



# Chapter 2

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## **Microprudential supervision**



## Chapter 2

### Takeaways

- In Spain, 186 credit institutions operate through permanent establishments. These credit institutions can be categorised into 10 Spanish groups of significant institutions, with an 89.8% share of the Spanish market; 56 Spanish less significant institutions or groups of institutions (5.4% share); and other subsidiaries and/or branches of foreign institutions (4.9% share).
- The consolidated assets of the Spanish banking sector totalled €4,235 billion in September 2024, including business abroad, which accounts for 42% of consolidated assets.
- In 2024, the Spanish banking sector had a loan portfolio of stable quality and sustained growth, thanks to activity outside Spain; high liquidity; constantly growing profitability (due to the increase in net interest income and fees), outstripping that of comparable European institutions; and capital ratios at record highs and comfortably above the requirements, although on average lower than those of European peers, whose risk profile is worse.
- Establishing supervisory priorities in advance reinforces risk-based supervision and the effectiveness and efficiency of actions. In 2024, actions continued to focus on the following: credit, liquidity and interest rate risk management; the functioning of management bodies, data quality and climate risk; digitalization; and technology risk.
- In 2024, there was a slight improvement in the risk profile, which is reflected in a 7 basis point decrease in the weighted average of the system's P2R supervisory requirement.

# 1 Spanish banking system

In the framework of the Single Supervisory Mechanism (SSM), institutions are classified as either significant institutions (SIs) or less significant institutions (LSIs) depending on their size or relative importance within each country. The European Central Bank (ECB) is directly responsible for the supervision of SIs and exercises indirect supervision over LSIs, which in the case of Spanish LSIs are supervised directly by the Banco de España (see Figure 2.1).

In Spain, 186 credit institutions operate through permanent establishments. These credit institutions can be categorised into 3 major types: SIs, LSIs and other subsidiaries and/or branches in Spain of foreign institutions.

- 10 groups of Spanish SIs, some of which carry out notable international activity, with an 89.8% share of the Spanish market;
- 56 Spanish LSIs or groups of LSIs,<sup>1</sup> with a 5.4% market share; and
- a further 71 groups comprising other subsidiaries and/or branches in Spain of foreign credit institutions, with a 4.9% share.

Figure 2.1

## Distribution of supervisory powers over credit institutions

|                     | Tasks assigned to the ECB within the SSM   | Tasks assigned to the NCAs within the SSM  |
|---------------------|--|--|
| Supervision of SIs  | Direct supervision of SIs.   | Support to the ECB for supervision of SIs: participation in JSTs and in on-site missions.  |
| Supervision of LSIs | Indirect supervision of LSIs.  | Direct supervision of LSIs.  |
| Common procedures   | Common procedures are the responsibility of the ECB, with proposals from the NCAs: the granting and withdrawal of authorisation for credit institutions, and authorisations for the acquisition/sale of qualifying holdings in a credit institution.                   | Preparation of the proposal for SIs and LSIs.  |
| Penalties           | <p>SIs: sanctioning powers in the event of non-compliance with directly applicable EU law, except for non-financial penalties and penalties for natural persons.</p> <p>LSIs: sanctioning powers in the event of non-compliance with an ECB decision or regulation</p> | <p>SIs: sanctioning powers, upon instruction by the ECB, for non-compliance with national legislation transposing EU directives; for infringements attributable to their directors and executives; and for the purpose of imposing non-financial penalties.</p> <p>LSIs: sanctioning powers for other cases of non-compliance, in some cases upon instruction by the ECB</p> |

SOURCE: Banco de España.

<sup>1</sup> The Banco de España also supervises the Official Credit Institute (ICO).

**Table 2.1**
**The 10 Spanish SI groups account for 89.8% of the assets of the banks operating in Spain**

Data at 30 September 2024

|  | 2023             |                              |                                     | 2024             |                              |                                     |
|--|------------------|------------------------------|-------------------------------------|------------------|------------------------------|-------------------------------------|
|  | Number of groups | No. of banks in these groups | Market share in terms of assets (%) | Number of groups | No. of banks in these groups | Market share in terms of assets (%) |
| Spanish SIs                                  | 10               | 39                           | 90.4                                | 10               | 38                           | 89.8                                |
| Other SSM SIs in Spain via subsidiary/branch | 34               | 46                           | 3.9                                 | 34               | 45                           | 4.4                                 |
| Spanish LSIs                                 | 56               | 67 (a)                       | 5.2                                 | 56               | 66 (b)                       | 5.4                                 |
| Branches of other SSM LSIs                   | 34               | 34                           | 0.4                                 | 33               | 33                           | 0.4                                 |
| Branches of non-EU banking groups            | 4                | 4                            | 0.1                                 | 4                | 4                            | 0.1                                 |
| <b>TOTAL</b>                                 | <b>138</b>       | <b>190</b>                   | <b>100.0</b>                        | <b>137</b>       | <b>186</b>                   | <b>100.0</b>                        |

**SOURCE:** Banco de España.

**a** 23 banks, 42 cooperatives and 2 saving banks.  
**b** 22 banks, 42 cooperatives and 2 saving banks.

**Table 2.2**
**The number of registered institutions decreased very slightly**

Data at 31 December 2024

|  | 2023       | 2024       |
|--|------------|------------|
| Credit institutions                    | 189        | 188        |
| Banks                                  | 47         | 46         |
| Savings banks                          | 2          | 2          |
| Credit cooperatives                    | 61         | 61         |
| ICO                                    | 1          | 1          |
| Branches of EU credit institutions     | 74         | 74         |
| Branches of non-EU credit institutions | 4          | 4          |
| Financial holding companies            | 7          | 6          |
| Mixed financial holding companies      | 1          | 1          |
| <b>TOTAL</b>                           | <b>197</b> | <b>195</b> |

**SOURCE:** Banco de España.

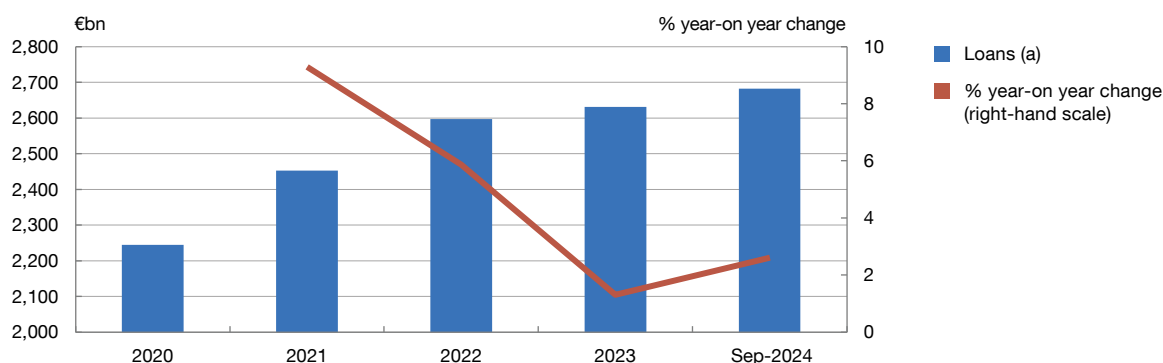
In September 2024, the consolidated assets of Spanish banking sector institutions totalled €4,235 billion (bn) euros. Business abroad accounted for 42% of consolidated assets.

In line with their retail banking business models, in September 2024, 62% of total consolidated assets consisted of loans, of which credit to the non-financial private sector accounted for 83%. Mortgage financing to households (41%) and credit to large companies (24%) predominated, although consumer lending to individuals (16%) and credit lines to SMEs (15%) were also significant. Lending in 2024 grew thanks to activity outside Spain. Box 2.1 contains further information about the business model of Spanish SIs as compared to European SIs.



Chart 2.1

### In a climate of uncertainty, sustained growth in lending due to activity outside Spain



SOURCE: Banco de España (supervisory statistics on credit institutions).

a Loans and advances included in accounting portfolios subject to impairment review under IFRS 9 (portfolios at amortised cost and at fair value through other comprehensive income). Therefore, portfolios of financial assets or liabilities held for trading and at fair value through profit or loss, and cash balances at central banks and other demand deposits at credit institutions, are excluded.

- After the pandemic, lending entered a phase of sustained growth, reaching €2,683 bn in September 2024, thanks to the contribution of activity outside Spain. On the other hand, despite the initial upturn motivated by pandemic-related aid, financing to Spanish borrowers has shown a downward trend since the summer of 2022, coinciding with the start of the monetary tightening cycle. However, a certain slowdown in the overall rate of decline was already observed in the months prior to September 2024 (with the Spanish market on the rise in large companies and consumer credit, stable in mortgages and falling in SMEs).
- This evolution was influenced by macroeconomic factors and growing global geopolitical uncertainty, which contribute to a retraction in the demand for credit, even though no restrictions in supply or tightening of lending standards were detected.

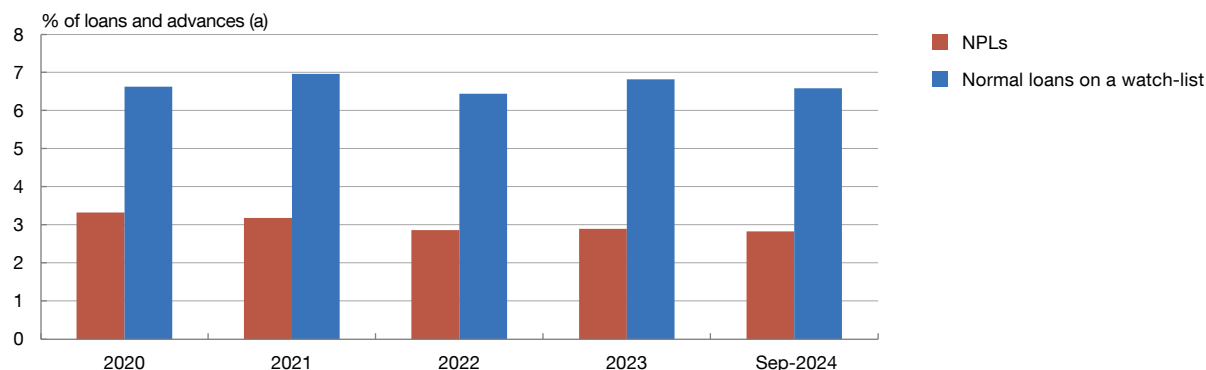
For now, credit quality has not deteriorated, despite the fact that the uncertainties generated by the geopolitical situation, the evolution of inflation and interest rates, armed conflicts and pessimism about European Union (EU) expectations remain high and call for caution.

- Credit quality has not suffered, despite the upturn in inflation and the consequent monetary tightening cycle of 2022-2023. The NPL ratio (2.82% in September 2024) has stabilised at levels slightly below 3%, leaving behind the declines of recent years. Although they grew slightly, normal loans on a watch-list remained below 7% (6.58% in September 2024).
- The main reasons for this NPL ratio include the low level of private indebtedness, of both households and companies, which is currently at a record low and below the European average; the strength exhibited by the economy and employment in Spain; and the level of savings accumulated during the pandemic.

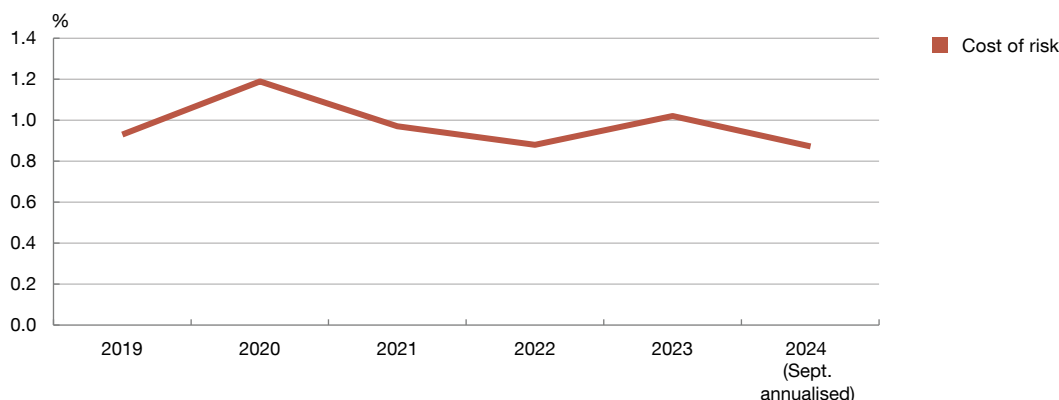
Chart 2.2

**Despite the macroeconomic environment and geopolitical uncertainties, credit quality was not compromised, with the cost of credit stabilising at around 1%**

### 2.2.a Credit quality of loans and credits (a)



### 2.2.b Cost of risk (b)



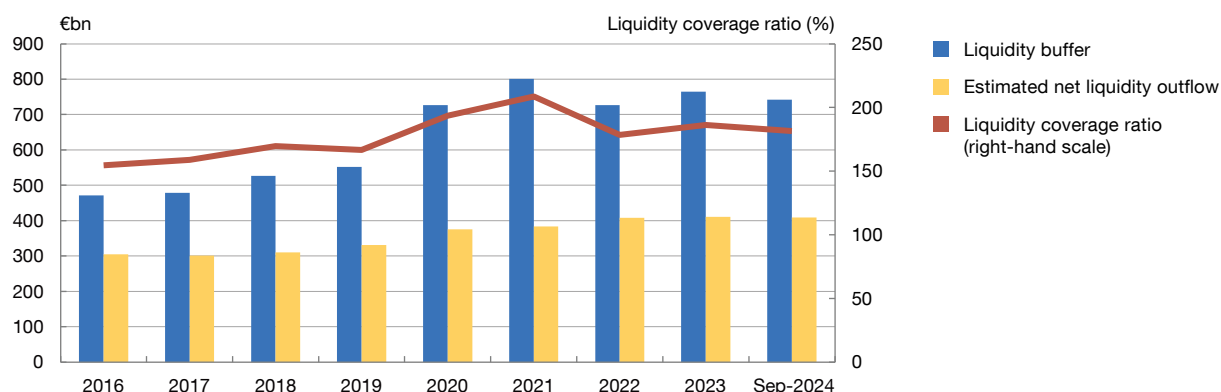
**SOURCE:** Banco de España (supervisory statistics on credit institutions).

- a** NPLs are taken to be loans with credit impairment; normal loans on a watch-list are loans with a significant increase in risk since their initial recognition; and normal loans are all other loans. All of this is in accordance with IFRS 9. They are also referred to as Stage 3, 2 and 1, respectively.
- b** In summary, the cost of risk consists of the charges to income for write-downs and gross provisions due to the impairment of the loan and credit portfolio.

- It is also worth highlighting the improvement in institutions' management of troubled assets, including sales of NPL and written-off portfolios, which was encouraged by ongoing supervisory pressure.
- The cost of risk remained slightly below 1% per year (0.87% annualised in September 2024), at pre-pandemic levels, without any significant extra write-down effort by institutions being noted. In comparison to European institutions, Spanish banks' write-downs are much higher (around double), due largely to the foreign business of banks with greater international exposure, which in turn is offset by higher net interest income.
- The recently initiated downward trend in interest rates, stemming from the control of inflationary pressures, is expected to help mitigate the risk of an increase in NPLs and credit deterioration. However, growing uncertainties, mainly on the geopolitical front, make it advisable to remain cautious.

Chart 2.3

**The liquidity coverage ratio maintained comfortable levels in 2024, similar to December 2023 levels**



SOURCE: Banco de España (supervisory statistics on credit institutions).

The liquidity coverage ratio (LCR) remained stable in 2024 (at around 180%), notably above the regulatory minimum (100%).

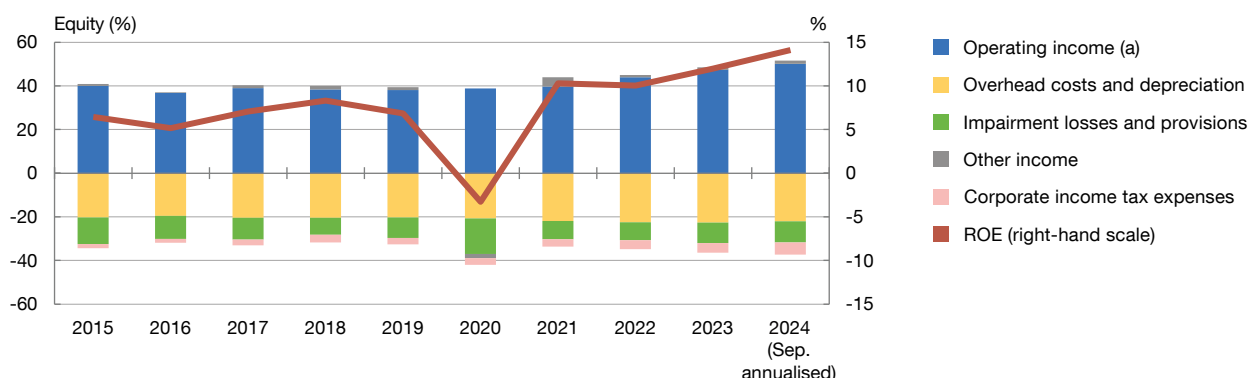
- In Spain, after reaching maximum liquidity levels in 2020 and 2021 as a result of the ECB's expansionary measures, the start of the ordinary and early repayments of Targeted Longer-Term Refinancing Operations III (TLTRO III) in 2022 led to a small reduction in institutions' buffers.
- Although this repayment process was intensified in 2023, its impact on the system's liquidity was offset by a notable reduction in credit in Spain, which exceeded the decrease in deposits. In 2024, although the evolution of credit led to a slight drain on liquidity, the LCR was maintained due to lower outflows of demand deposits, reflected in the ratio's denominator.
- The near completion in 2024 of the repayment of TLTRO III meant a reduction in asset encumbrance, from 26% in June 2022 to 19% in June 2024 (below the 23% weighted average ratio in the EU in June 2024).

Profitability continued to increase: for the fourth consecutive year, it was above pre-pandemic levels and profits reached a record high. This was despite inflation remaining high and the temporary bank levy, which in 2024 amounted to €1.6 bn, which equals 0.6 percentage points (pp) of capital (ROE). However, there are signs of stabilisation due to the recent fall in interest rates. The efficiency ratio continued to perform favourably due to the improvement in the operating result.

- The profitability of the Spanish banking sector (14.1% ROE in September 2024) improved in 2024, as in previous years, due mainly to the growth in net interest income and also to the increase in fee income. Both factors have more than compensated for the increase in

Chart 2.4

**Recovery of profitability, with operating income growth outpacing growth in overhead costs and write-downs, following major provisions and extra impairments in 2020 (due to COVID-19 and goodwill), exceeding pre-pandemic levels**



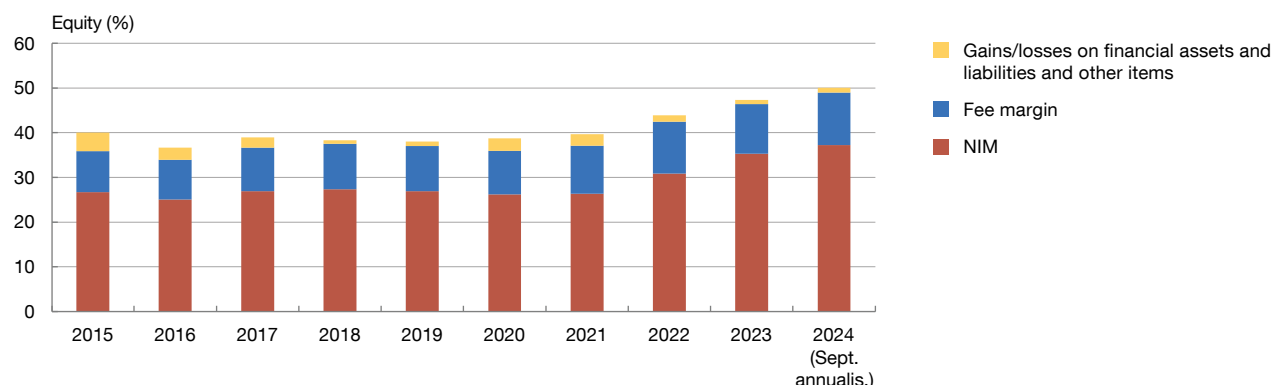
SOURCE: Banco de España (supervisory statistics on credit institutions).

a Operating income is the sum of net interest income, net fee and commission income, net income from financial operations, net foreign exchange differences and other net operating income.

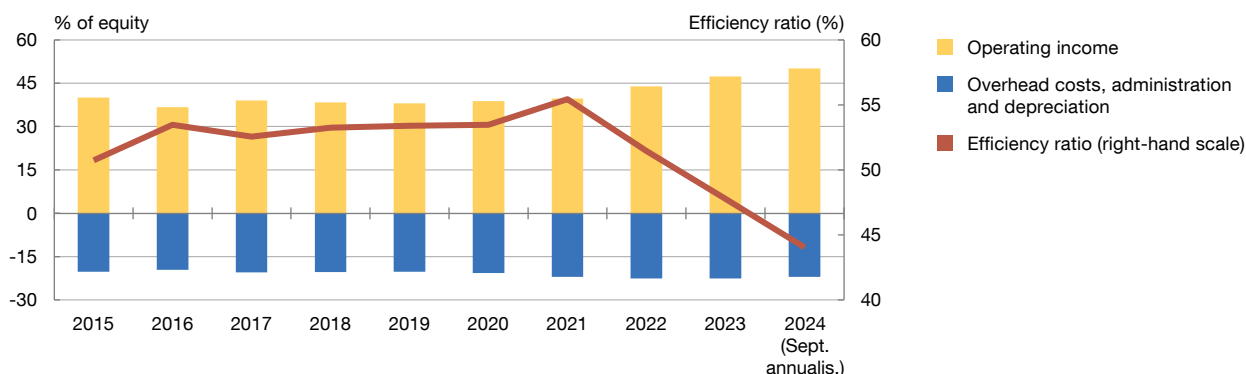
overhead costs, credit impairments and provisions, allowing Spanish banks to achieve an aggregate profitability that exceeds the average of their European peers.

- The strong growth in net interest income is the result of the evolution of interest rates, the combination of a rapid rise in rates on assets, yet with a relative stagnation in volume, and a slower repricing of deposits, especially from individuals, in a context of high liquidity in the system and lower demand for credit. However, the most recent evolution points to the beginning of a possible change in trend stemming from the reduction in interest rates commenced by the ECB in June 2024.
- Net fee and commission income also continued to grow, albeit to a lesser extent than net interest income, due to the increase in income from payment methods (cards) and higher income from asset management.
- The bank levy, which was introduced in 2022 and is calculated on net interest income and fees from activity in Spain, increased in 2024, with an aggregate cost of 0.6% in terms of ROE (2023: 0.5%). This higher cost, which is not tax deductible, was absorbed by the growth in operating profit, which, despite the levy, grew significantly in 2023 and 2024.
- Overall, the performance of the efficiency ratio (44.1% in September 2024) remained favourable due to an improvement in operating profit that far exceeded the increase in overhead costs.
- Staff costs have grown more sharply than other overhead costs, both in Spain and abroad, in a high-inflation environment. Although it is true that inflation has been moderating in Spain, it is still high in markets of importance to the large Spanish banking groups, such as certain Latin American countries and Turkey, where hyperinflation episodes have been



**Chart 2.5**
**Operating income continued to show the strong growth that began in 2021, driven mainly by net interest income**


**SOURCE:** Banco de España (supervisory statistics on credit institutions).

**Chart 2.6**
**Efficiency ratio**


**SOURCE:** Banco de España (supervisory statistics on credit institutions).

recorded. Contributions to resolution and guarantee funds, which increased overhead costs in previous years, had less of an impact in 2024 because the target level of funds was reached in several jurisdictions.

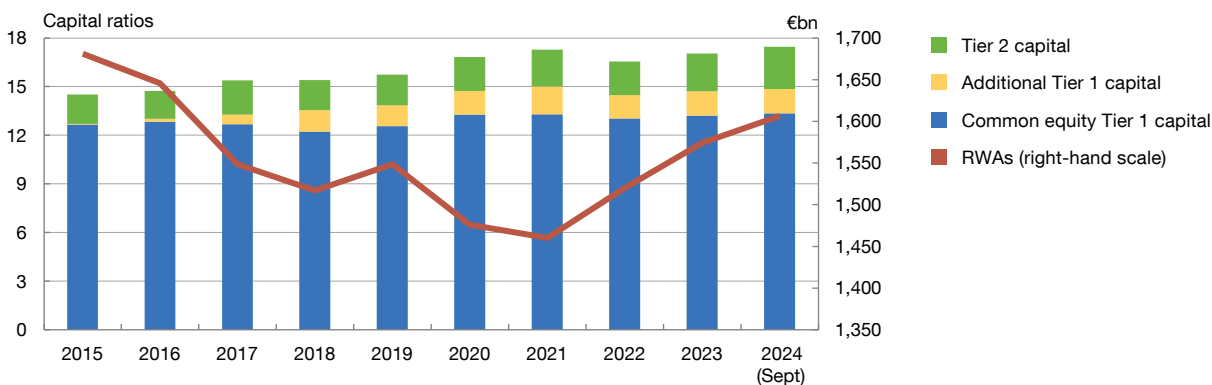
With regard to operational risk, the number of events and losses recorded continued to increase in 2024, in line with the trend of recent years.

- The bulk of the events continue to fall into the external fraud category, which is consolidating its position as one of the main threats in an environment of growing banking digitalisation.
- However, most of the losses continued to fall into the conduct and customers category, which in Spain has been marked by the extraordinary provisions made by institutions in response to the latest rulings on mortgage costs.

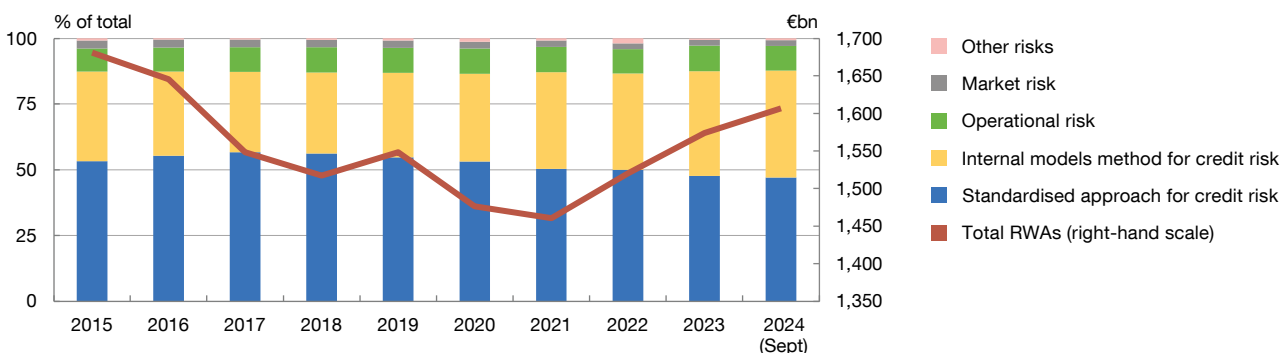
Chart 2.7

**Capital ratios stable at record highs, in a context of rising risk-weighted assets (RWAs), where credit risk is clearly predominant and the use of internal models continues to rise**

### 2.7.a Capital ratios



### 2.7.b RWA breakdown



SOURCE: Banco de España (supervisory statistics on credit institutions).

The capital ratios of Spanish institutions remained stable at maximum levels, more than covering regulatory requirements, but without taking advantage of the boom in profits to reduce the differential in solvency ratios with respect to the European average.

- The notable growth in earnings since 2022 has been largely offset by the increase in dividends, growing share buybacks (see [Box 2.2](#)) and the rise in risk-weighted assets, thus leading to very moderate increases in the Common Equity Tier 1 (CET1) ratio.
- The CET1 ratio of Spanish banks remained stable at record levels in 2024 (13.3% in September 2024), although it is still below the ratio of their European peers (15.8% for SSM SIs).<sup>2</sup> The solvency of Spanish banks is supplemented by a level of loan loss provisions (measured as a proportion of risk-weighted assets) that is notably above the average for SSM SIs.

<sup>2</sup> Data extracted from ECB supervisory statistics at June 2024.

- However, the gap in the CET1 ratio with respect to European peers is significantly reduced in terms of capital surplus (or management buffer) because of Spanish banks' lower requirements arising from their specific risk profile (lower P2R, macroprudential buffers and P2G).
- In 2023 and 2024, SIs increased net issues of additional Tier 1 and Tier 2 capital instruments, which helps diversify and optimise their capital structure.
- As regards risk-weighted assets (RWAs), credit risk continues to be by far the most significant (almost 88% in September 2024), given the business model of Spanish institutions, which are universal or retail banks, followed at a great distance by operational risk (just over 9%).
- It is worth noting the growing weight of internal models in the calculation of RWAs for credit risk, although it remains well below the European average.

## 2 Supervisory priorities

Supervisory priorities are determined on the basis of the sources of risk and vulnerabilities specific to the banking sector. Establishing supervisory priorities strengthens risk-based supervision and allows for improvements in the effectiveness and efficiency of supervisory activities.

- The process is carried out in two different spheres. On the one hand, the SSM,<sup>3</sup> with the participation of the Banco de España and the other national competent authorities, establishes the priorities for SIs with a medium-term horizon (three years) and a multi-annual supervisory activity plan. On the other hand, the Banco de España carries out a similar process and establishes the priorities for LSIs with a one-year horizon.
- The supervisory plan is materialized in various activities, each with a specific scope or intensity. These activities include most notably the supervisory review and evaluation process (SREP), more in-depth reviews, such as specific “deep dives” or horizontal detailed reviews, and on-site inspections.
- The text and figures below include, inter alia, references to the most salient findings obtained through supervisory actions and their connection with strategic priorities.

### 2.1 Supervisory focal points in 2024

The identification of institutions’ risks and the priorities for 2024 was based on an environment in which there had been several macro-financial and geopolitical shocks, including most notably the financial crisis that affected several US regional banks and Credit Suisse in Switzerland between March and May 2023. Added to this was concern about a potential deterioration in credit quality and an increase in the cost of bank funding in view of rising interest rates. Also, there were already significant structural challenges, such as climate change and digital transformation.

Figure 2.2.1 shows the 2024 supervisory focal points for SIs and certain of the findings derived from the actions taken, which are explained in more detail in section 3, all within the framework of the priorities that were updated in 2023 for the following three years. Additionally, these findings inform the process of setting the SSM’s priorities for 2025-2027, which are detailed in section 2.2. In short, the priorities for the following years are adapted on the basis of the results of the actions carried out.

Figure 2.2.2 summarises the specific risks of LSIs that were the subject of special attention by the Banco de España in 2024.

<sup>3</sup> The supervisory priorities identified by the SSM for SIs for 2025-2027 can be found at this [link](#).

Figure 2.2.1

### Supervisory focal points for SIs in 2024

| SUPERVISORY PRIORITIES FOR 2024-2026       |   | SUPERVISORY FOCAL POINTS FOR 2024  | FINDINGS  |
|--|---|--|---|
| 1 MACRO-FINANCIAL AND GEOPOLITICAL SHOCKS  | Credit and counterparty risk              | Review of shortcomings in credit risk management frameworks and review of vulnerable portfolios (including exposures to SMEs).   | Improvements in the anticipation of emerging risks, particularly in the consideration of climate and environmental risks. There is still work to be done regarding the consideration of geopolitical risk and the classification of debtors according to their credit quality.  |
|  | Funding and interest rate risk            | Asset and liability management (ALM) and structural interest rate risk (IRRBB) management have been the subject of several supervisory activities in recent years.   | Identification of good practices and detection of areas for improvement in funding plans, indicator monitoring and creation of contingency plans.<br><br>This area is no longer a priority for 2025, although the shortcomings identified will be followed up under the framework of ongoing supervision.   |
| 2 MANAGEMENT CAPABILITIES AND CLIMATE RISK | Governance                                | Work has continued on improving the functioning and management capabilities of governing bodies since 2020.<br><br>Reviews of risk data aggregation and reporting (RDAR) capacity have continued.  | Progress has been made in diversity, but shortcomings remain in collective suitability, succession planning and the functioning and composition of committees.<br><br>Following the progress observed, improving the functioning of governing bodies will not be considered a priority in 2025.<br><br>Overall progress in the RDAR area, although challenges remain. |
|  | Climate and environmental risk management | Work continued on the review of compliance with supervisory expectations and the monitoring of shortcomings identified in previous years.  | Significant progress, except in certain cases where supervisory pressure has been intensified.  |
| 3 DIGITAL TRANSITION AND TECHNOLOGY RISK   | Digital transition                        | The review of digital transformation strategies has identified good practices and improved their supervisory assessment.   | Publication of a report on assessment criteria and good practices in the area of digitalisation.  |
|  | Technology risk                           | Building robust operational resilience frameworks, in areas such as cyber risk, data security or risks stemming from innovative technologies, has been a notable priority, with activities at various levels, such as on-site inspections or stress tests (see section 3.3). | In the area of cybersecurity, institutions have response and recovery frameworks in place, but improvements in certain areas are required.  |

SOURCE: Banco de España.

Figure 2.2.2

### Supervisory focal points for LSIs in 2024

| RISK/ SUPERVISORY PRIORITY  | 2024 SUPERVISORY FOCAL POINTS  | FINDINGS   |
|---|--|--|
| <b>Credit risk:</b><br>risk management and concentration in vulnerable sectors.               | Particular attention was paid to the identification of shortcomings in loan origination, monitoring, accounting classification and loan-loss provisioning policy, and to the possible concentration of risk in vulnerable sectors and to possible increases in NPLs due to the rise in interest rates.   | The rise in rates has not led to a significant reduction in the quality of institutions' loan portfolios, although areas for improvement in risk monitoring and pricing have been identified.  |
| <b>Operational risk:</b><br>in particular, technology risk.                                   | Particular attention was paid to the monitoring of institutions' measures in response to the requirements and recommendations arising from the horizontal technology risk actions carried out in 2023.<br><br>The adaptation to DORA, the new regulations and the EBA guidelines on outsourcing of critical services, as well as the necessary digitalisation that institutions must undertake, made it advisable to strengthen operational risk monitoring. | Institutions have made significant progress in controls on critical outsourcing and in adapting contracts with suppliers. A horizontal supervisory review of digitalisation strategies and the implementation of DORA requirements is being carried out on a sample of LSIs. |
| <b>Governance:</b><br>reviewing the three lines of defence and other shortcomings identified. | The adequate separation and capacity of the three lines of defence have received special attention in recent years. Also, the composition, functions and performance of the Board of Directors or Governing Board and, where appropriate, the role of the CEO are analysed.  | Although the LSIs continue to progress in making changes, there is still room for improvement in order to meet the requirements for the second and the third line, which are more difficult for smaller institutions to meet.  |
| <b>Climate and environmental risk:</b><br>meeting supervisory expectations.                   | Work continued on the assessment of compliance with climate risk expectations which commenced in 2023, assessing how non-green risks are identified, originated, monitored and, where appropriate, hedged in a sample of institutions.   | In line with the supervisory expectations published by the Banco de España, LSIs are making gradual progress, albeit not without difficulties, in climate and environmental risk identification, management and measurement.   |
| <b>Business model:</b><br>sustainability  | Institutions' ability to obtain sufficient recurrent earnings in an environment of falling interest rates and rising costs due to inflation is under analysis; also, their readiness to adapt to technological change (digitalisation) is assessed.  | LSIs' profitability as compared to the previous year improved again, despite the gradual fall in interest rates.   |
| <b>Liquidity risk:</b><br>management procedures and tools.                                    | Liquidity risk management policies and procedures have been reviewed in inspections, and a cross-sectional analysis of a number of liquidity indicators has been carried out.  | Although Spanish LSIs have a comfortable short- and medium-term liquidity position, following the events of 2023 in several US institutions, LSIs were asked to strengthen liquidity risk management, and the on-site review of these controls was stepped up.               |
| <b>IRRBB risk:</b><br>impact on profitability.  | The IRRBB risk management policies and procedures have been reviewed in inspections, in the LSIs most exposed to this risk and, more generally, in the framework of the SREP.  | The on-site review was stepped up and LSIs were made aware of the need to actively manage and monitor IRRBB risk and to provide corrective measures.   |

SOURCE: Banco de España.

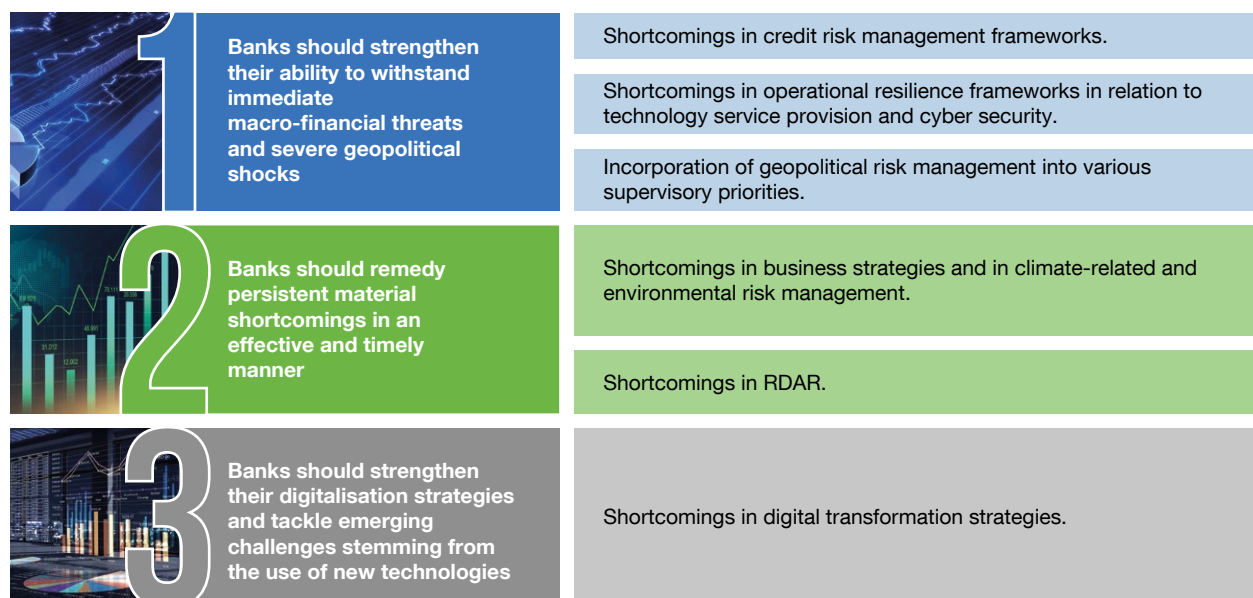
## 2.2 Supervisory priorities in 2025

Within the scope of the SSM, three supervisory priorities for SIs were established for 2025- 2027.

The first priority is to increase resilience to macro-financial and geopolitical shocks. To this end, banks must reinforce their capacity to identify deteriorations in credit quality and build up prudent levels of provisions, and they must intensify their efforts to address the credit risk management shortcomings identified in previous years.



Figure 2.3

**SI supervisory priorities for 2025-2027**


SOURCE: SSM Supervisory Priorities 2025-27.

- Supervisory activity has revealed shortcomings related to the consideration of new risks, including geopolitical risk, in the application of the International Financial Reporting Standard 9 (IFRS 9) framework.
- In this context, the focus will be on IFRS 9, both in remedying the deficiencies identified and in carrying out new supervisory activities. Also, reviews of vulnerable portfolios, such as SMEs, will continue.

In addition, banks must also strive to resolve the shortcomings identified in the area of technology risk, particularly those related to cybersecurity and the use of external service providers, and to comply with the requirements arising from the new digital operational resilience act (DORA).

- In the current context, characterised by high geopolitical tensions, an increase in cyber incidents and the concentration of certain technology service providers, it is important that institutions strengthen their resilience to possible operational disruptions triggered by sudden events. In addition, the systemic nature of technology risk also suggests that this resilience should be strengthened.
- Consequently, the risk associated with external suppliers and cyber resilience will remain under review. The focus will also be placed on compliance with DORA. The application of DORA from January 2025 will require supervisory work to be adapted to its requirements, including the performance of advanced cybersecurity tests.

Lastly, the cross-cutting nature of geopolitical shocks calls for a supervisory strategy that reviews whether geopolitical risk is taken into consideration in different areas of risk management.

- Consequently, there will be an examination of whether and how banks take geopolitical risk into consideration in the following: risk appetite and risk culture frameworks; expected loss estimates in their application of IFRS 9; the areas of outsourcing and cyber risk; risk management frameworks; capital and liquidity planning; and internal stress tests.
- Also, geopolitical risk will be a fundamental component in the definition of the scenarios applied in the stress tests coordinated by the European Banking Authority (EBA) at the European level that will be carried out in 2025.

The second priority is the effective remediation of the shortcomings identified in the compliance with supervisory expectations related to climate and the environment and in the risk data aggregation and reporting (RDAR) capabilities.

- Banks must fully comply with supervisory expectations on the management of climate-related and environmental risks, as well as with the requirements of the CRR III/CRD VI package (including prudential transition plans), and they must address the identified shortcomings. There will also be reviews of compliance with the disclosure regulations (Pillar 3), banks' transition plans and legal and reputational risks.
- Banks must intensify their efforts to remedy the shortcomings detected in the RDAR frameworks and bring these frameworks into line with supervisory expectations. Supervision will continue to interact with banks to address shortcomings, and supervisory action will be intensified so that institutions comply with the supervisory expectations established in the RDAR guide.

The third priority relates to the need to continue strengthening digitalisation strategies. Banks must reinforce these strategies and the implementation plans in order to mitigate risks, including risks arising from the use of new technologies.

- In recent years, the SSM has prioritised the assessment of digitalisation strategies in a more comprehensive manner.
- Moving forward, there will be more of a focus on the use of key technologies, such as cloud services or artificial intelligence (see Box 2.3), and on the impact on profitability and risks of digitalisation strategies in specific business lines.

Lastly, it should be noted that, in order to ensure compliance with expectations and the resolution of unresolved shortcomings, supervision will apply escalation processes, through the use of progressively more intrusive or severe supervisory measures to incentivise corrective actions by the institutions.

The Banco de España determined the supervisory priorities for LSIs for 2025, incorporating these institutions' idiosyncratic risks and taking into account the supervisory priorities identified by the SSM for SIs. Priorities were set in the following areas: credit risk, operational risk, governance, climate risk, business model, structural interest rate risk and liquidity risk.

- In relation to credit risk, work will continue on the identification of shortcomings in granting, monitoring, accounting classification and loan-loss provisioning policy, and on the review of potentially vulnerable portfolios, particularly in relation to the potential impact of the October 2024 floods on certain institutions.
- In the area of operational risk, work will continue on the assessment and monitoring of the action plans requested from institutions to correct the shortcomings identified in previous horizontal reviews and of the adaptation to the new regulation (DORA), and on the assessment of the effects of digitalization, which entails the coexistence of new and pre-existing systems.
- In relation to governance, the focus will be placed on the sufficiency of resources, access to the board and the correct reporting line of the second and third lines of defence; the assessment of the composition, access to information, functioning and exercise of responsibilities by the board of directors or the governing board, and the composition of the delegated committees.
- Regarding the identification, measurement and management of climate risk, the scope of the on-site review of compliance with climate risk expectations that began in 2024 will be extended to other institutions.
- As regards the analysis of the business model and sustainability, work will continue on the analysis of institutions' internal capital generation capacity in an environment of falling interest rates following the increase in costs due to inflation, and on monitoring digitalisation.
- With regard to the management of interest rate risk in the banking book (IRRBB), risk management policies and procedures will be reviewed as part of the inspections scheduled at the institutions with the greatest exposure to this risk and, in general, within the framework of the SREP.
- Lastly, in relation to liquidity management, policies and procedures will be reviewed as part of the inspections scheduled, and a cross-sectional analysis of a series of liquidity indicators will be carried out.

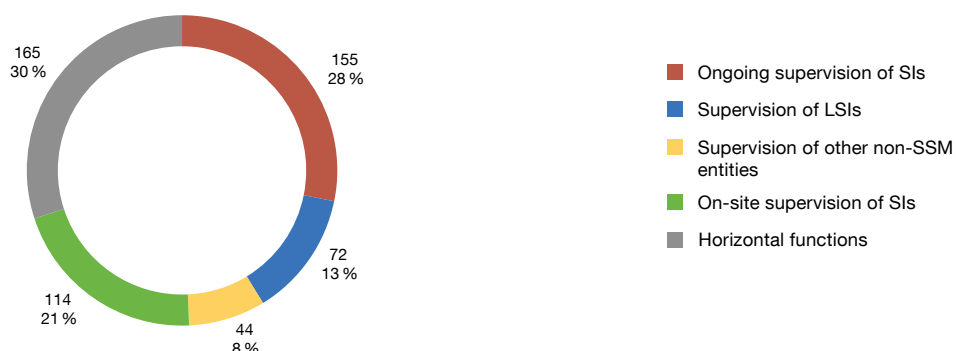
In order to address these supervisory priorities, the various supervisory activities (inspections, monitoring, horizontal actions, meetings, etc.) set out in the supervisory plans for the year will be carried out. The Executive Committee of the Banco de España approves the LSI action plan. Also, in 2025, more intrusive actions will be taken with institutions to ensure compliance with the requirements, and the degree of implementation by the institutions of the recommendations made will be controlled.

### 3 Supervision of credit institutions

The supervision of SIs and LSIs is mainly performed through a combination of two complementary channels: (i) ongoing off-site supervision, and (ii) on-site supervision, for which a range of microprudential tools are available. More information can be found in the [supervisory model](#).

Chart 2.8

**Of the 550 microprudential supervision staff, 49% are involved in the off-site and on-site supervision of SIs; another 21% supervise LSIs and non-SSM institutions; and the remaining 30% carry out horizontal supervisory support functions**

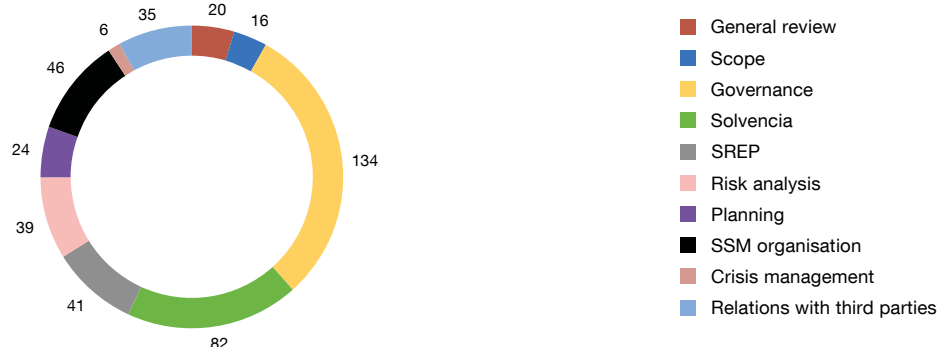


SOURCE: Banco de España.

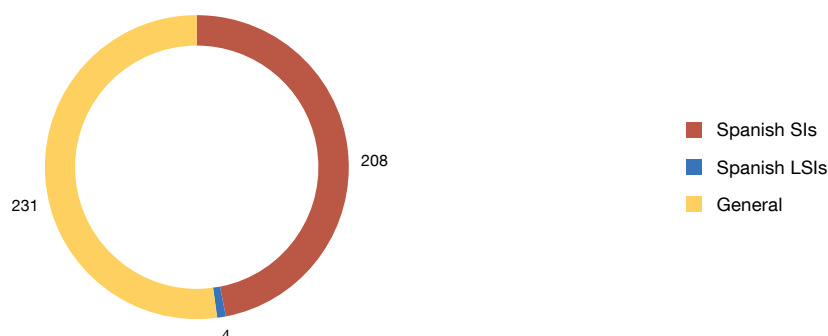
Chart 2.9

**There was a slight decrease in the number of ECB decisions and actions specifically targeting Spanish institutions with respect to 2023, but a notable increase in those relating to governance, mainly due to suitability assessment processes**

2.9.a By category



2.9.b By type of institution



SOURCE: Banco de España.

Chart 2.8 describes the allocation of staff to the main microprudential supervisory tasks within the Banco de España.

The Banco de España participates in decision-making regarding all credit institutions under SSM supervision by means of the presence of the Director General of Supervision and the Governor on the ECB Supervisory Board and Governing Council, respectively.

- Of the total 2,329 decisions adopted by the ECB in 2024, 443 were applicable to Spanish institutions: 212 decisions specifically addressed to them and a further 231 of a general nature (see Chart 2.9).

### 3.1 Supervision of significant institutions

The Banco de España makes an essential contribution to the supervision of Spanish SIs, through its presence on the joint teams (which are responsible for ongoing off-site supervision), through its participation in on-site inspections and in model investigations, and through its collaboration with the SSM working groups and expert networks. In January 2024, the SSM Supervisory Board launched an initiative to review its supervisory culture following the recommendation made by a group of experts who analysed the effectiveness and efficiency of the SREP and its implications for other supervisory processes (see Box 2.4).

- Together with the ECB, and within the SSM, the Banco de España participates in the microprudential supervision of the 10 groups of Spanish SIs. In addition, it also participates in 5 other joint teams which supervise SSM significant banking groups with a presence in Spain (through 4 subsidiaries and 41 branches).
- The on-site inspection teams are mainly composed of Banco de España inspectors, although joint inspection teams are often formed, which contribute to the creation of a common supervisory culture within the SSM.
- The working groups and expert networks, in which the Banco de España actively takes part, are a key element in the SSM supervision. These groups analyse and develop technical and supervisory policy proposals with a view to improving the functioning of the SSM.

Among the recurrent **ongoing supervision** tasks, a central role is played by those related to the SREP and the subsequent capital decision.<sup>4</sup> Their findings take into account not only the specific work planned in the SREP methodology, but also all the information and findings obtained in other supervisory activities.

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<sup>4</sup> The capital decision includes the capital requirement (P2R) and the capital recommendation (P2G). Requirements are mandatory and legally binding, i.e. in the event of non-compliance, institutions may be subject to supervisory measures, including sanctions. Recommendations, unlike requirements, are not legally binding.

As a result of the 2024 SREP, the P2R levels required for Spanish SIs stood at a weighted average of 1.76% (calculated by weighting the P2Rs of the SIs by their respective RWAs). The weighted average P2G remained constant at 0.83%.

- As a result of the SREP, the capital decisions resulted in a weighted average P2R of 1.76% required in 2025 (as compared to 2.1% for the average of the SSM SIs). This represented a decrease of 7 bp on average, as a result of a reduction in three institutions and stability in the other seven with respect to the 2023 SREP.
- In addition, the average in the P2G guidance (0.83%, as compared to 1.3% for the aggregate of SSM SIs) remained unchanged across all institutions with respect to 2023, as the biennial stress test coordinated by the EBA and the ECB, which serves to determine the P2G level applicable to each institution, was not conducted in 2024.

Chart 2.10 shows the quantitative and qualitative requirements and recommendations resulting from the 2024 SREP, which include most notably those related to governance, credit risk, business model and operational risk.

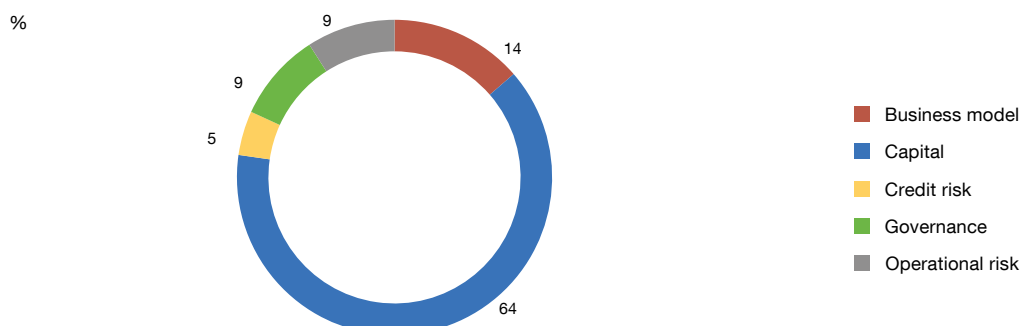
- With regard to governance, emphasis was placed on increasing the transparency of the remuneration framework for members of the management bodies, key executives and other employees in the identified group; on reinforcing diversity in the composition of the board of directors; and on the existence of adequate plans for the renewal and succession of directors. In addition, it also reiterated the importance of ensuring that the risk control function carries weight within the organisation and a degree of independence commensurate with the complexity of the banking activity carried out. Lastly, recommendations were made to ensure the proper functioning of internal audit and regulatory compliance.
- As regards credit risk, supervisory effectiveness and industry efforts helped ensure that, unlike in previous years, no institutions were identified with high levels of non-performing assets. However, in certain residual sectors, non-performing exposures remained high and, therefore, the institutions concerned were required or recommended to introduce a strategy to reduce them. In addition, in two cases, and in application of the ECB's *Guidance to banks on non-performing loans*, of March 2017, a specific additional capital requirement (Pillar 2 supervisory add-on) was allocated for the difference between the supervisory coverage expectations and the accounting provisions recorded for non-performing exposures.
- In relation to the business model, the importance of strengthening analytical accounting was reiterated with a view to improving management reporting and ensuring the appropriate allocation of costs and income across the various business units, geographical areas, customers and products, etc. In addition, several institutions were informed of the importance of formally establishing a strategic business plan that includes all the relevant variables, both external and internal impacts, all the companies and business lines within the group, scenarios and sensitivities, as well as adequate monitoring.



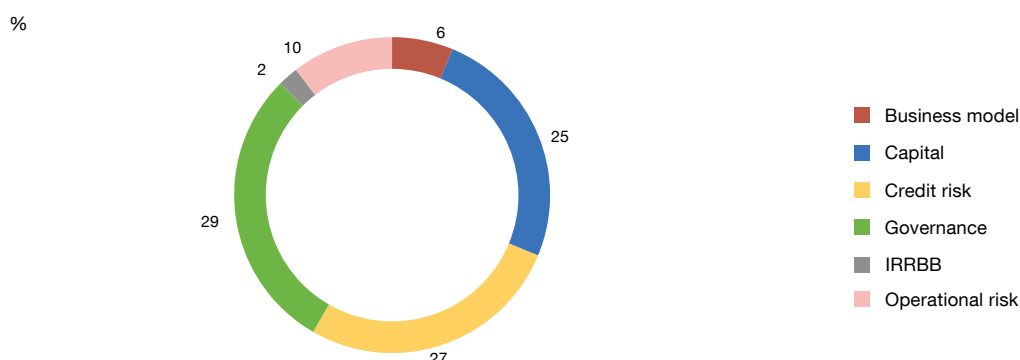
Chart 2.10

**As a result of the SREP on Spanish SIs, 70 quantitative and qualitative requirements and recommendations were made in 2024, of which 23 (31%) were requirements. This represents a clear reduction with respect to the 97 issued in 2023 and reflect the considerable efforts and improvements made by the institutions and the effectiveness of supervision**

#### 2.10.a Requirements



#### 2.10.b Recommendations



SOURCE: Banco de España.

- In the area of operational risk, three SIs were urged to strengthen their provisioning system to cover, in a timely and sufficient manner, legal contingencies arising from market conduct, paying special attention to mortgage expenses. In addition, it was recommended that the second line of defence perform the fundamental task of reviewing both the calculation and the establishment of these provisions for all operational risk, not only for conduct contingencies.

In addition to the SREP, other salient ongoing off-site supervisory actions were carried out in 2024, as detailed below.

In relation to credit and counterparty risk management, the following actions are worthy of note: horizontal reviews of portfolios that are potentially more sensitive to the macroeconomic environment and of the coverage of novel risks, and in-depth reviews of refinancing policies and management of unlikely-to-pay exposures (UTPs).

- The specific horizontal reviews of sensitive portfolios included both credit risk management (granting, refinancing, application of IFRS 9 and collateral valuation) and the monitoring of the recommendations issued following the reviews carried out in 2023 (e.g. on residential and commercial mortgages).
- In the in-depth reviews of UTP risk management and refinancing policies, weaknesses were generally identified in: i) the analysis of borrowers' payment capacity; ii) the delimitation of responsibilities in the process of identifying and monitoring these risks; and iii) the functioning of early warning systems. Also, a lack of alignment with the new EBA guidelines on UTP indicators was observed.
- In addition, a horizontal review was conducted of the status of the 2023 recommendations on the capture of “novel” risks in institutions' provisioning frameworks and, in particular, the use of adjustments (overlays) to internal IFRS 9 provisioning models. It was concluded that institutions have made progress in identifying new risks. However, limitations are still found in the design of overlays and in the accounting classification of transactions (see [Box 2.5](#)).

With regard to asset and liability management (ALM) and funding and liquidity risk, the horizontal reviews of the following areas are worthy of note: i) the funding structure and viability of funding plans; ii) ALM strategy and governance; and iii) the criteria used to calculate the liquidity coverage ratio.

- The review of the funding structure and of the viability of funding plans identified good practices and spotted areas for improvement related to deviations in budgeted funding plans, in the monitoring of certain indicators and the formalisation of contingency plans.
- The review of ALM strategy and governance, which is still under way, is expected to identify good practices and potential shortcomings related to the data used throughout the ALM cycle, to organisation and procedures, and to risk identification and measurement methods.
- The analysis of the criteria applied by institutions in the calculation of the liquidity coverage ratio has made these criteria more homogenous.

In the area of governance, the following actions were carried out: i) a horizontal analysis on remuneration and risk culture; ii) a thematic review of the effectiveness and diversity of the board of directors and its capacity for debate and supervision of the institution; iii) an in-depth review of the control model (second line of defence); and iv) a horizontal review of data governance (RDAR).

- The horizontal exercise on remuneration and risk culture, which sought to ascertain how institutions reflect their risk perspective in their incentive frameworks, concluded primarily that there was a need to improve the risk alignment of the indicators used to determine variable remuneration.

- The thematic review of the effectiveness and diversity of the board of directors and its capacity for discussion and supervision of the institution highlighted weaknesses related to the succession plans for directors.
- As regards the data governance framework (RDAR), Spanish SIs accounted for 33% of the total number of SSM institutions participating in the horizontal review of the degree of compliance with the supervisory expectations stemming from the ECB guide on effective risk data aggregation and risk reporting.
- Overall progress was evident in the industry's alignment with best practices and supervisory expectations.<sup>5</sup> However, it is worth noting that the main challenge remaining was the definition of remediation plans to ensure the establishment of robust data governance and management frameworks that support appropriate decision-making.
- Other weaknesses identified were: i) insufficient involvement, lack of allocation of responsibilities and training weaknesses affecting governing bodies in the areas of governance and data quality; ii) insufficient scope of data governance frameworks, with the exclusion of certain key risk reports, financial information or information sent to the supervisor; iii) absence of comprehensive and effective validation by the second and third lines of defence of data aggregation processes; and iv) lack of detail and update of the documentation of the information flow of key risk indicators.
- Supervisory activities in the coming years will analyse compliance with the remediation measures.

In relation to climate and environmental risk management, the following supervisory actions stood out: i) the monitoring of compliance with supervisory expectations and the shortcomings identified in the 2022 thematic review; and ii) the assessment of the information published by institutions (Pillar 3) on environmental, social and governance (ESG) risks. In addition, two initiatives on these risks stood out: the Fit-for-55 exercise (coordinated by the EBA) and the workshops on this topic held at the Banco de España (known as “green Fridays”).

- With regard to compliance with supervisory expectations by the end of 2024, two specific analyses have already been carried out. In 2023, the review was focused on assessing materiality and the business environment, and it revealed weaknesses in certain institutions. As a result, binding supervisory decisions were sent to certain institutions, including the potential imposition of penalty payments in the event of non-compliance.
- In 2024, the specific monitoring of these decisions and of compliance with the requirements set for the end of 2023 showed significant efforts and improvements, but it also revealed

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<sup>5</sup> The ECB considers the [Principles for effective risk data aggregation and risk reporting](#), published by the Basel Committee on Banking Supervision in January 2013, to be a benchmark for good practice in this area.

that there were still non-serious weaknesses, which were reflected in new formal communications to the institutions.

- As part of the recurrent supervisory activity, a review was also performed of the ESG risk information disclosed by institutions under Pillar 3 standards, in line with EU regulations, including both qualitative and quantitative information.
- In relation to climate and environmental risk, it is also worth noting that the Fit-for-55 scenario analysis exercise, coordinated by the EBA, involved the participation of the ECB and the European Systemic Risk Board. The objective was to assess how the financial system (banking, securities and insurance) would be affected by public policies for the transition to a more decarbonised economy by 2030.
- Also, the Banco de España continued to hold its “green Fridays” in 2024. Green Fridays are specific workshops with industry participation, which in 2024 were focused on: i) reflecting on existing practices in climate scenario analysis and stress tests; and ii) analysing the challenges posed by the use of data in such exercises, particularly with regard to the energy efficiency of collateral, the climate footprint of SMEs and the physical risks that may affect them.
- In short, despite the efforts and greater awareness of the issue, challenges remain in the area of climate and environmental risk management, such as the need for institutions to develop transition plans with quantifiable intermediate deadlines and milestones for aligning their credit portfolios with the Paris Agreement objectives. It is essential to continue the dialogue with institutions and counterparties so as to analyse their ESG risk profiles, integrate them into their management and deploy the necessary actions to support the transition.

In relation to the digital transition, at the end of 2023, a specific review of institutions’ digitalisation strategies was launched within the SSM, which enabled the best practices in the sector to be identified.

- The review had a high representation of Spanish SIs (28% of the total) and it was centred on the areas of business, governance and risk management. The main objective was to assess how institutions design, manage and implement these strategies, with a particular focus on risk identification and mitigation.
- One of the good practices observed is the proactive involvement of management in defining the digitalisation strategy and supervising its implementation, although the reality is that many banks still have room for improvement in this area. What is observed in most institutions is the involvement of internal control functions in defining the digital strategy.
- On the less positive side, it should be noted that many banks have not defined with sufficient granularity the performance indicators that measure the progress of digital transformation,

Table 2.3

**On-site supervision at SIs. Number of inspections commenced in 2024**

|   | 2024                |                      | Total     |
|---|---------------------|----------------------|-----------|
|   | On-site Inspections | Model Investigations |           |
| On-site Inspections/Investigations            | 21                  | 13                   | 34        |
| At Spanish credit institutions                | 18                  | 13                   | 31        |
| Led by the Banco de España                    | 12                  | 7                    | 19        |
| Led by the ECB                                | 4                   | 2                    | 6         |
| Led by other NCAs                             | 2 (a)               | 4 (b)                | 6         |
| At credit institutions of other SSM countries | 3 (c)               | 0                    | 3         |
| <b>TOTAL</b>                                  | <b>21</b>           | <b>13</b>            | <b>34</b> |

**SOURCE:** Banco de España.

**a** Banca d'Italia and Autorité de Contrôle Prudentiel et de Résolution.

**b** Bundesbank and Banco de Portugal.

**c** The Banco de España led an inspection in France and participated in the inspections teams at German and Irish institutions.

including economic gains and losses. This makes it difficult to determine the effectiveness of their strategies or to know whether they are achieving the objectives set.

In addition, other actions were carried out which, while not falling within the supervisory priorities, are particularly salient, notably relating to market risk.

- In relation to market risk, mention should be made of a horizontal review involving three Spanish SIs on the implementation of the alternative standardised approach defined by the prudential market risk framework – fundamental review of the trading book (FRTB) – in order to analyse the degree of regulatory compliance under this new framework.
- The horizontal review identified shortcomings related to the calculation of the three components of the alternative standardised approach (the sensitivity-based approach, the default risk add-on and the residual risk add-on), the internal validation and audit review, and the methodological documentation and information reported to senior management.

With regard to **on-site inspections** of SIs in 2024 (see Table 2.3), their scope was aligned with the SSM supervisory priorities which, in turn, were geared towards further exploring the impact of the macroeconomic environment and interest rate rises on institutions.

- The design of the 2024 inspection plan was marked in particular by the impact of the macroeconomic environment on credit quality, particularly in corporate and real estate-backed lending portfolios (seven inspections), and on interest rate, liquidity and market risk management (five inspections). In addition, the planning of inspections also took into account the results of “horizontal” reviews and other areas of concern identified by the joint supervisory teams; noteworthy in this regard are the reviews of the calculation of regulatory and economic capital (three inspections).

- Also, in relation to technology risk, an inspection was carried out in 2024 at a Spanish institution that was focussed on cybersecurity and outsourcing management. In addition, the Banco de España participated in a joint inspection with the SSM of a cloud service provider serving around 40 European SIs; this joint action is not included in Table 2.3.
- With regard to grouping inspections by similar themes and characteristics, the organisational approach of “campaigns” was maintained in order to reinforce consistency in on-site inspection work. Specifically, 8 of the 18 inspections scheduled in the 2024 plan for Spanish institutions were part of one of the campaigns, in particular those assessing collateral and real estate-backed financing, collective provisioning models and credit classification for SMEs, interest rate or liquidity risk as regards the adequacy of financing and contingency plans and assessment of compliance with regulatory liquidity ratios.
- Credit risk inspections accounted for most of the weaknesses detected in 2024. The most serious weaknesses related to: i) the parameters used in internal accounting provisioning models; ii) the treatment of collateral and the haircuts applied in its valuation; and iii) the classification of transactions according to their credit risk.
- In addition, in the interest rate and liquidity risk inspections significant weaknesses were observed in: i) the models used to measure them; ii) the quality of information received by management bodies; and iii) the control framework for metrics and models.
- Lastly, it should be noted that an on-site inspection of a Spanish SI, that had commenced in 2023 and was focused on climate risk, was completed in 2024. Inspections on climate risk will continue to be carried out, either with a single subject or including the climate component in the scope of other inspections focused on other risks.

Most capital model investigations (see Table 2.3) were geared towards reviewing changes arising from both new regulatory requirements and the resolution of obligations from previous missions.

- By type of risk, in 2024 all investigations focused on credit risk models. In terms of content, most of the missions were aimed at reviewing changes in models arising from new regulatory requirements and the resolution of obligations from previous missions.
- The main weaknesses detected over the course of 2024 were concentrated in the quantification of both probability of default (PD) and loss given default (LGD) and in validation and governance processes.

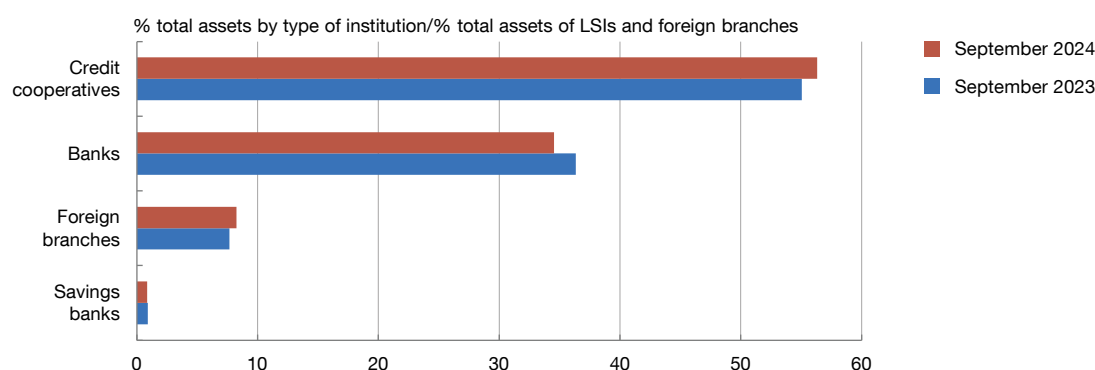
### **3.2 Supervision of less significant institutions, non-EU branches and the Official Credit Institute**

Overall, in 2024, 483 ongoing supervisory actions were carried out on LSIs and the ICO, and the economic and financial performance of 37 branches was monitored on a regular basis.



Chart 2.11

The volume of total assets of the various types of LSIs and foreign branches resulted in an increase in the weight of credit cooperatives and foreign branches, and a decrease in the weight of banks



SOURCE: Banco de España.

Also, 11 on-site inspections commenced (with particular emphasis on analysing credit quality, governance, internal control and solvency), of which 2 were completed. In addition, a further 5 inspections, which had commenced in the previous year, were also completed. Of the 11 inspections that commenced, 2 addressed technological risk, 1 of them at a major LSI technology service provider.

The supervisory actions described above resulted in 115 letters being sent to LSIs and the ICO (see Chart 2.12).

Chart 2.13 shows the breakdown by subject matter of the 528 requirements and recommendations included in the letters addressed to LSIs (stemming from the conclusions of the SREP, the review of recovery plans and inspections), the most salient content of which is described below.

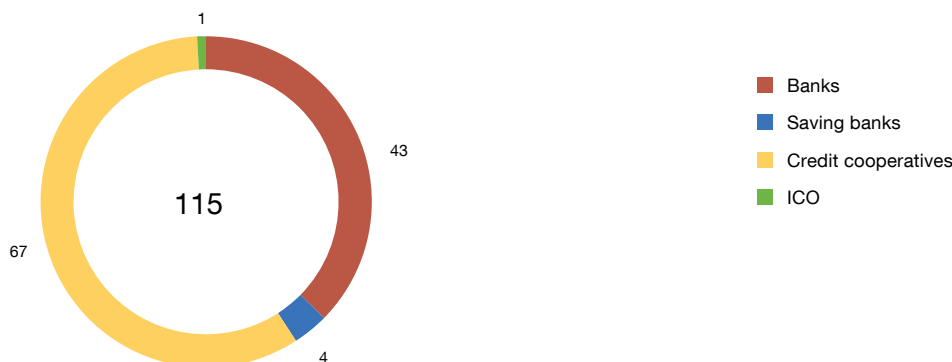
The SREP plays a key role in off-site monitoring and leads to the subsequent capital decision. It is carried out in line with the common SSM methodology and incorporates all the information obtained from all the supervisory activities carried out on institutions (monitoring, thematic reviews, inspections, meetings with persons responsible, etc.). The SREP carried out in 2024 resulted in a weighted average P2R requirement for LSIs of 1.72%, while the P2G guidance remained constant at a weighted average of 0.99%.

- As a result of the SREP, the weighted average P2R applicable to LSIs in 2025 was 1.72%, down 8 bp with respect to the SREP carried out in 2023. The P2R remained broadly stable: it was unchanged for 39 institutions, increased for 11 and decreased for 9. The 8 bp reduction in the weighted average P2R was largely due to the decrease in the case of 2 institutions, which previously had high requirements.
- In 2024, the need to establish a capital add-on for excessive leverage was also analysed, but in no case was it necessary to require this add-on.

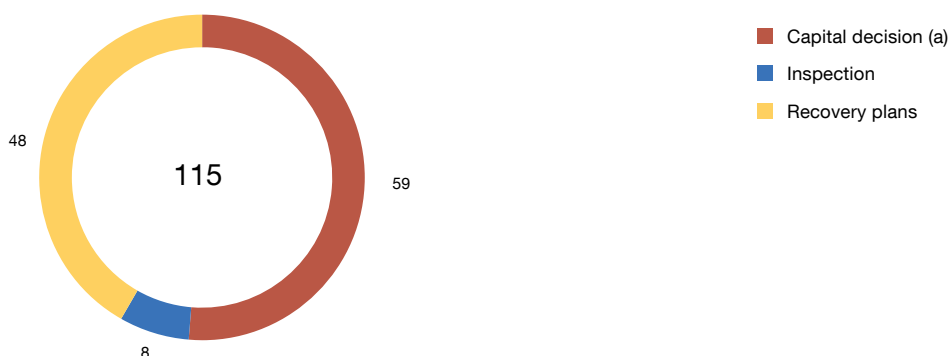
Chart 2.12

**Capital decisions account for 51% of the number of letters addressed to LSIs, while another 42% relate to the assessment of recovery plans**

### 2.12.a By type of institution (2024)



### 2.12.b By origin (2024)



SOURCE: Banco de España.

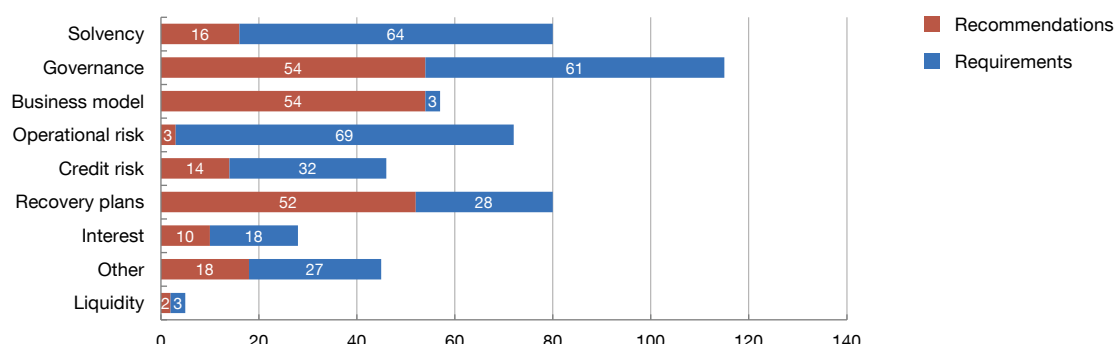
**a** The 59 capital decision letters addressed to the 58 LSI institutions or groups (in one case a letter was addressed to a subsidiary of an LSI group in addition to the group itself) and to the ICO.

- The P2G guidance, which was calibrated in 2023 for two years, remained unchanged in 2024 at a weighted average of 0.99%.
- The P2G is set using results of the domestic stress test (see section 3.3) known as the Forward-Looking Exercise on Spanish Banks (FLESB), together with the quantitative results of the stress tests performed by the institutions within their internal capital and liquidity adequacy assessment reports.
- The FLESB was also used to identify the possibility of establishing P2G guidance for excessive leverage (P2G-LR) for the first time, although this was not necessary for any LSI.

The annual letter (capital decision) to institutions with the SREP results, together with the P2R decision and P2G guidance, included requirements and recommendations to remedy the shortcomings or areas for improvement identified during supervisory activities. In 2024, the most

Chart 2.13

**Noteworthy is the number of requirements and recommendations to LSIs on governance and solvency and, to a lesser extent, business models and operational risk. There are also numerous requirements and recommendations on recovery**



SOURCE: Banco de España.

NOTE: "Other" contains requirements and recommendations in relation to climate risk and liquidity.

frequent requirements and recommendations referred to credit risk, operational risk, governance, business model, structural interest rate risk and the internal capital and liquidity adequacy assessment process report.

- With regard to credit risk, requirements were made to nine LSIs (one more than in 2023) to implement NPL and foreclosed asset reduction plans, as well as recommendations to implement NPL reduction measures for institutions whose non-performing loans have worsened and to take extra precautions in loan origination and the monitoring of credit risk.
- In the area of operational risk, the conclusions were related to the completion of the implementation of improvements in relation to information technology (IT) risk and of the adaptation of all critical outsourcing arrangements to current regulations, following the horizontal reviews carried out in 2023.
- These reviews had identified the following: i) a significant number of critical outsourcing arrangements had not been notified to the Banco de España; and (ii) many of these critical outsourcing arrangements did not comply with the requirements of Circular 2/2016 or the EBA guidelines on outsourcing arrangements.
- In 2024, the institutions were regularising this situation, adapting the arrangements to the higher requirements and preparing for the new DORA requirements.
- As regards governance, weaknesses were identified in relation to boards of directors: i) lack of gender balance; ii) high tenure/average age of members; iii) insufficient quality of minutes; iv) aspects of variable remuneration; and iv) the need to reinforce internal audit's independence, improve its resources and qualifications, and establish procedures for monitoring its recommendations and action plans, among other matters.

- In relation to the business model, they referred to improvements in the definition of strategic plans, in their integration into internal management and in the identification, communication and resolution of deviations, and to the need to take concrete measures in order to ensure recurring profitability, efficiency and improvement of the balance sheet structure.
- With regard to interest rate risk, recommendations were included on the need for active management, risk monitoring and corrective measures, and requirements were communicated on the need to intensify control and strengthen monitoring of interest rate risk and to return to compliance for institutions that exceed regulatory limits (impact on the scenarios considered: greater than 15% of economic value or greater than 5% of income).
- In relation to the review of the “internal capital and liquidity adequacy assessment report”, requirements and recommendations were made on: i) integration of leverage in capital planning; ii) improvement of quantitative analysis in risk assessment; iii) full integration of structural balance sheet credit spread risk; iv) adequate justification of capital and liquidity stress tests; v) explanation of the use of the results of these tests in planning and strategy, and vi) scenarios included in the stress exercise.

The letters on recovery plans are mandatory, and most of the recommendations in them (33 out of 52) referred, in 2024, to the fact that these plans do not include all the indicators listed in Annex II of the EBA/GL/2021/11 Guidelines, without adequately justifying why these specific indicators are not relevant to the institution or, where appropriate, replacing them with more relevant ones.

The off-site monitoring actions also include regular monitoring of LSIs and branches, with different scopes depending on the type of institution.

- Quarterly monitoring of LSIs or groups of LSIs is intended to anticipate the detection of potential problems in the various risks. It includes an assessment of the status of the requirements and recommendations not yet resolved by each institution, which is reported to the Executive Committee of the Banco de España within the framework of the supervisory plan activities.
- In the case of branches in Spain of LSIs with headquarters in other EU Member States (not subject to prudential or liquidity requirements), their performance is monitored on a regular basis.
- The regular monitoring of branches in Spain of credit institutions from non-EU countries (non-EU branches) includes the analysis of their performance and the assessment of compliance with the solvency regulation requirements from which they have not been exempted.<sup>6</sup>

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<sup>6</sup> The Banco de España, upon reasoned request, may exempt branches in Spain of credit institutions with headquarters in a non-EU country from compliance with Parts Three, Four, Six, Seven and Seven bis of Regulation (EU) No 575/2013, and from compliance with Chapter 3 and Section 3 of Chapter 4 of this circular, provided that the conditions set out in Article 55 of Royal Decree 84/2015 and Rules 4.5 and 4.6 of Circular 2/2016 are met.

In addition, two horizontal reviews were carried out on two LSI samples, and monitoring continued of the review carried out in 2023 of the outsourcing of critical functions and activities.

- One of the horizontal reviews relates to climate risk management and aimed to verify the effective implementation of controls in the identification, pricing and monitoring of a selection of exposures to the most polluting sectors.
- Progress was seen in the degree of alignment and checks were made as to whether the LSIs have basic practices in place regarding: i) integration of climate-related risks into their customer onboarding processes; ii) use of qualitative and quantitative information to identify and assess climate risks; iii) adequate mechanisms for supervising climate-related credit risk; and iv) consideration of climate risks in their loan pricing framework.
- The longest delays relate to the integration of climate risks into their credit policies and collateral valuations.
- The second horizontal review, regarding credit risk, included institutions with potential shortcomings in the reclassification and coverage of their credit risk.

In relation to on-site inspections, the letters sent to institutions highlighted weaknesses in: i) governance (in the functioning of the management body and the appointment and remuneration committees, and internal audit); ii) credit risk appetite policies and guidelines; and iii) the quantification of risk-weighted assets for the calculation of solvency ratios.

In addition, the Banco de España participated in the supervisory colleges of the subsidiary of a third-country bank and the branch of an EU credit institution,<sup>7</sup> contributing to joint decision-making on capital and liquidity requirements; in a European resolution college of the subsidiary of a third-country bank;<sup>8</sup> in three supervisory colleges,<sup>9</sup> and in three resolution colleges<sup>10</sup> of central counterparties (CCPs).

7 In accordance with Article 3(2) of Delegated Regulation (EU) 2016/98, the consolidating supervisor may invite the competent authorities of host Member States where non-significant branches are established to participate in the college as observers.

8 In accordance with Article 89 of Directive 2014/59/EU establishing a framework for the recovery and resolution of credit institutions and investment firms (Article 88 BRRD), where a third country institution or third country parent undertaking has EU subsidiaries established in two or more Member States, or two or more EU branches that are regarded as significant by two or more Member States, the resolution authorities of the Member States where those EU subsidiaries are established or where those significant branches are located shall establish a European resolution college.

9 In accordance with Article 18(2)(c) of Regulation (EU) No 648/2012 on OTC derivatives, central counterparties and trade repositories (commonly known as EMIR), the Banco de España participates as the competent authority responsible for the supervision of clearing members established in one of the three Member States with the largest contribution to the default fund of the CCP.

10 In accordance with Article 4(2)(c) of Regulation (EU) 2021/23 on a framework for the recovery and resolution of CCPs, the members of the resolution college shall be the competent authorities and resolution authorities of the clearing members of the CCPs established in the three Member States that, over a one-year period, make the largest aggregate contribution to the default guarantee fund.

### 3.3 Stress tests

The results of the FLESB<sup>11</sup> stress tests show that the aggregate solvency of a majority group of LSIs, exposed to macro-financial risks, would remain high and comfortably above regulatory requirements in both the baseline and adverse scenarios.

- As in previous years, the Banco de España conducted stress tests on a group of LSIs<sup>12</sup> with the aim of measuring their capacity to cope with potential macroeconomic and financial risks arising from a baseline scenario and an adverse scenario.
- These tests are conducted under the FLESB methodological framework – described in Chapter 3 – and serve as a reference for the supervisory review and evaluation process (SREP), particularly for determining the additional capital needed in adverse conditions (P2G).
- The aggregate results of the test<sup>13</sup> (see Chart 2.14) show how capital varies at the end of the time horizon in the baseline and adverse scenarios, after a series of effects have been taken into account: positive effects (such as the use of provisions and the generation of resources) and negative effects (such as impairment and other impacts), with the former clearly predominating over the latter (even in the adverse scenario). Mention should be made of the importance of the interest rate trajectory envisaged in the two scenarios (stable in the baseline scenario and rising in the adverse scenario), which is key to maintaining high net interest income.
- Solid resilience would be maintained, even in an environment where risks materialise, such as in the adverse scenario. The high level of institutions' solvency at the end of 2023 (2 pp above the 2022 year-end level) and the high net interest income in both scenarios considered are decisive in this regard.

Furthermore, the ECB/SSM alternates annually between conducting a comprehensive solvency assessment ST and a thematic ST. While in 2023 it conducted a comprehensive ST, in 2024 it conducted a thematic ST on cyber resilience covering 109 institutions supervised by the SSM, including the 10 Spanish SIs.

- The envisaged scenario assumed a successful cyberattack affecting the integrity of the databases of the systems supporting the institutions' critical services. The central objective of the ST was to assess the institutions' response and recovery in this scenario.

11 The Banco de España's stress test (ST) exercise, FLESB, follows a top-down approach based on regulatory and supervisory reporting and on its own estimates of the various risk models and financial performance of institutions.

12 These tests are conducted in accordance with Article 55(5) of Law 10/2014 on the regulation, supervision and solvency of credit institutions.

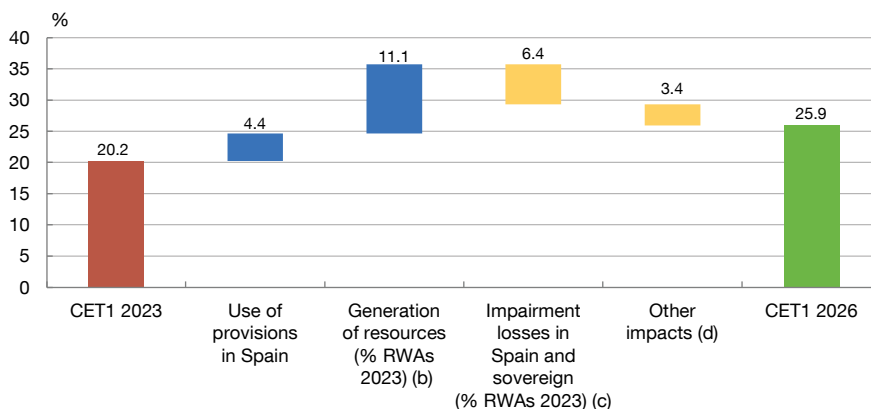
13 Following the static balance sheet principle, as in the tests conducted by the EBA, and, unlike the macroprudential exercise described in Chapter 3, without considering the possible additional adverse effects on credit risk of potential latent impairment arising from the economic effects of the COVID-19 health crisis.



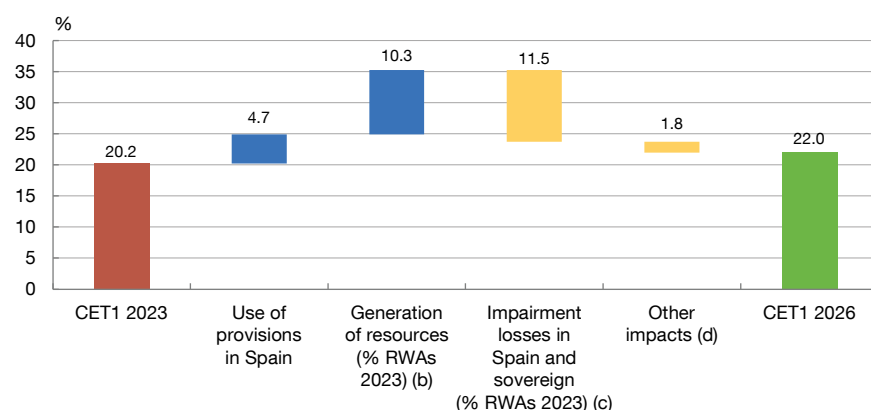
Chart 2.14

**LSIs' CET1 ratio increases in both the baseline scenario (+5.7 pp) and the adverse scenario (+1.7 pp) in the FLESB stress test**

#### 2.14.a Static baseline scenario (a)



#### 2.14.b Static adverse scenario (a)



SOURCE: Banco de España.

a The yellow (blue) colour of the bars indicates a negative (positive) contribution of the item corresponding to the change in the CET1 ratio at the horizon end of the forward-looking exercise (2026) as compared to the beginning of the exercise (end of 2023/beginning of 2024).

b The generation of loss-absorbing resources is determined by net operating income in Spain.

c Impairment losses on loans and foreclosed assets in Spain, and the impact on capital of the potential impairment of institutions' sovereign exposures.

d Other consolidated profit and loss, tax and exchange rate effects, profit distribution and changes in RWAs.

- The test consisted of a theoretical exercise in which all of the institutions completed a questionnaire and provided documentation to support their answers. In addition, a sample of 28 institutions (3 of them Spanish) covering different business models and countries underwent more thorough reviews, including a real recovery test and visits by supervisors to carry out additional checks.
- The institutions had to demonstrate aspects related to their capacity to activate response and recovery plans, analyse the situation, implement mitigation measures, manage communication with stakeholders and recover theoretically affected data and systems.

- The test showed that, although the institutions have response and recovery frameworks in place, these frameworks have areas for improvement that need to be addressed. The results were taken into account in the supervisory evaluation process for each institution.
- This is a pioneering initiative that has raised awareness of the need to strengthen institutions' cyber resilience frameworks.
- Together with the ECB and other national authorities, the Banco de España participated in both the design and execution of the test.

### 3.4 Supervision of covered bonds and securitisations

The supervisory powers over covered bonds are attributed to the Banco de España by Royal Decree-Law 24/2021.<sup>14</sup>

- This supervisory regime is complemented by the designation by the issuing institutions of a cover pool control body, which performs the ongoing monitoring of the cover assets.
- Royal Decree-Law 5/2023 of 28 June 2023 introduced significant amendments in this matter, including, inter alia, those relating to the assessment of cover assets, loan exits from the cover pool and the authorisation of loan restructurings by the control body, as well as to the appointment and sanctioning regime of that control body.

In December 2024, there were 20 Spanish credit institutions issuing covered bonds under the scope of this supervision. In 2024, individual monitoring was carried out on each of the issuing institutions, inspections were conducted, and also a consolidated horizontal analysis was performed.

- These institutions have designated a total of five commercial companies as cover pool control bodies.
- Issuers submit to the Banco de España, on a quarterly basis, the confidential returns relating to covered bonds provided for in Circular 1/2023, which entered into force on 31 March 2023.
- As a new development, the 2024 Directorate General Supervision Action Plan included inspection actions targeting covered bonds. Specifically, two of the issuers were inspected, one in each half of the year.

Issuing institutions have made efforts to adapt to the requirements of the covered bond regime and the market is functioning smoothly, providing greater security to covered bond investors.

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14 This regulation transposed Directive (EU) 2019/2162, thereby establishing a harmonised minimum regime in the EU with regard to the conditions for the issue and characteristics of this type of instrument, with the aim of promoting the unified development of these markets.

The cover pool control body's role is essential in this regard, and its review is a key part of the investor protection scheme.

As part of its supervisory functions, the Banco de España must authorise the programmes that include the characteristics of the covered bonds issued under them.

- Over the course of 2024, the Banco de España authorised one new programme and the increase in the amount of another programme.
- At the end of 2024, there were 28 authorised covered bond programmes, covering both issues outstanding at that date and issues that may occur until the programme maturity date and up to the maximum authorised amount.
- At that date, there were 211 outstanding covered bonds on the Spanish covered bond market (see Table 2.4), with a nominal value of around €207 billion, of which 90% corresponded to mortgage covered bonds, 4% to public sector covered bonds and 6% to internationalisation covered bonds.

In compliance with Royal Decree-Law 24/2021, the Banco de España discloses and updates periodically on its website ([covered bonds](#)) the list of authorised issuing institutions and of covered bonds issued under authorised programmes.

The Banco de España supervises the specific framework for simple, transparent and standardised (STS) securitization and also compliance with certain “general requirements” that all securitisations must meet.

- In accordance with Law 5/2015 of 27 April 2015 on the promotion of business financing, in 2023 the Banco de España assumed the supervision of the specific framework for STS securitisation, provided for in Regulation (EU) 2017/2402, when the issuers of these instruments are credit institutions or other institutions under the supervision of the Banco de España.
- In accordance with Regulation (EU) 2017/2402, the Banco de España must also supervise compliance with certain “general requirements” that all securitisations (whether STS or not) must meet, relating to risk retention, transparency of information, the ban on re-securitisation and credit granting. In this case, the scope of the supervision of the Banco de España concerns only LSIs, as well as the other institutions subject to the supervision of the Banco de España in accordance with sectoral regulations; therefore, for securitisations carried out by SIs, this supervisory competence is exclusive to the ECB.
- In 2024, monitoring was performed on all securitisations notified to the Banco de España within its sphere of competence that had been carried out between the beginning of 2019 (when Regulation (EU) 2017/2402 entered into force) and the end of 2023. A total of 54 securitisations were notified, of which 49 were STS securitisations (see Table 2.5).

**Table 2.4**
**Outstanding covered bonds at 31/12/2024**

Amounts in millions of euros

|              | Mortgage covered bonds |                | Public sector covered bonds |              | Internationalisation covered bonds |               |
|--------------|------------------------|----------------|-----------------------------|--------------|------------------------------------|---------------|
|              | No. of issuance        | Amount         | No. of issuance             | Amount       | No. of issuance                    | Amount        |
| SLs          | 172                    | 180,851        | 8                           | 8,290        | 9                                  | 11,605        |
| LSIs         | 22                     | 6,682          | 0                           | —            | 0                                  | 0             |
| <b>TOTAL</b> | <b>194</b>             | <b>187,533</b> | <b>8</b>                    | <b>8,290</b> | <b>9</b>                           | <b>11,605</b> |

**SOURCE:** Banco de España.

**Table 2.5**
**Individual monitoring of securitisations in relation to Regulation (EU) 2017/2402**

No. of securitisations

|              | Traditional securitisations |          | Synthetic securitisations (b) |          | <b>Total</b> |
|--------------|-----------------------------|----------|-------------------------------|----------|--------------|
|              | STS                         | Non-STS  | STS                           | Non-STS  |              |
| SLs          | 19                          | (a)      | 16                            | (a)      | <b>35</b>    |
| LSIs         | 3                           | 3        | 0                             | 0        | <b>6</b>     |
| SLIs         | 11                          | 1        | 0                             | 1        | <b>13</b>    |
| <b>TOTAL</b> | <b>33</b>                   | <b>4</b> | <b>16</b>                     | <b>1</b> | <b>54</b>    |

**SOURCE:** Banco de España.

**a** Compliance with the general securitisation requirements of non-STS by SLs is under the scope of the supervision of the ECB.

**b** So-called “balance-sheet” synthetic securitisations which comply with the requirements set out in Articles 26(3) to 26(6) of Regulation (EU) 2017/2402.

- All STS securitisations have been notified to the European Securities and Markets Authority in accordance with the procedures established for this purpose and, pursuant to Article 28 of Regulation (EU) 2017/2402, they have used the service of an authorised third party certifying that the STS criteria have been respected.
- The originators of securitisation transactions have notified their issues incorporating the reporting requirements established by the Banco de España, which enable verification of compliance with the requirements laid down in Regulation (EU) 2017/2402.

### 3.5 Anti-money laundering and countering the financing of terrorism

In 2024, AML inspections were focused on reviewing governance in relation to the AML external expert report for a sample of eight credit institutions, on the general review of two LSIs selected on the basis of their risk profile and the fact that they had not yet been inspected, and on three payment institutions, as this is a sector with significant inherent risk.

- The Banco de España’s actions in this area are planned annually in close cooperation with the Secretariat of the Commission for the Prevention of Money Laundering and

Monetary Offences (CPMLMO) and SEPBLAC, and with the National Securities Market Commission (CNMV) and the Directorate General of Insurance and Pension Funds (DGSFP), in order to avoid overlaps and optimise available resources, thus contributing to institutional efficiency.

- In 2024, in addition to the completion of a general inspection at an SI which commenced in 2023, the work on credit institutions included the review of AML/CFT policies, procedures and controls at two LSIs. As a result, requirements were issued relating to the need to improve the application of due diligence measures, customer transaction alerts, the detection, analysis and reporting of suspicious transactions as well as the allocation of technical and human resources.
- Also, a horizontal review of governance was performed on the external expert report on two SIs and six LSIs, with the aim of assessing the process for selecting the expert and the way in which the institutions monitor the expert's recommendations. As a result of this review, recommendations were made to strengthen the control over the monitoring of external expert report findings and on the need for an adequate remediation plan.
- In relation to other types of institutions, three general inspections were carried out at payment institutions (PIs), as this is a sector with significant inherent ML/FT risk according to Spanish and international risk assessments. As a result of these inspections, recommendations were made on the monitoring and control of agents, and on the implementation of the improvement measures identified by the institution in the assessment of its agent network.
- In addition to on-site inspections, the AML work is complemented by off-site monitoring of institutions supervised by the Banco de España. Thus, in 2024, 32 supervisory actions were carried out in order to update the risk profile of the most significant institutions, and the Banco de España oversaw compliance with the requirements and recommendations issued in previous inspections.
- At the international level, the Banco de España continued to cooperate closely with other AML/CFT supervisors, both at the bilateral level and by participating in international supervisory and regulatory fora. Notably, together with SEPBLAC, the Banco de España organised the AML supervisory colleges for 6 Spanish credit institutions and 1 Spanish PI.
- Also, the two authorities coordinated their participation in 70 AML/CFT supervisory colleges of other European institutions operating in Spain; the Banco de España participated in 21 of these colleges.
- Lastly, it is worth noting the approval in June 2024 of the new European prevention package, which includes the creation of the European Anti-Money Laundering Authority (AMLA), based in Frankfurt, which will have direct and indirect supervisory functions over regulated institutions and will become operational in 2025.

- The new package also includes a more harmonised regulatory framework in the EU, through a new regulation, that is directly applicable to all regulated institutions, and the sixth AML/CFT directive.

### 3.6 Common procedures, suitability assessment procedures and other procedures

Within the framework of supervision, credit institutions are subject to various administrative authorisation procedures. Common procedures are those relating to the authorisation to perform the activities specific to credit institutions, the withdrawal of such authorisation and the acquisition of qualifying holdings. They are set out in ECB Regulation (EU) No 468/2014, which establishes the framework for cooperation within the SSM between the ECB and the national competent authorities.

- In these procedures, and for Spanish institutions, the Banco de España makes an initial assessment and formulates a draft decision for each specific case. Subsequently, based on this proposal and any additional work it deems appropriate, the ECB adopts a definitive decision.

As for the other procedures, the Banco de España is responsible for those relating to Spanish LSIs and collaborates with the ECB in those relating to Spanish SIs.

Table 2.6

#### Procedures in respect of credit institutions involving the Banco de España

Data at 31 December 2024

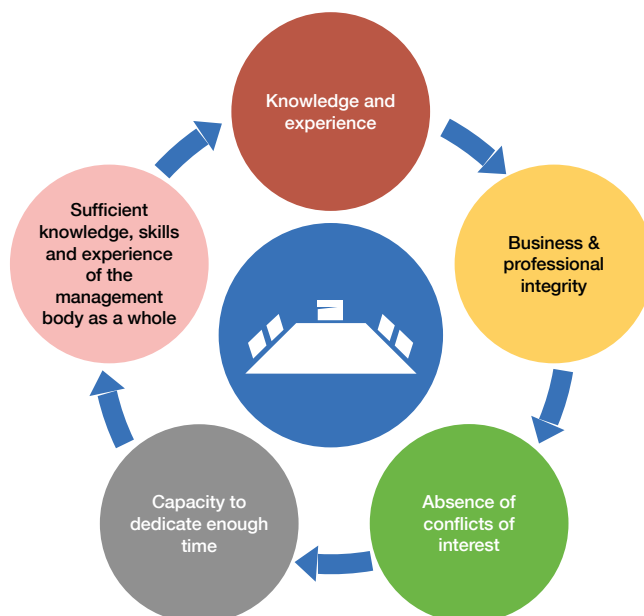
|  | Total number |
|--|--------------|
| Qualifying holdings, merger, spin-off and other significant acquisitions | 12           |
| Cross-border activity of Spanish credit institutions                     | 77           |
| Branches in the EU   | 36           |
| Branches in third countries  | 1            |
| Freedom to provide services  | 35           |
| Representative offices   | 5            |
| Deregistration   | 1            |
| Loans to directors & senior officers                                     | 31           |
| Suitability of directors & senior officers (a)                           | 172          |
| Procedures relating to capital   | 130          |
| Amendments to articles of association                                    | 38           |
| Communications with other supervisory authorities or institutions        | 30           |
| Other procedures   | 29           |
| <b>TOTAL</b>   | <b>520</b>   |

**SOURCE:** Banco de España.

**a** Includes 1 senior officer suitability assessment regarding a mixed financial holding company.

Figure 2.4

**Suitability requirements assessed for directors within the SSM**



SOURCE: Banco de España.

- These procedures include most notably the prior assessment of the suitability of directors and senior officers and their subsequent registration in the Banco de España’s Senior Officer Register.

Table 2.6 details the common procedures and the rest of the procedures on credit institutions in which the Banco de España has participated.

Figure 2.4 offers a visual summary of the determining criteria for the suitability assessment of SSM directors.



## 4 Supervision of institutions other than credit institutions

Any operator wishing to provide financial services supervised by the Banco de España must obtain prior authorisation or registration. The Banco de España is the competent authority for granting and withdrawing authorisations or registering the following institutions or activities:

- Electronic money institutions (ELMIs) and payment institutions (PIs), specialised lending institutions (SLIs) which provide payment services (SLI-PIs) or which issue electronic money (SLI-ELMIs), PIs exempt pursuant to Article 14 of Royal Decree-Law 19/2018<sup>15</sup> and account information service providers (known as “aggregators”).
- Currency-exchange bureaux.
- Official recognition of appraisal companies.

The Banco de España is also responsible for carrying out certain actions related to the authorisation and verification of requirements for other types of institutions, and for supervising certain aspects of some of these institutions:

- Issuance of the mandatory report on the authorisation of SLIs, mutual guarantee societies (MGSs) and re-guarantee companies, the granting of which is the prerogative of the Ministry of Economy, Trade and Business.
- Verification that payment service providers that notify that their activity is covered by one of the exclusions provided for in Article 4(k) or (l) of Royal Decree-Law 19/2018 meet the necessary criteria.
- Supervision of Sareb (the asset management company for assets arising from bank restructuring)<sup>16</sup> and banking foundations.<sup>17</sup>
- From 30 June 2024,<sup>18</sup> authorisation, supervision, inspection and sanctioning of issuers of asset-referenced tokens (ARTs) and electronic money tokens (EMTs). The Banco de España

<sup>15</sup> These are small payment institutions (SPI) that are subject to a process of registration in the PI register, subject to less stringent requirements than those required in an PI authorisation process, insofar as the total average value of payment transactions executed in the preceding 12 months, including any agents for whom it assumes full responsibility, does not exceed €3 million per month. Only certain regulatory provisions of Royal Decree-Law 19/2018 apply to them.

<sup>16</sup> The Banco de España supervises fulfilment of Sareb’s sole corporate purpose, in order to identify deviations therefrom that jeopardise the attainment of Sareb’s overall legal objectives.

<sup>17</sup> Law 26/2013 of 27 December 2013 on savings banks and banking foundations confers on the Banco de España control of compliance with certain rules related to the influence of the banking foundation over the sound and prudent management of the investee credit institution, in the event that the foundation holds an ownership interest of, at least, 30% of the share capital of the credit institution or which allows it to exercise control. This compliance control involves the submission for approval by the Banco de España of management protocols and annual financial plans.

<sup>18</sup> The date of entry into force of Titles III and IV of Regulation (EU) 2023/1114 (MiCAR) relating to the issuance, offer to the public and admission to trading of asset-referenced tokens (ARTs) and electronic money tokens (EMTs).

is also responsible for verifying issuers' compliance with the requirements for eligibility for the exemptions under Articles 16(2) and 48(5) of MiCAR. For more information on the regulation of ARTs and EMTs introduced by MiCAR, see Box 2.6.

In 2024, the Banco de España introduced several improvements to the authorisation and registration procedures.

- The review of certain aspects of the projects was brought forward to the pre-application stage, which enabled the early identification of potential problems.
- The forms published on the Sede Electrónica (Electronic Headquarters) were improved in order to expand and specify the documentation to be provided with them.
- Certain manual tasks were automated in order to streamline procedures; this process will continue with a view to enhancing efficiency.
- In the MiCAR area, the Banco de España made “expressions of interest” forms available on the Sede Electrónica so that those interested in issuing and offering to the public and requesting admission to trading of ARTs or EMTs can notify the Banco de España before initiating the formal procedure.
- Table 2.7 lists other categories of institutions other than credit institutions that are registered with the Banco de España.

It is worth noting the upward trend in the number of electronic money or payment service providers (PSPs)<sup>19</sup> in the Spanish market. The number of registered PSPs other than credit institutions increased from 49 at the end of 2018 to 82 at the end of 2024 (51 PIs, 12 ELMIs, 14 PIs that are exempt pursuant to Article 14 of Royal Decree-Law 19/2018, and 5 aggregators). This trend is shaping a heterogeneous ecosystem with diverse business models, which requires increased supervisory efforts. The number of PSPs with payment instruments excluded under Article 4 of the aforementioned Royal Decree-Law<sup>20</sup> also continues to grow.

- With regard to authorisation processes, 23 applications for authorisation of ELMIs or PIs were resolved, of which 10 were authorised, 12 were withdrawn and 1 was rejected.<sup>21</sup> Also, 10 requests were processed regarding the exclusion from the scope of application of the payment services regulation of certain payment instruments that can only be used in a limited way, resulting in 4 being accepted, 5 dismissed and 1 withdrawn.

19 The PSP category comprises the following types of institution: a) credit institutions, b) ELMIs, c) PIs, d) exempt PIs, and e) account information service providers (aggregators).

20 The payment service providers excluded under Article 4 of Royal Decree-Law 19/2018 that are included in Table 2.7 are subject to a separate registration regime at the Banco de España and only certain regulatory provisions of the aforementioned Royal Decree-Law are applicable to them.

21 A significant proportion of these dismissed or rejected projects had business plans that were not sufficiently mature or viable. It should be noted that this sector in Spain has a large number of existing operators, with a high concentration of activity within few players and difficulties in making the business profitable.

Table 2.7

**Register of institutions other than credit institutions. Upward trend**

Data at 31 December 2024

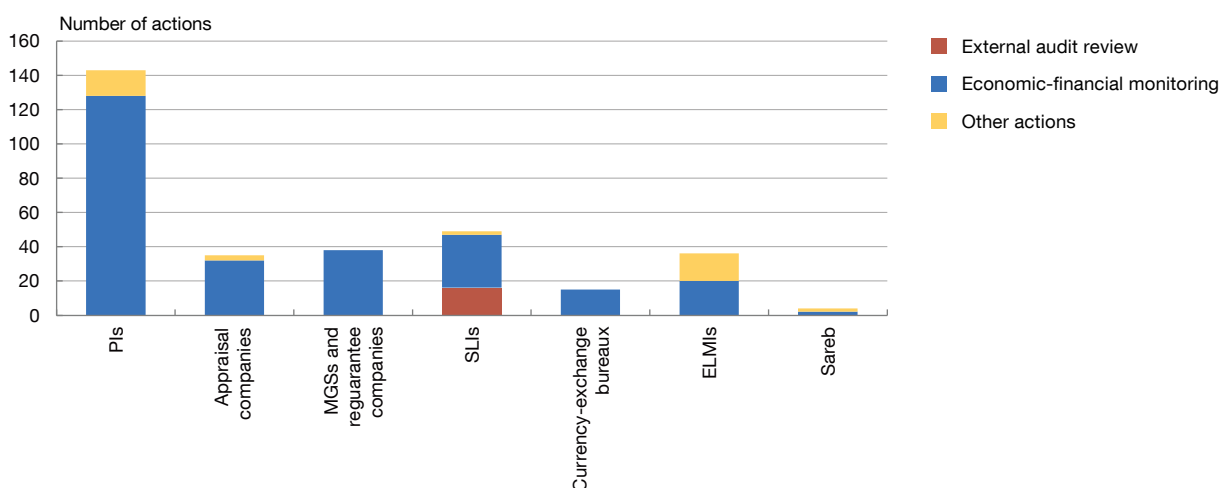
|   | 2022       | 2023       | 2024       |
|---|------------|------------|------------|
| SLIs  | 24         | 25         | 23         |
| SLI-PIs   | 9          | 9          | 10         |
| Branches of financial institutions subsidiaries of EU credit institutions | 1          | 1          | 1          |
| MGSs and reguarantee companies  | 19         | 19         | 19         |
| Appraisal companies   | 32         | 32         | 31         |
| Currency-exchange bureaux (a)   | 16         | 15         | 15         |
| PIs   | 52         | 50         | 51         |
| PIs exempt under Article 14 of Royal Decree-law 19/2018                   | 10         | 14         | 14         |
| Payment service providers with excluded payment instruments (b)           | 18         | 23         | 25         |
| Account information service providers                                     | 3          | 4          | 5          |
| ELMIs   | 10         | 10         | 12         |
| Branches of EU PIs  | 9          | 8          | 9          |
| Branches of EU ELMIs  | 4          | 6          | 8          |
| <b>TOTAL</b>  | <b>207</b> | <b>216</b> | <b>223</b> |

**SOURCE:** Banco de España.

**a** Not including establishments authorised only to purchase currency using euros.

**b** Payment service providers with excluded payment instruments under Article 4 of Royal Decree-Law 19/2018.

Chart 2.15

**High number of off-site supervisory actions on institutions other than credit institutions (outside the scope of the SSM), the vast majority of which are economic-financial monitoring**

**SOURCE:** Banco de España.

- In addition, 7 notifications were received from various European supervisory authorities requesting the establishment of branches in Spain by PIs and ELMIs, all of which received favourable reports.

Monitoring these institutions involved a total of 320 actions in 2024, the breakdown of which is shown in Chart 2.15. Also, 8 inspections were carried out (1 PI, 1 ELMI, 2 MGSs and 4 appraisal

**Table 2.8**
**Other procedures performed by the Banco de España on institutions**

Data at 31 December 2024

|  | PIs    | ELMIs | SLIs | MGSs | Appraisal companies | Currency-exchange bureaux | Sareb | Banking foundations | Total other institutions |
|--|--------|-------|------|------|---------------------|---------------------------|-------|---------------------|--------------------------|
| Qualifying holdings, mergers, spin-offs and other significant acquisitions | 12     | 3     | 3    |      | 5                   | 3                         |       |                     | 26                       |
| Cross-border activity of Spanish credit institutions (a)                   | 2,435  | 89    | 0    |      |                     |                           |       |                     | 2,524                    |
| Branches in the EU   | 8      | 1     |      |      |                     |                           |       |                     | 9                        |
| Branches in third countries  |        |       |      |      |                     |                           |       |                     | 0                        |
| Freedom to provide services  | 259    | 75    |      |      |                     |                           |       |                     | 334                      |
| Agents   | 2,168  | 13    |      |      |                     |                           |       |                     | 2,181                    |
| Deregistration   | 4      |       | 1    |      | 1                   |                           |       |                     | 6                        |
| Suitability of senior officers   | 62 (b) | 21    | 53   | 49   | 10                  | 4                         |       |                     | 199                      |
| Procedures relating to capital   | 4      | 1     | 5    | 1    |                     |                           |       |                     | 11                       |
| Amendments to articles of associatio                                       | 6      | 0     | 3    | 4    |                     |                           |       |                     | 13                       |
| Authorisation of management protocol and financial plan                    |        |       |      |      |                     |                           |       |                     | 0                        |
| Communications with other supervisory authorities or institutions          |        |       |      |      |                     | 1                         |       |                     | 1                        |
| Other procedures   |        |       | 4    | 1    |                     |                           |       | 10                  | 15                       |
| <b>TOTAL</b>   |        |       |      |      |                     |                           |       |                     | <b>2,795</b>             |

**SOURCE:** Banco de España.

**a** Each daily notification per recipient country and institution is deemed a procedure.

**b** Includes 3 SLI-PI suitability procedures.

companies), of which 4 were completed. In addition, to complement this, the details of the high number (2,795) of other procedures carried out by the Banco de España in relation to these institutions are shown in Table 2.8.

## 4.1 Specialised lending institutions

Supervision of this category of institutions was performed mainly through 49 off-site actions, including most notably 31 economic and financial monitoring exercises and 16 external audit reviews (see Chart 2.15). No inspections were carried out on this group in 2024. It is worth noting the high number (53) of senior officer suitability assessment procedures (see Table 2.8).

## 4.2 Payment institutions and electronic money institutions

Supervisory actions<sup>22</sup> on PSPs other than credit institutions, in particular PIs and ELMIs, included on-site inspections, the monitoring of ongoing supervisory measures and off-site supervisory actions:

- As well as completing 1 on-site inspection at an ELMI that began in 2023 and commencing an on-site at 1 PI, monitoring was performed on the implementation of the corrective measures required of 2 ELMIs as a result of 2 on-site inspections (the inspection completed in 2024 and another earlier inspection).
- In addition, 179 off-site actions were carried out (see Chart 2.15), including most notably 148 monitoring actions on the economic and financial situation of IPs and ELMIs and the review of compliance by 16 institutions (including among them all ELMIs) with the requirements for the guarantee and protection of payment service users' funds.
- Mention should be made of the high number of senior officer suitability assessment processes (83), due in part to the numerous changes in capital structure mentioned below.

With regard to the supervision of operational aspects and the safeguarding of funds in the area of PSPs other than credit institutions, of particular significance were the outsourcing of operational functions, communications related to international activity and requests for changes to the safeguarding method.

- There were 54 outsourcing notifications by PIs and ELMIs, most of which related to critical operational functions, more than double the number in the previous year. Also, within the EU, the Banco de España participated in the Joint-ESAs' "dry run" exercise on ICT Third Party Providers<sup>23</sup> in order to help the PIs and ELMIs prepare for the submission of information on contractual arrangements with third parties required by DORA.
- As regards the method of protecting funds received from payment service users for the execution of payments, 3 requests were registered for a change to the sole safeguarding method used to date.<sup>24</sup> Of these requests, 2 were in progress and 1 was completed.<sup>25</sup>

22 The Banco de España has distributed the supervision of PIs and ELMIs internally between the Directorate General Supervision and the Directorate General Operations, Markets and Payment Systems. To simplify matters: (i) the Directorate General Supervision supervises solvency, the shareholder structure and business model from a profitability perspective; and (ii) the Directorate General Operations, Markets and Payment Systems supervises the safeguarding of funds and the operational and technological aspects of payment service provision.

23 <https://www.eba.europa.eu/activities/direct-supervision-and-oversight/digital-operational-resilience-act/preparation-dora-application>

24 Separation of such funds from any other funds and their deposit in a separate account with an EU credit institution, with an express reference to their status as customer funds of the institution concerned.

25 Of the requests in progress, one seeks to safeguard customer funds by investing them in liquid, secure and low-risk assets that have no credit risk weight in accordance with Article 114 of Regulation (EU) No. 575/2013, while the second has communicated its intention to safeguard them through an insurance policy or other comparable guarantee from an insurance company or credit institution. The latter is the method chosen by the institution that has already been authorised to change its method.

In terms of results and profitability in the specialised payment service provider sector, in recent years there has been marked polarisation, with institutions operating with very uneven solvency margins and approximately half of PSPs reporting losses and difficulties in meeting their business expectations.

- Consequently, in the last five years there have been up to 35 cases of non-compliance with capital requirements due to scant internal capital generation.
- In 2024, work was carried out to establish a classification on the basis of the supervisory risk profile of solvency and profitability of Spanish Pls and ELMIs, as well as to define specific action plans that enable closer monitoring of the institutions with the highest risk profile.
- The shareholder structures of institutions in the sector have undergone numerous changes in recent years, although in 2024 there was a slight slowdown in investor appetite for this sector compared to previous years.

With the aim of providing greater transparency on supervisory expectations for specialised PSPs in relation to institutions' good governance, sustainability of their business models and capital generation capacity, the Banco de España's Directorate General Supervision is expected to publish in the course of 2025 a document setting out supervisory expectations as to how Pls and ELMIs should progress in risk management and control of their activity in the above-mentioned issues. In addition, a supervisory action plan on these matters will be designed.

- These expectations revolve, inter alia, around institutions' good governance and the need for internal reflection on the sustainability of their business models and their capital generation capacity, including, where necessary, the availability of recapitalisation plans.
- As this is a sector in which institutions carry out very diverse activities, each institution is expected to be able to identify the aspects that are relevant to it and take the necessary actions so that the risks assumed are adequately managed and controlled and that users' funds are fully secured.
- The design of a supervisory action plan is also planned, with a cross-institutional review of business models based on a broad sample of institutions with recurring problems in the generation of earnings and viability, with a view to adopting supervisory measures.

### 4.3 Appraisal companies

Since 2018, on-site inspections have been carried out at several appraisal companies which, together, account for an 80.7% market share of the total volume of appraisals. In 2024, the supervision of appraisal companies included 35 off-site actions (see Chart 2.15) and 4 inspections, of which 2 were completed in 2024.

- Of the 35 off-site actions, 32 consisted of economic and financial monitoring, and, of the 4 inspection visits, 2 were completed in 2024.
- The selection of companies to be inspected is based on both size and risk profile, which is determined using all available information on the companies, including data from valuations issued in the previous year.

The officially recognised appraisal company sector is concentrated and, in addition, a significant part of its business comes from credit institutions. Therefore, taking into account the banks' potentially stronger position in terms of bargaining power, a review was carried out to analyse the manner in which credit institutions contract appraisal companies, interact with them and carry out quality control on appraisals. As a result of the review, it was observed that certain practices could undermine the independence of appraisal companies or adversely affect the quality of appraisals.

- Indeed, 7 companies or groups of companies issued appraisals accounting for 67% of the total volume of appraisals in 2023, while at the other extreme, the 10 appraisal companies with an individual market share of less than 1% together issued only 3.8% of this volume.
- A significant part of the business of appraisal companies continues to come from credit institutions, which, since 2013, can no longer hold qualifying holdings in appraisal companies, a measure that was adopted to foster the independence of the sector and avoid potential conflicts of interest.
- In 2023, the Banco de España carried out a cross-institutional action, under the powers attributed to it by Law 10/2014 as mortgage market supervisor, in order to analyse the manner in which credit institutions contract appraisal companies and perform quality control on appraisals.
- This work was carried out by sending a questionnaire and conducting subsequent interviews with the heads of credit institutions, which together accounted for more than 90% of the credit market in Spain.
- Following these tasks, a letter was sent in 2024 to the various credit institution associations to warn of certain practices that could undermine the independence between credit institutions and appraisal companies or adversely affect the quality of appraisals.



## 5 Supervision of payment service providers

The PSP group (made up of credit institutions and institutions other than credit institutions) reported 32 major operational or security incidents related to payment services, mostly affecting the availability of online banking services.

- In 2024, distributed denial-of-service attacks on online banking stood out as an emerging cause of incidents, although operational incidents continued to play a predominant role.
- Two incidents reported by different PSPs stood out, both of which originated from the same correspondent service provider, which, when faced with a data security problem, decided to temporarily suspend its services for a relatively long period of time until it had sufficient evidence of its resolution.
- The Regulation on digital operational resilience for the financial sector (DORA), which replaces the regime for reporting major payment-related operational or security incidents, became applicable on 17 January 2025. Accordingly, part of the supervisory resources has been devoted to adapting systems, processes and tools to the requirements of this regime, for the purpose of facilitating institutions' compliance with the new reporting obligations.
- The new procedures were communicated to all PSPs other than credit institutions, informing them of the steps required to use them (which differ significantly from the current procedures) and announcing the organisation of an upcoming practical seminar.

The payment and fraud statistics for the first half of 2024 (see Box 2.7) show an increase in the number of fraudulent transactions in absolute and relative terms for transfers and, conversely, a decrease in card and electronic money payment transactions in both absolute and relative terms.

- In 2024, there was an increase in the fraud rate for transfers in which strong customer authentication (SCA) was applied, accompanied by a significant decrease in the average value of fraudulent transactions. This was fundamentally due to the increase in the type of fraud involving the manipulation of the payer to authenticate a payment that appears legitimate but is in fact fraudulent. The spread of this practice, together with a shift in the target of fraud from corporate environments to instant credit transfers between end users, led to a decrease in the amount defrauded per transaction.
- The type of fraud has not changed significantly, although cases of manipulation of the payer by fraudsters continue to gain relative weight and account for more than 80% of total transfer transactions.

As regards the specific interfaces provided by account servicing PSPs in accordance with the provisions of Delegated Regulation 2018/389, the monitoring tasks continued in 2024 and,

where appropriate, the potential problems reported by third-party PSPs were remedied or fixed:

- It is worth noting the general positive trend in terms of both the availability and usability of the aforementioned interfaces, which has led to a decrease in the number of reported complaints or operational problems.
- In addition, greater awareness of the need for collaboration was observed among the various players involved.

With regard to international cooperation, the Banco de España participated in knowledge-sharing activities on fraud with the Central Bank of Serbia and on the application of SCA with the Central Bank of Ukraine. It also participated in activities organised by the Latin American Reserve Fund (FLAR) related to payment systems and services.

## 6 Oversight of legal vetted access to activity and name reservation

Spanish legislation establishes that only certain duly authorised institutions or persons can carry out certain financial activities, such as the collection of deposits, provision of payment services or foreign exchange, or use certain names, such as the terms “bank”, “payment institution” or “electronic money institution”. The Banco de España’s functions include overseeing compliance with these legal restrictions and, it acts, where appropriate and with the prior authorisation of the Ministry of Economy, Trade and Business, in accordance with the Fourth Additional Provision of Law 10/2014 of 26 June 2014 on the regulation, supervision and solvency of credit institutions.

Since the end of 2023, the supervision of vetted access to activity and name reservation has been performed centrally by the Financial Fraud Prevention Unit, within the General Secretariat.

The Banco de España’s supervision of compliance with vetted access to activity and name reservation is a fundamental pillar of the preservation of stability and confidence in the financial system and the protection of its users, especially in the context of the emergence of new players and new forms of financial service provision through digital channels.

In 2024, 52 supervisory actions were performed against legal entities or individuals that may have been carrying out activities restricted to institutions supervised by the Banco de España, or simply making improper use of a name pertaining to supervised institutions.

- As can be seen in Chart 2.16, in 2024 the Banco de España significantly intensified its efforts in the supervision of vetted access to activity and name reservation, as the number of actions in the previous year was exceeded by far.

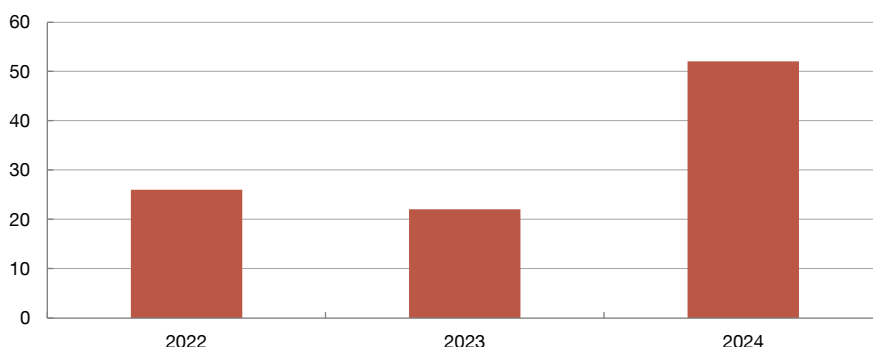
Chart 2.17 contains the breakdown of the actions carried out in 2024 by type of activity investigated.

Almost one-third of these actions were related to the possible provision, by persons not authorised or registered in the official registers of the Banco de España, of payment services, an innovative sector that has seen significant growth in recent times, driven by major technological advances. In April 2022, the Banco de España signed up to the General Protocol for Collaboration in the Fight against Financial Fraud (also known as the Action Plan against Financial Fraud), which was also signed by other authorities such as the Ministry of Economy, Trade and Business, the CNMV, the Public Prosecutor’s Office, various state and autonomous community law enforcement bodies and SEPBLAC, the main objectives of which include strengthening cooperation among the signatories, enhancing prevention and combatting fraudulent offers with a view to protecting financial service customers and investors.

The oversight of vetted access to activity and name reservation in 2025 will have two main objectives: on the one hand, to consolidate the current model of centralised supervision in a

Chart 2.16

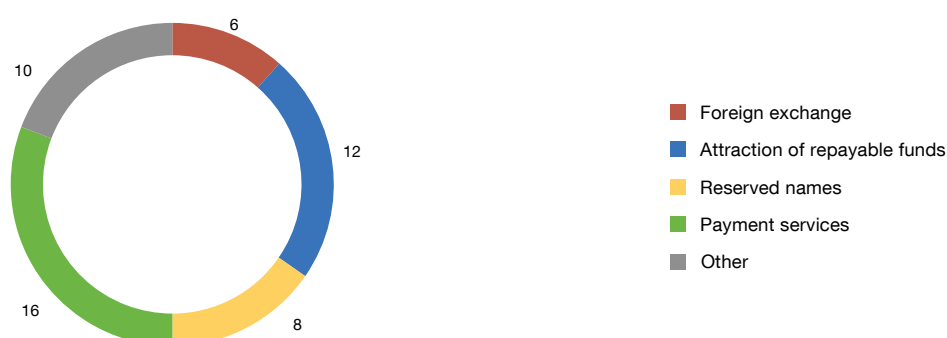
### Clear increase in actions relating to restricted activity and reserved names



SOURCE: Banco de España.

Chart 2.17

### Actions initiated in 2024 according to the type of activity under investigation



SOURCE: Banco de España.

single unit within the Banco de España; and, on the other hand, to strengthen links with institutions connected to the prevention of financial fraud.

- In 2025, the aim is to consolidate the supervisory model by reinforcing the resources allocated to the oversight of financial intrusion and adapting them to the current dynamic and digital context.
- Within the framework of the Action Plan against Financial Fraud, the signing of cooperation agreements with the most relevant institutions in the fight against financial fraud will be promoted, with the aim of improving coordination and the detection and response capacity against fraudulent activities.

## 7 SupTech function and sandbox (digital innovation controlled testing space)

### 7.1 SupTech Function

In 2024, two international experts issued their evaluation report on the SupTech function at the Banco de España, highlighting the achievements made and pointing to possible areas for further improvement. This has facilitated the update of the SupTech roadmap, guiding the development of new tools and their use in supervisory processes.

- Broadly speaking, SupTech can be defined as the use of innovative technology (e.g. machine learning and big data) by supervisory authorities to support their work.<sup>26</sup>
- As supervisor, the Banco de España has access to various sources of information. Most notably, it has access to three main types of information: i) aggregate information in the form of confidential returns; ii) granular information on loans, securities, etc.; and iii) unstructured data in the form of text, such as news, contracts or reports.
- The purpose of the SupTech function is to help supervisors transform the large volume of available data into useful information for decision-making.
- As mentioned in the Supervisory Report 2023, an evaluation of the SupTech initiative was conducted that year by two of the leading international experts in this matter. As well as highlighting the progress made in recent years, the evaluation pointed to certain areas for improvement, which are being addressed through an action plan drawn up in 2024.
- One of the core features of this plan is the updating of the roadmap with the main milestones to be achieved in the following two years, i.e. in 2025 and 2026. The main pillars of the plan are:
  - Developing new SupTech tools and enhancing the use of available SupTech tools, through greater accessibility and integration in supervisory processes.
  - Fostering a culture of innovation in the Directorate General Supervision and in the Banco de España as a whole. In this regard, it is worth highlighting the recent creation of a [cross-institutional group](#) on artificial intelligence to promote its use.
  - Offering comprehensive SupTech training, with the creation of different itineraries, with various levels depending on the degree of knowledge to be achieved, and the definition of the objectives and metrics necessary to monitor progress.

<sup>26</sup> Simone di Castri, Stefan Hohl, Arend Kulenkampff and Jermy Prenio. (2019). "The supotech generations". FSI Insights, 19. <https://www.bis.org/fsi/publ/insights19.htm>

Figure 2.5

**SupTech tools being explored**

|      | NATURAL LANGUAGE PROCESSING TOOL ON COMPANY NEWS   | GEOLOCATION AND GEOGRAPHIC INFORMATION SYSTEM   |
|------|--|---|
| WHY  | There is unstructured information on companies that is published in the news which, if properly exploited, can provide useful information for supervisory analysis.  | Supervisors face the challenge of obtaining more information, e.g. on the climate risk associated with institutions' exposures (loans, credit) and their collateral, without increasing the regulatory burden on institutions.  |
| HOW  | The tool can be divided into 3 blocks: <ul style="list-style-type: none"> <li>– It identifies the companies that appear in the news.</li> <li>– It establishes, through the use of graphs, the relationships that may exist between them.</li> <li>– On the basis of the above information, it analyses market sentiment associated with companies, or anomalous patterns that may indicate problems associated with these patterns. Based on this analysis, early warnings are designed.</li> </ul> | This involves linking the information available at the Banco de España with information from public sources, such as the land registry or the INE, or the information contained in environmental risk maps (e.g. maps of flood zones), using geolocation tools. Thus, company headquarters or collateral can be geolocated. |
| WHAT | This tool would contribute to the design of an early warning system for companies that might face economic or financial difficulties.  | This type of analysis opens up a vast range of opportunities. An example could be the possible identification of credit investment whose collateral presents a certain risk of flooding.  |

SOURCE: Banco de España.

- Seeking to be considered an international benchmark and maintaining collaboration with the SSM. One of the major milestones of 2024 was the successful development of a use case for Navi, the SSM Grafos tool. The application allows the structures of groups of credit institutions to be presented via graphs on the basis of the information contained in the FINREP 40 return.

The process of creating new tools involves four major lines of work: i) improvements in the quality of information received from institutions, particularly by reconciling aggregate and granular information; ii) detection of changes in trends and anomalous data; iii) advanced data visualisation; and iv) development and implementation of forward-looking and natural language processing tools.

Figure 2.5 provides information on two forward-looking tools that are currently being explored. In line with the evaluators' recommendations, both tools use new information sources and explore new risks.

## 7.2 Financial innovation controlled testing space: sandbox

The financial sandbox, created in 2020, provides benefits both to promoters of innovative projects for the financial sector and to sectoral authorities.<sup>27</sup>

In 2024, the Banco de España conducted an exercise to analyse the impact of the sandbox on the promoter projects monitored by the Bank. To this end, bilateral meetings were held and information was gathered on their experience and on the status of these initiatives. In addition, the promoters shared suggestions with the Banco de España on how to improve the functioning of the tool.

- The main benefits include most notably the usefulness of interaction with the supervisor in order to redefine initial proposals and optimise the associated processes.
- It allows potential regulatory barriers to be identified and regulatory doubts related to the Banco de España's sphere of competence to be resolved.
- The sandbox is also considered to add value to improve promoters' image both internally and vis-à-vis third parties. In certain cases, it has even facilitated access to financing and potential customers.
- Furthermore, the controlled testing space fulfils the authorities' objective, as it helps supervisors better understand the implications of digital transformation and how it fits into the current regulatory framework.
- In April 2024, the document [Questions and answers on the functioning of the regulatory sandbox and the Banco de España's consultation channels related to financial innovation](#), was published on the Banco de España's website to improve innovation facilitators' understanding.

As regards the sandbox's first eight calls, the promoters of the projects analysed by the Banco de España were mainly fintechs, banks and financial consultancy firms, as shown in Chart 2.18. In projects with a favourable prior assessment, the most widely used technologies were distributed ledger technology, artificial intelligence and biometrics or digital identity, as shown in Chart 2.19.

Throughout 2024, projects from five calls coexisted. During that period the seventh and eighth calls were launched, with one project assigned to the Banco de España, which will also participate as an observer authority in another project.

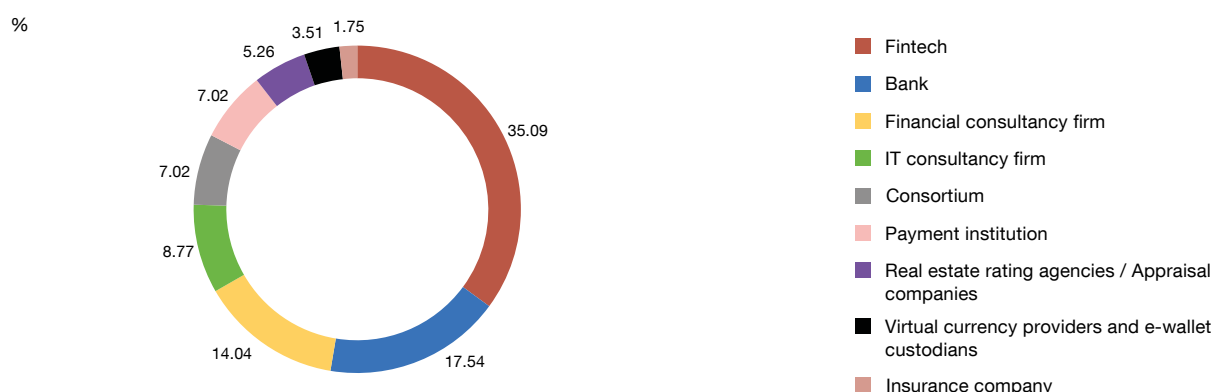
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<sup>27</sup> For more information on the functioning of the sandbox, see the Banco de España blog post "[Sandbox: the testing environment for financial innovation](#)".



Chart 2.18

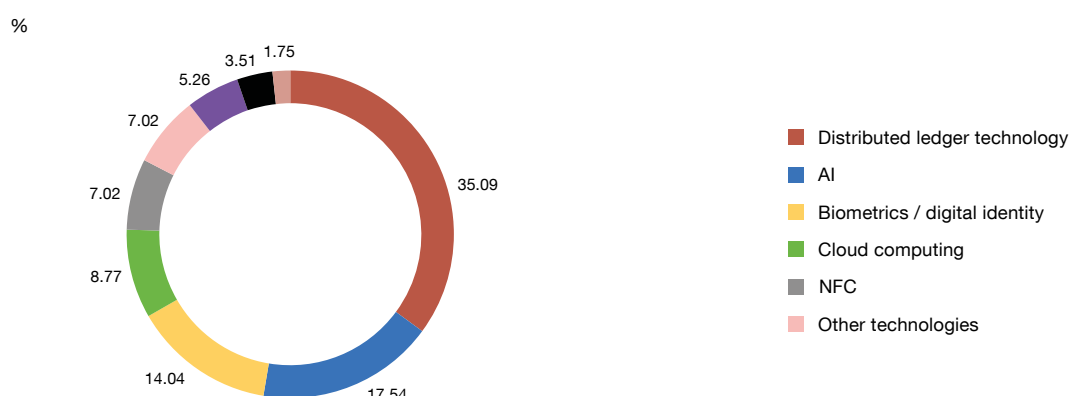
**Among the types of promoters in the sandbox projects analysed by the Banco de España, fintechs stand out most, followed by banks and financial consultancy firms**



SOURCE: Banco de España.

Chart 2.19

**Among the projects with favourable prior assessment, distributed ledger technology prevails, followed by AI and biometrics/digital identity**



SOURCE: Banco de España.

- In the seventh call,<sup>28</sup> the Banco de España was assigned a project, which received a favourable prior assessment. However, it did not reach the testing phase.
- In the eighth call,<sup>29</sup> the Banco de España will participate as an observer authority in one project.

In addition, over the course of 2024, testing was completed and the documents containing the conclusions of one project from the fourth call and four projects from the fifth call were

<sup>28</sup> Announced by the [Resolution of the General Secretariat of the Treasury and International Financing of 16 January 2024](#), with an application submission period between 1 March and 15 April 2024.

<sup>29</sup> Announced by the [Resolution of the General Secretariat of the Treasury and International Financing of 28 June 2024](#), with an application submission period between 2 September and 11 October 2024.

published. These projects are based on a mobile app called DNI Wallet, the details being as follows:

- The “Monei” project consists of a payment solution that, through the use of blockchain technology, allows payment transactions to be made with so-called EURM tokens that aim to maintain their value stable at par with the euro. With this solution, the project’s promoter seeks to compete with other card-based or SEPA transfer-based payment solutions.
- The “Tarjeta Openbank en DNI Wallet” (Openbank Card in DNI Wallet) project consists of the creation of a customer card (Openbank Card) as a method of identity verification for customers and non-customers to carry out multiple transactions. For this purpose, this card is stored in the DNI Wallet app, which provides direct access to the app and to the Openbank website. It also checks that the corresponding ID document (DNI) has been neither tampered with nor revoked and that it has not expired.
- The “Onboarding financiero con DNI Wallet” (Financial Onboarding with DNI Wallet) project consists of a solution for reliably identifying a potential customer during the onboarding process. To this end, the data set included in the ID document chip presented via the DNI Wallet is used. In addition, the customer’s ID document is checked to ensure that it has been neither tampered with nor revoked and that it has not expired.
- The “Segundo factor de autenticación con DNI Wallet” (Second authentication factor with DNI Wallet) project uses the DNI Wallet app as a second authentication factor when the user wishes to modify their personal data on the institution’s website. On the one hand, it checks that the ID document has been neither tampered with nor revoked and that it has not expired. On the other hand, it checks that the ID document presented physically is the one previously selected by the user in the DNI Wallet app.
- The “Identificación física en oficina con DNI Wallet” (Physical identification in the branch with DNI Wallet) project allows a user’s identity to be checked in the physical branch and verifies that their ID document has been neither tampered with nor revoked and that it has not expired. For this purpose, the DNI Wallet app is used instead of the physical ID card.

None of the projects tested in the sandbox, from its launch to date, is applicable to a better performance of the supervisory functions carried out by the Banco de España.

## Box 2.1

**BUSINESS MODEL OF SPANISH SIGNIFICANT INSTITUTIONS VERSUS EUROPEAN ONES**

The integration of a group of countries into a banking union, such as the European one, does not necessarily mean that their banking systems are homogeneous. In fact, there are substantial differences between the various countries. The aim of this box is to highlight some of the differences between Spanish and European significant institutions (SIs), with the focus on their business model.

Firstly, Spanish SIs represent an overwhelming majority of the Spanish banking system, in contrast to certain jurisdictions. Thus, 94% of the market share held by Spanish institutions (excluding foreign subsidiaries and branches) corresponds to the ten Spanish SI groups, as compared to 84% of the average for the SIs that make up the Single Supervisory Mechanism (SSM)<sup>1</sup> or, for example, 61% in Germany. Therefore, talking about the business model of Spanish SIs could be likened to talking about the business model of Spanish banks, unlike in some cases, such as Germany, where this could be very nuanced.

When we analyse the business model of Spanish SIs, in comparison to SIs of other countries, the first thing we see is the greater weight of commercial banking and, in particular, retail banking.

Thus, on the asset side, there is a higher proportion of loans to households and SMEs (40.1% of assets, as compared to 31.8% for the European (SSM) average) and a greater weight of variable-rate loans (49.6% vs. 31.1%, although the difference is narrowing). The latter entails a greater natural sensitivity of net interest income to interest rate movements, which has played a significant role in the recent increases in Spanish banks' profitability. In addition, the weight of the trading book, which is more typical of investment banking activities, remains relatively small, as shown by off-balance sheet items, e.g. the significantly lower weight of trading derivatives (in notional amounts).

On the liability side, there is also a greater weight of retail funding, basically deposits from households and SMEs (44.2% vs. 33.7% in the SSM), which means that the proportion of liabilities covered by the deposit guarantee fund is higher than in other jurisdictions (34.5% vs. 25.8% in the SSM). In addition, the weight of time deposits with respect to total deposits is significantly lower than in other countries (17.8% vs. 42% in the SSM). These two factors provide Spanish institutions with a more stable and profitable funding base, which has further reinforced the greater increase in asset profitability, as mentioned above.

All of this is also clearly reflected in the income statement, where net interest income is overwhelmingly predominant (representing 75.4% of gross income, against 59.2% for

Chart 1  
RoE (SIs)

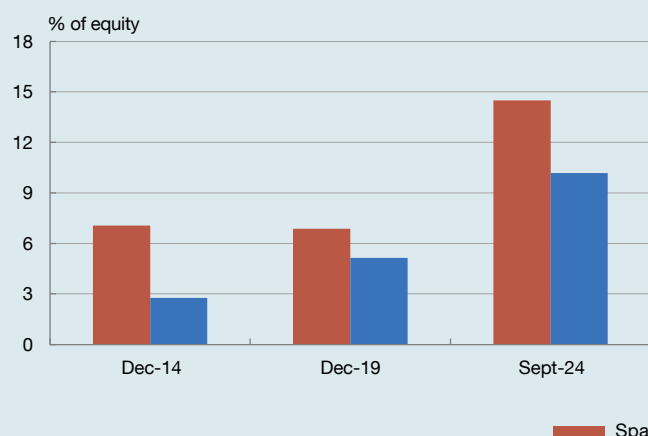
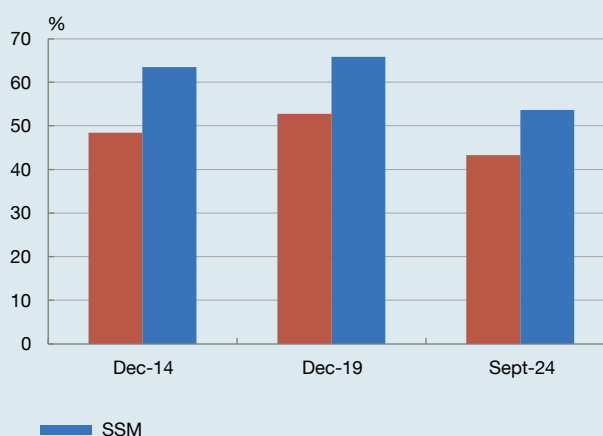


Chart 2  
Efficiency ratio (SIs)



**SOURCE:** Produced by the Banco de España.

<sup>1</sup> Both here and from this point onwards, the average includes Spanish institutions.

## Box 2.1

**BUSINESS MODEL OF SPANISH SIGNIFICANT INSTITUTIONS VERSUS EUROPEAN ONES (cont'd)**

the European average). Commissions come in a secondary but important position (23% vs. 28.5% in the SSM), and the rest of net income is fairly residual, while in other countries the latter is more significant. This income structure makes Spanish banks' profitability more recurring and predictable.

When one compares profitability and risk (risk-weighted assets; RWAs), Spanish institutions generate more gross income per unit of risk than the European average (8.5% vs. 6.8% in the SSM), with a similar level of operating expenses (3.7% of RWAs), thereby translating into better efficiency levels (43.3% vs. 53.6% in the SSM).

In the first nine months of 2024, loan loss provisions as a percentage of RWAs were almost three times the European average (1.4% annualised vs. 0.5% in the SSM), which has been a regular situation since the creation of the SSM, although the difference has usually been less marked (the average over the last five years was around double the European average).

In a context in which the greater provisioning needs arising from the global financial crisis would already have been met, that situation could be due, on the one hand, to the greater weight of retail banking, as mentioned above, and, on the other hand, to the higher proportion of exposures in emerging countries.

All in all, and despite the latter, Spanish SIs' profitability is higher and more recurring than the European average (return on equity -RoE- of 14,5% vs. 10,2% in the SSM), since their business is more stable and geographically diversified.

And this greater organic capital generation capacity has regularly driven better capital projections in European stress tests (as regards the exercise conducted in 2023, +275 bp vs. +126 bp in the SSM under the baseline scenario, and -245 bp vs. -478 bp in the adverse scenario). As a result, Spanish banks have consistently enjoyed, in the supervisory review process, a lower supervisory additional capital guidance under Pillar 2.

**Box 2.2**
**SHARE BUYBACK PROGRAMMES IN BANKING**

Share buyback programmes are common practice in many countries, but in the case of Spanish institutions, they are a recent phenomenon. They began to be implemented in 2021, following the COVID-19 crisis, after the European Central Bank's recommendation on the non-distribution of dividends was finalised. At that time, there was a sharp upturn in buybacks worldwide, due to excess liquidity in banks and the absence of attractive investments given the high asset valuations following a decade of negative interest rates.

Share buybacks basically consist of the institution purchasing its own shares on the market, reducing the number of shares in circulation with a view to subsequently redeeming them. The main objectives of these transactions are to:

- Increase shareholder remuneration. This increase occurs when the buyback is extraordinary, i.e. when it was not previously included in the annual remuneration policy.
- Optimise the use of capital (avoiding the excess of an expensive instrument) and improve certain financial metrics, such as earnings per share.
- Generate value for shareholders who do not participate in the buyback. For the buyback to create value, two conditions must be met: the transaction must not prevent the institution from meeting its operating and future growth needs, and the market price at which the buybacks are made must represent a discount on their book value.

Bearing in mind these objectives and the cases observed in Spanish banks, a distinction can be made between two types of share buybacks:

- 1) Buybacks included in the annual shareholder remuneration policy, combined with cash dividends.
- 2) Extraordinary or non-recurring buybacks, which are intended to reduce excess capital and, ultimately, optimise the use of capital.

In Spain, share buyback programmes must be approved by the General Shareholders' Meeting, must not exceed 10% of the share capital and must be authorised by the National Securities Market Commission. These programmes are mainly regulated by the Securities Markets Law and Regulation (EU) No 596/2014 on market abuse. Share buybacks must meet a number of conditions, such as:

- The market must be informed of the terms and conditions of the transaction.
- In order to prevent market manipulation, the volume of shares that can be repurchased under open market conditions during a given period is restricted.
- In order to prevent the misuse of insider information, purchases are prohibited during certain periods linked to corporate events.

In addition, in the case of banks, prior authorisation from the supervisor is required when reducing eligible own funds, in compliance with Regulation (EU) No 575/2013 and Delegated Regulation (EU) No 241/2014.

**Table 1**  
Detail of the evolution of share buybacks

| Millions of euros | 2021         | 2022         | 2023         | 2024         | Total buybacks executed from 1/1/2021 to 31/12/2024 |
|-------------------|--------------|--------------|--------------|--------------|---|
| Santander         | 1,706        | 1,921        | 2,769        | 1,525        | 7,921   |
| BBVA              | 3,160        | 422          | 1,781        |              | 5,363   |
| CaixaBank         |              | 1,800        | 500          | 1,751        | 4,051   |
| Unicaja           |              |              |              | 100          | 100   |
| Sabadell          |              | 204          | 93           |              | 297   |
| <b>TOTAL</b>      | <b>4,866</b> | <b>4,347</b> | <b>5,143</b> | <b>3,376</b> | <b>17,732</b>                                       |

**SOURCE:** Banco de España.

## Box 2.2

**SHARE BUYBACK PROGRAMMES IN BANKING (cont'd)**

Such authorisation may be granted provided that the institution has satisfactorily demonstrated to the competent authority that its own funds, after the buyback, will exceed the regulatory requirements by the margin deemed necessary by the competent authority, in accordance with Article 104(3) of Directive 2013/36/EU. Even if the execution of the buyback takes some time, the amount is deducted from own funds from the date on which it is authorised or reported to the market, whichever comes first.

Since 2021, five Spanish significant institutions have executed share buyback programmes for an aggregate amount (see Table 1) of €17,732 million (representing 126 basis points of the aggregate CET1 of those institutions); of this amount, just over €7,500 million correspond to extraordinary programmes.

Based on supervisory experience over the last four years, the following conclusions can be drawn:

- Given the solvency levels of Spanish banks, and given that their projections show comfortable capital positions, the supervisor has not identified any impediments to these transactions to date.
- Since 2021, Spanish banks have been slightly more active in this type of transaction than the average for institutions in the Single Supervisory Mechanism, in terms of buybacks relative to annual net profit. In general, institutions carry out these buybacks as a way of using their excess capital to boost their share price while rewarding their shareholders.
- It cannot be said that buybacks are better or worse than cash dividends from a supervisory perspective. However, cash dividends continue to be the main form of shareholder remuneration, while buybacks are the most widely used tool for optimising capital, in the event of a surplus, due to their potential to generate value.

## Box 2.3

**ARTIFICIAL INTELLIGENCE: AN AREA OF GROWING OPPORTUNITIES AND NEW SUPERVISORY CHALLENGES**

In recent years, artificial intelligence (AI) has experienced a dramatic rise in popularity. This is due both to continuous advances in computational capabilities and to the emergence of large, state-of-the-art foundation models<sup>1</sup> capable of processing vast quantities of information. New AI models make it possible to tackle tasks normally associated with human intelligence, such as translating languages, answering questions or even reasoning.

These technologies are used by financial institutions, for example, to automate and optimise administrative tasks, analyse large volumes of data or in customer relationship applications. Thus, we are seeing AI-powered conversational assistants (chatbots) that can handle customer queries 24 hours a day, the use of advanced classification algorithms to detect financial fraud, and the application of AI to assess customer credit risk, among other applications.

From a general point of view, these general-purpose technologies have the potential to boost productivity across the entire economy. However, their use also entails risks, some of which are particularly relevant in the area of conduct supervision, where models can cause discrimination in the granting of credit, on the basis of biases in the data used to develop them, that violates the fundamental rights of customers. It is worth recalling the difficulty in explaining these models, as they use billions of parameters, thereby making it complicated to understand the factors that determine the results obtained, which is why they are known colloquially as “black boxes”.

To address this situation, Regulation 2024/1689 of 13 June 2024 on AI regulates the use of AI systems in the European Union (EU) with an approach based on risk levels and the protection of fundamental rights. It therefore identifies AI systems used in the granting of credit to natural persons as high-risk AI systems. In the case of these high-risk systems, developers and users must carry out comprehensive assessments of the risks associated with their models before they are put into production. In particular, the European regulation states they must comply with risk management and data governance requirements, have adequate technical documentation, analyse their results as well as have sufficient levels of accuracy, robustness and cybersecurity. It specifically stresses that AI systems must ensure that they are transparent and explainable. The latter entails providing

clear information on how the models work and how decisions are taken on the basis of said models. Similarly, they must apply supervisory mechanisms to ensure that automated decisions are reviewed (and, if necessary, corrected by persons).

Once these high-risk AI systems go to production, the regulation identifies that they must be supervised by market surveillance authorities. These authorities are designated at the national level and, in the case of credit models, the banking supervisory authority must also report incidents to the European Central Bank (ECB).

In view of the foreseeable designation of the Banco de España as the market surveillance authority for the use of AI in lending to physical persons, the Bank is already working towards assuming these powers. This surveillance work will include, inter alia: supervision and control of supervised institutions’ compliance with the regulation; assessment of the compliance of these models with the regulations; international collaboration with other market surveillance authorities for the exchange of information and the consistent application of the regulation throughout the EU; monitoring of incidents; and promotion of innovation.

In the exercise of these functions, the Banco de España will have to coordinate with other bodies, including the Spanish Agency for the Supervision of Artificial Intelligence. Thus, for example, the European Banking Authority and the ECB, together with the national competent authorities of the Single Supervisory Mechanism, have been working on the use of AI in regulatory capital calculation models, setting regulatory expectations and supervisory techniques. These expectations will be reflected in the update of the ECB’s Guide to Internal Models, which is due to be published in 2025.

In short, the rise of AI and the opportunities and challenges it brings have led the Banco de España to set up a cross-institutional working group which, together with the deployment of the market surveillance authority function, includes various lines of work to ensure the necessary human and computational resources, the deployment of use cases in the various functions exercised by the Bank and the development of an internal governance model that ensures the ethical and responsible use of AI.

<sup>1</sup> Foundation models are models trained on large quantities of data that can subsequently be specialised to perform specific tasks through retraining with more specific data.



## Box 2.4

### PROGRESS MADE IN THE SUPERVISORY CULTURE OF THE SINGLE SUPERVISORY MECHANISM

In January 2024, the Supervisory Board of the Single Supervisory Mechanism (SSM) launched an initiative to review its supervisory culture, following the recommendation made by a group of experts that, in 2023, analysed the effectiveness and efficiency of the Supervisory Review and Evaluation Process (SREP) and its implications for other supervisory processes.

Throughout the year, work was carried out to define the elements of supervisory culture, which affects, to some extent, all the national competent authorities within the SSM. Initially, the focus was on the successful implementation of the initiatives that are deemed strategic by the Supervisory Board:

- **Achieving greater effectiveness and efficiency in supervisory activity:** enhancing its impact on institutions through the implementation of reforms to the SREP, such as the reduction in process times and greater use of proportionality for smaller and less complex institutions. The aim is also to enhance the impact of supervision through strategies for the progressive application of increasingly severe and/or intrusive supervisory measures when institutions exhibit unjustified delays in resolving the problems identified and communicated by the supervisor.

The aim of the above is not only to reduce the bureaucratic burden and the complexity of internal processes, but fundamentally to resolve the

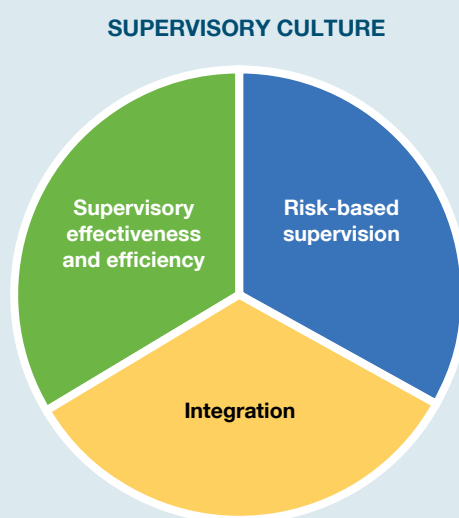
problems identified within a reasonable time horizon.

- **Strengthening risk-based supervision:** prioritising the identification of the most important vulnerabilities so that institutions can address their remediation, in view of emerging risks and the current greater uncertainty.

The supervisory risk tolerance framework is key to achieving this objective. The framework promotes the use of expert judgement to identify, for each institution, the areas in which less supervisory risk should be assumed, so that greater supervisory intensity can be focused on these areas. The designed process is based on global supervisory priorities and identifies, in each exercise, the priority risk areas in each institution, in order to finally define the specific supervisory action plan for the year.

- **Integration of the SSM:** furthering the integration of the various national authorities that make up the SSM to create a working environment that allows them to act as a coordinated and efficient team. To this end, several initiatives have been undertaken, such as the development of common IT tools, the organisation of staff mobility programmes between the competent national authorities and the European Central Bank, and the promotion of cross-border training plans.

Figure 1  
Progress made in the SSM supervisory culture



SOURCE: Banco de España.

## Box 2.4

**PROGRESS MADE IN THE SUPERVISORY CULTURE OF THE SINGLE SUPERVISORY MECHANISM (cont'd.)**

The review carried out on the occasion of the SSM's tenth anniversary highlighted the considerable progress that has been made. However, there are still areas where further improvements are needed to make the process more effective, efficient and focused on priority risk areas and to achieve greater integration.

The cultural change is already underway. And these initiatives are part of the review of the main components

of the SSM's strategic framework, including its mission, values and vision. In order to achieve this objective, the various layers of the organisation are being involved and contributing their opinion on the potential improvements to the strategic initiatives identified by the Supervisory Board. Ultimately, these initiatives to improve the supervisory culture will enable us to reconfigure and enhance the way we work, collaborate and supervise banks, which should result in higher-quality supervision.

## Box 2.5

## RISK COVERAGE THROUGH IFRS 9 OVERLAYS

One of the objectives set by the European Central Bank (ECB) in its supervisory priorities for 2024 was to strengthen credit risk management.<sup>1</sup> In this area, supervisory activity continued along the same lines, with a new thematic review of loan loss provisions, as a follow-up to the review carried out in 2023.

Thus, in 2024, the ECB conducted an exercise to ascertain whether institutions were taking certain risk factors into account in their loan loss provisions, recognised in accordance with International Financial Reporting Standard 9 Financial Instruments (IFRS 9). Another purpose of this review was to understand the use of adjustments to loan loss accounting models, the procedure for calculating these adjustments and the governance of the process.

The results and main conclusions of this review were published in July 2024 in the report *IFRS 9 overlays and model improvements for novel risks*.<sup>2</sup>

First, the ECB identified a number of factors affecting credit risk, which it called “novel risks”: climate change, high interest rate environment, high inflation, geopolitical instability, energy price rises and supply chain disruptions.

These risks are characterised by the limited capacity of traditional loan loss provisioning models to capture them, due to the lack of historical data on them. Consequently, in order to incorporate these risks adequately into their loan loss provisions, institutions need to make changes to their methodologies. Thus, it is common for them to make adjustments to their models, either to the data or to the model output. These adjustments are commonly referred to as “overlays”.

Once these novel risk factors had been identified, the ECB collected information from 53 significant institutions on these factors and on overlays, which enabled it to identify best practices in this area. In addition, the ECB was able to assess each institution’s progress with respect to the review carried out in 2023 and thus have a measurement of supervisory effectiveness.

The main conclusions published by the ECB in its report were:

- Institutions show improvements in the incorporation of novel risk factors into their expected loan loss

provisions in comparison to the 2023 review. Of particular note is the improvement in the consideration of climate and environmental risk, which is now taken into account by 55% of institutions in the exercise.

- The use of overlays, provided they are based on robust analyses and subject to strong governance, is fundamental to incorporating risks that are not adequately captured by traditional models into estimates of loan loss provisions.
- Institutions must continue to pay attention to governance. Although the majority of institutions have processes in place to identify novel risks and determine the necessary overlays, approximately half still lack clear allocation of responsibilities or robust review mechanisms.
- Although the ECB acknowledges that, in general, progress has been made, it continues to observe certain limitations in the design and implementation of overlays:
  - The practices employed do not always allow for the differentiation of impacts and of the sectors or customer groups most exposed to each risk.
  - In certain cases, a generic overlay is recorded to cover a wide range of risks; a practice that does not allow for an assessment of whether each risk is adequately covered.
  - Occasionally, there is an excessive reliance on expert judgement in the quantification of the overlay.
  - The recording of overlays does not always translate consistently into the reclassification of exposures to worse credit quality categories. It should be remembered that when an identifiable risk affects a transaction’s default risk, it should also be taken into account when assessing whether reclassification is necessary.

It is worth noting that, although the ECB’s work is focussed on the six novel risks mentioned above, its conclusions could be extended to the recording of overlays due to

<sup>1</sup> For further details, the supervisory priorities of the Single Supervisory Mechanism for 2024-2026 can be found at the following [link](#).

<sup>2</sup> BCE. (2024). *IFRS 9 overlays and model improvements for novel risks. Identifying best practices for capturing novel risks in loan loss provisions*. [https://www.bankingsupervision.europa.eu/ecb/pub/pdf/ssm.IFRS9novelrisks\\_202407-5e0eb30b5c.en.pdf](https://www.bankingsupervision.europa.eu/ecb/pub/pdf/ssm.IFRS9novelrisks_202407-5e0eb30b5c.en.pdf)

Box 2.5

**RISK COVERAGE THROUGH IFRS 9 OVERLAYS (cont'd.)**

other factors that are not adequately considered in loan loss provisioning models or to other limitations of these models.

Lastly, the ECB indicates that it will continue to monitor the most lagging institutions and it even envisages the application of specific supervisory measures in certain cases.

## Box 2.6

**MARKETS IN CRYPTO-ASSETS EUROPEAN UNION REGULATION (MiCAR): REGULATION OF STABLECOINS**

The European Union was the first major jurisdiction to introduce a comprehensive regulatory framework for crypto-asset activities through the Markets in Crypto-Assets (MiCA) Regulation or MiCAR. This regulation is in response to the potential expansion of the crypto-asset sector and its interconnection with the traditional financial sector. Its objective is to ensure financial stability and consumer protection in the crypto-asset market. MiCAR, is applicable, in general, from the end of 2024 (with a transitional period of 18 months), but the titles regulating the issuance of so-called “stablecoins”, which is under the supervision of the Banco de España, are applicable from 30 June 2024.

MiCAR regulates two types of stablecoins: a) asset-referenced tokens (ARTs), whose value remains stable in relation to other assets or a combination of assets; and b) electronic money tokens (EMTs), whose value remains stable in relation to an official currency.

Despite their name, stablecoins are not always stable, and this instability can spread to the financial system, as demonstrated by the cases of the FTX platform and Silicon Valley Bank. Therefore, MiCAR introduces specific requirements for the issuance, public offering and admission to trading of these coins.

Before issuance, issuers must publish a white paper detailing the main characteristics of the issuance, as well as the issuer's rights and obligations towards holders. After issuance, they must invest the funds received in secure, low-risk assets, have adequate own funds and comply with operating, organisational and governance rules.

Despite its many benefits, the implementation of MiCAR poses several challenges to issuers, supervisors and regulators, some of the most significant of which are mentioned below.

One of the main challenges is the delimitation of the various types of crypto-assets and their classification,

since MiCAR does not apply to crypto-assets considered to be financial instruments or other already regulated financial products, such as deposits, or to unique and non-fungible crypto-assets.

Also, the issuance and provision of crypto-asset services is a global phenomenon, which adds complexity to their supervision and regulation. International business models and the decentralised nature of many crypto-assets make it difficult to locate the provision of the service precisely and to identify the institutions responsible. This poses a significant challenge for regulators, who must achieve extensive, effective coordination at the international level to ensure effective and consistent supervision.

The Banco de España, as the competent authority under MiCAR for exercising supervisory, inspection and sanctioning functions in relation to ART and EMT issuers, must coordinate with other competent national and European authorities for the supervision of generally global business models.

Furthermore, prudential supervisors not only supervise a large proportion of issuers, but must also be particularly attentive to the connections between the banking sector and crypto finance; and especially to the systemic risk arising from the potential contagion that could occur as a result of mass withdrawals of bank deposits held by crypto companies as an investment in low-risk assets of funds received.

In summary, although MiCAR represents a significant step forward in the regulation of crypto-assets, its implementation is not without challenges, such as the delimitation of the types of crypto-assets, the need for effective international coordination and the possible links to the banking system. Addressing these challenges is essential to ensuring that the regulation meets its objectives of financial stability and consumer protection in a global and constantly evolving market.

**Box 2.7**
**EVOLUTION OF FRAUD IN PAYMENT OPERATIONS**

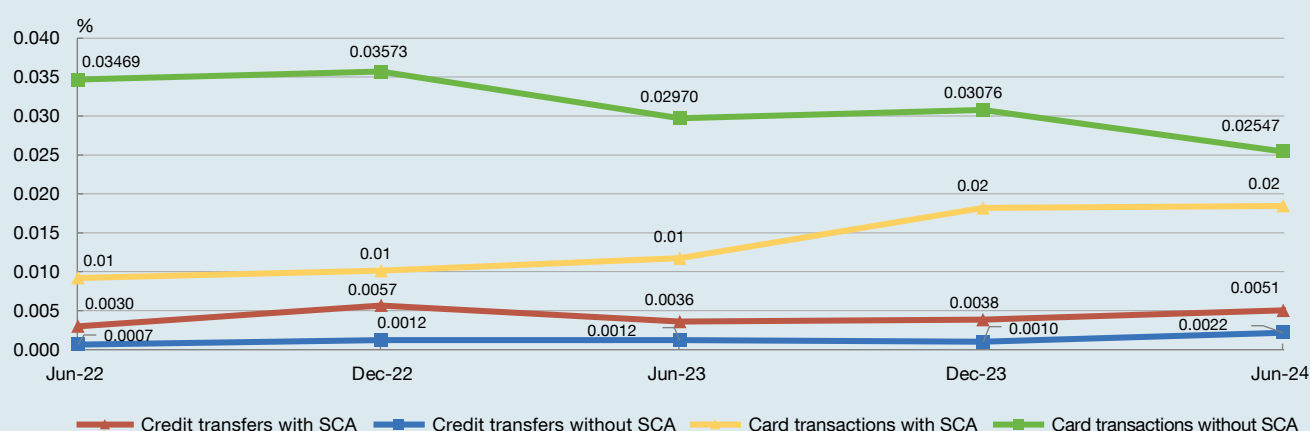
Since 1 January 2020, payment service providers (PSPs) have been required to provide their national competent authority with statistical data on fraud relating to the various means of payment, under the PSD2 regulatory framework and its subsequent developments. The European Central Bank (ECB) Regulation on payment statistics also requires PSPs to report this information. With regard to Spanish PSPs, the Banco de España has been monitoring fraud reporting with a view to gradually

improving the quality of the data provided by supervised institutions and being able to assess their evolution more effectively.

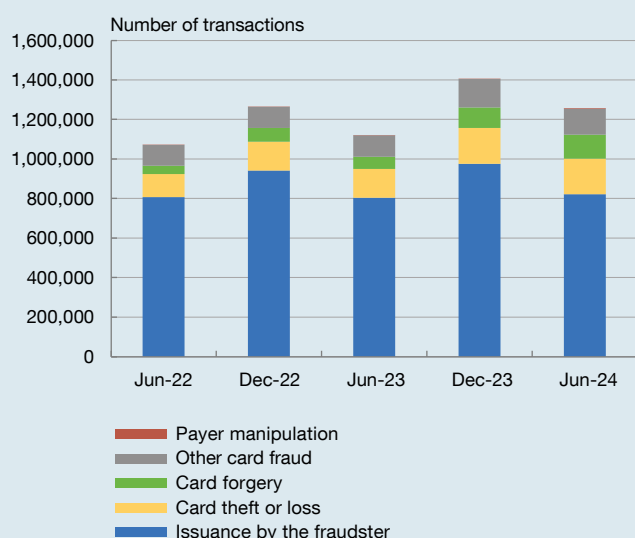
The collection of these data facilitated the publication in 2024 of a joint report by the ECB and the European Banking Authority,<sup>1</sup> which is to date the most comprehensive publication on payment fraud within the European Union (EU).

**Chart 1**

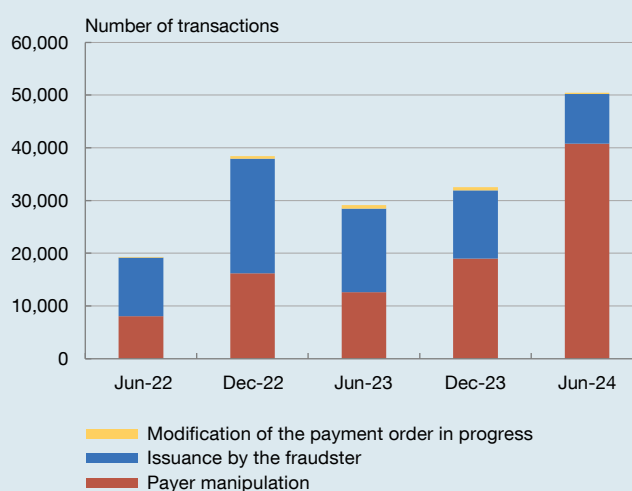
Evolution of fraud rates with and without SCA in credit transfers and card transactions by number of transactions


**Chart 2**

Causes of fraud in card transactions


**Chart 3**

Causes of fraud in credit transfers



**SOURCE:** Compilation of payment and fraud statistics based on the requirements of Regulation (EU) No 1409/2013 of the European Central Bank, amended by Regulation (EU) No 2020/2011 of 1 December 2020 on payment statistics, which establishes the framework for the collection of statistics on payments by the European System of Central Banks.

<sup>1</sup> Banco de España press release dated 1 August 2024.

**Box 2.7**
**EVOLUTION OF FRAUD IN PAYMENT OPERATIONS (cont'd.)**

At the national level, the evolution of data for the last two years does not diverge greatly from the findings of the aforementioned European report. Credit transfers and card transactions are the payment methods with the highest number and value of fraudulent transactions. By way of example, the data from the joint report by the ECB and the European Banking Authority show a fraud rate in terms of number of transactions in the European Economic Area in the first half of 2023 of 0.003% for credit transfers and 0.015% for card transactions, while at the domestic level, these rates are 0.002% and 0.023%, respectively.

Among the breakdowns required by the regulation, the application of strong customer authentication (SCA) in payment transactions is an essential source of information on the role of this measure in mitigating the fraud risk.

Chart 1 shows the effect of SCA on card transactions and credit transfers, revealing that, in contrast to what might be expected, in both cases the fraud rate appears to be rising in transactions with SCA.

This fact is brought about by fraudsters seeking new ways to operate despite SCA, mainly through customer manipulation and identity theft, which lead customers to correctly authenticate transactions (even by applying SCA) that are actually fraudulent.

Payer manipulation and identity theft occur in transactions that are generally high value, through techniques such as phishing, vishing, spoofing or similar, known as “social engineering fraud techniques”. However, the implementation of SCA has helped keep the fraud rate at relatively low levels, although it will be necessary to pay attention to the effects of the greater use of instant credit transfers in the future, where fund movements are almost instantaneous.

In this regard, Chart 3 shows how, in the case of credit transfers, fraud involving the manipulation of the payer by the fraudster is gaining relative weight each year (particularly due to so-called “CEO fraud”) and now accounts for almost 80% of the number of fraudulent transactions. In the case of card transactions (see Chart 2), the theft of personal security credentials for issuing orders by fraudsters has been declining, as a result of the greater complexity introduced by the increasingly widespread use of SCA.

The above data would seem to show that, although SCA has had a positive impact on the fight against fraud, it is not effective, on its own, to eliminate it, due to its limited capacity to combat fraudulent social engineering practices.

This fact has given rise to various regulatory initiatives aimed, inter alia, at improving protection against fraud. In this regard, DORA<sup>2</sup> will demand more rigorous technology risk management by PSPs, which should mitigate the risk linked to the exploitation of technical vulnerabilities. The so-called Instant Payments Regulation<sup>3</sup> includes the obligation for the PSP of the payer to offer the payer a service ensuring the verification of the payee to whom the credit transfer is sent, immediately after the relevant information is provided and before the payer is offered the possibility of authorising the transaction. Also, the current PSR/PSD3 proposal contains various operational measures aimed at reinforcing the application of SCA, such as real-time monitoring of transactions, the possibility of sharing information on fraud among PSPs, cooperation between electronic communications service providers and PSPs to ensure the confidentiality and security of communications and raising awareness among payment service users about fraud.

<sup>2</sup> Regulation (EU) 2022/2554 of the European Parliament and of the Council of 14 December 2022 on digital operational resilience for the financial sector and amending Regulations (EC) No 1060/2009, (EU) No 648/2012, (EU) No 600/2014, (EU) No 909/2014 and (EU) 2016/1011.

<sup>3</sup> Regulation (EU) 2024/886 of the European Parliament and of the Council of 13 March 2024 amending Regulations (EU) No 260/2012 and (EU) 2021/1230 and Directives 98/26/EC and (EU) 2015/2366 as regards instant credit transfers in euro.