FINANCIAL STABILITY: MAIN VULNERABILITIES AND RISKS

Since the last *Financial Stability Report* (FSR) was published, there has, on balance, been some containment of the risks identified and the vulnerabilities have eased. That said, a potential escalation of the geopolitical tensions, associated in particular with the war in Ukraine and the conflict in the Middle East, remains the main risk to economic activity and the stability of the Spanish financial system.

Despite these tensions and the tight monetary policy stance, the global growth outlook for 2024 has been revised upwards slightly since last autumn thanks to some positive surprises, which have affected the United States in particular. However, the euro area has performed relatively weakly and its growth outlook has worsened.

Meanwhile, the drop in headline and underlying inflation in the advanced economies, not least in the euro area, has led financial markets to bring forward and heighten expectations of monetary policy easing, with the consequent reduction in expected interest rates in both the short and long term. However, these interest rate expectations have partially corrected upwards since the start of 2024, reflecting uncertainty over the disinflationary process. The monetary authorities of the main developed economies have been signalling that the first interest rate cut could be near, while emphasising that their decisions will remain data dependent.

Since the last FSR, risk premia have held at low levels by historical standards (especially considering the climate of macroeconomic uncertainty) and have declined in some asset classes. Against this background, greater risk aversion among agents, prompted by a shift in the perceived level of uncertainty, could lead to an abrupt and deep correction of risky asset prices.

Meanwhile, positive income developments and deleveraging in Spain's private non-financial sector have helped to improve its financial position. However, the country's high government debt remains a significant vulnerability.

Turning to financial intermediation capacity, the Spanish banking industry reported very positive profitability developments in 2023, driven by net interest income growth. The cumulative increase in policy rates since 2022 has gradually driven up the average return on assets while being passed through to the cost of liabilities more slowly. At the same time, the sector has maintained comfortable liquidity and funding positions.

The recent easing of money market rates has led to the tapering off of interest rate increases on new loans. Conversely, the shift from sight deposits to term deposits persists and the average remuneration of the latter, while remaining low, has continued to improve. Against this background, the supply of credit appeared more buoyant in the final stretch of 2023. Meanwhile,

Figure 1

Financial stability: main risks and vulnerabilities (a) (b)



SOURCE: Banco de España.

a In this report, the vulnerabilities are defined as economic and financial conditions that increase the impact or probability of materialisation of risks to financial stability, which in turn are identified as adverse changes in economic and financial conditions, or in the physical or geopolitical environment, with an uncertain probability of occurrence, which hamper or impede financial intermediation, with negative consequences for real economic activity.
b The risks and vulnerabilities shown here are measured using three colours: yellow (low level), orange (medium level) and red (high level). The arrows denote the change in the risks and vulnerabilities since the last FSR.

credit quality in Spain, specifically in the households segment, performed less favourably in 2023, although the deterioration has been very limited.

The growth in bank profitability has not yielded a significant strengthening of banking sector solvency: unlike in other European countries, the CET1 ratio in Spain improved only very moderately in 2023. In consequence, the gap between the Spanish and European banking systems has widened. On the whole, banks would remain well advised to use their current positive earnings to strengthen their capacity to absorb potential macro-financial shocks in the future, particularly in light of the persisting downside risks to economic growth.

The main risks¹ to the stability of the Spanish financial system are discussed in greater detail below.

R1. Geopolitical risks

The military conflicts in Ukraine and the Middle East continue to be geopolitical flashpoints and, despite remaining contained in scale, constitute sources of uncertainty that are hard to quantify.

¹ Risks to financial stability are defined as adverse changes in economic and financial conditions, or in the physical or geopolitical environment, with an uncertain probability of occurrence, which hamper or impede financial intermediation, with negative consequences for real economic activity.



SOURCES: Chicago Board Options Exchange, Factiva DJ, IMF and Banco de España.

b The bars denote the latest projections (IMF World Economic Outlook Update, January 2024). The diamonds denote the previous projections (IMF World Economic Outlook, October 2023).

In the Middle East, there have been some instances of the tensions spreading across the region. This has notably affected shipping traffic in the Red Sea and caused trade routes to lengthen, primarily those between the Asia-Pacific region and Europe. All this has resulted in longer delivery times for some products and a broad-based increase in shipping costs. The economic impact of these incidents has, for the time being, been limited. However, an escalation of the conflict, particularly one that affects traffic through the Strait of Hormuz, could ultimately disrupt the global economy more severely.

Therefore, the potential remains for the geopolitical tensions to adversely impact trade in energy and other commodities, and freight traffic more generally, and to trigger sharp falls in the prices of risky financial assets. As Box 1.1 discusses in more detail, these tensions, insofar as they translate into greater economic uncertainty, could have a significant impact on activity (see Chart 1). However, for the time being there have been no signs of a significant materialisation of these risks.

In particular, natural gas prices have fallen considerably since October 2023, while oil prices are at relatively contained levels, despite rising since early December 2023. Gas prices stand well below the levels observed before the Russian invasion of Ukraine began, while oil prices stand at somewhat higher levels. Developments in global energy demand, increased fracking and greater oil production in non-OPEC+ countries appear to have contributed to this price containment.

In addition, a full analysis of the geopolitical risks requires continued close monitoring of the tensions between China and the United States, which have very significant ramifications for the entire Asia-Pacific region and for global trade in technological goods. Several important elections are set to take place around the world in 2024, adding a further layer of uncertainty to the geopolitical context.

a The chart shows the response to a positive one standard deviation shock in the VIX. The solid (hollow) circles indicate statistical significance at 5% (10%); the unbroken line indicates no statistical significance. The VAR model for Spain includes the following variables: the EPU index, the spread over German 10-year sovereign bonds, year-on-year GDP growth and inflation; the VIX is included as an exogenous variable in the first position, forcing its equation to depend only on its own past values and not on the other lagged variables. For the euro area, the same model is estimated, but considering the spread between German and US bonds as a proxy for the European spread.

The possibility of an intensification of cyber attacks globally also remains a specific risk. This FSR includes a special feature on the bank-level and systemic implications of cyber risk, and the European and global regulatory and supervisory initiatives to protect the financial system against them.

R2. Higher and more persistent inflation

Euro area inflation eased markedly in the last 12 months, recording a year-on-year rate² of 2.4% in March 2024, down from 6.9% in March 2023. This decline, which was sharper than anticipated last autumn, can be attributed not only to the decrease in energy prices, but also to lower underlying inflation³ (2.9% in March 2024 compared with 5.7% a year earlier), largely reflecting the monetary policy tightening and the easing of supply chain tensions. Services sector inflation has shown more downward stickiness than that of non-energy industrial goods, just as it displayed greater upward stickiness during the period of inflationary pressures.

In line with the previous FSR, central banks' forecasts continue to point to a gradual easing of inflation to around 2% in the medium term, both in the euro area as a whole and in Spain. However, this target would now be reached in 2025, while in 2024 the disinflation process would be somewhat slower due to (i) the disappearance of the benign energy-related base effects and some of the temporary fiscal measures introduced to soften the impact of surging energy and food prices on the shopping basket, and (ii) the greater historical persistence of services inflation.

For these projections, geopolitical factors remain a significant source of upside inflation risk, mainly due to their potential impact on energy prices, but also on other commodities such as food. They could also have a bearing on freight costs and trade and financial fragmentation. However, as noted above, energy prices have not yet been strained despite the adverse political and military developments in the Middle East.

Labour markets in the euro area remain very buoyant, with a low level of slack, and wages continue to see robust growth, enabling workers to gradually recover the purchasing power they lost in previous years. This dynamic is expected to continue over the coming years. A larger wage increase than expected on the basis of current trends continues to be a source of upside risk to inflation.

Conversely, the materialisation of downside risks to growth, amid persistent signs of weak global demand, or a potentially greater monetary policy impact could lead to inflation being lower than projected. Overall, the risks to inflation appear balanced.

Since the last FSR, the Governing Council of the European Central Bank (ECB) has kept the key interest rates unchanged, albeit stressing in its statements the sound developments in headline

² Growth in the Harmonised Index of Consumer Prices.

³ Excluding the energy, food, alcohol and tobacco components.



SOURCES: ECB, Refinitiv Datastream and Banco de España.

- a For the projection period, the figures are technical assumptions, prepared following the Eurosystem's methodology. These assumptions are based on futures market prices or on proxies thereof and should not be interpreted as a Eurosystem prediction as to the path of these variables.
 b The date 23/10/23 refers to the cut-off date for the last FSR.
- c Spreads against the swap curve of the ICE Bank of America Merrill Lynch indices. The historical average refers to the period 1998-2024, and is 78 basis points (bp) for euro area investment-grade bonds, 131 bp for US investment-grade bonds, 452 bp for euro area high-yield bonds and 444 bp for US high-vield bonds
- d The equity risk premium is calculated using a two-step 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 historical average refers to the period 2006-2024, and is 494 bp for the S&P 500, 658 bp for the EURO STOXX and 781 bp for the IBEX 35.

and underlying inflation and the strength of monetary policy transmission. The markets anticipate a cut in euro area interest rates in June and three or four over the course of 2024.

This scenario of falling inflation is being witnessed in economies across the world (see Chart 2). Specifically, inflation expectations for the United States are already around 2% for 2024, in turn strengthening expectations of a cut to its current monetary policy rates. Given this country's key position in the global financial system, such a shift in its monetary policy would be conducive to some easing of global financial conditions. However, the United States continues to post stronger GDP growth than other advanced economies, driven by its expansionary fiscal policy, and the latest inflation data contain some upward surprises, against a backdrop in which the unemployment rate remains at very low levels. Thus, there are still some risks to inflation in the United States.

Meanwhile, weaker growth in China, linked to some extent to difficulties in its property market, could help lower inflation in other economies through various financial and trade channels. Specifically, a sharper slowdown in this country's economy would dampen global demand for commodities and ease pressure on their prices.

Financial market expectations of the future paths of interest rates have adjusted downwards since the last FSR (see Chart 3), which is consistent with the receding inflation pressures. However, more recent developments show expectations of interest rate cuts reversing partially (see Chart 3).

R3. Greater risk aversion among economic agents

Equity and corporate risk premia are at historically low levels and have even declined for some asset classes since the last FSR was published (see Chart 4). Risk aversion is at very reduced levels in the financial markets,⁴ despite elevated geopolitical uncertainty and expectations of low global economic growth.

Thus, the continuing misalignment of risky-asset valuations and the macroeconomic fundamentals also increases the likelihood of agents becoming more risk averse. This could amplify any further tightening of financing costs and incentivise agents to postpone or cut back their consumption and investment plans. Higher risk premia would not only affect traded financial instruments, but could also impinge on the supply of bank credit.

The main trigger for such a risk materialising would be a potential shift towards a more negative perception of the future course of growth and inflation among agents. As discussed in the last FSR, the existence of high asset valuations in the current uncertain environment could render these perceptions more fragile to shocks of different magnitudes, and lead to sharper and larger corrections if they turn more pessimistic. Although there are clearer signs of high valuations in the United States than in the other advanced economies, any potential price correction in its financial markets would foreseeably affect other economies owing to the high degree of global interconnectedness.

In these more adverse scenarios, the possibility of fire sales by some financial intermediaries, such as international open-ended investment funds, with illiquid or highly leveraged positions could prompt larger falls in prices for some assets.

R4. Downside risk to economic growth

Since the last FSR was published, growth in global economic activity has been more buoyant than expected, with the upward surprises concentrated in the United States, China and some emerging economies. In 2024 Q1 the outlook for manufacturing activity improved worldwide, except in the euro area, while the services sector also saw a slight recovery in the main economic areas (see Chart 5).

Economic activity in the euro area remained weak in 2023 H2. A gradual recovery is expected in 2024, albeit one slower than envisaged last autumn, with growth projected to remain at low levels in the medium term. Some of the main euro area economies contracted or posted low growth in 2023 (-0.3% in Germany and 0.9% in France), and are not expected to see any marked acceleration in economic activity in 2024.

⁴ For the purposes of this analysis, the term "risk aversion" is used in its broad sense, i.e. as the reduced willingness of agents to assume risk, owing to a more pessimistic assessment of the future probability of adverse macro-financial scenarios or a lower preference for (or a higher cost of) decisions that may generate losses. A strict definition referring exclusively to agents' preferences has not been applied.



SOURCES: National statistics, IGAE, S&P Global and Banco de España.

a The purchasing managers' index (PMI) is a survey-based qualitative indicator that captures the change in economic activity with respect to the previous month, indicating an increase (decrease) when the value is above (below) 50.

b The blue shaded area represents the interquartile range of the distribution of government debt ratios in the euro area.

Spain posted GDP growth of 2.5% in 2023, a significantly higher rate than the euro area average of 0.4% and outstripping expectations. The factors underpinning this growth include the favourable developments in external demand and household income, with the latter linked to job creation (which has been a major factor in the strong increase observed in immigration) and the recovery in real wages. The latest information points to a slight moderation in 2024 Q1, amid weak economic activity among Spain's main trading partners. Nevertheless, growth is expected to hold above its potential in 2024-2026.

As with the global economy, the risks to GDP growth in Spain remain on the downside. The main source of uncertainty continues to be a potential heightening of the global geopolitical tensions outlined above.

In addition, the downturn in China's real estate market remains a global concern. An abrupt slowdown in this economy could reduce growth in the other main economies, particularly through the trade channel, and increase uncertainty about international economic developments, which could affect the global financial markets.

In this context, the main vulnerabilities⁵ of the Spanish economy and financial system include:

⁵ In this report, vulnerabilities are defined as economic and financial conditions that increase the impact or probability of materialisation of risks to financial stability.

V1. High level of government debt

The budget deficit in Spain stood at 3.6% of GDP in 2023, 1.1 percentage points (pp) less than in 2022. The government debt ratio declined by nearly 4 pp, to 107.7% of GDP, underpinned by strong nominal GDP growth. This level of government debt is significantly below the peak reached after the pandemic began (125.3% in March 2021), but remains above its pre-pandemic level (98.2% in December 2019) and is high compared with other euro area countries (see Chart 6).

The average cost of new debt issuance in 2023 was 3.4%, up 2.1 pp on its 2022 level, with the increase being particularly concentrated in shorter-term instruments. However, the average cost of more recent issuances (3.3% in February 2024) remains below the peak of 2023 (3.9% in October), reflecting expectations of a reduction in monetary policy rates.

The higher cost of new issuance is only passing through gradually to the average cost of Spanish government debt for two reasons: (i) its long average term to maturity (close to eight years) and (ii) the debt currently maturing was issued a decade ago at much higher rates than the current ones. The lower interest accrued on inflation-linked bonds also partly offset the impact of the costlier new issuance last year. Specifically, since 2021 the average cost of outstanding Spanish government debt has increased by only 0.4 pp, to 2.3%.

In the absence of the consolidation measures required to comply with the new European fiscal rules, the Banco de España's projections continue to envisage a moderately upward path for the average cost and level of government debt over the coming years. Thus, the average cost would rise by approximately 0.3 pp over the next three years, to 2.6% in 2026. In addition to the higher debt burden, there will be other upward pressures on government spending, driven by factors such as population ageing, climate change-related investment needs, digitalisation and defence spending. The government debt ratio would therefore increase by 0.7 pp, to stand at 108.4% of GDP in 2026.

On the basis of these expectations, government debt remains a significant vulnerability for the Spanish economy. The limited fiscal space may make it difficult to absorb fresh shocks – whether real or financial – to the Spanish economy. High government debt may also render issuance costs more sensitive to changes in the policy interest rate expectations and risk perception of the financial markets.

In light of the foregoing, and also taking into account the cyclical position of the Spanish economy, a fiscal consolidation process must get under way in 2024 and be designed to boost the economy's potential growth as much as possible. In this respect, strict compliance with the new EU fiscal rules is a sound foundation upon which to base such process.

V2. Financial weakness of households and non-financial corporations

Following growth in earlier quarters, non-financial corporations' (NFCs) earnings stabilised in 2023 H2. Higher turnover and increased profit margins contributed to the growth in earnings in 2023.

With regard to profit margins, higher wage growth was offset by a moderation of other production costs (energy, other commodities, etc.). Earnings growth was broad-based across sectors.

Spanish firms also continued the strong deleveraging process in 2023, reducing their total financing (loans plus debt securities and including external financing) by slightly more than 1% year-on-year in February 2024. This was partially driven by the repayment of outstanding loans, such as those obtained during the pandemic under the Spanish Government's public guarantee scheme. Deleveraging and income growth reduced NFCs' debt ratio to 65% of GDP in December 2023, down 6.4 pp from its end-2022 level. This is the lowest level observed for this ratio in Spain since 2002 and is almost 3 pp below the euro area average (see the left-hand panel of Chart 7).

Despite the positive performance of corporate earnings and the deleveraging, higher interest rates continue to exert upward pressure on the average cost of debt and debt burden of NFCs. Specifically, in December 2023 the debt service ratio (interest expenses as a percentage of gross operating surplus) stood at 16.3%, up 7.3 pp and 9.8 pp from its December 2022 and December 2021 levels, respectively (see the right-hand panel of Chart 7). Meanwhile, the percentage of firms under high financial pressure, i.e. that were unable to cover their interest payments with their gross operating profit, increased moderately in 2023 according to the simulations performed by the Banco de España.⁶

The decline in reference interest rates since end-2023 and the expectations of further reductions in 2024 could lead to downward revisions to the interest rates on floating-rate business loans, which account for around 70% of total lending to the sector. Nevertheless, in 2024 interest rates would remain at considerably higher levels than those prevailing before the monetary tightening cycle, meaning that financial pressure will not be eased entirely.

Turning to households, growth in employment and wages in 2023 H2 continued to underpin the increase in their income. In 2023 as a whole, average real household gross disposable income (GDI) grew by around 5.5%, although it remained 1.1% below its pre-pandemic level. This increase, together with the sector's deleveraging, reduced households' debt ratio to 47% of GDP in December 2023, some 5.5 pp below its 2022 Q4 level. This is the lowest level observed for this ratio since 2002 (see the left-hand panel of Chart 7) and is also 4 pp below the European average.

Despite these favourable developments in households' indebtedness, those with floating-rate debt continued to see their interest expenses rise to end-2023. Such expenses were, however, largely offset by income growth, resulting in households' aggregate debt burden ratio only increasing by 1.1 pp in 2023, to stand at 3.2% in December 2023 (see the right-hand panel of Chart 7).

Income growth also curbed the increase in the proportion of households with a high gross debt burden (over 40% of household income). According to the simulations conducted by the Banco

⁶ See Chapter 1 of this report and Banco de España. (2024). "Box 2. The impact of interest rate hikes on firms' financial pressure". Report on the Financial Situation of Households and Firms - Banco de España, second half of 2023.

Chart 7

Debt ratio and interest expenses of households and NFCs

Chart 8 Breakdown of the change in bank profit.

Consolidated net profit as a percentage of ATAs (b)



SOURCE: Banco de España.

a Interest expenses are quarterly and are neither seasonally adjusted or adjusted for the allocation of financial intermediation services indirectly measured (FISIM). GDI and gross operating surplus (GOS) are quarterly and seasonally adjusted.

b The red (green) colour of the bars denotes a negative (positive) contribution of the corresponding item to the change in consolidated profit in December 2023 compared with December 2022. The yellow diamonds denote the ROA excluding the extraordinary losses in 2022 from the purchase of offices by a bank (-€0.2 billion) and the impact of the temporary levy on the banking sector in 2023 (-€1.3 billion).

c Includes, among other items, the extraordinary losses and the temporary levy on the banking sector mentioned in the previous note.

de España,⁷ the percentage of indebted households in a vulnerable financial position only rose by 0.7 pp between 2020 and 2023 Q3, to 11.2%. The effect of inflation on consumer staples – food and energy – exerted further pressure on households' ability to cover their interest payments.

As with NFCs, the policy interest rate hikes had passed through virtually in full to the average cost of Spanish households' outstanding loans at end-2023. Similarly, the decline in the reference interest rates since October and the further decrease expected by the markets will bring down the related interest costs in 2024, particularly for floating-rate mortgages.⁸ In any event, in 2024 reference interest rates will foreseeably be significantly higher than before the monetary tightening cycle, which will keep the cost of new credit and of rollovers at a relatively high level for households.

Lastly, households' use of Codes of Good Practice⁹ remains limited, which is consistent with their financial resilience described above.

V3. Weaknesses in the financial sector's intermediation capacity

Spanish banking sector profits grew significantly in 2023, confirming the positive performance observed in the first half of the year. Overall, return on assets (ROA) and

⁷ Based on the granular data from the Spanish Survey of Household Finances, whose latest wave refers to 2020. The simulation is based on aggregate interest rate and GDI developments, applied to these granular data.

⁸ Floating-rate mortgages accounted for approximately 65% of mortgage lending to households at end-2023.

⁹ See the Special Feature on the Codes of Good Practice in the Spring 2023 FSR.

return on equity (ROE) stood at 0.8% and 12.4%, 15 bp and 230 bp, respectively, higher than at end-2022.

The main driver of banking profits is rooted in the growth of net interest income (see Chart 8), which rose by 22.4% in 2023, fundamentally underpinned by wider net interest margins. Banks' cost of liabilities increased in 2023 by 1.4 pp (only 0.3 pp of which correspond to 2023 H2) and stood around 2.6% at the consolidated level. However, monetary policy tightening has continued to be passed through to lending rates more forcefully than to deposit rates, thereby buoying growth in net interest margins.

As things stand in the current interest rate hiking cycle, further growth in net interest income via the pass-through of policy rate rises is unlikely. Indeed, the latest data show a flattening in interest rate increases on new loans in Spain, with slight falls in some segments. In addition, both US and European banks have seen a levelling off in the contribution of net interest income to ROA.

However, some headroom appears to still exist for Spanish banks' deposit rates since, although there are expectations of a moderation in the reference rates for 2024, they will likely remain above the average deposit rate. Given this situation, the replacement of sight deposits with term deposits may continue, as may the shift away from bank deposits to investment funds and public debt, as investor seek higher returns.

In any event, deposits from the private non-financial sector grew by close to 1.5% at the consolidated level in 2023 and by 0.3% for business in Spain. Spanish banks also maintained a comfortable liquidity position at the end of 2023, with a liquidity coverage ratio of 186.3%, almost 8 pp higher than at end-2022.

Bank fees and commissions grew much more moderately than net interest income, at an annual rate of 2.2%, while there was a downturn in other income statement headings in 2023, as foreseen on the basis of data from 2023 H1. Operating costs have risen in the current inflationary environment, as have impairment losses. The effect of the levy on banks' operations in Spain (which amounted to 3.9% of consolidated net profit) was one of the factors that weighed on consolidated net profit.

Impairment losses rose by 22.9% year-on-year at consolidated level, and also grew, albeit to a lesser extent, in business in Spain. Here, the increase in impairment losses was not observed until 2023 H2, which is consistent with the worse performance of credit quality in Spain.

Specifically, the non-performing loan (NPL) ratio for lending to households in Spain increased slightly (by 14 bp) in 2023 to 2.9%, and the ratio of Stage 2 loans rose from 5.5% to 6.1% (see Chart 9). Improvements in credit quality in the non-financial corporate sector meant that the NPL ratio of the resident private sector in Spain remained essentially stable in 2023, at 3.4%.

Despite strong profits in 2023, the banking sector has not seen a significant increase in its solvency: the CET1 capital ratio held steady over the last year, standing at 13.2% in December

2023, 17 bp above its 2022 level. However, the gap between that of the Spanish banking system and the EU average has widened to 3.3 pp.

The most recent stress tests carried out on the Spanish banking sector show a high aggregate loss-absorbing capacity.¹⁰ However, in an environment where uncertainty remains high, banks are still recommended to use some of the current improvement in profitability to buttress their capacity to absorb future losses via provisioning and capital policies.

Lastly, as noted above, some concerns remain internationally about the vulnerabilities of some non-bank financial intermediaries (NBFIs) (e.g. open-ended investment funds) regarding their tight liquidity positions and high degree of leverage. The NBFI sector's growth means that it is increasingly important for financial stability monitoring purposes.

Real estate market developments

The acceleration in housing prices seen during the first three quarters of 2023 slowed somewhat towards the end of the year. As a result, house prices rose by 4.2% year-on-year in Q4, 0.6 pp above the average of the first two quarters of the year, but 0.3 pp below the figure seen three months earlier. The average of house price imbalance indicators increased slightly in 2023 H2, remaining positive, but near neutral levels.

House sales rallied somewhat in late 2023, with seasonally adjusted quarter-on-quarter growth slightly above 3% in Q4, breaking with the previously observed downward trend. For 2023 as a whole, their cumulative decline from 2022 reached 11%, although they were still 12% above pre-pandemic levels. The flow of new lending followed a pattern comparable to that of housing sales, with marked declines over the year, but a slowdown in the declines in 2023 Q4. If this improvement in activity indicators continues, house prices could show similar behaviour in the coming quarters.

The commercial real estate sector remains relatively sluggish, both in terms of prices and sales, although no sudden corrections were seen in 2023.

Despite the levelling out of the contractionary trend observed in the housing market in 2023 H1, it is necessary to increase monitoring of the banking sector's real estate exposures in order to better detect the potential build-up of risks and better measure the impact of their potential materialisation. This FSR analyses construction and real estate activities firms' ability to pay their bank debt and the impact on banks' solvency of the materialisation of risks in the wider real estate sector. The gradual reduction of Spanish banks' real estate exposures since the global financial crisis limits the estimated impact of real estate shocks

¹⁰ The latest stress tests reveal the adequate aggregate resilience of the Spanish banking sector, but they also show a reduction in its CET1 solvency ratio of more than 2 pp in adverse scenarios. See Chapter 2 and Box 2.1 of the Autumn 2023 FSR of the Banco de España for a summary of the results for Spanish banks in the Forward Looking Exercise on Spanish Banks and in the European Banking Authority's 2023 tests.

Chart 9

20

18

16

14

12

10

8

6

4

2

0

Share of lending classified as non-performing and in Stage 2. December of each year. Business in Spain. ID

Stage 2





Macroprudential indicators



SOURCE: Banco de España.

NPLs

- a The credit-to-GDP gap is calculated as the percentage point difference between the observed ratio and its long-term trend calculated by applying a one-sided statistical Hodrick-Prescott filter with a smoothing parameter of 25,000. This parameter is calibrated to the financial cycles historically observed in Spain. See Jorge E. Galán. (2019). "Measuring credit-to-GDP gaps. The Hodrick-Prescott filter revisited". Documentos Ocasionales, 1906, Banco de España.
- 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.
- c The indicator of real estate sector imbalances represents the average value of four indicators of house price imbalances: (i) the real 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. 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.
- d The systemic risk indicator (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 four 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.

on them, but it remains a significant channel to be analysed as part of the supervisory function.

In view of the above, and also taking into account the absence of signs of easing lending standards for mortgages, the real estate sector remains absent from the list of vulnerabilities, but it is essential that a potential accumulation of risk in this market is carefully monitored.

Macroprudential policy stance

The decline of the credit-to-GDP gap has slowed, as the continuing deleveraging of the banking sector results in lower estimates of its long-term trend. This gap fell in 2023 H2, albeit less so than in early 2023 and is still significantly below zero, against the backdrop of a further contraction in lending and rising nominal output. The output gap remained at a neutral level and the contemporaneous financial market indicators show no signs of stress.

Overall, since the publication of the last FSR, developments in the various macro-financial indicators have tended to be still contractionary in the case of lending, neutral in the case of output, and somewhat more expansionary in the real estate or wholesale financial markets (see Chart 10).

Consequently, the countercyclical capital buffer currently remains at 0% and no other macroprudential measures have been activated.