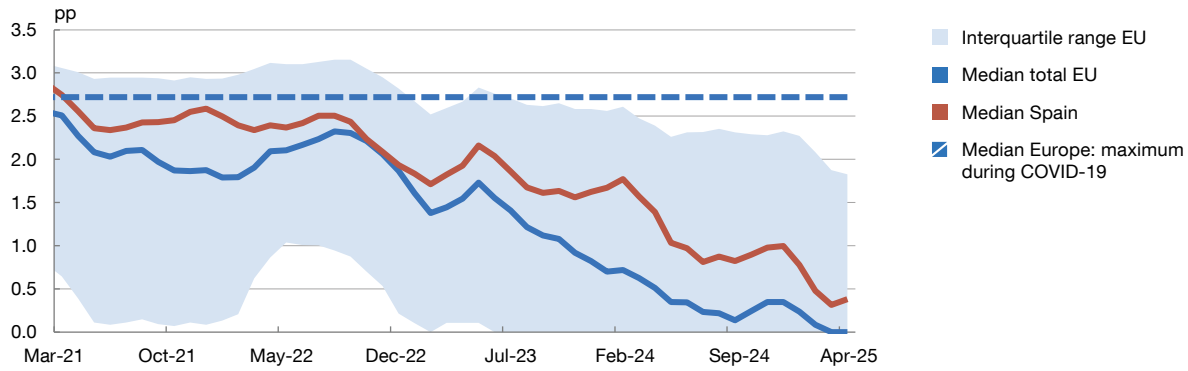


SOURCE: Banco de España. Latest observation: December 2024.

A2.3.1.2 Solvency

Chart A2.3.1.2.1

SRISK indicator (a)



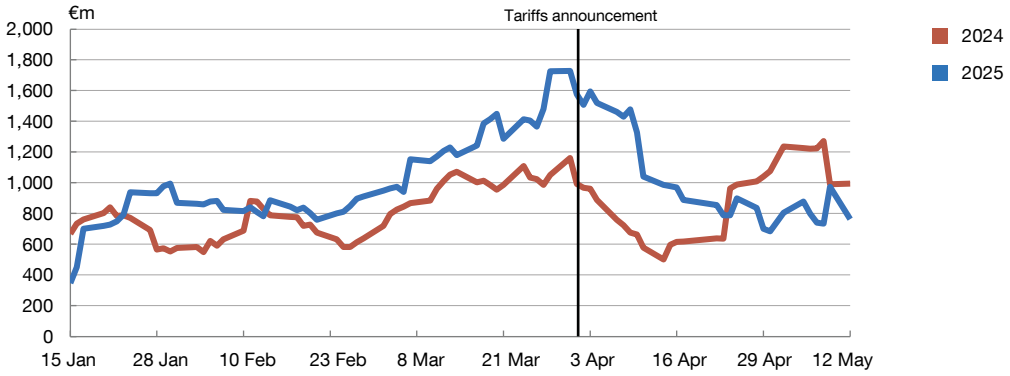
SOURCES: LSEG Datastream, S&P Capital IQ and Banco de España. Latest observation: April 2025.

a The SRISK indicator measures the market value of the regulatory capital shortfall of an individual bank or the banking sector overall following a significant correction in the equity market (for more details, see Christian Brownlees and Robert Engle. (2017). "SRISK: a conditional capital shortfall measure of systemic risk". The Review of Financial Studies, 30, pp. 48-79). It is expressed as a percentage of each bank's total assets. The parameters used are 4.5% for capital requirements, 40% for the decline in the European equities index and 132 business days for the period over which the hypothetical market decline occurs. See C. Broto, L. Fernández Lafuerza and M. Melnychuk. (2025). "Do buffer requirements for European systemically important banks make them less systemic?" International Journal of Central Banking, 21(1), pp. 235-272 for more details. The SRISK indicator for the months in 2025 Q1 and April 2025 is calculated based on 2024 Q4 assets and liabilities values, drawing on the stock price data of the corresponding month. The time series have been smoothed using a three-month moving average. The interquartile range is defined as the difference between the 75th and 25th percentiles of the SRISK distribution for EU banks. The dashed line represents the SRISK's maximum value since the COVID-19 crisis.

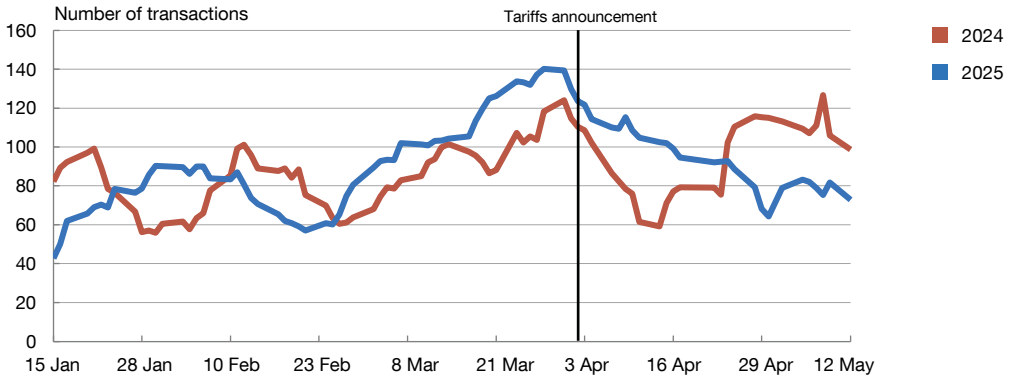
Chart A2.3.1.2.2

Trading volume for CDSs (a)

3.1.2.2.a Aggregate notional values of CDSs for main European banks



3.1.2.2.b Number of traded CDS transactions for the main European banks



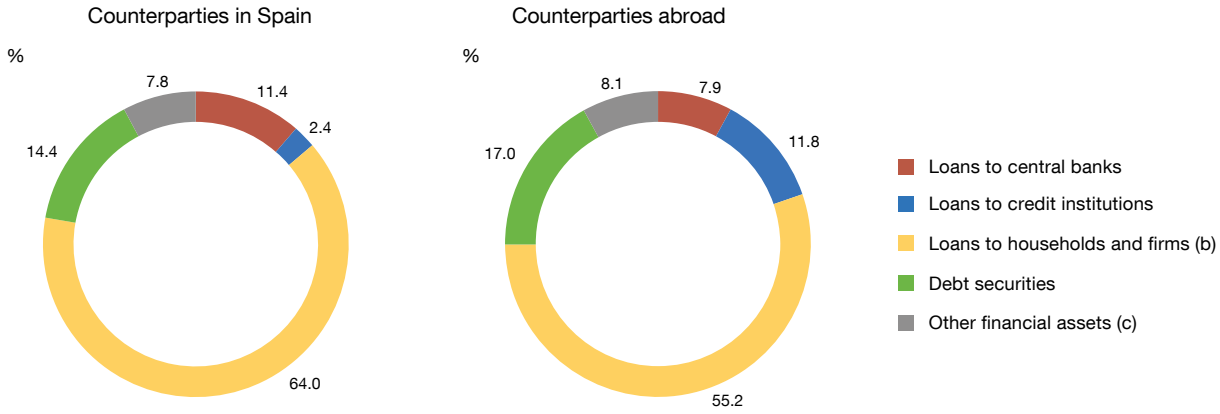
SOURCES: EMIR and EMIR REFIT. Latest observation: 12 May 2025

a The volume traded and the number of new contracts are shown daily. It is depicted a 10-day moving average. The sample includes Santander, BBVA, Deutsche Bank, Commerzbank, Crédit Agricole, Société Générale, BNP Paribas, Unicredit and Banca Monte dei Paschi di Siena. Excluding intra-group transactions. The vertical line indicates the date of announcement of the US tariff policy on 2 April 2025.

A2.3.1.3 Consolidated balance sheet

Chart A2.3.1.3.1

Breakdown of financial assets with counterparties in Spain and abroad by asset type in December 2024. Consolidated data (a)

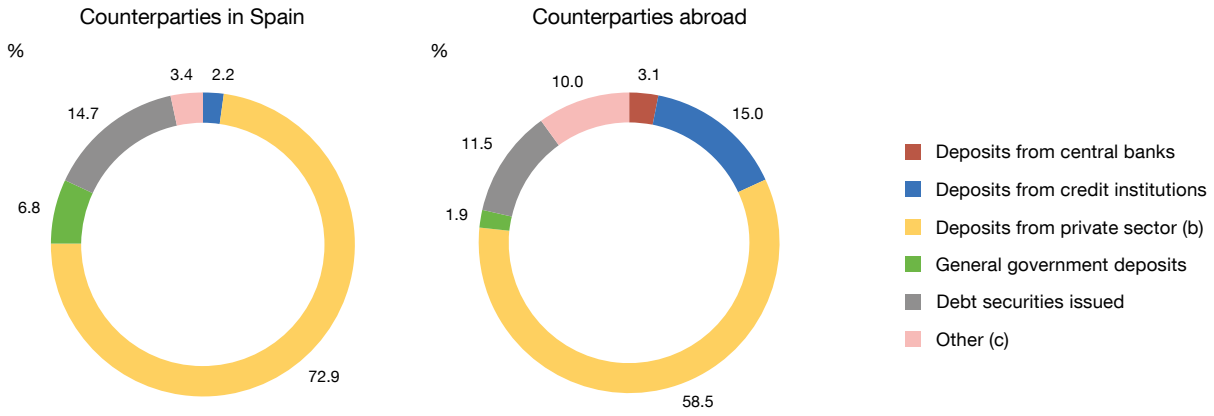


SOURCE: Banco de España Latest observation: December 2024.

a The residence criterion is applied to identify the counterparties as Spanish or foreign.
b Includes both non-financial and financial corporations other than credit institutions.
c The "Other financial assets" item comprises loans to government, cash balances, derivatives and holdings of equity instruments issued by other corporations.

Chart A2.3.1.3.2

Breakdown of financial liabilites with counterparties in Spain and abroad by liability type in December 2024. Consolidated data (a)

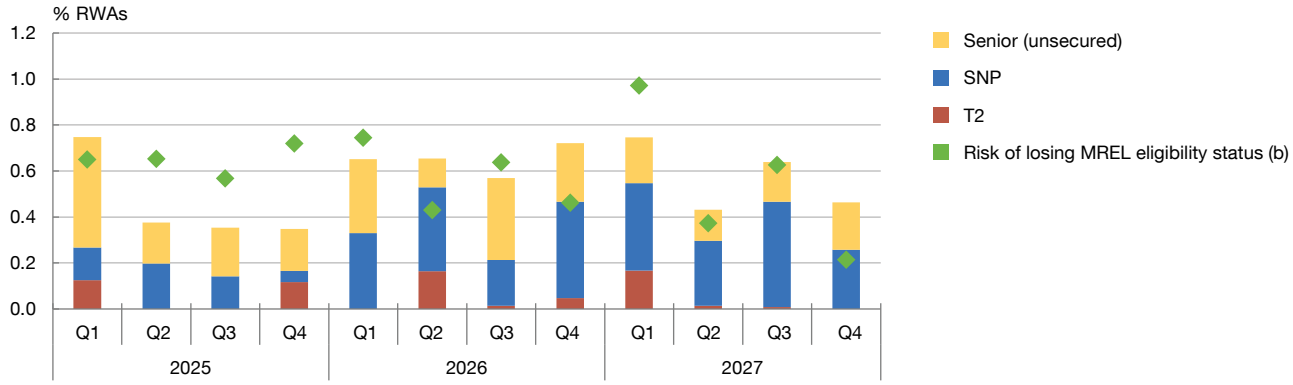


SOURCE: Banco de España Latest observation: December 2024.

a The residence criterion is applied to identify the counterparties as Spanish or foreign.
b The resident private sector includes households, NFCs, the self-employed (also referred to as sole proprietors) and non-bank financial institutions.
c This item comprises derivatives, short positions and other financial liabilities.

Chart A2.3.1.3.3

Expected maturities of unsecured debt issued by Spanish institutions and risk of losing MREL eligibility (a)



SOURCES: Banco de España calculations based on CSDB and Eikon-Refinitiv. Latest observation: December 2024.

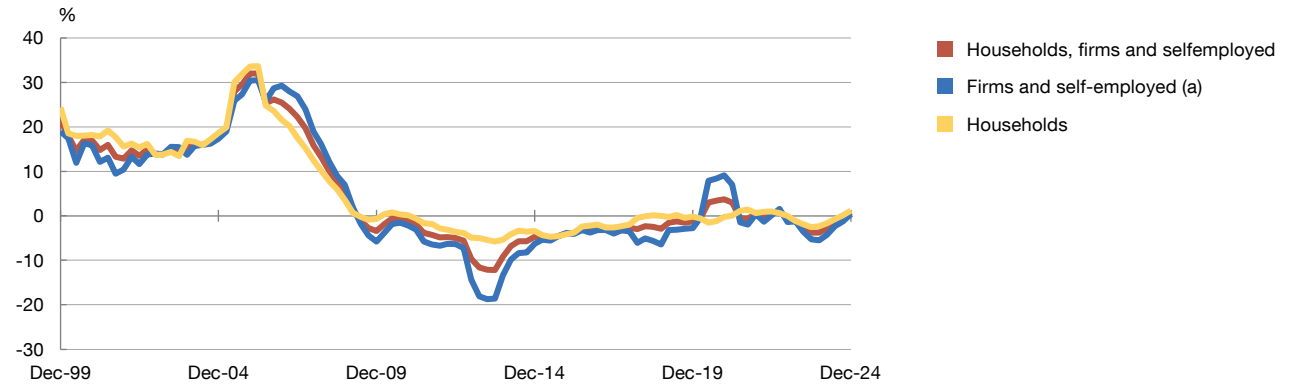
a Over 2025-2027 Spanish banks' expected maturities of unsecured debt (senior unsecured, senior non-preferred (SNP) and Tier 2 (T2)) account for approximately 6.7% of risk-weighted assets as at December 2024, mainly in senior unsecured and senior non-preferred instruments, without a high concentration being recorded in specific quarters. See Chart 3.13 for the definition of the different debt categories.

b Quarterly percentage of instruments that lose their MREL eligibility status due to a residual maturity of less than one year, shown as a percentage of RWAs. Refinancing needs due to loss of MREL eligibility tend to increase in the first quarter of each year, being somewhat higher in the first quarter of 2027, when they reach 1% of RWAs and where, in addition, significant maturities of T2 instruments are recorded, with a high degree of subordination.

A2.3.1.4 Credit

Chart A2.3.1.4.1

Annual rate of change in loans to households, firms and the self-employed resident in Spain. Business in Spain. Individual data

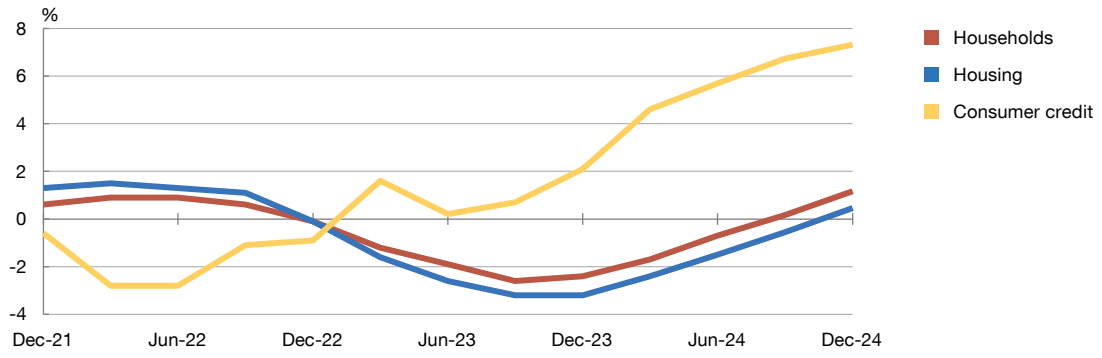


SOURCE: Banco de España. Latest observation: December 2024.

a The "Firms and self-employed" category denotes the institutional sectors of NFCs and sole proprietors.

Chart A2.3.1.4.2

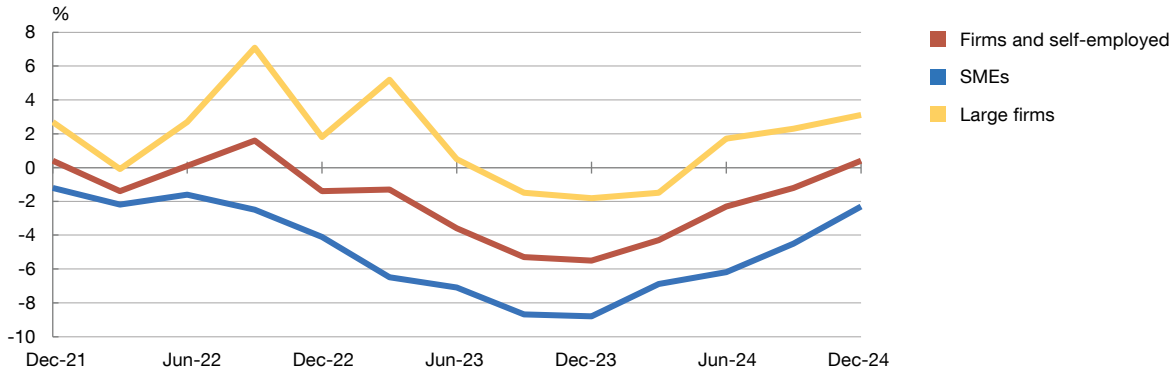
Annual rate of change in loans to households resident in Spain. Business in Spain. Individual data



SOURCE: Banco de España. Latest observation: December 2024.

Chart A2.3.1.4.3

Annual rate of change in loans to firms and the self-employed resident in Spain (a). Business in Spain. Individual data

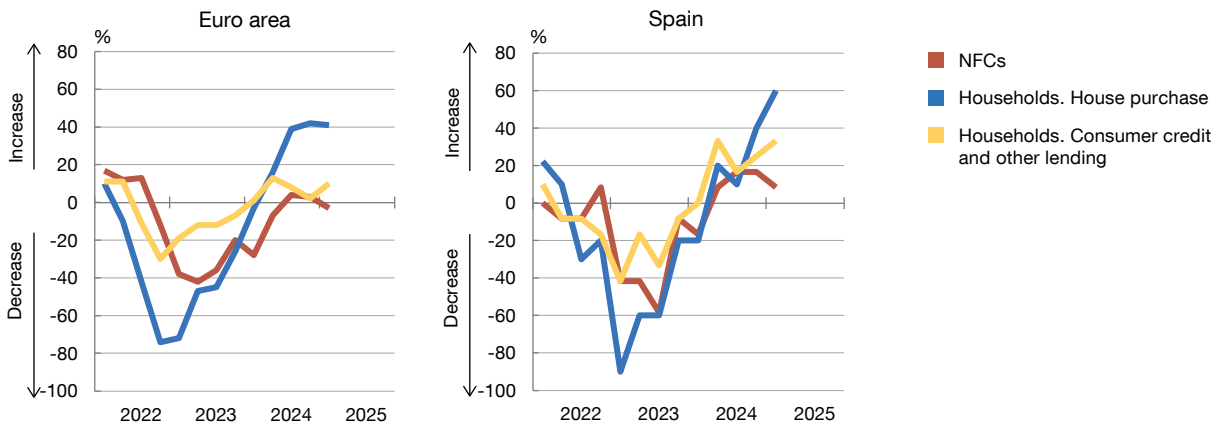


SOURCE: Banco de España. Latest observation: December 2024.

a The "Firms and self-employed" category denotes the institutional sectors of NFCs and sole proprietors.

Chart A2.3.1.4.4

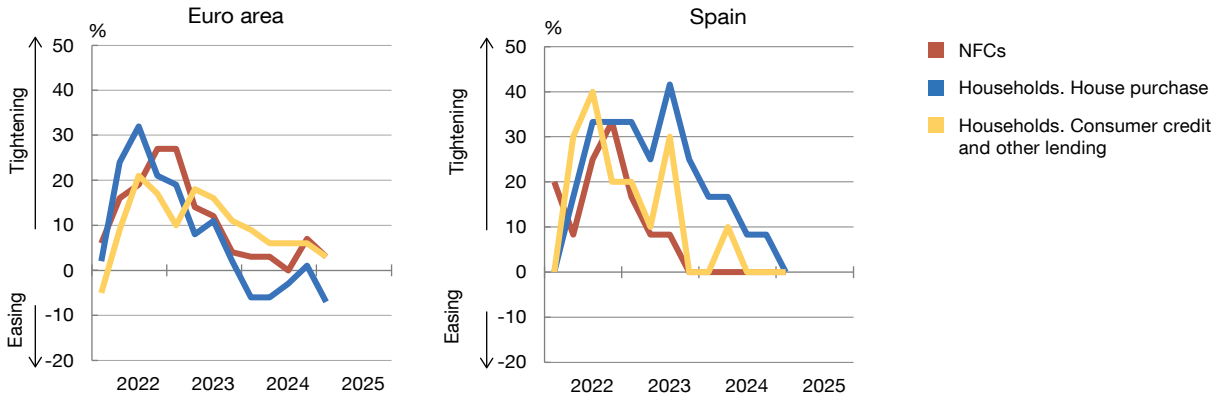
Change in loan demand



SOURCE: BLS. Latest observation: March 2025.

Chart A2.3.1.4.5

Change in credit standards

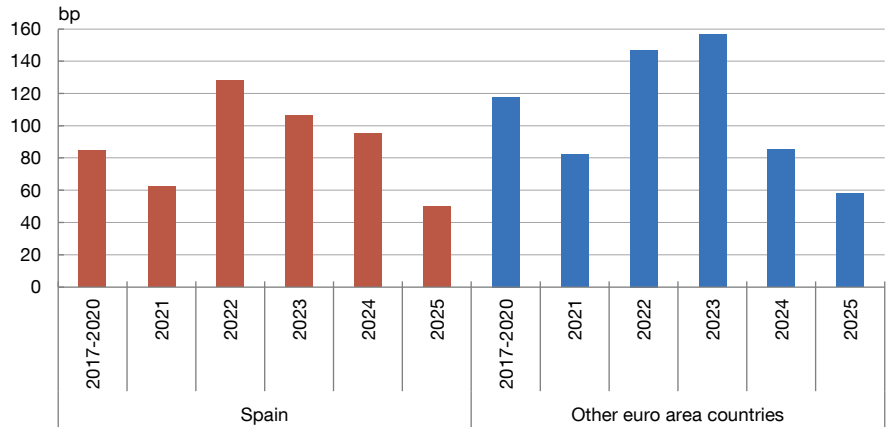


SOURCE: BLS. Latest observation: March 2025.

A2.3.1.5 Financing conditions and liquidity

Chart A2.3.1.5.1

Comparison of the spread between sovereign bonds and senior non-preferred (SNP) instruments issued by major Spanish and other European banks (a)



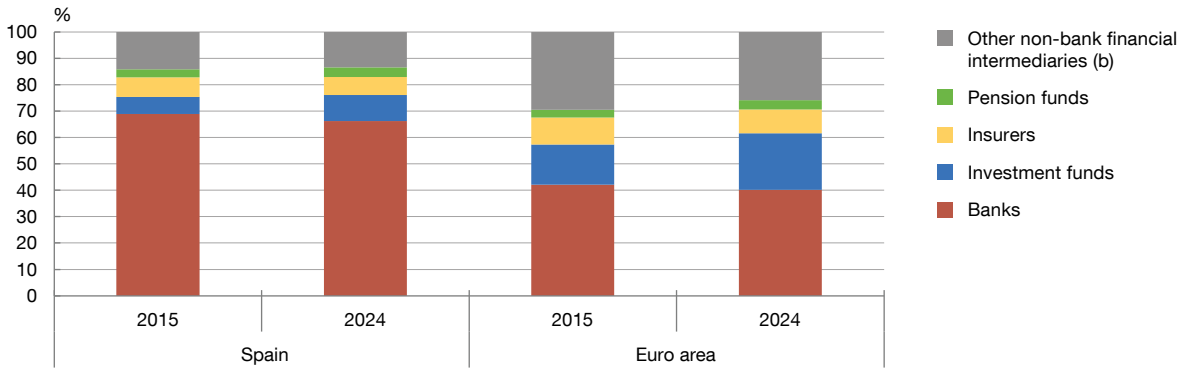
SOURCES: CSDB, Dealogic and Eikon Refinitiv. Latest observation: March 2025.

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-banking financial sector

Chart A2.3.2.1

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)



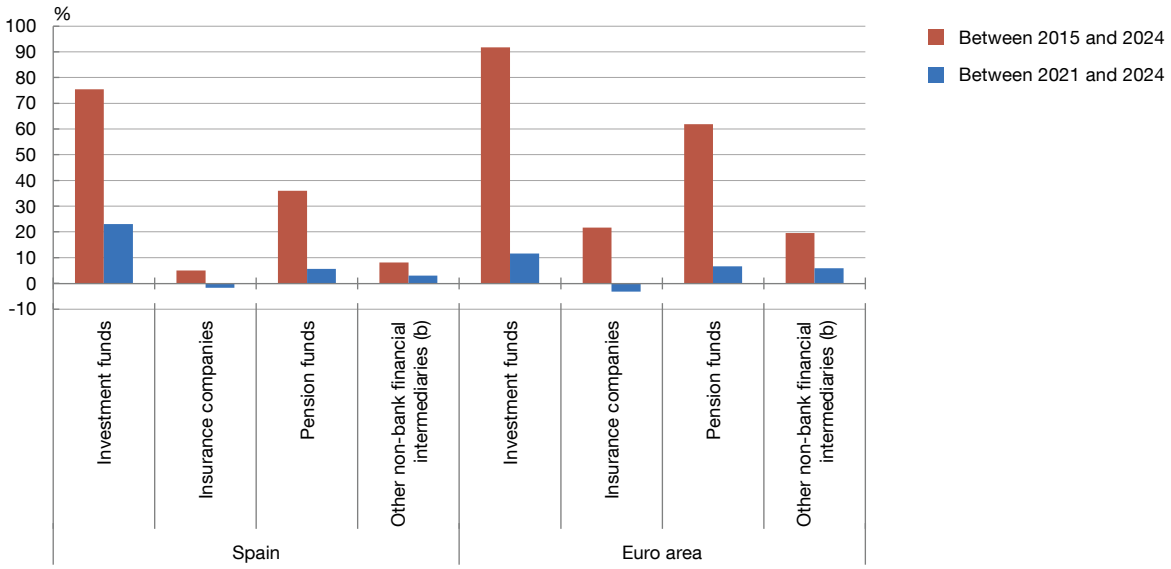
SOURCES: Banco de España and ECB. Latest observation: December 2024.

a In 2024 Q4 total non-consolidated assets of investment funds, insurers, pension funds and other non-bank financial intermediaries in Spain amounted to €462 billion, €318 billion, €171 billion and €628 billion, respectively. The corresponding values for the euro area amounted to €20,595 billion, €8,714 billion, €3,367 billion and €24,823 billion, respectively.

b Other non-bank financial intermediaries include specialised lending institutions, venture capital firms, securities dealer companies, special-purpose vehicles, central counterparty clearing houses, real estate investment trusts, securities agencies, collective investment institution management companies, mutual guarantee companies, 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

Total asset growth of the different sub-sectors within the NBFG sectors in Spain and the euro area. Nonconsolidated data (a)



SOURCES: Banco de España and ECB. Latest observation: December 2024.

a In 2024 Q4 total non-consolidated assets of investment funds, insurers, pension funds and other non-bank financial intermediaries in Spain amounted to €462 billion, €318 billion, €171 billion and €628 billion, respectively. The corresponding values for the euro area amounted to €20,595 billion, €8,714 billion, €3,367 billion and €24,823 billion, respectively.

b Other non-bank financial intermediaries include specialised lending institutions, venture capital firms, securities dealer companies, special-purpose vehicles, central counterparty clearing houses, real estate investment trusts, securities agencies, collective investment institution management companies, mutual guarantee companies, financial group head offices, appraisal companies, payment institutions, holding companies, special-purpose entities that issue securities and other specialised financial institutions.

A2.3.3 Systemic interconnections

All the relevant charts relating to this section are included in the body of Chapter 3 of the FSR.

A2.4.1 The Spanish real estate market

Additional notes A2.4.1.1

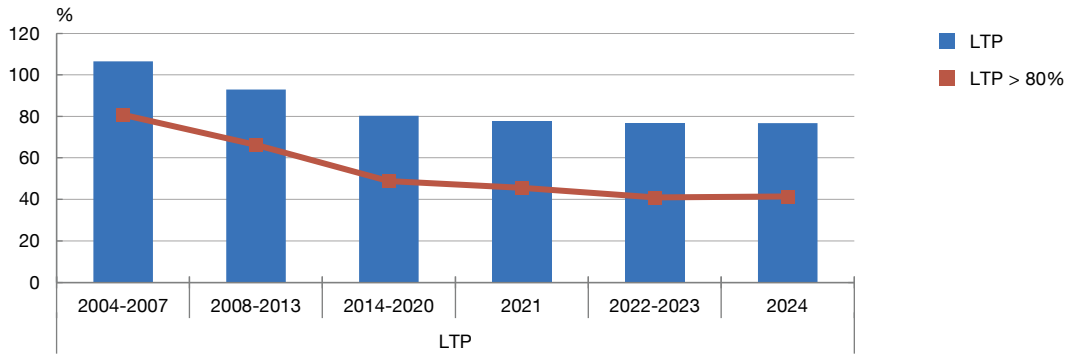
Credit standards for new mortgage loans to households (Chart 4.5)

The definition of income used is this report to calculate the LTI and LSTI ratios is aligned with ESRB Recommendation 2016/14. This definition entails using net household income rather than gross income as had previously been the case until the Financial Stability Report, Spring 2024. Average household net income published by the INE by postcode, available in the Household income distribution map for Spain, is used for data from 2015 to 2022. To infer household net income for the period 2023, the 2022 net income data are extrapolated using the INE's aggregate information on household net income. Since 2024, banks have started to report to the Central Credit Register (CCR) detailed information on the income declared by the applicants of each new mortgage. This definition of income is aligned with the guidelines established in ESRB Recommendation 2016/14, as stipulated in Banco de España Circular

2/2023 on the CIR. A value for income based on the information available for the same postcode is imputed to those loans in the CCR with empty or ineligible values for 2024 for the required income data. In any case for comparison purposes, the calculation of these standards is also presented for 2024 using the average net income by postcode.

Chart A2.4.1.2

Credit standards for new mortgage lending to households. LTP (a)

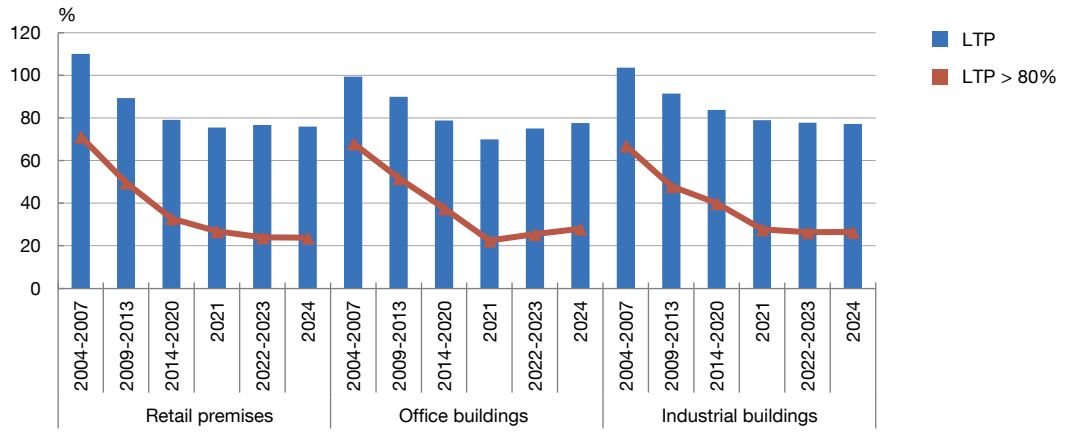


SOURCES: Association of Registrars and Banco de España. Latest observation: December 2024.

a The loan-to-price (LTP) ratio is the amount of the mortgage principal relative to the purchase price of the property, based on Association of Registrars information. The average LTP values are weighted by the principal of each mortgage.

Chart A2.4.1.3

Credit standards for new mortgages with commercial real estate collateral (a)

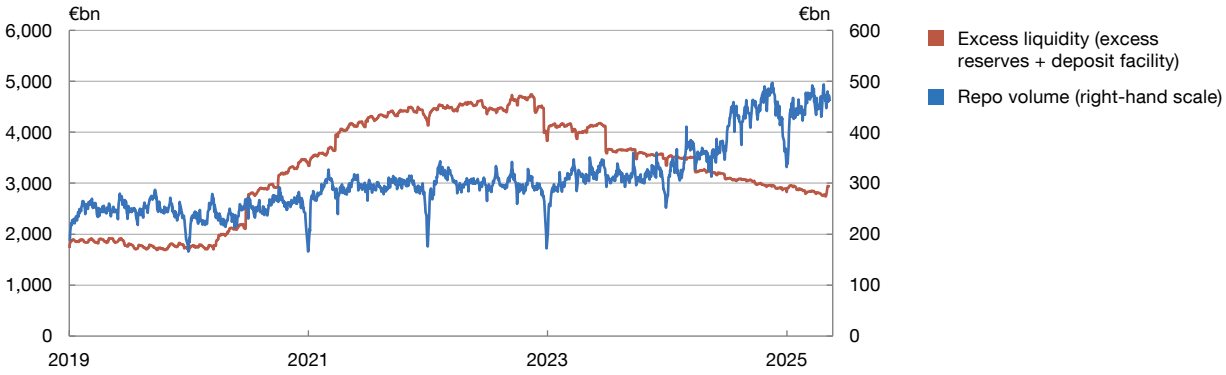


SOURCES: Association of Registrars and Banco de España. Latest observation: December 2024.

a The loan-to-price (LTP) ratio is the amount of the mortgage principal relative to the purchase price of the property recorded in the transaction, based on Association of Registrars information. The average LTP ratios are weighted by the principal of each mortgage and calculated for new mortgages.

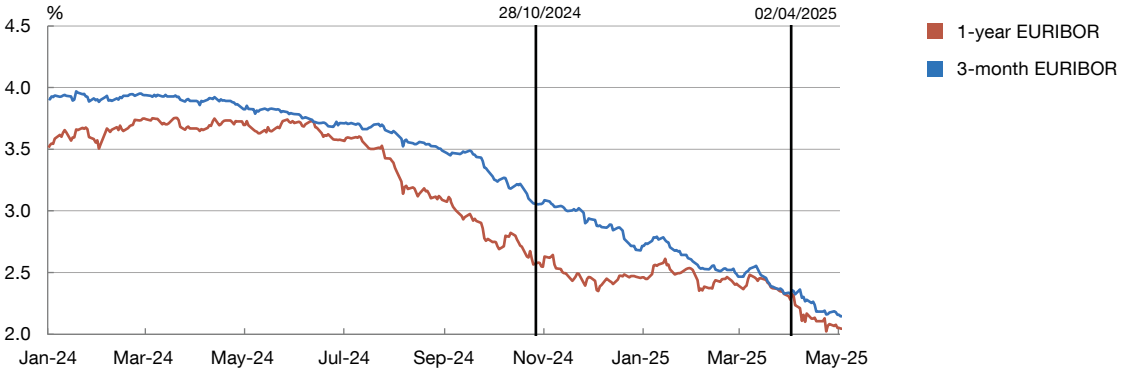
A2.4.2 Financial markets

Chart A2.4.2.1
Excess liquidity and volume in the repo market



SOURCES: MMSR and Banco de España. Latest observation: 12 May 2025.

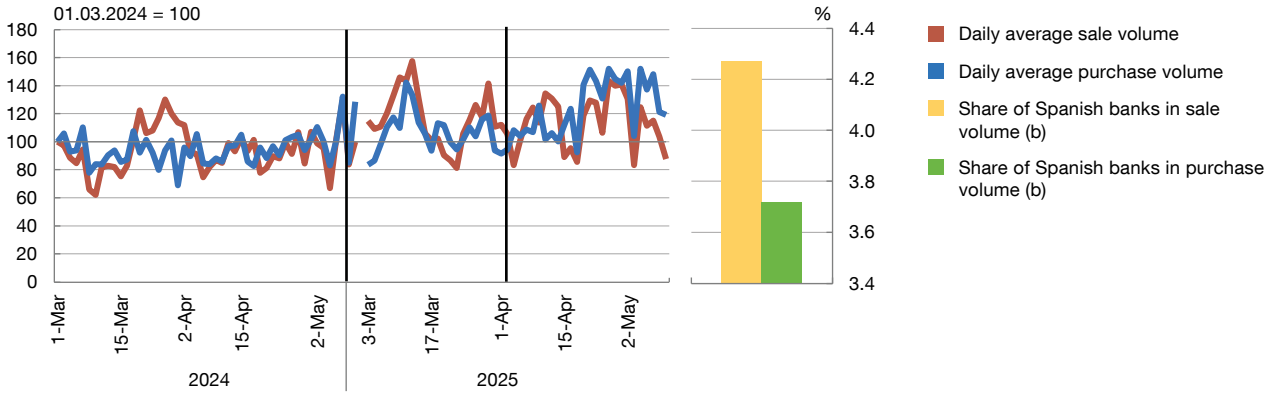
Chart A2.4.2.2
EURIBOR



SOURCES: Banco de España and LSEG Datastream. 28/10/2025 is the cut-off date for the previous FSR. The tariff war escalated on 02/04/2025. Latest observation: 12 May 2025.

Chart A2.4.2.3

Purchase and sale volumes of euro/dollar swaps by European banks (a)

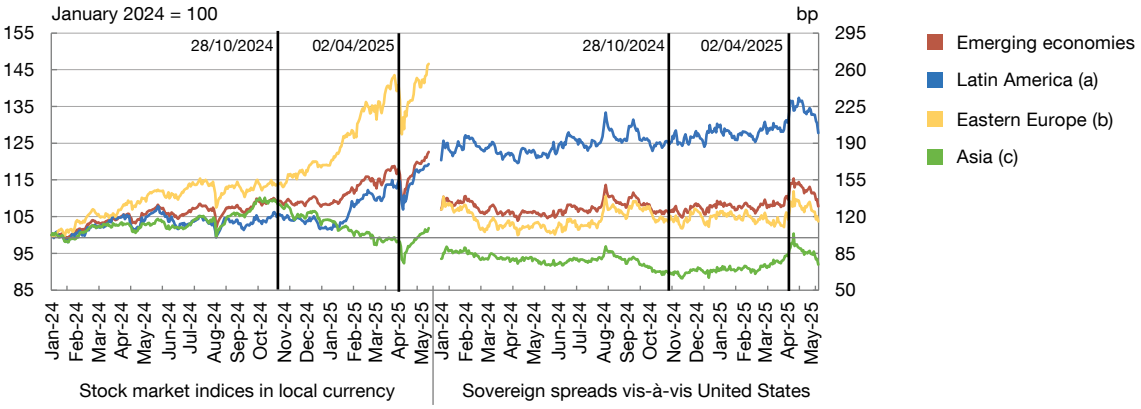


SOURCE: ECB. Latest observation: 12 May 2025.

a Aggregate data of European banks which report statistics on the euro area money market (Money Market Statistical Reporting). Purchase refers to buying euro in exchange for dollars and sale refers to delivering euro in exchange for dollars.
b The share of Spanish banks in purchase and sale volumes was calculated for the period between 12 May 2024 and 12 May 2025.

Chart A2.4.2.4

Stock market indices and sovereign spreads in emerging countries



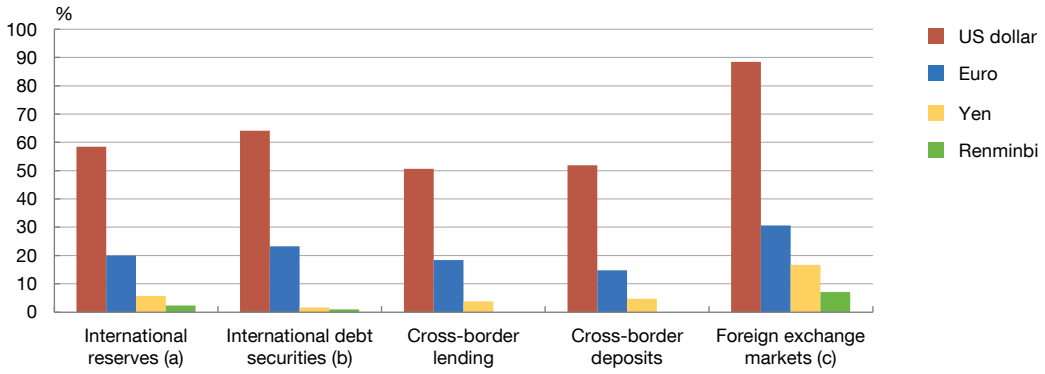
SOURCES: Banco de España and LSEG Datastream. 28/10/2024 was the cut-off date for the latest report. The tariff war escalated on 02/04/2025. Latest observation: 12 May 2025.

a Average of Brazil, Chile, Colombia, Mexico and Peru.
b Average of Czech Republic, Poland and Hungary.
c Average of China, South Korea, Philippines, India, Indonesia, Malaysia and Thailand.

A2.5.1 Geopolitical risks

Chart A2.5.1.1

Shares of currencies most commonly included in central bank international reserves

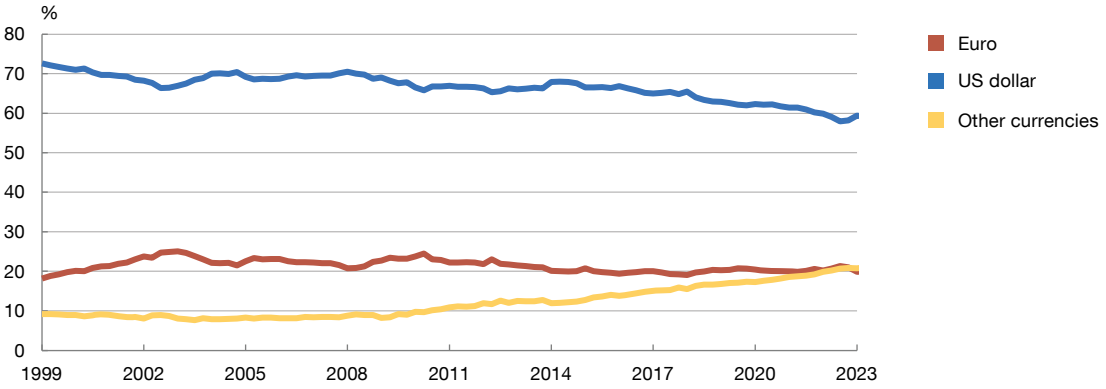


SOURCES: ECB, BIS, IMF, CLS Bank International, Ilzetzki and Reinhart and Rogoff (2019). Latest observation: 2023 Q4.

a The international reserves of central banks are defined as immediately available external assets controlled by monetary authorities.
b Outstanding balance of debt securities issued by non-residents.
c Trading volume on these markets. Since foreign exchange market transactions always involve two currencies, the trading volume on the markets could reach 200%.

Chart A2.5.1.2

Share of currencies as official reserve assets (a)



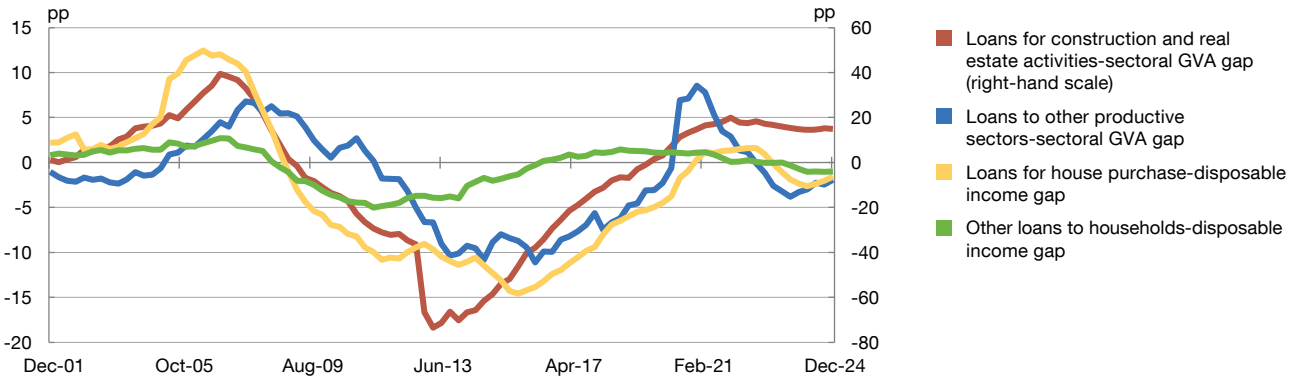
SOURCES: ECB, BIS, IMF, CLS Bank International, Ilzetzki and Reinhart and Rogoff (2019). Latest observation: 2023 Q4.

a At constant exchange rates of 2023 Q4.

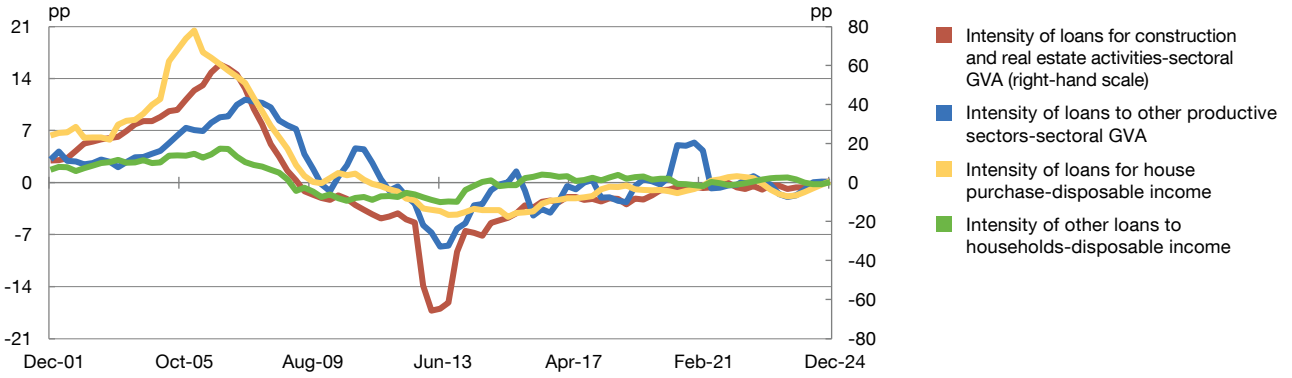
Chart A2.6.1.1

Indicators used to monitor the sectoral credit cycle

6.1.1.a Credit-to-GVA gap (firms) and credit-to-disposable income gap (households) (a)



6.1.1.b Credit intensity of firms and households with respect to GVA and disposable income, respectively (a)



SOURCES: Banco de España and INE. Latest observation: December 2024.

a Each sector's credit gaps measure the difference between the sectoral debt indicators and their equilibrium values, estimated as long-term trends obtained using a statistical one-sided Hodrick-Prescott filter with a smoothing parameter equal to 25,000. Sectoral credit intensity is calculated as the ratio of the annual change in each sector's credit (as the numerator) to the annual cumulative GVA or disposable income (as the denominator).

The Banco de España publishes various types of documents providing information on its activity (economic reports, statistics, research papers, etc.), which can be consulted in the Institutional Repository at https://repositorio.bde.es/?locale=en.

Most of these documents are available in PDF format and can be downloaded free of charge from the Banco de España website at http://www.bde.es/webbde/en/secciones/informes/.

The cut-off date for this report: 12 May 2025.

ISSN: 1696-3520 (online)

SYMBOLS AND ABBREVIATIONS

AT1	Additional Tier 1
ATAs	Average total assets
BCBS	Basel Committee on Banking Supervision
BCP	Basel Core Principales
BIS	Bank for International Settlements
BLS	Bank Lending Survey
bn	Billion
bp	Basis points
CBQ	Banco de España Central Balance Sheet Data Office Quarterly Survey
CCR	Banco de España Central Credit Register
CCyB	Countercyclical capital buffer
CET1	Common Equity Tier 1
CDS	Credit default swap
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
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
ETF	Exchange Traded Fund
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
GHG	Greenhouse gas
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
PEPP	Pandemic emergency purchase programme
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
SOCIMI	Spanish real estate investment trust
SRI	Systemic risk indicator
SRM	Single Resolution Mechanism
SSM	Single Supervisory Mechanism
sSyRB	Sectoral systemic risk buffer
SyRB	Systemic risk buffer
TLTROs	Targeted longer-term refinancing operations
tn	Trillion
VAR	Vector autoregression
WEO	World Economic Outlook
y-o-y	Year-on-year

ISO COUNTRY CODES

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