

# 2

## FINANCIAL SECTOR RISKS AND RESILIENCE



## 2 FINANCIAL SECTOR RISKS AND RESILIENCE

The continuing higher interest rate environment in 2023 added more fuel to the decline in credit to the resident private sector in Spain that began in 2022. This contraction was broadly based across the different portfolios, with notable decreases in lending for house purchase and for business purposes, although their levels tended to stabilise in the final stretch of the year. Credit quality in Spain, which had improved steadily in recent years, interrupted only marginally by the pandemic, deteriorated somewhat, especially in loans to households.

Higher interest rates continued to drive up the cost of all funding instruments for Spanish banks, including the cost of firms' and households' deposits, which are their largest source of funds. However, the pass-through of higher money market rates remains low compared with the pass-through to lending, prompting a substantial improvement in banks' earnings via net interest income growth.

Improved bank profitability has underpinned strong shareholder remuneration and a timid increase in solvency, such that the Common Equity Tier 1 (CET1) ratio gap with the main European banking systems has widened again. The stress tests, such as that presented in Box 2.1 below, evidence the banking sector's high aggregate resilience to adverse scenarios.

Nevertheless, unlike the favourable effects already observed, the bulk of the adverse effects of the recent monetary tightening will take some time to emerge. Consequently, a gradual moderation in net interest income is to be expected, as the pass-through to liability rates moves closer to the pass-through to lending rates. An increase in impairment losses may also be expected, depending on the intensity of the change in trend of credit quality developments.

In this setting, banks would be well advised to earmark a significant share of their current profits to strengthening their ability to absorb any delayed costs resulting from the current higher interest rate environment.

The Spanish non-bank financial intermediation (NBFi) sector was relatively stable in 2023 in terms of size and interconnections, against the backdrop of monetary policy tightening.

## 2.1 Deposit institutions

### 2.1.1 Balance sheet structure, risks and vulnerabilities

#### *Credit risk in business in Spain*

**The decline in credit to the resident private sector intensified in Spain in 2023, both in nominal and real terms.** Specifically, the stock of lending by deposit institutions to the resident private sector in Spain fell by 3.4% year-on-year in 2023, 2.8 percentage points (pp) more than in 2022. In real terms,<sup>1</sup> lending fell by 6.7%, also greater (0.8 pp more) than in 2022 (see Chart 2.1.a).

**The contractionary dynamics were broadly based across sectors and banks, moderating in the last part of the year.** Significant contraction was observed both in lending to non-financial corporations (NFCs) and sole proprietors and in lending to households, while only lending to financial corporations<sup>2</sup> increased. This pattern was broadly based across banks (see Chart 2.1.b). The year-on-year declines in credit to households and to the non-financial corporate segment steadied in 2023 Q4 (see Chart 2.1.c).

**In the non-financial corporate sectors, the decline in the volume of credit was significantly larger in 2023 than in 2022.** For NFCs and sole proprietors, lending contracted by 5.5% in 2023, 4.1 pp more than in 2022. This decline was broadly based across the different sectors of activity and firm sizes and was partly due to repayment of loans granted under the public guarantee programme introduced in response to the pandemic (the total stock declined by almost 30% year-on-year in 2023). The contraction in lending to firms contributed 2 pp to the total decline in credit to the resident private sector (see Chart 2.1.c). Lending to SMEs fell by 8.8% year-on-year in 2023 (4.1% in 2022), while lending to larger firms fell by 1.8% (compared with growth of 1.8% in 2022).

**The stock of lending by deposit institutions to households declined, influenced by developments in loans for house purchase.** Lending to households decreased by 2.3% year-on-year, 2.2 pp more than in 2022, mainly owing to loans for house purchase which fell by 3.1% in 2023, the largest year-on-year decline since 2015. As noted in Chapter 1, the extraordinarily high level of loan repayments played a significant part. Of the 3.4 pp decline in credit to the resident private sector in 2023, 1.3 pp corresponded to lending for house purchase. Other lending to households grew by 1.1% in the year, but this barely shaved 0.1 pp off the negative net contribution of lending to households,<sup>3</sup> which stood at -1.2 pp (see Chart 2.1.c).

<sup>1</sup> The figures for real lending in this paragraph are obtained by deflating the portion of lending to households (not for business purposes) by the consumer price index and all other lending (to non-financial corporations, financial corporations and sole proprietors) by the GDP deflator. All other references to lending in this chapter relate to nominal lending.

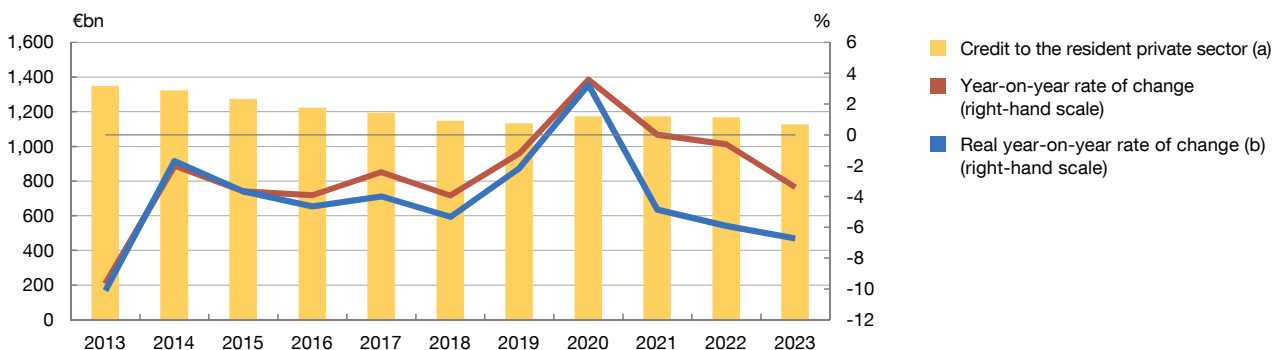
<sup>2</sup> Financial corporations account for a small part of the portfolio of credit to the resident private sector in Spain, amounting to 5.6% at December 2023.

<sup>3</sup> At December 2023 this portfolio accounted for 19% of lending to households and for 10.2% of total credit to the resident private sector.

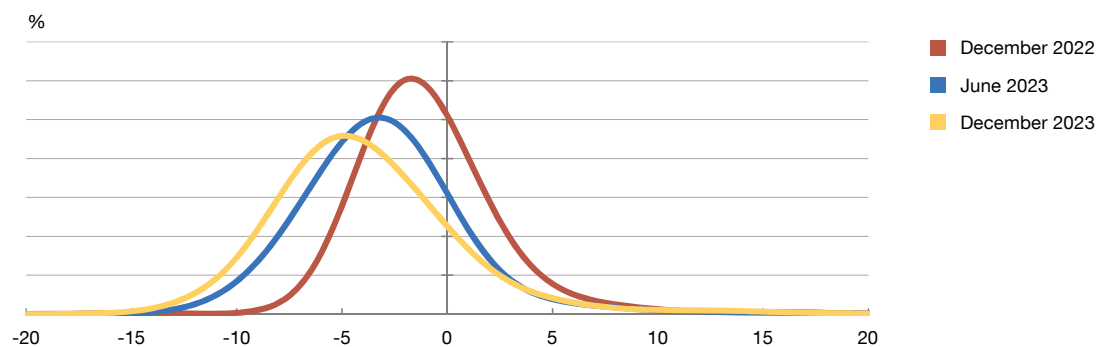
Chart 2.1

**Credit to the Spanish resident private sector declined across the board in 2023, albeit at a slower pace in the last stretch of the year**

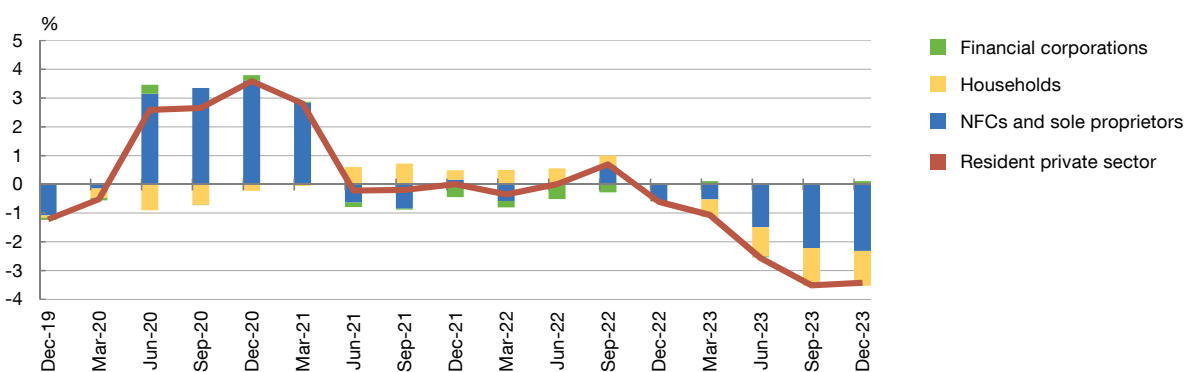
2.1.a Volume of lending and rate of change. Business in Spain. ID



2.1.b Distribution of year-on-year rates of change in credit to the resident private sector, by bank (c). Business in Spain. ID



2.1.c Contributions to year-on-year rates of change in credit to the resident private sector, by sector. Business in Spain. ID



SOURCE: Banco de España.

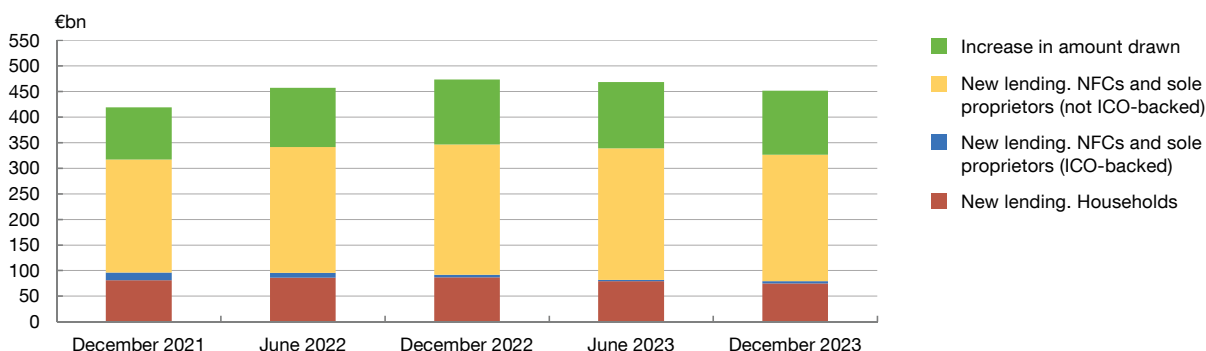
- a The resident private sector includes households, NFCs and sole proprietors, and financial corporations.
- b The time series of the real change in credit is obtained by taking into account its composition, deflating the portion of lending to households (not for business purposes) by the consumer price index and all other lending (to NFCs, financial corporations and sole proprietors) by the GDP deflator.
- c The chart shows the density function of the rate of change in credit to the resident private sector for Spanish deposit institutions, weighted by the corresponding amount of credit. This density function is proxied using a kernel estimator which enables a non-parametric estimate of the density function, yielding a continuous and smoothed graphical representation of that function.



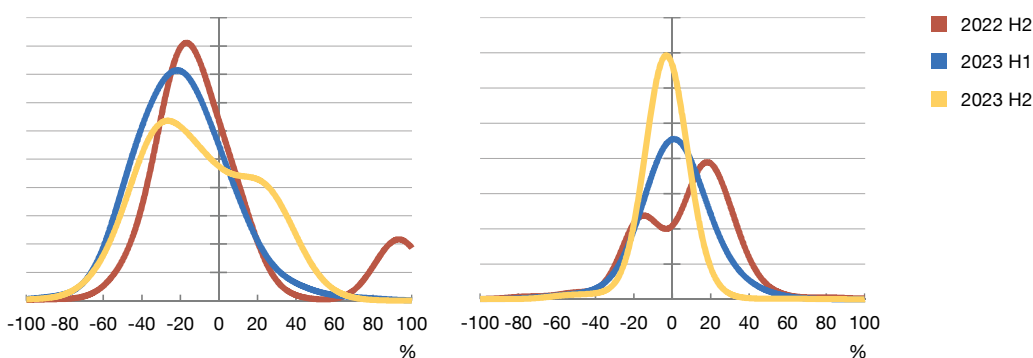
Chart 2.2

**New lending to NFCs fell slightly in 2023 while new lending to households fell more markedly**

2.2.a New lending volume, 12M cumulative. Households, NFCs and sole proprietors (a). Business in Spain. ID



2.2.b Distribution by bank of year-on-year rate of change in half-yearly new lending flows to households (l-h panel) and NFCs and sole proprietors (r-h panel) (b). Business in Spain. ID



SOURCE: Banco de España.

a Excluding other financial corporations.

b The chart shows the density function of the year-on-year rate of change of the half-yearly new lending flows to households (left-hand panel) and NFCs and sole proprietors (right-hand panel) for Spanish deposit institutions, weighted by the flow of half-yearly new lending for that purpose. The density function is estimated using a kernel estimator which enables a non-parametric estimate of the density function, yielding a continuous and smoothed graphical representation of that function.



**New lending also fell, at a slightly slower pace than the volume of credit.** New lending to households and NFCs was 3.1% lower than in 2022 (see Chart 2.2.a). This net decline reflects the 4.3% decrease in new lending, which was partially offset by the increase in amounts drawn under existing loans.

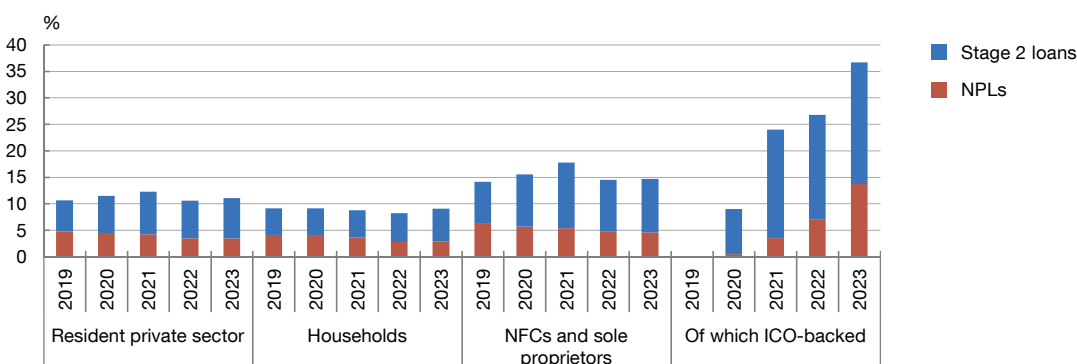
**The decline in new lending was most pronounced in loans to households, although it also affected NFCs and sole proprietors.** The year-on-year decline in 2023 was smaller for new corporate credit (-1.1%) than for households (-9.5%). For NFCs, the decline was most marked among SMEs, where new lending fell by 5.4% year-on-year.

**The contraction in new lending in 2023 was broadly based across deposit institutions.** In the case of lending to households (see Chart 2.2.b, left-hand panel), the dispersion in year-on-year growth increased in 2023 H2, with some banks moving towards positive values. This

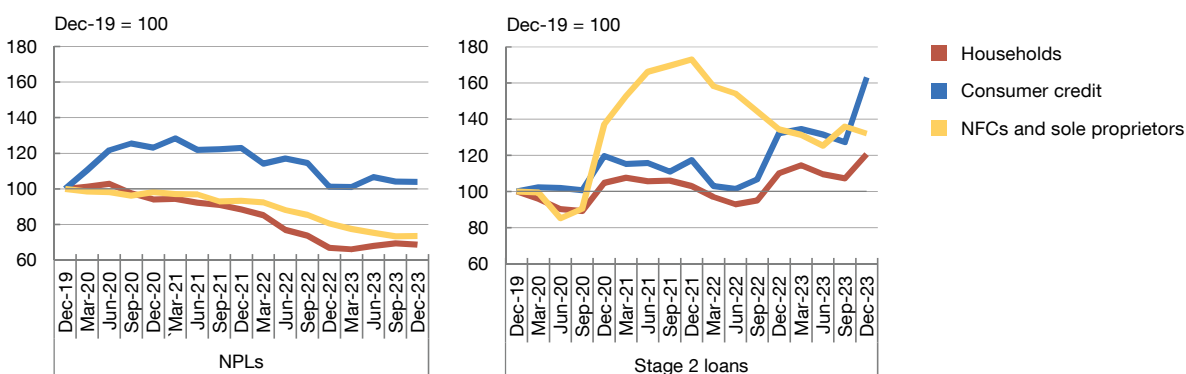
Chart 2.3

**Problem loans worsened in 2023, the decline in NPLs stalled and Stage 2 loans increased, especially on account of the adverse performance of the household segment**

2.3.a Share of NPLs and Stage 2 loans. At December of each year. Business in Spain. ID



2.3.b Volume of NPLs (left-hand panel) and Stage 2 loans (right-hand panel). Business in Spain. ID



SOURCE: Banco de España.



can probably be attributed, at least in part, to competitive dynamics in the banking sector, with certain groups of banks looking to shore up their market share. In any event, this change in distribution will have to be monitored, to ascertain whether it indicates a change in aggregate lending to households. By contrast, in the case of the non-financial corporate sectors (see Chart 2.2.b, right-hand panel), compared with previous half-yearly periods more homogeneity was observed across banks as they converged closer to the average rate of decline.<sup>4</sup>

**The non-performing loan (NPL) ratio held broadly steady in 2023, with a small decline in the volume of NPLs that offset the upward momentum stemming from the contraction in the total stock.** The NPL ratio decreased by less than 0.1 pp in 2023, standing

<sup>4</sup> In the most recent period (2023 H2), higher growth in new lending to households and NFCs appears to be linked to a higher solvency ratio and a lower NPL ratio in business in Spain. This growth also seems to be driven by the banks that started out with a lower level of net interest income to total assets in business in Spain.

at 3.4% for the resident private sector as a whole (see Chart 2.3.a). As a result, the sharp declines observed since the end of the global financial crisis, mainly as a result of the reduction in the stock of non-performing loans, came to a halt. In particular, the cumulative total for the year decreased by 3.7% (well below the fall of 18.5% in 2022). The decline in the total stock of lending to the resident private sector is estimated to have contributed 0.1 pp to its NPL ratio.<sup>5</sup>

**Non-performing loans for house purchase rose in 2023, driving up the NPL ratio in lending to households.** Specifically, NPLs to households rose by 2.7% year-on-year (compared with a decline of 24.3% in 2022), driven by a significant increase (6.9%) in NPLs for house purchase (see Chart 2.3.b). In consequence, the NPL ratio stood at 2.4%, up 0.3 pp in the year.

**The volume of non-performing loans to the non-financial corporate sector continued to decline in 2023, albeit at a slower pace than in previous years.** NPLs to NFCs and sole proprietors fell by 8.8% in 2023, a smaller drop than in the previous year (-13.7%) (see Chart 2.3.b). This decline was broadly based across sectors of activity and firm size, with the exception of large firms, whose NPLs grew by 0.3% in the year.

**The NPL ratio of loans to firms backed by the Official Credit Institute (ICO-backed loans) rose in 2023, partly owing to the decline in this portfolio.** The ratio rose by 6.6 pp year-on-year to 13.7%. Although the NPLs in this portfolio increased considerably in 2023 (37.6%), the pace of growth slowed in the final stretch of the year. Moreover, a significant part of the climb in the NPL ratio was due to the substantial decrease in the stock of these loans (-29% in 2023) as a result of the gradual repayment process. Had the total loan stock in the ICO portfolio (the denominator of the ratio) remained constant in 2023, the share of NPLs would have risen by 2.7 pp in the year, to 9.7% at December.

**Stage 2 loans also increased in the year, again owing to lending to households.** Stage 2 loans rose by 3.2% in 2023 for the resident private sector as a whole. This is a reversal of the 2022 pattern. In addition, 23% of ICO-backed loans to firms were classified as Stage 2, 3.3 pp more than a year earlier. Had the total loan stock in the ICO portfolio (the denominator of the ratio) remained constant in 2023, the share of Stage 2 loans would have fallen by 3.4 pp in the year, to 16.3% at December.

**The change in NPLs was driven by higher Stage 2 inflows and lower Stage 2 outflows.** Specifically, in 2023 new NPLs increased by 18.2% (see Chart 2.4.a). In addition, outflows to write-offs fell by 6.8%, while all other outflows (mainly repayments, recoveries to performing or Stage 2, and portfolio sales) fell by 14.5% compared with 2022.

**The increase in Stage 2 loans is also explained by the higher inflows and lower outflows in the year.** In 2023 Stage 2 inflows increased by 15.3% on a year earlier, owing to loans reclassified from performing which rose by 19.3%. Meanwhile, Stage 2 outflows fell by 15.1% in the year, mainly due to the lower flow of loans reclassified to performing which decreased by 22.9%.

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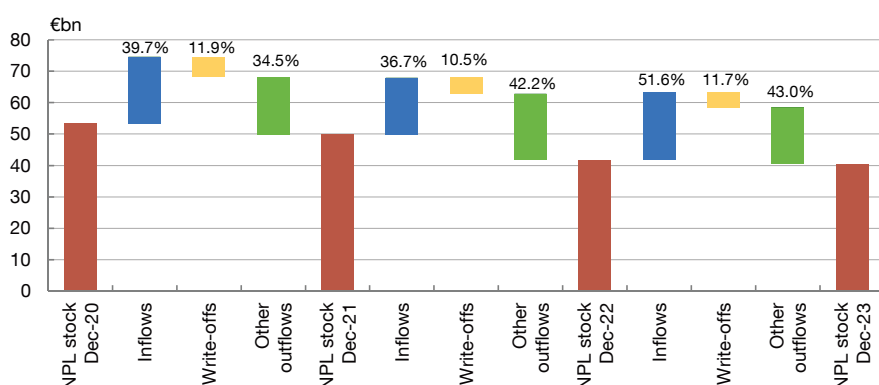
<sup>5</sup> Had the stock remained constant, the NPL ratio of credit to the resident private sector would have stood at 3.3% at December 2023, compared with the 3.4% actually observed.



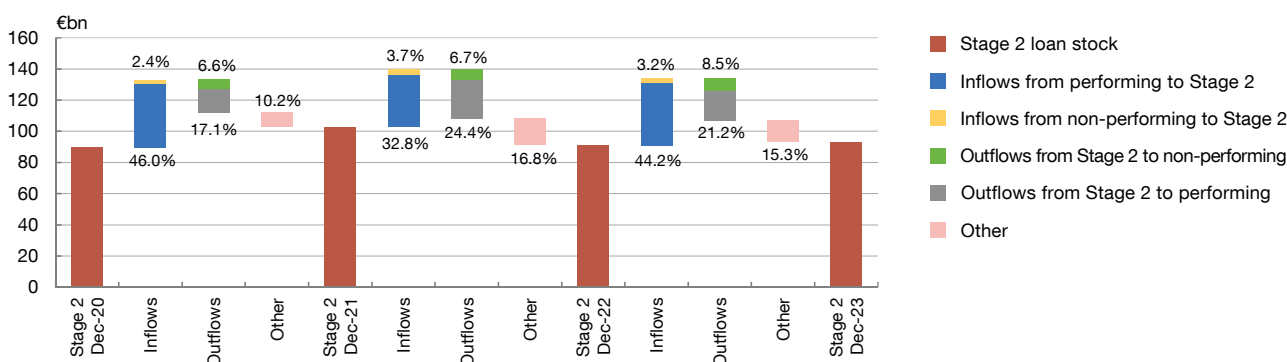
Chart 2.4

**In 2023 inflows to NPLs and Stage 2 loans increased, both in absolute terms and as a proportion of the total loan stock**

2.4.a Inflows and outflows of non-performing loans and advances (a).  
Business in Spain. ID



2.4.b Inflows and outflows of Stage 2 loans and advances (b).  
Business in Spain. ID



SOURCE: Banco de España.

- a The stock of non-performing loans and advances in each year corresponds to the carrying amounts on banks' balance sheets. NPL inflows are movements of loans from performing and Stage 2, along with loans acquired from third parties. NPL outflows include movements to performing and Stage 2, along with asset foreclosures, portfolio sales and securitisations. The percentages above the inflows and outflows over the course of a year denote their share of the stock of non-performing loans and advances at December of the previous year.
- b The volume of Stage 2 loans is measured using the carrying amount on banks' individual balance sheets. To be included as inflows and outflows, at year-end loans must have a different stage of impairment than at the start of the year or at the time of initial balance sheet recognition, if later. The percentages above and below the bars of the Stage 2 inflows and outflows denote their share of the stock of Stage 2 loans on balance sheets at December of the previous year. The "Other" bar includes loans which, having been in Stage 2 at the previous year-end, were repaid or sold in the current year.



**The proportion of forbore loans in lending to households continued to decline in 2023.**

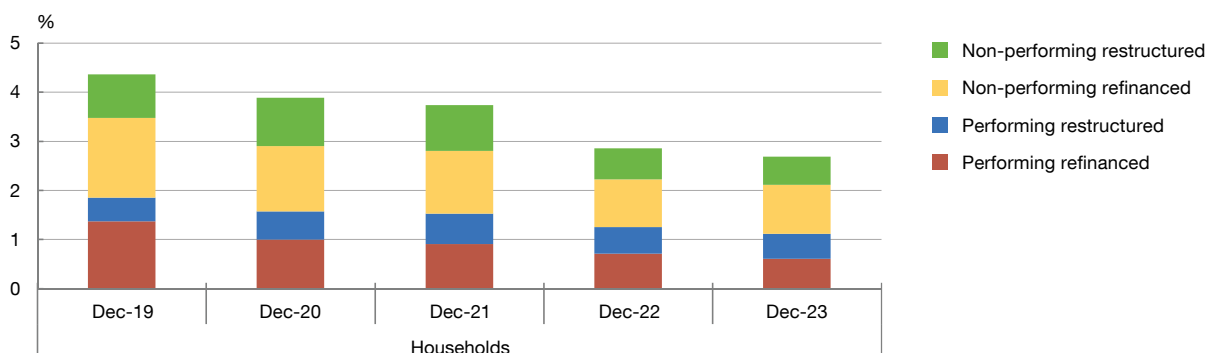
At year-end they accounted for 2.7% of lending, somewhat less than at December 2022 (2.9%) and substantially lower than at December 2019 (4.4%) before the onset of the pandemic (see Chart 2.5.a). In terms of credit quality, while the NPL ratio in the restructured loan portfolio fell slightly (53.1% at December 2023 compared with 53.9% at December 2022), in the refinanced loan portfolio it rose slightly (62.3% at December 2023 compared with 58% at December 2022).

**The share of forbore loans in lending to the non-financial corporate sector also declined.** Compared with December 2022, it fell by 1.2 pp to 5.5% of total lending to NFCs at December 2023 (see Chart 2.5.b). The NPL ratio in the refinanced loan portfolio fell to 57.2%

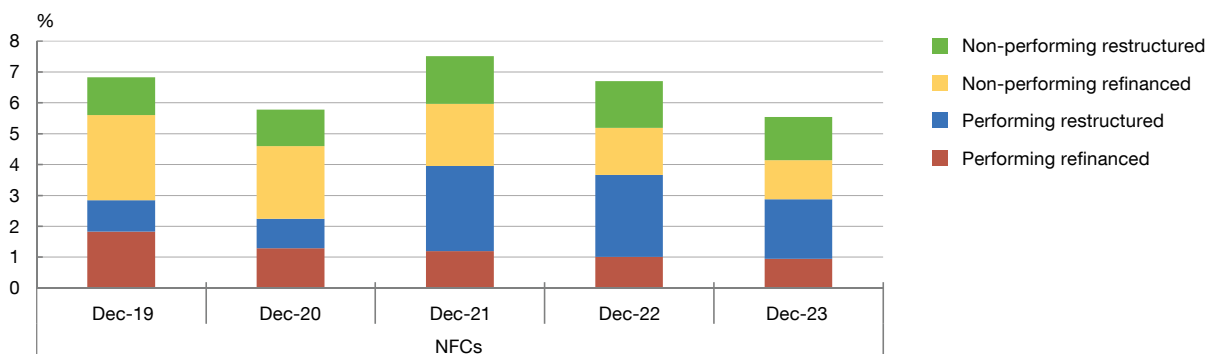
Chart 2.5

**The proportion of forbore loans to households and NFCs has continued to decline, albeit concentrated on performing exposures**

2.5.a Share of performing and non-performing forbore loans. Households (a). Business in Spain. ID



2.5.b Share of performing and non-performing forbore loans. NFCs. Business in Spain. ID



SOURCE: Banco de España.

a To calculate the share of forbore loans, sole proprietors are included under households.

at December 2023 (compared with 60.3% at December 2022), while in the restructured loan portfolio it rose to 42.1% at December 2023 (up from 36.4% at December 2022).

**The volume of loans granted under the Codes of Good Practice (CGP), while remaining contained, increased considerably in 2023.** The cumulative total of outstanding loans granted in 2023 under the 2012 CGP and the new 2022 CGP amounted to €907 million in almost 7,900 loans (0.2% of the outstanding amount of loans to households for house purchase at end-2022). This compares with loans granted in 2022 under the 2012 CGP totalling €135 million in almost 1,350 loans (0.03% of the outstanding amount of loans to households for house purchase at end-2021). In 2023, new applications for CGP measures were made for loans totalling €7.6 billion (1.5% of the outstanding amount of loans to households for house purchase at end-2022). Of these applications, loans accounting for 12% by volume were admitted and 43% were rejected.<sup>6</sup>

<sup>6</sup> With data to December 2023, more than 80% of these rejections are due to a failure to meet the objective eligibility requirements.

**The credit quality of the loans subject to CGP measures worsened somewhat in 2023.** As these facilities target vulnerable households or households at risk of vulnerability, credit quality ratios are expected to be worse than for lending for house purchase overall. Of the total stock of loans subject to CGP measures, at December 2023 46.9% were non-performing restructured exposures, 2.7% were non-performing non-restructured exposures and 26.3% were Stage 2 exposures. This is a minor deterioration in credit quality compared with December 2022 (increases of 1.5 pp, 2.2 pp and 5.3 pp, respectively), consistent with the greater fragility of this portfolio and with the deterioration observed in lending for house purchase overall.

### *Financial assets in the consolidated business*

**Financial assets in business abroad increased by 6% in 2023, in contrast to the contraction in Spain.** Specifically, in business in Spain, financial assets decreased by 1.4% year-on-year in 2023. Meanwhile, the main contributors to balance sheet growth abroad were loans to credit institutions (24.4% year-on-year), loans to resident private sectors in countries other than Spain (3.1%) and debt securities (13.2%). In Spain, as mentioned above, the significant decline in credit to the private sector was the largest contributory factor to the decrease in financial assets in business in Spain overall (see Chart 2.6.a).

**Lending by Spanish banks declined in the United Kingdom and Türkiye and increased in the other countries where Spanish banks conduct significant international business.** In the United Kingdom, which accounts for more than a quarter of loans to the resident private sector abroad, lending contracted by 5% in 2023, despite the slight appreciation of the pound in the year. In Mexico, lending rose by 20.1% in euro terms, partly owing to the significant appreciation of the Mexican peso against the euro. In the United States, lending increased by 1.8% year-on-year, despite the depreciation of the dollar, while in Brazil the appreciation of the *real* contributed to the 10.8% rise in lending in euro terms. Lastly, exposure in Türkiye declined by just 2.4%, despite the sharp depreciation of the Turkish lira in the period (see Chart 2.6.b).

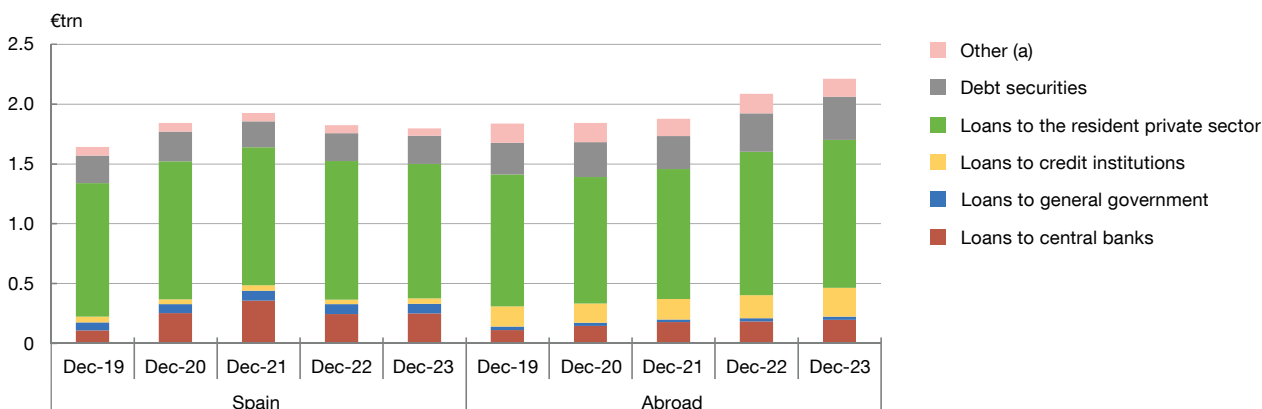
**Non-performing financial assets increased in business abroad, as did the NPL ratio, albeit in both cases unevenly across jurisdictions** (see Chart 2.7.a). The NPL ratio of credit to the resident private sector rose markedly in the United States (by 1.4 pp to 4.9%), driven by a strong increase of more than 40% in NPLs, especially in lending to households where the NPL ratio climbed to 12.9%. There were no notable changes in NPL ratios in the other geographical areas, with the exception of Türkiye where the NPL ratio fell by 1.8 pp to 4.6%, mainly owing to the decline in NPLs to firms.

**The consolidated balance sheet mix of Spanish banks has shifted since the start of the interest rate hiking cycle in 2022, with an increased share of debt securities.** While credit to the resident private sector has continued to account for just over 55% of total assets since December 2021, in the last two years the share of debt securities rose by almost 2 pp to 14.3%. Government debt securities increased by 18.8% in the period, accounting for 11.6% of total assets at end-2023 (1.3 pp more than in 2021), while private sector debt securities grew

Chart 2.6

### The share of financial assets in business abroad increased in 2023

#### 2.6.a Financial assets in Spain and abroad, by asset type



#### 2.6.b Year-on-year rate of change in credit to the resident private sector in Spain and abroad and in exchange rates (b). Consolidated data



SOURCE: Banco de España.

a "Other" comprises cash balances, derivatives and equity instruments.

b A positive (negative) sign for the change in exchange rate indicates appreciation (depreciation) of the currency against the euro.

c The changes in the exchange rate of the Turkish lira against the euro were -39.8% in 2021, -24.4% in 2022 and -38.8% in 2023.

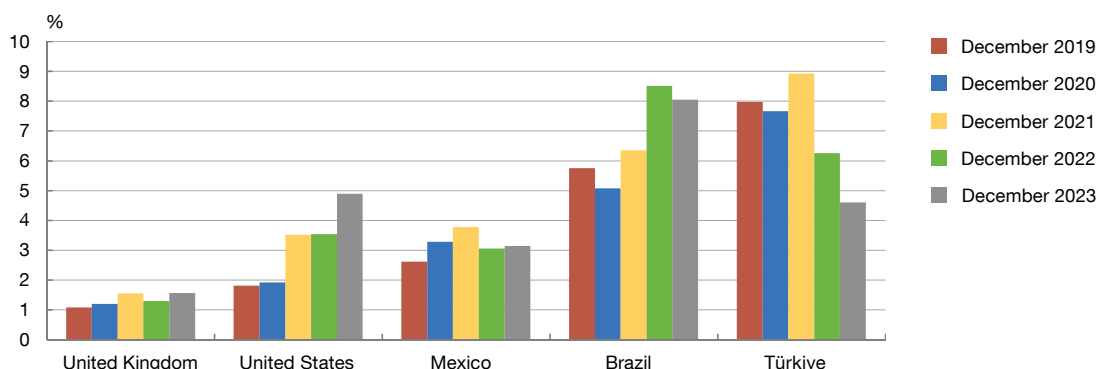
by 32.4%, although their share of the balance sheet is much smaller (2.7% at December 2023, 0.6 pp more than in 2021). Amortised cost debt securities accounted for 62% of the total at December 2023, 11 pp more than in 2021. As regards credit to the non-financial private sector, since 2021 the share of loans to NFCs has risen (by 0.4 pp to 20.4%), while the share of loans to households has declined (by 0.6 pp to 31.4%), the latter owing to the fall in lending for house purchase, which more than offset the increase in consumer credit.

**Banks' business in Spain balance sheets also show an increase in the share of debt securities.** This growth is comparable to that recorded at the consolidated level (between 2021 and December 2023 the share of debt securities rose by 2.1 pp to 14.2%). As discussed at the beginning of this chapter, lending to NFCs recorded the sharpest decline in credit, with

Chart 2.7

**The NPL ratio increased in business abroad overall, partly on account of the United States and despite the improvements in other areas, especially in Türkiye**

2.7.a NPL ratio in the main countries of interest for the Spanish banking sector (a)



SOURCE: Banco de España.

a Data on portfolios of loans to the resident private sector of Spanish deposit institutions in countries where they conduct significant international business.

consumer credit being the only portfolio to have grown its share. Various supply and demand factors arising from the interest rate hikes, such as lower agents' demand for credit and higher credit risk and returns for banks, played an important role in this shift in the balance sheet mix.

### *Liquidity and financing conditions*

**The Eurosystem has continued to adjust its balance sheet as a result of its monetary policy normalisation, contributing to the reduction of excess liquidity<sup>7</sup> at European banks.** Since the cut-off date of the last FSR the balance sheet has been reduced by €448 billion to €6,591 billion. This is also reflected in a reduction of €346 billion, to almost €3,244 billion, in banks' excess liquidity<sup>8</sup> (see Chart 2.8).

**The decline in the Eurosystem's balance sheet is partly explained by the contraction in the stock of the purchase programmes.** This stems from the Governing Council's decision to discontinue, from July 2023, reinvestments of maturing assets under all asset purchase programmes (with the exception of those acquired under the Pandemic Emergency Purchase Programme (PEPP)). Specifically, since the last FSR was published, the stock of these programmes has fallen by €162 billion to €4,589 billion.

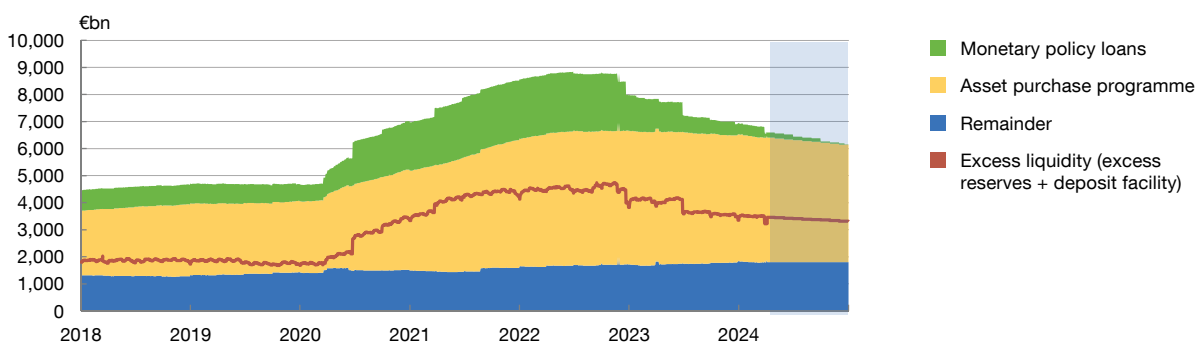
<sup>7</sup> Excess liquidity is the sum of a commercial bank's holdings at the central bank, whether on the current account or in the deposit facility, above the reserve requirements.

<sup>8</sup> The decline in excess liquidity is smaller than the reduction in the Eurosystem's monetary policy assets owing to shifts in autonomous liquidity factors that affect the net liquidity supply. Specifically, the decrease in government deposits with central banks and in deposits of non-euro area residents (non-monetary policy deposits) entail a release of liquidity to banks.

Chart 2.8

**Monetary policy normalisation has reduced the direct exposure of European banks' balance sheets to the Eurosystem**

2.8.a Eurosystem balance sheet and excess liquidity of European banks (a)



SOURCE: ECB.

a The data capture the balances that resident banks in each country, and their subsidiaries and branches abroad, hold with the ECB and national central banks. The forecasts include non-reinvested maturities under monetary policy loans and the asset purchase programme, and the assumption that the last excess liquidity ratio on both these items will remain constant. The shaded section shows the forecast for the rest of 2024.

**The reduction in the aggregate volume of purchase programme assets is set to gather pace in the coming months.** The Eurosystem also intends to reduce the reinvestment of PEPP assets by €7.5 billion per month from June 2024, before discontinuing reinvestments entirely from the end of the year. These decisions will lead to a further balance sheet reduction of more than €270 billion in 2024.

**The decline in long-term monetary policy loans has also driven the reduction in the Eurosystem's balance sheet.** Monetary policy loans to banks have fallen by €354 billion since the last FSR was published, mainly owing to repayment of two of the third series of targeted longer-term refinancing operations (TLTRO III) on 20 December and 27 March, in amounts of €99 billion and €251 billion, respectively. According to the latest data available, the stock of these loans stands at €153 billion.<sup>9</sup> Most of the remaining balance will be repaid in 2024.

**The further reduction in the Eurosystem's balance sheet triggered no significant movements in money market rates.** The main money market rates, such as the €STR (for unsecured transactions) and EURIBOR (for the interbank and mortgage markets), and secured money market rates (repos), which had quickly adjusted to the European Central Bank's policy rate hikes, held around 4% in the opening months of 2024 (see Chart 2.9.a).

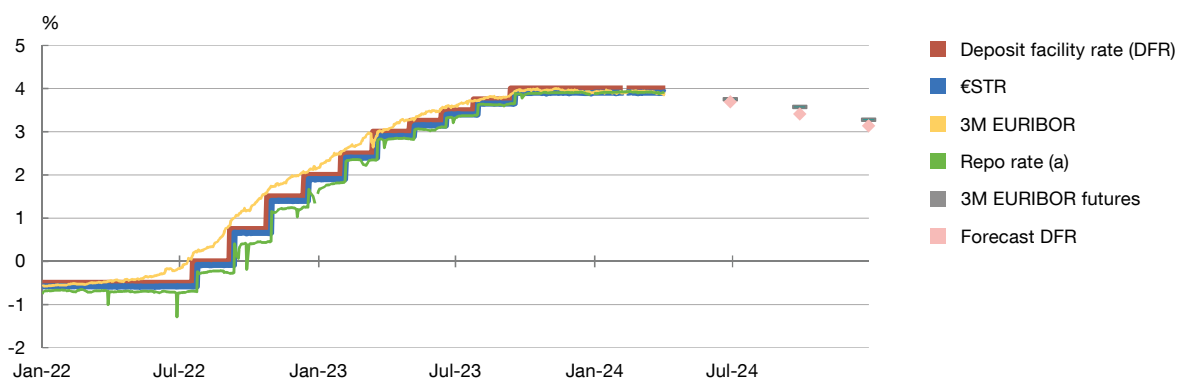
**Lower excess liquidity and banks' lower recourse to Eurosystem funding is revitalising money markets in the search for alternative sources of funding.** The repo market has performed better and become less volatile, especially at year and quarter-ends, as its problems of collateral shortage have eased. The increase in available collateral is explained, at least

<sup>9</sup> Compared with €1,321 billion at end-2022.

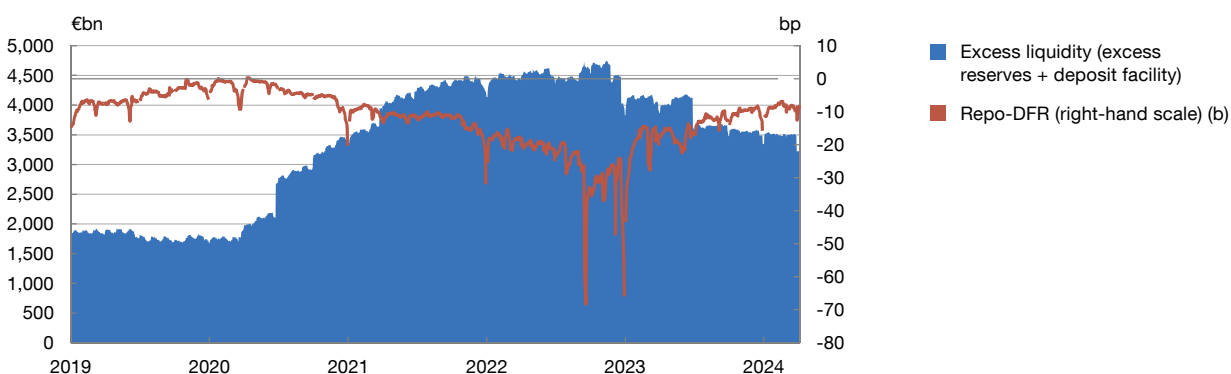
Chart 2.9

Money market and interbank rates rose only moderately in the second half of 2023, as policy rates steadied

## 2.9.a Risk-free rates



## 2.9.b Repo-DFR spread and excess liquidity



SOURCES: ECB and Banco de España.

- a The repo rate is calculated as a weighted average based on the volume of each transaction made in Spain, France, Germany and Portugal (only overnight transactions with effective value over €1 million and collateralised by government debt).
- b The repo-DFR spread is defined as the volume-weighted average rate for fixed-rate transactions collateralised by government debt, based on transactions reported in the Money Market Statistical Reporting (MMSR) dataset. These include transactions that are settled on the trade date (overnight or O/N), one day after the trade date (tomorrow-next or T/N) or two days after the trade date (spot-next or S/N). The DFR is the interest rate (remuneration) applicable to overnight deposits made by Eurosystem monetary policy counterparties.

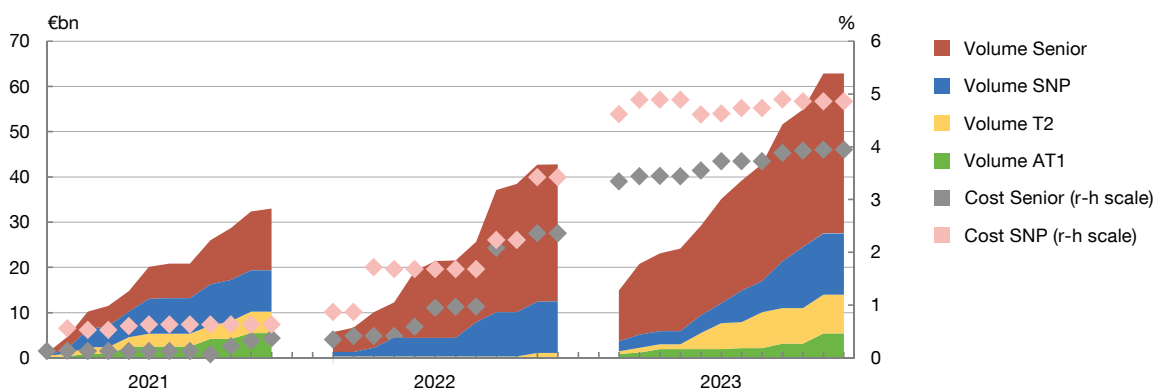
partially, by the high repayments of funds borrowed by banks under TLTRO III, which have freed up collateral, and by the discontinuation of the Eurosystem's reinvestments. Moreover, although the need to borrow collateral is still the main driver of repo market activity, as excess liquidity in the system declines banks are increasingly turning to this market to obtain funding, as shown by the growth in repo volumes compared with collateral overall. This better repo market performance owing to lower collateral shortage is also reflected in the narrowing of the negative spread between the repo rate and the deposit facility rate (DFR)<sup>10</sup> (see Chart 2.9.b). By contrast, there has been no resurgence in unsecured money market operations.

<sup>10</sup> The repo-DFR spread widened substantially during the period of monetary expansion owing to problems of collateral shortage, putting downward pressure on repo rates. See Claudio Vela and Alicia Aguilar. (2024). "The impact of monetary policy normalisation on secured money markets". *Economic Bulletin – Banco de España*, 2024/Q1, 04.

Chart 2.10

**Banking sector debt issuance has continued to grow, underpinned by strong investor demand, and its cost steadied in the second half of 2023**

2.10.a Volume (in year) and primary market issuance cost (a)



SOURCES: Dealogic and Banco de España.

a The chart depicts the cumulative monthly issuance volume over the course of each year. Primary market issuance costs for euro-denominated bonds are calculated as the volume-weighted average in each period of the year. The primary market cost of T2 and AT1 issues is not included, owing to their low issuance volume in 2022.

**Debt issuance by the Spanish banking sector continued to grow at a good pace in 2023 H2 in all segments, including senior debt.**<sup>11</sup> Issuance was driven by the need to meet the requirements laid down in the resolution regulations<sup>12</sup> and to replace part<sup>13</sup> of the reduced funding obtained through TLTRO III,<sup>14</sup> against a backdrop of strong investment demand in search of higher yields. In 2023 Spanish banks issued almost 50% more debt than in 2022, with a slight drop in the share of senior debt, which nevertheless continues to account for more than 50% of the total, growing some 17% in the year (see Chart 2.10).

**In 2023 Spanish banks were able to issue subordinated debt, both Additional Tier 1 (AT1) and Tier 2 eligible instruments.** The uncertainty generated by the Credit Suisse crisis<sup>15</sup> and the events at SVB and other US banks in March 2023 had a very negative impact on the AT1 and Tier 2 markets, which gradually reopened for larger banks from the summer onwards. In the closing months of the year these markets also opened up to smaller banks, fuelled by a strong and growing demand for instruments offering higher returns, amid improved market sentiment and lower volatility. Thus, AT1 and Tier 2 instruments accounted for more than 22% of all issuances in 2023, compared with a modest 2.5% in 2022 (see Chart 2.10).

<sup>11</sup> Both secured and unsecured.

<sup>12</sup> In 2023 Spanish banks issued some €46.7 billion in MREL-eligible instruments: a net increase in minimum required eligible liabilities (MREL) of around €13.1 billion, plus €33.6 billion to meet maturities or replace previous issuances.

<sup>13</sup> Spanish banks had more capacity to use money markets to meet TLTRO III repayments. See M.<sup>a</sup> Carmen Castillo Lozoya, Enrique Esteban García-Escudero and M.<sup>a</sup> Luisa Pérez Ortiz. "The effect of the redemption of TLTRO III on Spanish banks' balance sheets". Documentos Ocasionales, Banco de España (forthcoming).

<sup>14</sup> The stock of Spanish banks' TLTRO III funds decreased from €133.9 billion at the start of 2023 to €96.2 billion at June and to €22.7 billion at end-2023.

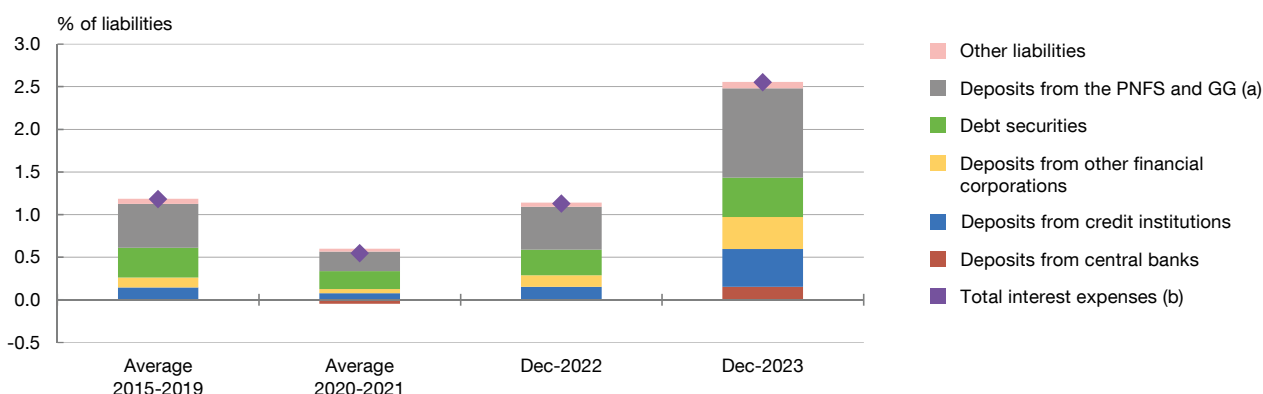
<sup>15</sup> When the Swiss authorities resolved to protect shareholders at the expense of AT1 holders.



Chart 2.11

### The average cost of liabilities rose significantly in 2023, driven by the higher cost of the different sources of bank funding

2.11.a Interest expenses on funding. Data at consolidated level



SOURCE: Banco de España.

a PNFS = private non-financial sector; GG = general government.

b Excludes expenses associated with interest rate hedge derivatives.

**The debt issuance costs of Spanish banks continued to increase over 2023, particularly in the case of senior debt, albeit less so than in 2022, in line with monetary policy developments.** The cost of senior debt went from 2.4% at December 2022 to around 3.9% in late December 2023. For senior non-preferred debt, this figure rose from 3.4% to 4.9% (see Chart 2.10).

**The average overall cost of bank liabilities rose significantly in 2023, as the different sources of funding became more expensive across the board.** At December 2023 the average cost of liabilities for banks as a whole stood at 2.6%, 140 basis points (bp) higher than at December 2022 and well above the low recorded in the pandemic years (0.6%). The higher remuneration of non-financial private sector deposits, which represent the main source of bank funding, accounts for 38% of this increase (see Chart 2.11), even though their unit remuneration remained low.

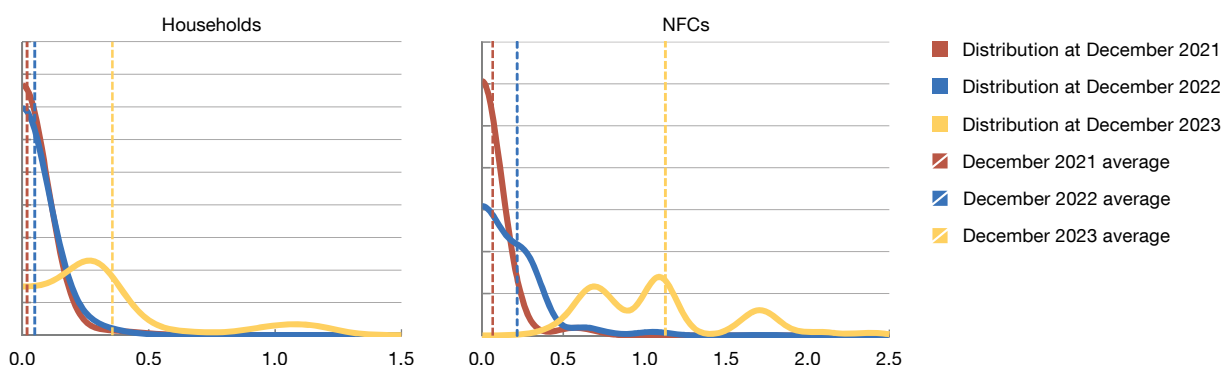
**The remuneration of household and NFC deposits in Spain increased in 2023, although the average cost remained low.** The pass-through from the reference interest rates to the overall remuneration of the sight and term deposits of the non-financial private sector in Spain gathered pace over 2023, while the flow of funds from sight accounts to higher-yield term deposits also increased considerably. At December 2023, for banks as a whole, the average interest rate paid on household deposits stood at 0.4%, up from 0.1% a year earlier. In the case of NFC deposits, the average rate was 1.1% (compared with 0.2% at December 2022).

**The rise in deposit interest rates in Spain was widespread across banks, albeit with notable heterogeneity.** Thus, the distributions of average deposit rates shifted to the right,

Chart 2.12

**Deposit interest rates in Spain increased in 2023, while becoming more heterogeneous across banks, particularly in the case of NFC deposits**

2.12.a Distribution of deposit interest rates. Business in Spain (a)



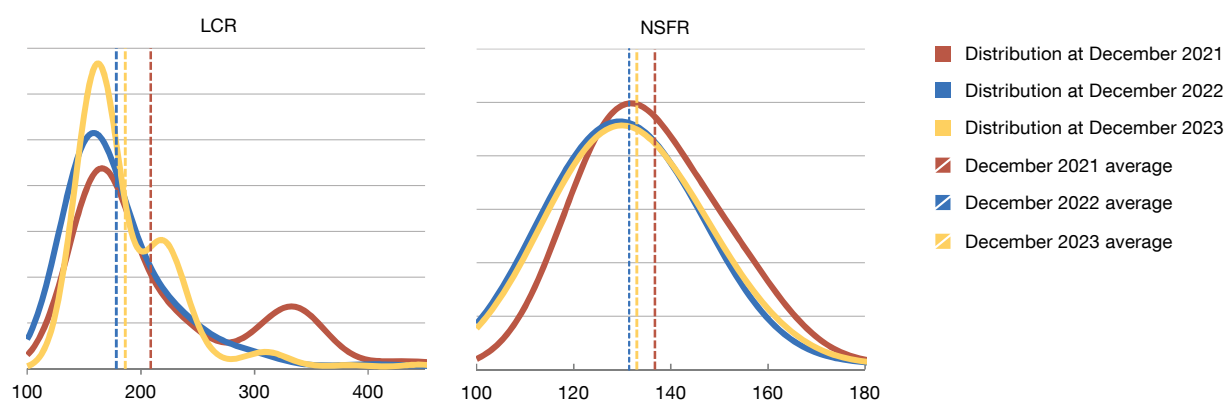
SOURCE: Banco de España.

a The charts show the density functions of the average interest rates applied by the different financial institutions to household and NFC deposits, weighted by the volume that such deposits represent at each institution. These density functions are proxied using a kernel estimator, which enables a non-parametric estimate of the density function, yielding a continuous and smoothed graphical representation of that function. The vertical broken lines show the average interest rates on each of the dates considered.

Chart 2.13

**The liquidity position of Spanish banks remains robust despite the monetary policy tightening**

2.13.a Distribution of the LCR and the NSFR. Consolidated data (a)



SOURCE: Banco de España.

a The charts show the density functions of the LCR and NSFR for the different financial institutions, weighted by the volume of assets at each institution. Such density functions are proxied using a kernel estimator, which enables a non-parametric estimate of the density function, yielding a continuous and smoothed graphical representation of that function. The vertical broken lines show the Spanish banking system's overall LCR and NSFR on each of the dates considered.

but also widened. In the case of households, the distribution of the rates applied by the different banks hovered around 0.3%, with some banks offering substantially higher rates (above 1%). Similarly, the interest rates paid on NFC deposits varied much more from bank to bank than in previous years (see Chart 2.12).

**Household and NFC term deposits increased by 7 pp in 2023, though they remain below the level seen before the negative interest rate period (14.6% at December 2023 versus 47.2% in 2014).** In aggregate terms, at December 2023 sight deposits accounted for 85.3% of total non-financial private sector deposits.

**Despite monetary policy tightening and the adjustments to the value of debt instruments, liquidity levels at Spanish banks remained robust.** The overall liquidity ratio (LCR) of Spanish banks stood at 186.3% at December 2023, around 8 pp up on the figure at end-2022 and comfortably exceeding the regulatory minimum (100%). This improvement was widespread across banks. The net stable funding ratio (NSFR) remained at levels similar to those seen in recent years, standing at 133% at December 2023, up from 131.4% a year earlier, again above the minimum required (100%) (see Chart 2.13).

## 2.1.2 Profitability and solvency

### *Profitability*

**The Spanish banking sector's consolidated net profit in 2023 increased by 27.7% compared to 2022, primarily due to growth in net interest income.** Thanks to this improvement in net profit, the return on assets (ROA) rose from 0.6% in 2022 to 0.8% in 2023 (see Chart 2.14.a). In the same vein, the return on equity (ROE) stood at 12.4%, 2.3 pp higher than a year earlier, and above the estimated cost of equity (COE), which stood at 9% at December 2023,<sup>16</sup> although this figure is subject to much uncertainty. The COE rose by 0.2 pp in 2023, as the rise in the real risk-free rate and the Spanish banking sector risk premium was not offset by the fall in the overall equity risk premium. Excluding the impact of the temporary levy on banks and other extraordinary items in both years,<sup>17</sup> profits would have grown 31.6% year-on-year, with ROE standing at 12.9%.

**Profits were buoyed by the rise in income from the business abroad of the main banks with an international presence.** The most significant boost came from Mexico (29% year-on-year), which, together with the growth in the United Kingdom and Türkiye, helped offset the fall in income in Brazil and the United States (see Chart 2.14.b).

**Consolidated net interest income increased markedly in 2023 (up 22.4% year-on-year), as a result of higher unit margins.** The growth in net interest income, which was more pronounced in business in Spain than in business abroad, was primarily due to the significant price effect (see Chart 2.15.a), as a result of the greater pass-through of higher interest rates

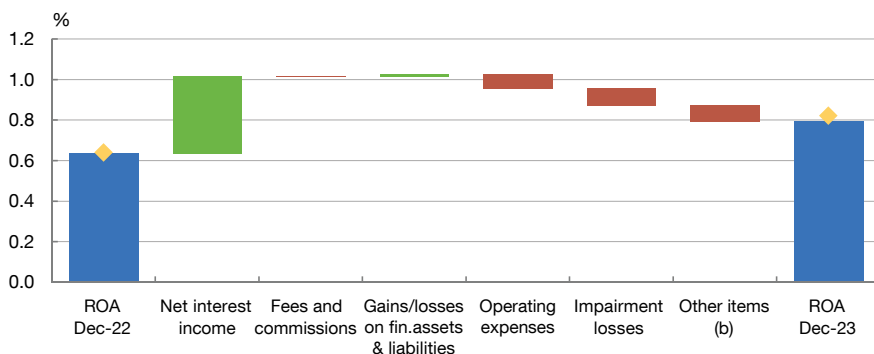
<sup>16</sup> Excluding the inflation risk premium from the main component of the COE could bring it down to 6.9%, even further below the ROE. COE is unobservable and its estimation may vary significantly depending on the model used. See Luis Fernández Lafuerza and Javier Mencía. (2021). "Estimating the cost of equity for financial institutions", *Financial Stability Review - Banco de España*, 40, pp. 43-60.

<sup>17</sup> The extraordinary levy on banks raised €1,263 million in 2023, while extraordinary losses were recognised in 2022 as a result of the €200 million-purchase of offices by one bank.

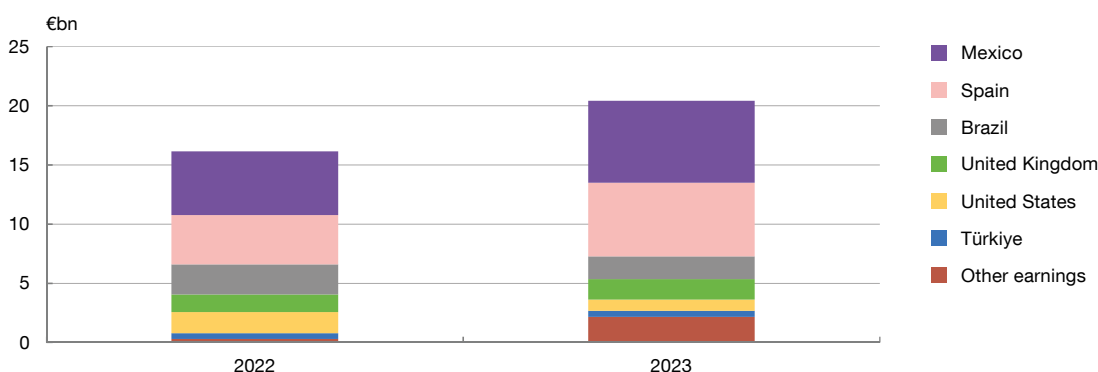
Chart 2.14

**Consolidated profit grew by 28% in 2023, driven primarily by net interest income and by strong business in Mexico and Spain**

2.14.a Breakdown of change in profit. Consolidated net profit as a percentage of ATA (a)



2.14.b Geographical distribution of ordinary profit attributable to the parent of banks with the most significant international activity (c). Consolidated data



SOURCES: Banco de España and banks' financial reports.

- a The red (green) colour of the bars denotes a negative (positive) contribution of the corresponding item to the change in consolidated profit at December 2023 compared with December 2022. The yellow diamonds denote the ROA excluding 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).
- b Includes, among other items, the extraordinary losses and temporary levy on the banking sector mentioned in the previous note.
- c The group of banks with significant international activity includes the three in which such activity is most important and longest-running, with profit measured excluding non-recurring items in the period considered. The "Other earnings" category includes earnings in other countries and those of the banks' corporate centres.



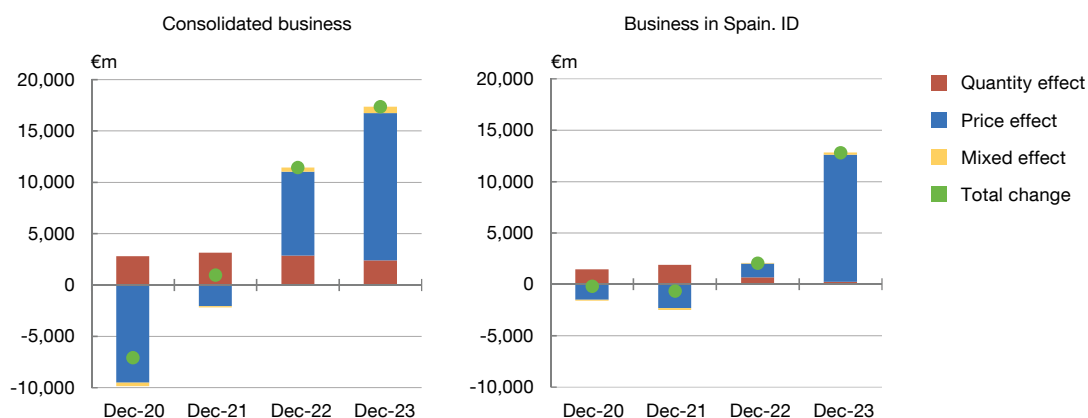
to lending than to deposits. The quantity effect was also positive, although its beneficial impact on net interest income was much smaller at the consolidated level, while business in Spain was barely affected. This growth was helped by the prevalence of variable rate loans and the fact that the Spanish banking sector is characteristically geared towards the retail sector.

**Pass-through of the key policy rate hikes to bank assets was greater than to bank liabilities.** On data for business in Spain, at December 2023 the cumulative pass-through to loans to the resident private sector stood at around 57% overall for loans to households for house purchase and to NFCs, some 10 pp higher than six months earlier. The overall pass-through rate for other lending to households stood at 37.7%. On the liabilities side, despite the

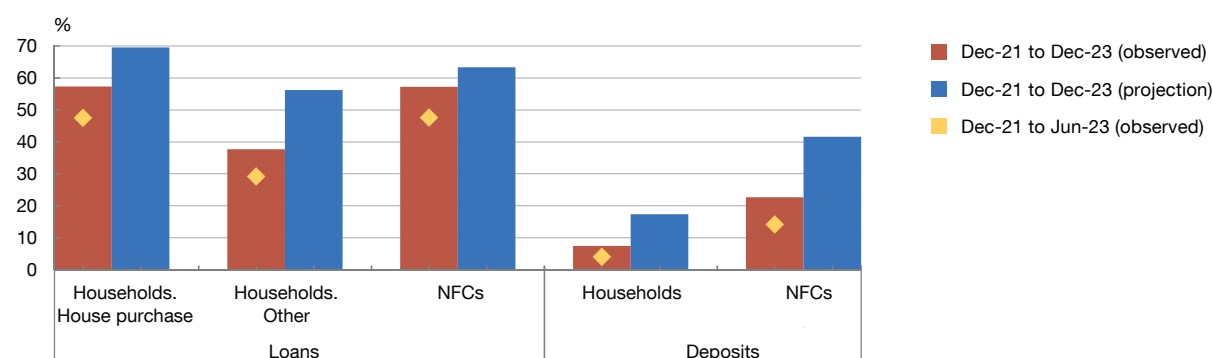
Chart 2.15

**The notable increase in net interest income in 2023 was essentially due to the widening of unit margins in the different areas of the banking business**

2.15.a Breakdown of the change in net interest income (a)



2.15.b Pass-through of the increase in the EURIBOR to loan and deposit interest rates (b)



SOURCE: Banco de España.

- a The quantity effect is calculated as the product of the change in investments (in the case of income) or funding (in the case of expenses) and the return (income) or cost (expenses) held constant at the values of the initial period. The price effect is calculated as the product of the change in return (income) or cost (expenses) and the investments (income) or funding (expenses) held constant at the values of the initial period. The mixed effect is a residual calculated as the difference between the total change and the sum of the price and quantity effects. The effects on net interest income are calculated as the difference between the effects on interest income and interest expense.
- b Pass-through is defined as the ratio between the cumulative change (in pp) in interest rates on bank loans and deposits in the period considered and the maximum change in the 12-month EURIBOR in the same period. Changes in bank loan and deposit interest rates are projected using a multivariate structural SVAR model based on interest rate data reported to the ECB.

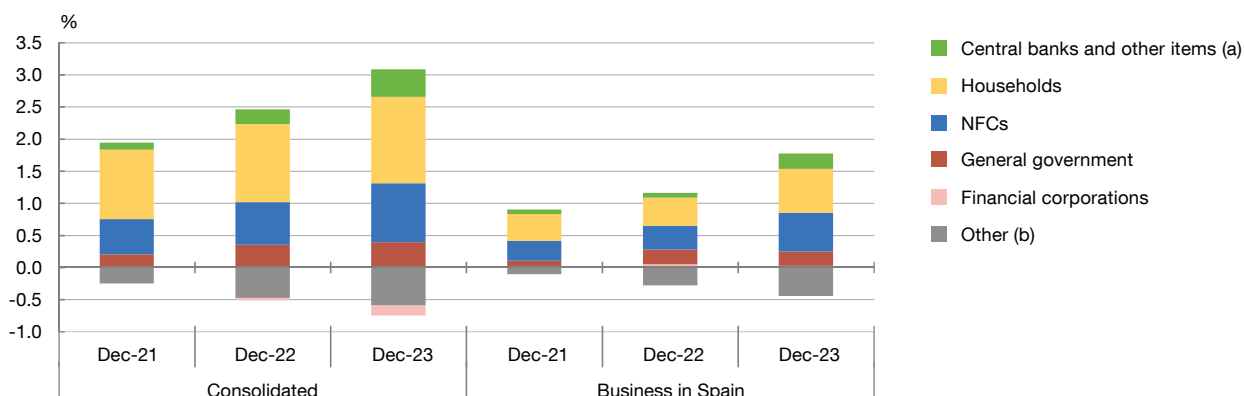
increase in retail deposit remuneration seen in 2023, the overall pass-through rates were a mere 7.5% and 22.6% for household and NFC deposits,<sup>18</sup> respectively. While the rate at which the higher interest rates passed through to deposits increased in the second half of the year (by 3.5 pp for households and 8.5 pp for NFCs), it remained below the levels of pass-through on the asset side, and still short of the levels to be expected based on past experience (see Chart 2.15.b), in large part owing to the fact that liquidity remained plentiful.

<sup>18</sup> Including both sight and term deposits.

Chart 2.16

**The weight of interest paid by central banks increased in 2023, although households and firms still constitute the main sources of net interest income**

2.16.a Breakdown of net interest income by counterparty



SOURCE: Banco de España.

- a "Central banks and other items" includes finance income and expenses from "Other assets", which includes the interest on cash balances at central banks but does not allow such interest to be broken down as it also includes other less important items, such as cash-related interest, non-current assets and disposal groups held for sale, net income from defined benefit assets, etc.
- b "Other" includes, among other items, derivatives (trading derivatives, hedge accounting, interest rate risk derivatives) and any debt securities issued whose finance costs are greater than the income they earn, thereby reducing net interest income.

**While the weight of interest paid by central banks increased over 2022 and 2023, the margin paid by households and NFCs remained the main contributor to net interest income.** Between December 2021 and December 2023, the interest paid by central banks as a proportion of average total assets (ATA) rose by 0.32 pp in consolidated terms (from 0.11% to 0.43%, see Chart 2.16), while in the case of households and firms it rose more, by 0.63 pp. Thus, households and firms still constitute the main sources of net interest income, accounting, at consolidated level, for 1.35% in the case of households and 0.92% in the case of firms. The trend is similar for business in Spain.

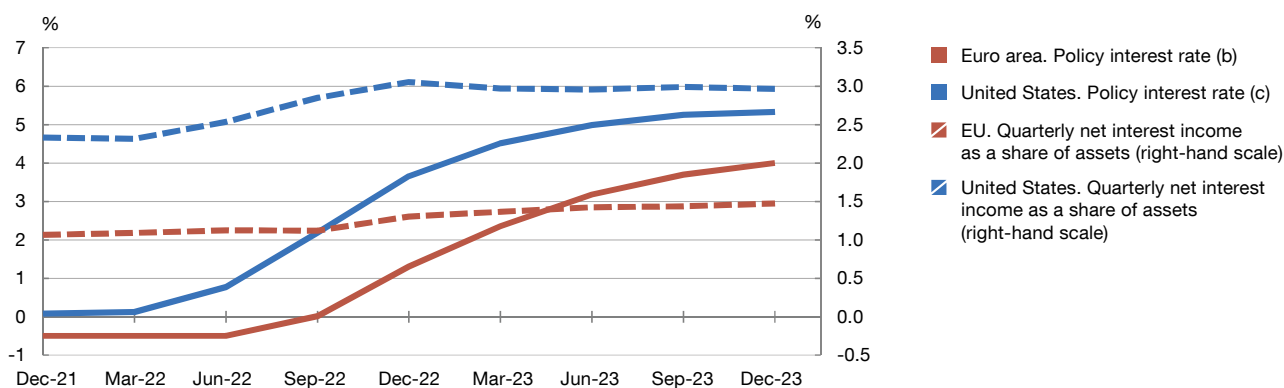
**The end of the monetary tightening cycle suggested by the current landscape is likely to limit the scope for further growth in interest income.** The latest available data on new lending to households and NFCs in Spain show that interest rate hikes now appear to have run their course, as borne out by the latest EURIBOR developments. As a result, if the market expectations of interest rate cuts prove well-founded, interest income appears to be nearing the end of its expansionary cycle. Moreover, variable rate loans should adjust automatically to a possible interest rate cut, in accordance with the rate reset periods established.

**By contrast, the cost of bank deposits still has some upside.** First, the shift from current accounts to higher-yield term deposits may continue, even though the latter cannot be used to manage customers' cash flows. Moreover, although the key policy rates are expected to ease in 2024, they would still stand well above average Spanish deposit rates (which remain among the lowest of the main European countries). This should help ensure that the returns

Chart 2.17

**Net interest income growth in Europe and the United States appears to have run its course as the interest rate hiking cycle comes to an end**

2.17.a Net interest income and policy rates in the euro area and the US (a)



SOURCES: EBA, ECB, FDIC and the Federal Reserve System.

- a European banks' net interest income as a share of assets corresponds to the sample of main EU banks considered by the EBA, while the United States considers a broader set of US institutions, including all banks reporting data to the FDIC.  
 b ECB marginal deposit facility rate.  
 c Federal Funds rate.

offered by alternative savings instruments – such as government debt, directly or indirectly via investment funds, or insurance savings products – remain an attractive option. The expected decline in ECB liquidity should also play a part.

**Net interest income at Europe's banks showed signs of levelling off in the final stretch of 2023, and even fell in the United States.** According to data from the European Banking Authority (EBA), quarter-on-quarter growth in net interest income as a share of assets at the main European banks slowed in the second half of 2023, mainly due to the greater pass-through of the higher interest rates to their cost of liabilities (see Chart 2.17). In the United States, where the monetary tightening cycle started and stabilised earlier, net interest income as a share of assets at December 2023 had fallen from its 2022 Q4 peak. These developments in net interest income help explain why ROA declined both in the United States and in Europe in the final quarter of 2023.

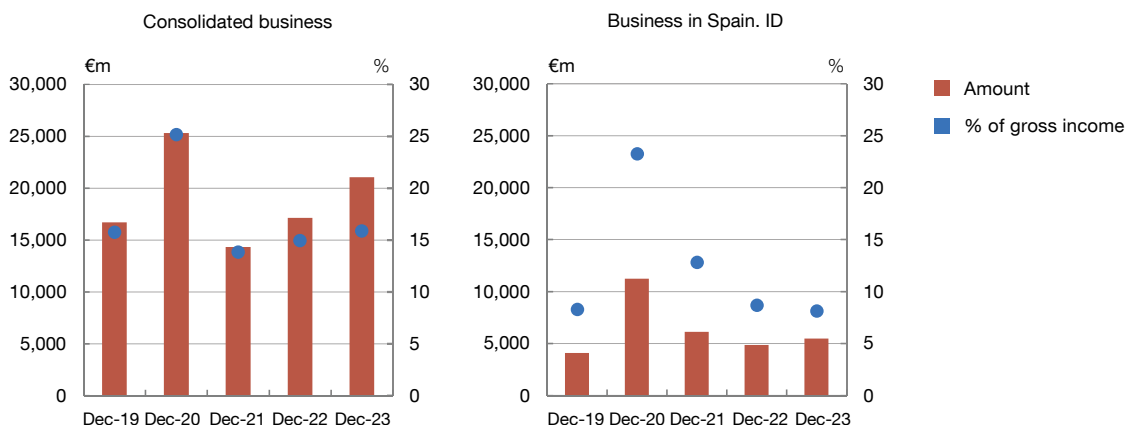
**In line with net interest income, net operating income also rose in 2023 (by 22.4% year-on-year), despite the increase in operating expenses (up 7.8% in 2023) driven by the high inflation environment.** Meanwhile, net fee and commission income rose by 2.2% year-on-year (see Annex 2), significantly below the increases in net interest income and operating expenses, while gains on financial assets and liabilities (up 14.2%) also contributed positively to net operating income.

**Financial impairment losses increased by 22.9% year-on-year at consolidated level, largely due to higher losses in business abroad, albeit also in business in Spain.** The rise

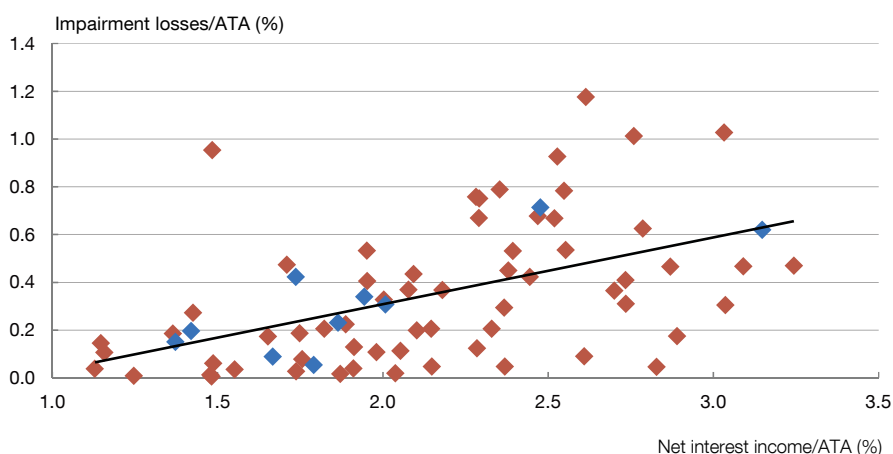
Chart 2.18

**Impairment losses increased in 2023, both at consolidated level and in business in Spain, and a positive correlation can be seen between such losses and net interest income**

2.18.a Impairment losses



2.18.b Correlation between net interest income and impairment losses. Consolidated data (a). December 2023



SOURCE: Banco de España.

a Significant institutions in blue.

in consolidated impairment losses began midway through 2022, whereas in Spain, in line with the recent downturn in credit quality (see Charts 2.3.b and 2.4.a), increases in impairment losses only began to emerge in the most recent quarters (with year-on-year growth of 2.5% in September and 12.6% in December) (see Chart 2.18.a). In any event, impairment losses continue to account for only a small share of the gross margin.

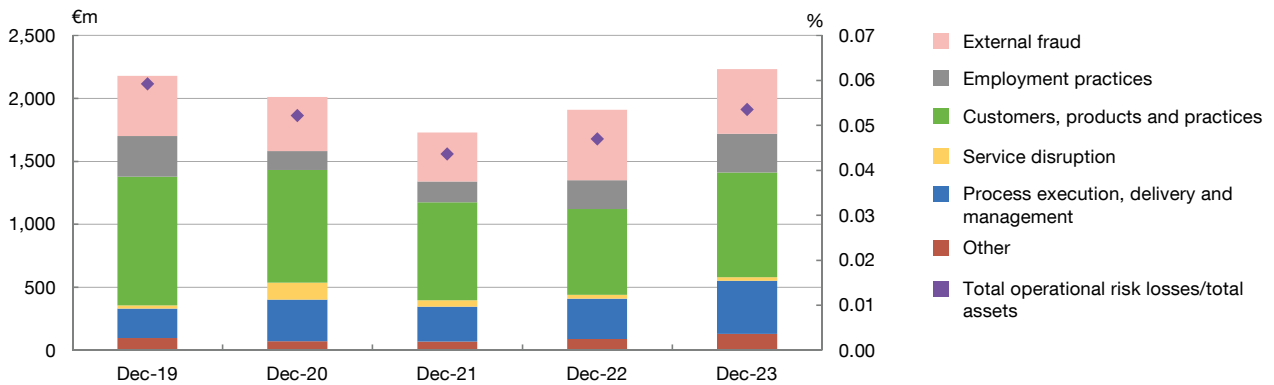
**A positive correlation can be seen between net interest income and impairment losses, signalling the link between profitability and risk.** In 2023 the banks posting higher net interest income (relative to ATA) were generally also those that had to recognise higher provisions (relative to ATA) (see Chart 2.18.b). Developments in these two variables over the coming quarters will have to be closely monitored, given that, on the one hand, net interest



Chart 2.19

**Conduct-related events continued to account for the bulk of gross operational risk losses, which rose in 2023**

2.19.a Gross operational risk losses. New events. Consolidated data



SOURCE: Banco de España.

income could level off or decline, while, on the other, impairment losses may increase due to an economic slowdown or the persistence of relatively high interest rates. Banks that have taken on more risks in their credit portfolios are likely to be more exposed to this risk.

**Gross operational risk losses from new events increased in 2023 compared with the previous two years.** The operational risk losses recorded in 2023 stood at €2.23 billion, accounting for 0.05% of the system’s total assets, up 0.007 pp on 2022 (see Chart 2.19). This increase can be attributed to incidents relating to banks’ customers, products and practices.

**The impact of cyber risks is currently limited, but they are a matter of increasing concern.** As an example of their potential impact, in November 2023 Redsys (the leading processor of card and Bizum payments) suffered two outages, temporarily interrupting these payment services, albeit without affecting interbank settlements. Both failures were due to technical infrastructure-related incidents that affected the transaction authorisation service, and any form of cyber attack was ruled out. In response to these incidents, Redsys activated its contingency plans, which, with the support of retailers and the other parties involved, helped mitigate the impact.<sup>19</sup> Ongoing vigilance is needed to guard against potentially more serious events, particularly those of a possibly malicious nature. The Special Feature in this FSR takes a more detailed look at cyber risks and the supervisory initiatives that seek to contain them.

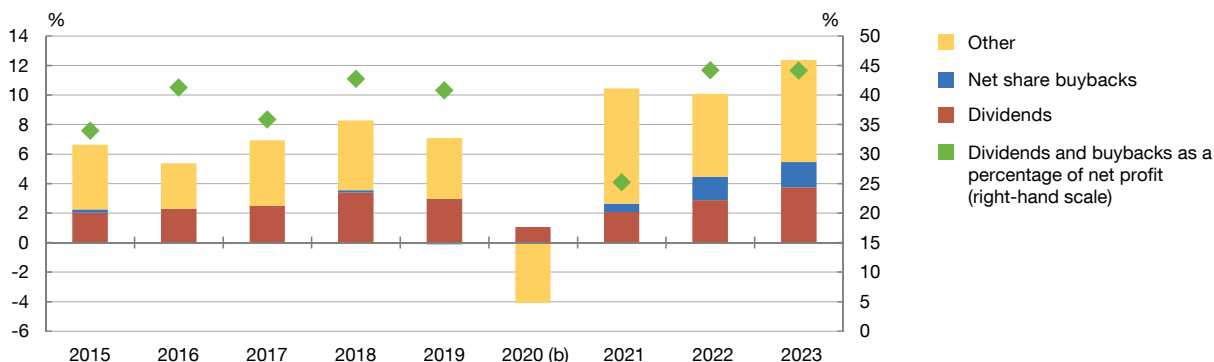
**The dividend distribution rate in 2023 (44%) remained virtually unchanged from a year earlier, although, given the rise in profits, shareholder remuneration increased**

<sup>19</sup> Royal Decree-Law 8/2023 of 27 December 2023 has broadened the scope of the parties subject to certain requirements under the Digital Operational Resilience Act with a view to strengthening the operational resilience of the payments system. The technology firms affected will have to set in place the necessary measures to comply with these new obligations. Any breach of the new regulations may be sanctioned by the Banco de España.

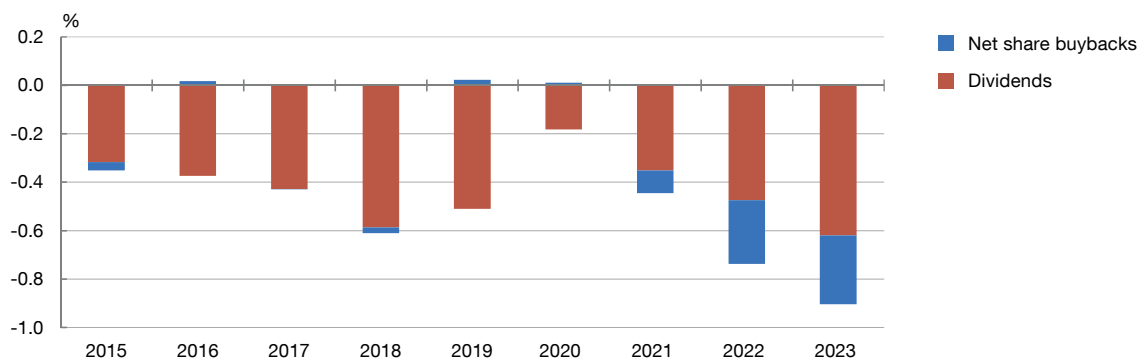
Chart 2.20

**Higher profits led to an increase in dividend distributions, which stand at relatively high levels vis-à-vis risk-weighted assets**

2.20.a Dividends and net share buybacks in terms of ROE and net profit (a)



2.20.b Dividends and net share buybacks as a percentage of risk-weighted assets (a)



SOURCE: Banco de España.

- 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 other than those earned in that year.
- b Dividends and buybacks as a percentage of net profit was not calculated in 2020, as losses were recorded.

**significantly** (see Chart 2.20.a). This is expected to make the banking sector more attractive to investors seeking regular profit distributions.<sup>20</sup> However, the distribution or use of profits also means that less is done to shore up solvency. In terms of risk-weighted assets (RWA, the denominator of the different capital ratios), the share of profits<sup>21</sup> used for dividend payments or share buybacks (0.9%) was at its highest level in recent years (see Chart 2.20.b). Again, this is due primarily to the growth in profits, which, by rising relative to RWAs, make it easier to strengthen solvency ratios by retaining earnings as reserves. The potential worsening in the coming quarters of key variables for the sector’s profitability, such as net interest income and impairment losses, means that banks would be well advised to observe a prudent profit

<sup>20</sup> See Esther Cáceres and Matías Lamas. (2023). “Dividend Restrictions and Search for Income”, Documentos de Trabajo 2332, Banco de España.

<sup>21</sup> 2023 was an exceptional year given that, for only the second time in the last ten years, the balance sheet adjustments deriving from “accumulated other comprehensive income” were positive.

management policy that would leave them better placed to withstand potential adverse shocks in the current macro-financial context.

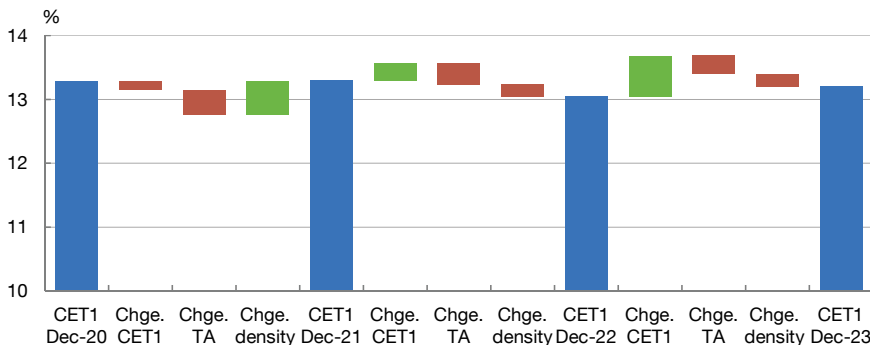
## Solvency

**The Common Equity Tier 1 (CET1) ratio rose very moderately over 2023, to stand at 13.2% at December 2023.** This represents a 17 bp increase on the figure reported at end-2022. This modest climb was due to the increase in CET1 capital (the numerator in the ratio), which rose by 5% year-on-year (see Chart 2.20.a). This increase offset the negative contribution made to the CET1 ratio by the growth in RWAs (the denominator in the ratio), which rose by 3.7% year-on-year. The negative contribution by RWAs was due primarily to the year-on-year growth of 2.3% in total assets in 2023 and, to a lesser extent, to the increase (55 bp) in asset density over the same period (see Chart 2.21.a). This greater RWA density can be attributed to the fact that assets with lower weightings (such as central bank or government-backed deposits) account for a smaller share of the total.

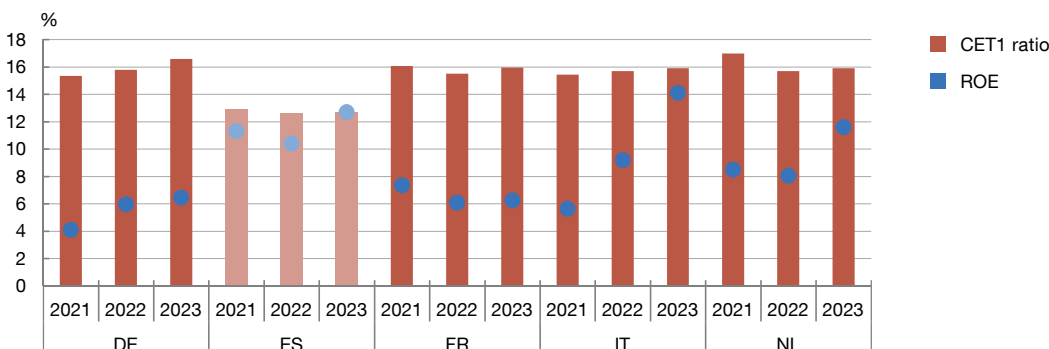
Chart 2.21

### Spanish banks' CET1 ratio rose very moderately in 2023

2.21.a Breakdown of the change in the CET1 ratio between 2020 and 2023 (a). Consolidated data



2.21.b European comparison of the CET1 ratio. Consolidated data. December 2021-2023



SOURCES: EBA and Banco de España.

a The CET1 ratio is broken down into the change in CET1, total assets (TA) and density, where density is calculated as the ratio of RWAs to total assets. Therefore, the CET1 ratio is calculated as CET1 to TA x density. The green (red) bars denote positive (negative) contributions from components.



**Despite having higher overall levels of ROE, the gap between the CET1 ratios of the Spanish banking sector and those of the other main European banking systems widened in 2023.** At end-2023, Spain's CET1 ratio was lower than that for countries such as Germany, France, Italy or the Netherlands (see Chart 2.21.b). Although these lower capital levels can in part be attributed to structural factors, such as the lower use of internal models and greater asset density, it should be noted that, despite the increase over the past year, Spain's CET1 ratio rose less than that of the benchmark economies. By contrast, compared with the same group of economies, the Spanish banking system has been among the most profitable over the last three years (see Chart 2.21.b).<sup>22</sup>

## 2.2 Non-bank financial sector and systemic interconnections

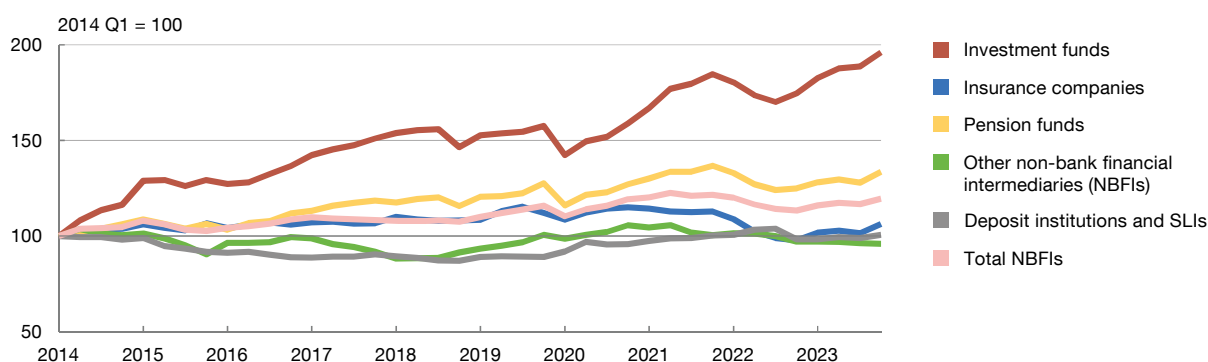
### 2.2.1 Non-bank financial sector

**The non-bank financial sector's total assets grew slightly in Spain over the course of 2023, reversing the downward trend of a year earlier.** In the first half of 2023, virtually all segments of the non-bank financial sector posted steady growth, with the most notable increase being among investment funds (see Chart 2.22). However, the trend was more uneven in the second half of the year: certain segments (such as investment funds) continued to grow, albeit more moderately, whereas others (such as pension funds) saw a slight decline.

Chart 2.22

**The non-bank financial sector's total assets have steadied following the downward trend that began in early 2022, with investment funds performing particularly well**

2.22.a Total assets in the different financial sectors in Spain. Non-consolidated data (a)



SOURCE: Banco de España (Financial Accounts).

a Total non-consolidated assets in Spain in 2014 Q1: investment funds (monetary and non-monetary), €203 billion; insurance companies, €285 billion; pension funds, €118 billion; all other non-bank financial intermediaries (NBFIs), €571 billion; and deposit institutions and specialised lending institutions (SLIs), €2,922 billion.

<sup>22</sup> The difference between the ROE figure in Chart 2.21.b (12.8%) and the ROE level indicated in the previous sub-section (12.4%) stems from the fact that the first figure relates to the sample of main banks (that account for more than 90% of total consolidated assets in the system) used by the EBA, whereas the second figures relates to all deposit institutions in the Spanish banking system.

**The relative weight of the non-bank financial sector also rose moderately in 2023.** With a year-on-year increase of 0.41 pp, it represented 32.1% of the Spanish financial system's total assets at end-2023. The relative growth of this segment was helped by the fact that the total overall assets of deposit and specialised lending institutions in Spain essentially remained unchanged throughout 2023, continuing the stable trend of the last decade. The stronger growth of investment funds since 2022 compared with the banking sector partly reflects a shift to these funds from some savers, in a context in which bank deposits offer low returns.

### *Investment funds*

**Investment funds domiciled in Spain continued to increase their government debt holdings, as part of a portfolio reallocation that had already begun in 2022 H2.** This sector's debt securities holdings in 2023 Q3 were 2.3 times larger than its equity holdings (not including holdings in other investment funds), with the ratio between the two types of holdings (debt securities-to-equity) rising by almost 70 bp, compared with the 161% observed at December 2021. This is likely due to the higher returns on debt securities due to the interest rate hikes. This reallocation was accompanied by a sizeable increase in the weight of investment grade instruments and, in particular, higher credit rated instruments (above BBB+), primarily government debt. Lastly, the cash holdings and deposits of funds domiciled in Spain continued to decline, gradually trending towards the levels typical of investment funds in the euro area.

### *Pension funds*

**While contributions to pension funds continue to decline, in 2023 their total assets and average annual returns continued to increase compared with end-2022.** The downward trend in gross pension contributions eased somewhat, declining by only 0.4% over 2023. Despite this, total pension scheme assets increased by 5.8% at December 2023, compared with the same month a year earlier. In any event, the average annual profitability of pension funds rose significantly, from -9.7% at December 2022 to 8.8% at December 2023. Cumulative three-year profitability also returned to positive territory (2.2% at December 2023 vs -0.4% at December 2022).

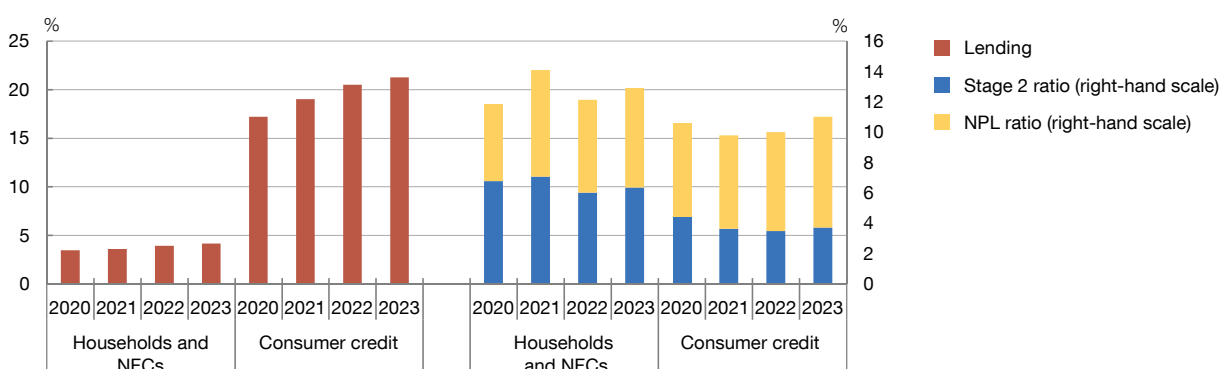
### *Specialised lending institutions*

**The market share of specialised lending institutions (SLIs) in overall lending by SLIs and deposit institutions increased slightly to 4.2%.** This recent trend has been shaped by consumer lending, a business segment in which these institutions specialise and in which their share has grown by 4 pp over the last three years (0.2 pp in 2023), standing at 21.2% at end-2023 (see Chart 2.23, left-hand side). This was possible thanks to the 30.6% cumulative growth in consumer lending by SLIs over the last three years (6.7% in 2023), in contrast to the modest 0.6% growth over the same period in the case of deposit institutions (2.1% in 2023).

Chart 2.23

**The share of SLIs in overall system lending (SLIs and deposit institutions) increased very slightly in 2023, as did the share of SLIs in problem assets**

2.23.a SLIs' share of total (l-h side). SLIs' NPL and Stage 2 loan ratios as % of total (r-h side). Business in Spain. ID



SOURCE: Banco de España.

**The NPL and Stage 2 ratios in lending by SLIs increased over 2023, albeit moderately.** This can be seen in both total lending to households and NFCs and in the consumer credit portfolio. Specifically, the consumer credit portfolio's NPL ratio increased year-on-year by 23 bp, to stand at 3.71%, while the Stage 2 ratio rose by 79 bp, to stand at 7.30% (see Chart 2.23, right-hand side).

## 2.2.2 Systemic interconnections

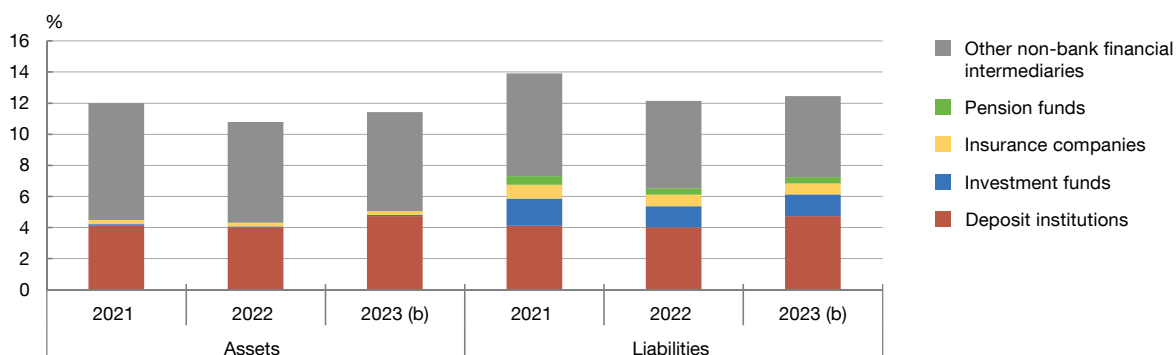
**Direct interconnections between the banking sector and the other Spanish financial sectors continued to decline in 2023, albeit much more moderately than in 2022** (see Chart 2.24). Conversely, as noted in the section on liquidity and financing, exposures between banking sector institutions, albeit limited relative to the sector's total assets (4.7% at September 2023), increased significantly over 2023 (by 0.7 pp as a share of total assets) amid greater interbank activity due to the decline in Eurosystem funding, thus reversing the small downward trend seen in 2022.

**The weight of common securities holdings of the banking sector and the other resident financial sectors increased slightly in 2023.** This was a continuation of the moderate upward trend seen in 2022 and was most significant in the case of banks' common holdings with insurance companies, whose share in the banking sector's securities portfolio rose by 1.7 pp (see Chart 2.25). Conversely, growth was more moderate in the case of common holdings with investment funds, whose share rose by only 0.8 pp. Most of this growth was in mid-investment grade securities (i.e. between A- and AA+). Lastly, by type of instrument and issuer sector, the most notable increase came in holdings of public sector debt.

Gráfico 2.24

**Direct interconnections between the banking sector and the other financial sectors declined only slightly in 2023**

## 2.24.a. Breakdown of banking sector assets and liabilities from exposures to other financial sectors (% of total assets) (a)



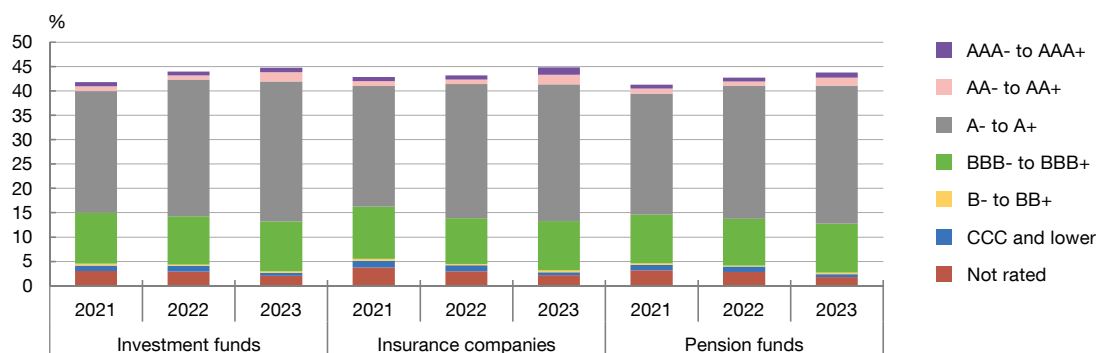
SOURCE: Banco de España (Financial Accounts).

- a Other non-bank financial intermediaries include SLIs, other financial intermediaries, financial auxiliaries, and captive financial institutions and money lenders.  
 b Data at September 2023.

Chart 2.25

**Banks' common marketable securities holdings with other financial sectors rose moderately in 2023**

## 2.25.a Share of common holdings between banks and other financial sectors in the banking sector's marketable securities portfolio (a)



SOURCE: ECB (Securities Holdings Statistics by Sector).

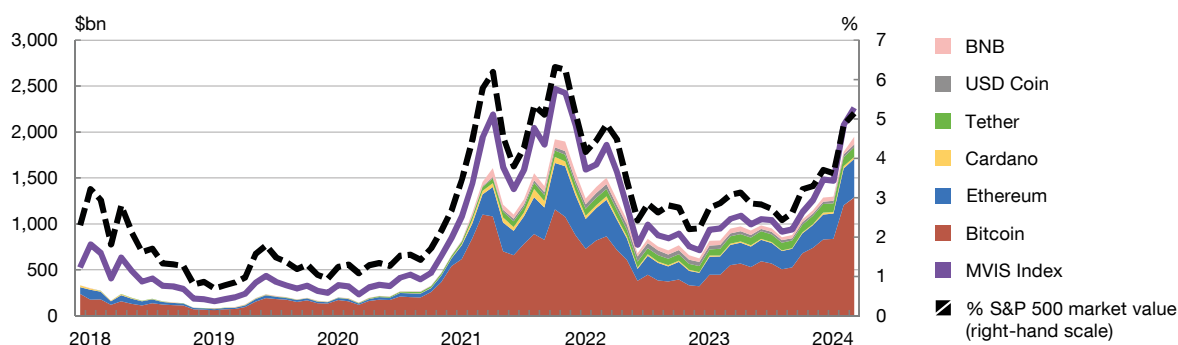
- a The banking sector's marketable securities portfolio includes securities that are also held by other sectors in their portfolios. The bars depict the share of the common holdings of banks and other Spanish financial sectors as a proportion of the banking sector's marketable securities portfolio, including both debt securities and equities, broken down by credit rating.

**The value of crypto-assets recovered strongly in the most recent period, although they still represent a small fraction of financial markets.** Thus, the market capitalisation of the MVIS CryptoCompare Digital Assets 100 Index, which groups the top 100 crypto-assets by market value, rose by more than 140% between early 2023 and March 2024 (see Chart 2.26). Both backed crypto-assets and the other crypto-currencies (including Bitcoin) played a part in this rally. The valuation of Bitcoin again hit an all-time high. Expectations that the monetary policy tightening cycle could be nearing its end may have heightened the appetite for certain high-risk assets, such as crypto-currencies. Moreover, the approval in the United States of a

Chart 2.26

### The main crypto-assets recovered notably in value in 2023, with some moving ahead of their all-time highs

2.26.a Market value of main crypto-assets (a)



SOURCES: Banco de España, MVIS and CoinMarketCap.

a The crypto-asset index depicted is the MVIS CryptoCompare Digital Assets 100 Index, which comprises the 100 main (backed and unbacked) crypto-assets, based on their market value. In the chart, BNB, USD Coin and Tether are backed crypto-currencies, All the others are unbacked.

Bitcoin Exchange Traded Fund (ETF) that could expand the investor base for such assets in future<sup>23</sup> may also have played a significant role in this rally.

#### Crypto-assets continue to represent a source of emerging risks to financial stability.

The market and liquidity risks associated with these instruments can be high, particularly when they are not backed by traditional financial assets. Moreover, such instruments may be used for unlawful activities, can pose significant operational risks and may impact climate-related risks, owing to the high energy consumption linked, inter alia, to mining activities. Although these assets are becoming increasingly familiar and some are now regulated, looking ahead they will still have to be monitored and properly supervised, while rounding out the prudential regulations in any areas not currently covered so as to avoid excessive risk-taking in this segment.<sup>24</sup>

**If crypto-asset markets and their interconnectedness were to scale up, they could become systemic.** While it is necessary to continue closing data gaps, there are as yet no signs at global level that the banking sector is systemically exposed to crypto-assets.<sup>25</sup>

<sup>23</sup> For more details, see [this statement of the U.S. Securities and Exchange Commission](#).

<sup>24</sup> For more details, see Banco de España. (2022). "Crypto-Assets". In Banco de España, *Financial Stability Report* Spring 2022.

<sup>25</sup> For further information, see BIS. (2022). "Banks' exposures to cryptoassets – a novel dataset", *Basel III Monitoring Report*. September 2022, BIS.