

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

As in previous years, the Banco de España has used its own methodological framework, known as the Forward Looking Exercise on Spanish Banks (FLESB),<sup>1</sup> to examine the Spanish banking system's resilience in the face of risks to the macro-financial environment. The framework has some methodological differences compared with the exercises conducted by the European Banking Authority (EBA).<sup>2</sup>

This year's exercise uses the macroeconomic scenarios defined for the EBA's 2023 stress tests,<sup>3</sup> with the time horizon 2023-2025: (i) a baseline scenario, which closely reflects the economic forecasts,<sup>4</sup> and (ii) an adverse scenario in which the risks identified materialise, significantly worsening the macro-financial environment. As in previous exercises, this one has been carried out under a dynamic balance sheet assumption, and banks' exposures therefore also change in line with the developments assumed in the macroeconomic scenarios.<sup>5</sup>

In addition to the solvency exercise, the results of the liquidity assessment, in which stressed fund outflow rates are applied to the LCR ratio, are also reported.

### Description of the scenarios

The baseline scenario reflects how the economic environment is expected to develop on the date on which it is prepared, and envisages average real growth of the Spanish economy over the projection horizon of 2% (see Chart 1). By contrast, the adverse scenario envisages a cumulative contraction of the economy over the same horizon, at an average rate of 1.8% over the projection

horizon. One of the main drivers of the contraction in the adverse scenario is the increase in the price level (measured by the harmonised index of consumer prices (HICP)) by an average of 4.4% a year between 2023 and 2025, which eats into households' purchasing power.<sup>6</sup> Energy and food prices lie behind this surge in inflation.

Interest rate levels in the baseline scenario are higher than those assumed in previous exercises, particularly for shorter terms, due to the monetary policy tightening that has already taken place since 2021 in response to rising inflation. The adverse scenario assumes an additional tightening of financial conditions as a result of somewhat higher risk premia. Specifically, in 2023-2025 the 12-month EURIBOR and the interest on Spanish 10-year government bonds are on average around 120 basis points (bp) higher than in the baseline scenario (with the short-term rates reaching 4.7% and the long-term rates 6.1%) (see Chart 2). Against this backdrop, stock market prices fall by 43.4% in cumulative terms, in contrast to the stability seen in the baseline scenario.

The scenario also considers different sector-specific trajectories for real gross value added (GVA), in line with the sectoral growth assumptions in the EBA exercise.<sup>7</sup> The impact of rising energy and other commodity prices and of value chain disruptions differs from sector to sector, and the impact of the adverse scenario on real GVA growth therefore varies across the different sectors (see Chart 3). The biggest impacts can be seen in the most energy and commodity-intensive sectors, such as manufacturing and transport.

1 The FLESB is a top-down methodology. In other words, it applies the same scenarios, assumptions and models consistently across all of the banks analysed. The data sources available are highly granular, reaching down to the level of individual transactions and foreclosed assets in operations in Spain. The methodological framework is developed in-house by the Banco de España. The main features of this framework are outlined in the *November 2013 Financial Stability Report (FSR)*. Over the succeeding years, the FSR has described the main improvements and new developments included in the model, since it is a dynamic framework under continuous development.

2 Under the FLESB framework, adverse credit risk shocks are applied in addition to those envisaged in the EBA exercise; specifically, based on an estimation of potential latent impairment deriving from the economic turmoil in the period 2020-2022. Moreover, the EBA exercise assumes a static balance sheet, while its size may oscillate dynamically in the FLESB depending on the scenario. The EBA exercise also considers a specific operational risk shock not envisaged in the FLESB exercise. As for the sample of banks, the EBA exercise is restricted to significant institutions, while the FLESB covers all of the significant institutions as well as less significant institutions.

3 See *EBA 2023 EU-wide stress test exercise*.

4 Growth under the baseline scenario is in line with the December 2022 macroeconomic projections for Spain and other countries relevant to Spanish banks.

5 In the scenarios in which activity contracts, declines are also projected in lending to the non-financial private sector in different portfolios (households and firms) and different countries.

6 In terms of cumulative growth, the baseline scenario assumes a 6.2% increase in GDP, while in the adverse scenario the Spanish economy contracts by 5.4% over the three years of the projection horizon. Cumulative inflation in the adverse scenario reaches 13.7%.

7 The FLESB methodology has a higher level of sectoral granularity than that included in the EBA scenarios, with a total of 61 sectors. Link regressions have been used to complete the sectoral disaggregation of the scenarios.

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The EBA also contemplates a global scenario, which covers other countries where Spanish banks have a significant presence (Chart 4). The narrative of the adverse scenario includes the possibility of heightened geopolitical tension, and even the outbreak of fresh waves of COVID-19, which would create an environment of stagflation and global value chain disruption. In the countries in which Spanish banks have their most significant operations, real

GDP see sharp average falls under this scenario, ranging between -2.8% and -1.5%, while average inflation exceeds 4%, and is exceptionally high in Türkiye (27.1%).

The adverse scenario also includes a global increase in short and long-term interest rates (Chart 5), with rising sovereign risk premia across different countries, and a depreciation of emerging economies' currencies against the euro.

Chart 1  
Baseline and adverse scenarios for Spain. Macroeconomic impact (a)

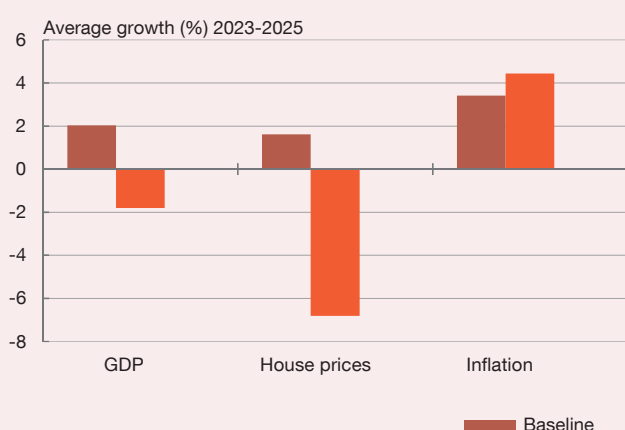
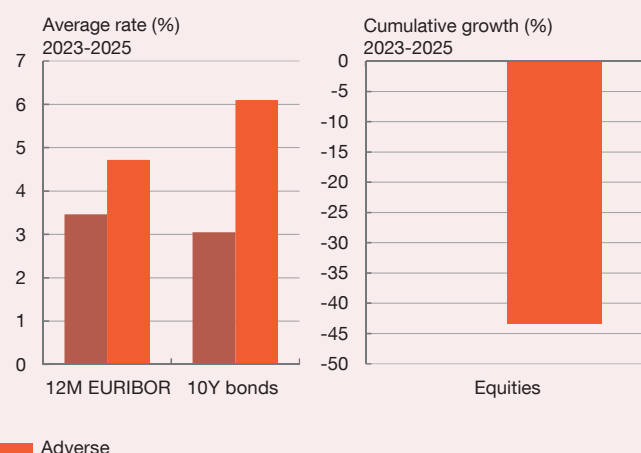


Chart 2  
Baseline and adverse scenarios for Spain. Impact on financial environment (b)

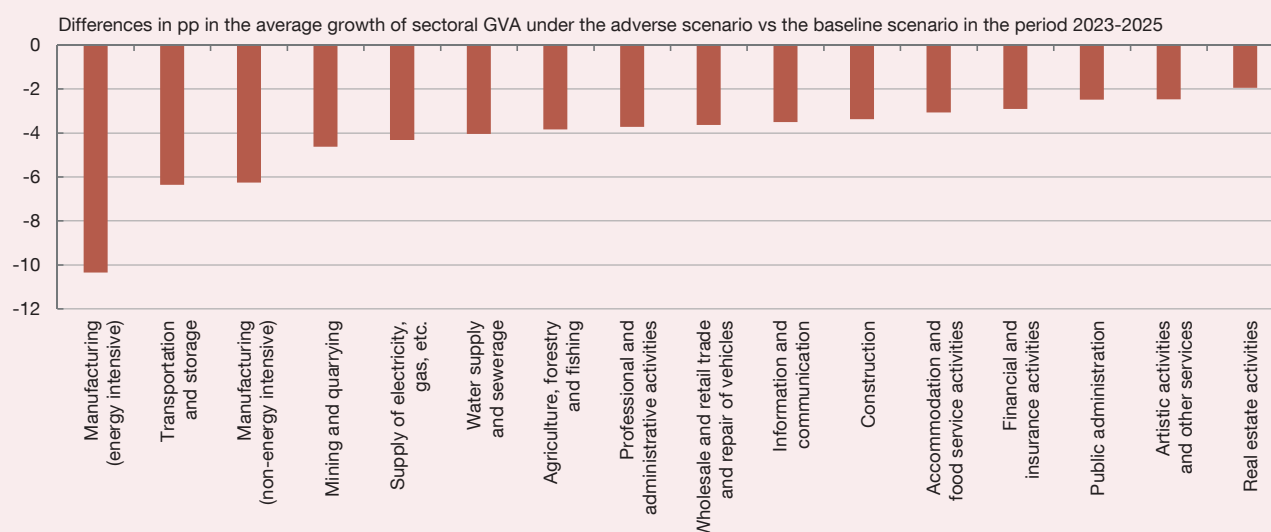


SOURCE: Banco de España.

a Inflation is calculated using the harmonised index of consumer prices (HICP).

b Changes in the valuations of equities are calculated drawing on the Madrid Stock Market General Index.

Chart 3  
Effect of the adverse scenario on average growth of real GVA in the period 2023-2025



SOURCE: Banco de España.

### Aggregate results of the exercise

Chart 6 shows the CET1 ratio in 2022 and the aggregate results of the exercise at the end of the time horizon (2025) under the baseline and adverse scenarios. For ease of interpretation, the results are broken down into three groups of banks, which differ in terms of size, business model and risk profile: (i) the banks supervised by the Single Supervisory Mechanism (SSM) that have the most significant international activity;<sup>8</sup> (ii) the other banks directly supervised by the SSM; and (iii) the smaller banks supervised directly by the Banco de España that have no significant international activity (less significant institutions, or LSIs).

The group of banks with a significant international presence has a CET1 ratio of 12.3% at the start of the exercise (lower than those of the other two groups), with this figure rising to 13.4% under the baseline scenario and falling to 9.5% in the adverse scenario at the end of the exercise.

The other banks supervised by the SSM have a CET1 ratio of 12.9% in 2022, which at the end of the stress testing exercise rises to 14.1% under the baseline scenario (increase in solvency), but decreases to 8.2% under the adverse scenario.

Lastly, the banks supervised directly by the Banco de España, which have a CET1 ratio of 18.2% in 2022, improve their solvency under the baseline scenario, with their CET1 ratio rising to 21.4% in 2025, but see a slight decline (to 17.3%) in the adverse scenario.

These results show that the Spanish banking sector would be resilient to the impacts under the scenarios, displaying satisfactory levels of aggregate solvency, particularly given the highly negative macro-financial impact assumed in the adverse scenario. Nonetheless, the impact measured by groups of banks is uneven, as analysed in greater detail below.

Chart 4  
Distribution by country of average real GDP growth and average inflation in 2023-2025 under the baseline and adverse scenarios (a) (b)

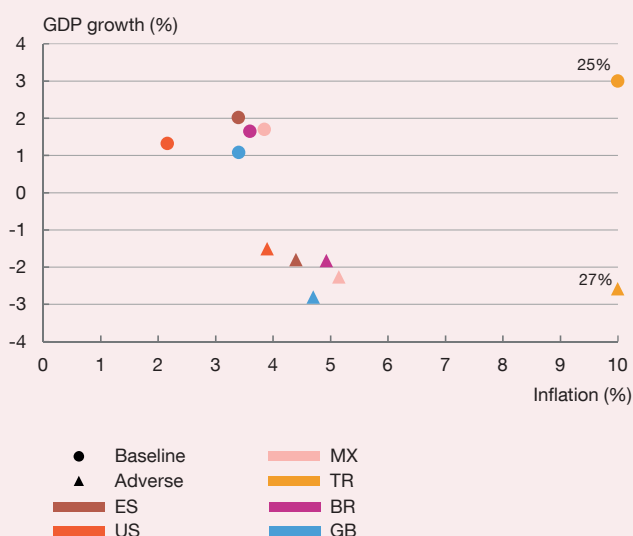
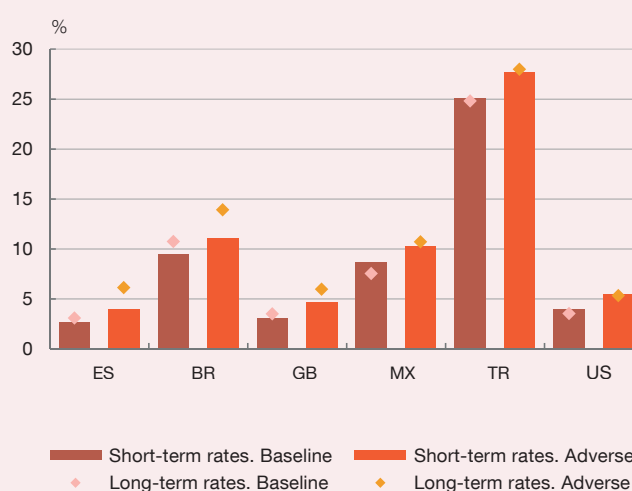


Chart 5  
Average short and long-term rates by country in 2023-2025 under the baseline and adverse scenarios



SOURCE: Banco de España.

- a The range of the horizontal axis has been limited owing to the extreme values of inflation in Türkiye (an average of 24.8% under the baseline scenario and 27.1% under the adverse scenario).  
b Inflation is calculated using the harmonised index of consumer prices (HICP).

<sup>8</sup> Among the banks with significant international activity, this group includes the three where this activity is most important and longest-standing.

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Chart 7 breaks down the main factors determining the impact of the scenarios on the CET1 ratio over the time horizon.<sup>9</sup> Under the baseline scenario, for the Spanish banks with the most significant international activity, capital generation through net operating income in Spain and net profit/loss of foreign operations (6.5% of RWAs) and the available provisions to cover impairment losses in Spain (1.5% of RWAs) more than offset the volume of impairment losses in operations in Spain and sovereign exposure valuation adjustments (4.5% of RWAs overall).<sup>10</sup> Operations outside of Spain make a particularly positive contribution to sustaining profitability and solvency in this scenario. Other impacts make a negative contribution

(-2.5% of RWAs), owing in part to taxes and profit distributions, but also to the growth in business volume, which results in higher RWAs under this scenario.

Under the adverse scenario, impairment losses in Spain and losses on consolidated sovereign bond holdings rise to 8.8% of RWAs for this group of banks, and are not offset by the use of provisions (1.5% of RWAs) and capital generation (3.9% of RWAs). The contribution made by operations outside Spain is much smaller in the adverse scenario than in the baseline scenario, owing to the sharp contraction of economies that are key for Spanish banks' business and to exchange rate depreciation.

Chart 6  
CET1 ratio observed in 2022 and results in 2025 of baseline and adverse scenarios

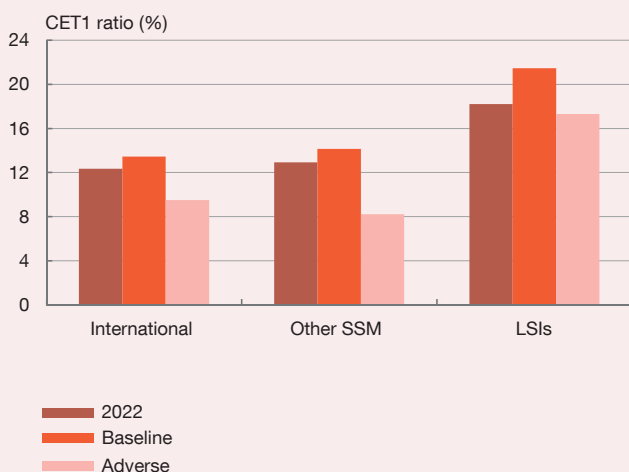
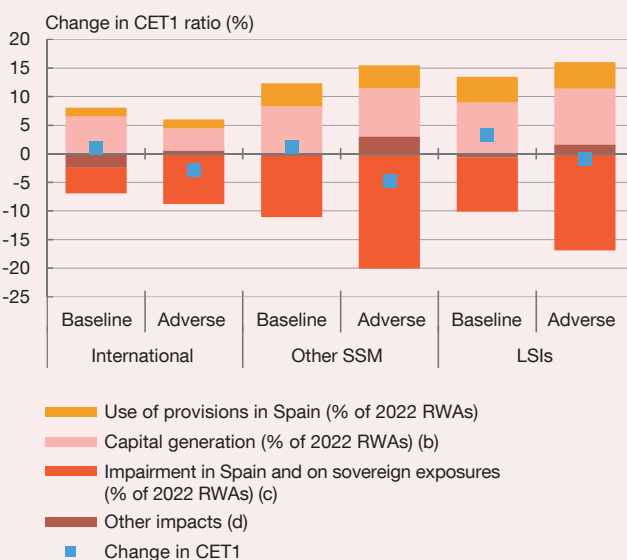


Chart 7  
Impact of the risk materialisation scenarios on bank solvency (a)



SOURCE: Banco de España.

- a The impacts are defined as the expected changes in the CET1 ratio in 2025 and in different financial flows in 2023-2025 (e.g. capital generation) stemming from the materialisation of the adverse changes in macro-financial conditions envisaged in the scenarios in this box.
- b The generation of loss-absorbing capital is determined by net operating income in Spain, which also includes the net profit/loss generated abroad for banks with significant international activity.
- c Impairment losses on loans and foreclosed assets in operations in Spain, and the impact on capital of the potential impairment on sovereign exposures at consolidated level.
- d Other consolidated gains and losses, tax effects, exchange differences, profit distribution, coverage of Government losses linked to ICO-backed loans and changes in RWAs.

- 9 These include the effects of the estimated losses, specifically the impairment losses on loans and foreclosed assets and the impact on capital of a potential deterioration of sovereign exposures. Loss-absorbing items, namely the use of existing provisions and capital generation through net operating income in Spain and net profit/loss of foreign operations, are also presented. Both the losses and the loss-absorbing items are presented as a percentage of the risk-weighted assets (RWAs) existing at December 2022. Also included are the other impacts, which reflect other items that affect CET1 capital (the numerator of the solvency ratio) such as other gains or losses and tax effects, and the change in RWAs (the denominator of the solvency ratio).
- 10 The group of Spanish banks with the most significant international activity differs from the other two in that it incorporates the net profit/loss of foreign operations in its capital generation (also capturing the higher impairment provisions outside of Spain under the adverse scenario). Thus, because of these banks' internationally diversified business model, the impairment losses, use of provisions and other effects in Spain have a lower relative weight in total RWAs.

The CET1 ratio for the other banks subject to SSM supervision increases by 1.2 pp in the baseline scenario, and decreases by 4.7 pp in the adverse scenario. Under the baseline scenario, the use of provisions (4.0%) and capital generation (8.3%) more than make up for the impairment losses (10.7% of RWAs), and the contribution of other impacts is negative but moderate (-0.4% of RWAs).

Under the adverse scenario, for this group of banks, higher interest rates enable them to earn more net interest income, thereby supporting capital generation (8.4% of RWAs) through net operating income. However, the sum of the positive contributions from these rates, the use of provisions (4%) and other impacts (3%), including some deleveraging, is not enough to offset the large impairment losses (20.1% of RWAs). These losses increase substantially owing to stagflation and high interest rates, which constrain Spanish households' and firms' ability to service their debts with deposit-taking institutions.

Lastly, the results for the CET1 ratio of the banks directly supervised by the Banco de España show that they are more resilient in terms of capital generation and impairment losses, and therefore perform better, with a 3.3 pp increase in their CET1 ratio in the baseline scenario and a reduction of only 0.9 pp in the adverse scenario. Under the baseline scenario, the generation of new loss-absorbing resources (8.9% of RWAs) and the use of provisions (4.5% of RWAs) outweigh the impairment losses (9.5% of RWAs) and other impacts (-0.7% of RWAs).

In the adverse scenario, thanks to the increase in net interest income driven by rising interest rates, new capital generation is highly positive (9.7% of RWAs) and, combined with the use of provisions (4.6% of RWAs) and the deleveraging that lifts other impacts into positive territory (1.6% of RWAs), largely offsets the impairment losses (16.9% of RWAs).

Comparing the aggregate results with those in last year's FLESB, the reduction in capital is bigger in this year's adverse scenario (3.3 pp vs 2.3 pp). Moreover, the CET1 ratio at the end of the exercise is lower (9.5% vs 10.5%).

In terms of the channels of impact, as compared with the previous exercise, less capital is generated (5.4% versus 7.1% of RWAs, a 1.7 pp difference), faced with a global scenario less favourable than the one analysed the 2022 exercise, reducing both the net profit of foreign operations and the net operating income in Spain. The pre-existing credit provisions in Spain also decline (2.3% versus 2.8%, a 0.5 pp difference), while the other effects (including deleveraging, exchange rate fluctuations, etc.) make a more positive contribution (1.3% versus 0.7%, a difference of approximately 0.6 pp).

Aggregate financial impairment losses in Spain and unrealised losses on sovereign debt are lower than in the previous exercise (12.2% vs 12.9%, a difference of -0.7 pp). This is due to the fact that the lower sovereign losses, with the bulk of the valuation adjustment having been made in 2022, more than offset the rise in credit losses owing to the more unfavourable macroeconomic scenario in Spain. Moreover, such credit losses are partially mitigated by the dissipation during 2022 of part of the potential latent impairment built up during the health crisis.

The outcome in terms of how the different groups of banks are ranked by impact on their final CET1 ratios is similar to last year, the biggest impact being felt by the other banks directly supervised by the SSM, while the banks supervised directly by the Banco de España were least affected.

As an additional exercise, results were also obtained for a more up-to-date baseline scenario based on the September 2023 macroeconomic projections. These projections envisage more positive developments in activity than were expected in winter 2022. In this context, the banks' overall CET1 ratio at the end of the exercise would stand at 14.2%, 24 basis points (bp) higher than under the EBA's baseline scenario.

### Analysis of the channels of impact

The main negative channel of impact for Spanish institutions' solvency is the increase in provisions for credit portfolio impairment.<sup>11</sup> As shown in Chart 8, under the adverse scenario the sharp contraction in real GDP and higher interest rates lead to median estimated credit

<sup>11</sup> The loan portfolio represents 64.3% of the sample banks' exposure in Spain. Loans to firms account for 45.6% of loans within operations in Spain as a whole, while those to households account for 54.4%.

impairment provisions in Spain that are 7.4 pp higher than under the baseline scenario. This impact is uneven across banks owing to initial differences in their loan quality, the sectoral composition of their loans and the degree of coverage from the ICO guarantees.

As in last year's exercise, where the interest rate hike factored into the adverse scenario was also higher than that factored into the baseline scenario, there is a negative adjustment through the correction in the value of sovereign bond holdings. Specifically, in the adverse scenario the additional median loss relative to RWAs on sovereign bond holdings is 0.6 pp (see Chart 8), although this figure varies across institutions. Losses on this type of exposure are more significant for institutions with a higher proportion of government debt classified at fair value.<sup>12</sup> However, most institutions have seen a reduction in this portfolio, leading to a smaller expected loss compared with the autumn 2022 exercise. Such losses are also affected by the share of instruments with longer terms to maturity and the holdings of sovereign bonds from countries facing higher haircuts on their government debt due to their macro-financial situation.

Lastly, of note among the scenarios' main channels of impact is the increase in net interest income. This increase represents a positive channel of impact under the adverse scenario, given the higher interest rates assumed. For operations in Spain, median net interest income is estimated to be 0.65 pp higher in the adverse scenario than in the baseline scenario (see Chart 8), a slightly smaller increase than in the 2022 stress test, as the difference in interest rates between the baseline and the adverse scenario is not as marked. In this case, the cross-bank heterogeneity depends on where banks get their funds and assets from and on the return on and profitability of such funds and assets.

### Additional sensitivity analyses

The FLESB methodology allows additional sensitivity analyses to be carried out by adjusting certain parameters.

In line with the other exercises conducted since 2020, this exercise estimates the effect on bank solvency of the ICO public guarantee scheme that was launched in response to the COVID-19 pandemic to mitigate its economic impact on the corporate sector. Given the uncertainty about the credit quality of the guaranteed loans and their performance, this effect is estimated considering a range of assumptions.<sup>13</sup> Under an intermediate assumption, the public guarantee scheme would increase the CET1 ratio by 1.2 pp in the baseline scenario and 2.1 pp in the adverse scenario (see Chart 9). This measure is beneficial for the solvency of Spanish institutions, but it should be noted that the scheme will have a higher fiscal cost the more impairment losses it is able to absorb.

Additionally, given the higher interest rate environment, the sensitivity analysis has been updated to estimate potential losses of value of the sovereign bond portfolio, under the assumption that institutions had classified all their government debt holdings (in Spain and abroad) at amortised cost before the interest rate rises had taken place in the scenario (see Chart 10). In this hypothetical case, the CET1 ratio would be 0.16 pp and 1.15 pp higher in the baseline and adverse scenarios, respectively, than in the main exercise, which considers the actual share of debt at amortised cost in banks' portfolios at end-2022.

With this strategy, banks would limit short-term losses of value from interest rate hikes. However, this would also mean holding relatively low-yield instruments on their balance sheet for longer, an additional effect that has not been examined. The improvement in the CET1 ratio obtained is lower than in last year's exercise, as institutions have in fact gradually increase their amortised cost portfolio as a percentage of the total.

At the opposite extreme, if the banks were to classify all their sovereign bond holdings at fair value, the decline in value of public debt holdings would lead to the CET1 ratio being 1.71 pp and 5.54 pp lower, under the baseline and adverse scenario, respectively, than in the main exercise. It should be borne in mind that even under a liquidity stress

12 Various bank investment portfolios are classified at fair value, and the value of such assets is recognised based on their realisable market value. They are classified as such on the understanding that, as part of its investment strategy, the bank may sell these assets before maturity. Conversely, assets expected to be held to maturity, for example with the purpose of collecting interest payments, are measured at amortised cost, and their value reflects the unamortised unimpaired portion of their nominal amount.

13 The bottom end of the range assumes that the expected loss on guaranteed loans is equal to the average for the corporate credit portfolio; the top end assumes that the guaranteed loans are concentrated among riskier debtors. The previous section's findings are based on the impact of the ICO guarantees at the midpoint of this range.

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Chart 8

Distribution among banks of the impact (relative to 2022 RWAs) of the adverse scenario on impairment provisions, sovereign losses and net interest income (a). SIs

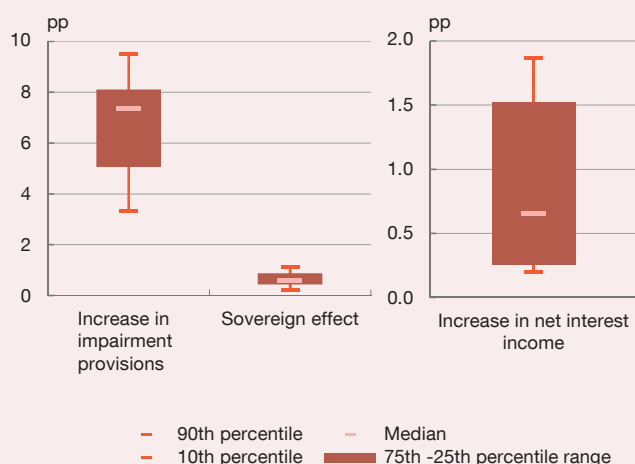


Chart 9

Effect of the ICO guarantee scheme (b) (c)

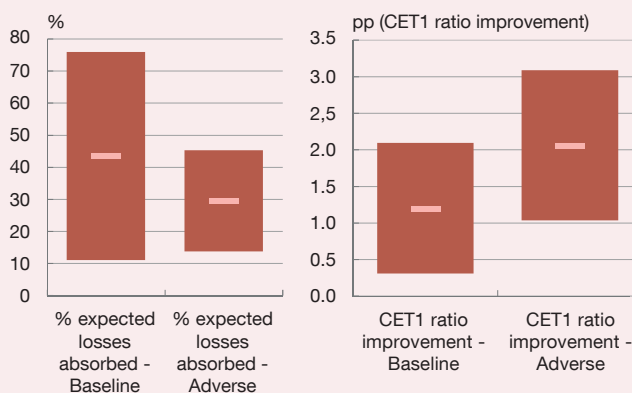
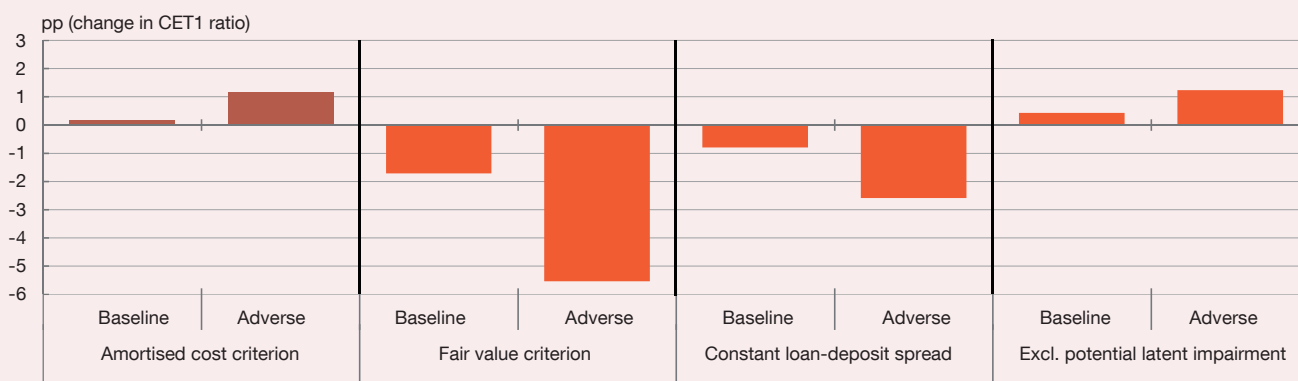


Chart 10

Sensitivities to other modelling assumptions (d)



SOURCE: Banco de España.

- a Shown is the distribution among banks of the differences between the adverse scenario and the baseline scenario in earnings due to higher net interest income in operations in Spain, in losses due to higher provisions in operations in Spain and in the effect of sovereign exposures in consolidated operations. These measures are cumulative over the horizon 2023-2025 relative to 2022 RWAs for the baseline and adverse scenarios, and the institutions considered are SIs. The boxes represent the values between the 25th and 75th percentiles, while the lines show the 10th, 50th (median) and 90th percentiles.
- b The main analysis (the results of which are set out in Charts 6 and 7 of this box) incorporates an intermediate assumption about the effect of the guarantee scheme.
- c Shown is the range of the measure's impact on the expected loss of the corporates portfolio (left-hand panel) and on the CET1 ratio (right-hand panel), depending on the assumptions regarding the credit quality of loans extended to firms and sole proprietors in Spain under the ICO guarantee scheme. The minimum effect assumes that the expected loss is equal to the average of the corporate lending portfolio, while the maximum effect assumes that NPL inflows are primarily concentrated among guaranteed loans. The line denotes the mid-range effect.
- d Shown are the differences in the average CET1 capital ratios of SIs and LSIs projected for 2025 in the sensitivity exercises compared with those projected in the main solvency exercise. The sensitivity exercises consider the following impacts: i) the effect of reclassifying all sovereign bond exposures to amortised cost; ii) the effect of reclassifying all sovereign bond exposures to fair value; iii) the impact of keeping the loan-deposit spread constant; and iv) the exclusion from the exercise of the effect of the potential latent impairment built up during the period 2020-2022 in the corporate credit portfolio as a result of the extraordinary crisis over this period.



scenario it is highly unlikely that banks would realise all the unrealised losses, due to hedging and to the possibility of using reserve holdings of liquid assets with no unrealised losses and of receiving central bank funding.<sup>14</sup> The sensitivity figure is high and represents some vulnerability, but it is considerably mitigated by Spanish banks' sound liquidity position.<sup>15</sup>

Another sensitivity analysis conducted consisted of estimating the effect of banks keeping the interest rate spread constant, in contrast to the estimation in the main exercise, in which the spread widened in a context of interest rates hikes, based on past experience. Thus, the CET1 ratio would decrease by 0.8 pp and 2.6 pp under the baseline and adverse scenarios, respectively. Therefore, widening net interest margins are an important mitigating factor under adverse scenarios that include a rise in interest rates.

The exercise considers a smaller impact – in terms of higher probabilities of default (PDs) – than in previous FLESBs<sup>16</sup> of the materialisation of latent corporate loan impairment (stemming from the COVID-19 crisis). Eliminating this effect would be equivalent to a complete lack of latent impairment. This assumption would improve the CET1 ratio by 0.42 pp and 1.23 pp, under the baseline and adverse scenario, respectively, compared with the results of the main exercise.

### Results of the liquidity exercise

As part of the FLESB, each bank's liquidity position is analysed using the LCR. To conduct this analysis, the baseline scenario considers the regulatory LCR set by the Basel Committee on Banking Supervision and the EBA, while the adverse scenario is calibrated by the Banco de España on the basis of outflows of funds observed in recent liquidity crises. Chart 11 shows the main coefficients determined by the defined scenarios.

The LCR measures whether unencumbered high-quality liquid assets (HQLAs)<sup>17</sup> are sufficient to cover net funding

needs in the event of a cash-flow strain lasting the next 30 calendar days.

In this exercise, the reference date used as a starting point is June 2023, in order to capture the possible effects stemming from the financial turbulence in early 2023. The analysis time horizon, in keeping with the definition of the LCR, is the 30 days following that date. The starting coefficients for the aforementioned baseline and adverse scenarios are applied to this analysis time horizon.

Charts 12 and 13 show the results obtained from this analysis and indicate that Spanish banks' liquidity position was fairly sound, since all the banking groups exceed the minimum LCR requirements set for 2023 (100%) under both scenarios. Particularly notable is the liquidity position of the less significant institutions, which even under the adverse scenario have a ratio of 228%.

### Conclusion

The FLESB highlights that Spanish banks' overall solvency levels would remain satisfactory under a markedly adverse scenario. Capital would be significantly depleted, but the set of banks analysed exhibit considerable resilience, due to their initial capital levels, their ability to generate profits and their pre-existing provisions. The short-term liquidity position, measured by an LCR to which further stress is applied, also proves to be sound in these exercises.

The loss on banks' sovereign portfolio is lower than last year, because a considerable valuation adjustment already took place in 2022 in response to interest rate hikes and since banks have also reduced the percentage of their exposure in the fair value portfolio. Meanwhile, although interest rate hikes will, with a high degree of certainty, have a positive impact on net interest income, they would also have negative impacts on other balance sheet and income statement items, such as the balance of non-performing loans and impairment charges.

<sup>14</sup> In the EBA's *ad-hoc analysis of unrealised losses on EU banks' bond holdings*, hedges reduce losses by 23% under the adverse scenario. However, this is the European average, rather than being specific to Spanish banks.

<sup>15</sup> The main body of Chapter 2 of this report details developments in Spanish banks' LCR and NSFR.

<sup>16</sup> Unlike in the exercises performed between 2020 and 2022, the additional shocks to credit risk in the 2023 FLESB, based on impairment that did not arise in 2020 thanks to economic policy measures, are reduced on two counts. First, the possibility of some of these risks having already materialised is considered. They are therefore reduced because of PD forecasting errors in 2021 and 2022 (forecast below the actual figure), which would be indicative of the impairment having already partially materialised. Second, they are revised down on the basis of the pace of repayment of ICO-backed loans, which is indicative of the deleveraging of the extraordinary debt taken on to meet extraordinary liquidity needs in 2020.

<sup>17</sup> The LCR is the percentage resulting from dividing the bank's HQLAs by net liquidity outflows (difference between expected liquidity inflows and outflows).



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However, despite the results of the exercise, some caveats must be added, such as heterogeneity in the individual bank's results around group aggregates. Banks and macroprudential

and microprudential supervision must continue to assess the challenges and uncertainty facing the sector and remain vigilant to respond swiftly should potential risks materialise.

Chart 11  
Percentage of outflows of funds by type of deposit and by scenario (a)

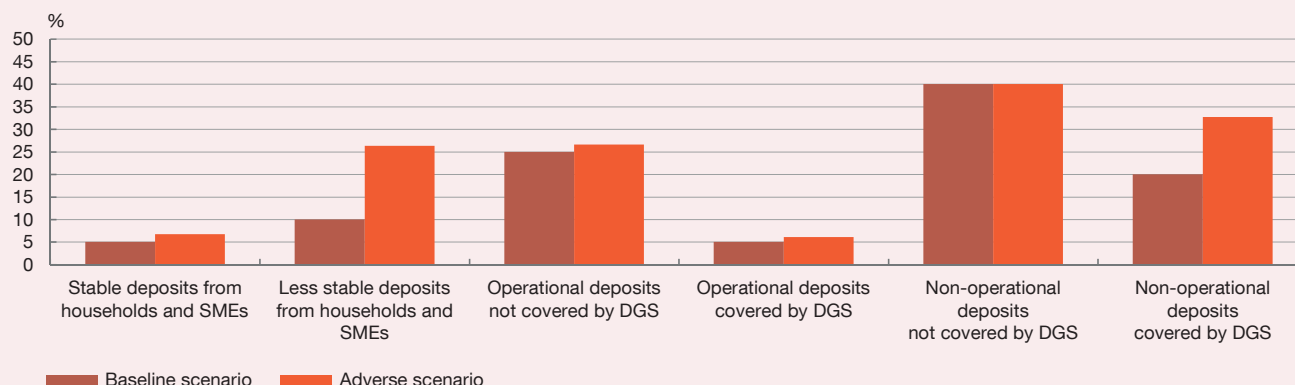


Chart 12  
Impact on LCR. Institutions under SSM supervision

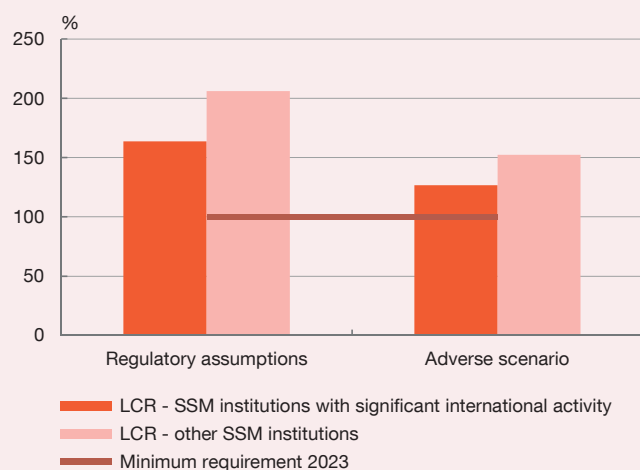
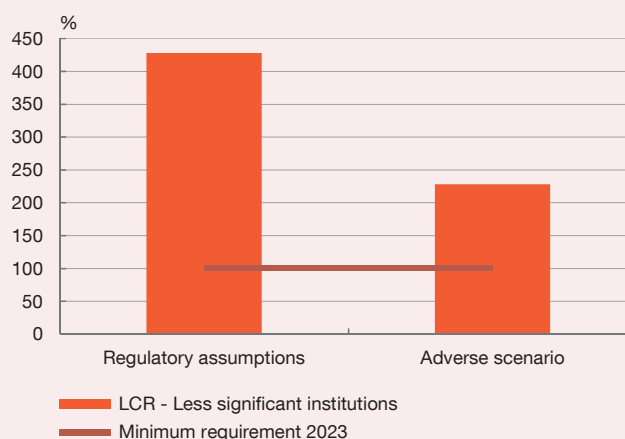


Chart 13  
Impact on LCR. Less significant institutions



SOURCE: Banco de España.

a Certain activities require customers to make or maintain deposits in a bank to improve their ability to access and use the payment and settlement systems or make payments by other means; these deposits are considered operational. Both operational and non-operational deposits are held by the corporate sector.