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MICROPRUDENTIAL SUPERVISION



SUPERVISION OF CREDIT INSTITUTIONS

Supervision performed within the SSM: i) 10 Spanish SI groups supervised by the ECB, with key participation by the Banco de España; and ii) 56 Spanish less significant institutions (LSIs) or groups supervised directly by the Banco de España, with indirect supervision by the ECB



2022 FOCAL POINTS

i) post-pandemic credit risk; ii) structural weaknesses: digital transformation strategy and improved governance; and iii) emerging risks: climate and operational risk due to cyber attacks and outsourcing



2023 SUPERVISORY PRIORITIES

i) Strengthening resilience to macro and geopolitical shocks; ii) structural vulnerabilities: digitalisation and technology risks; management capabilities; and iii) incorporation of climate risks into risk strategy, governance and management



ONGOING OFF-SITE SUPERVISION

The SREP is a core element of the supervisory activity, regularly updating the assessment of institutions' situation and risk profile



ON-SITE ACTIONS

Essential supplement to off-site supervision, through two types of action: inspections and investigations of regulatory capital calculation models



ANTI-MONEY LAUNDERING

The Banco de España supervises certain AML/CTF obligations (due diligence, internal control and reporting) and cooperates closely with the CPMLMO

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2.1 The Spanish banking sector

At 30 September 2022, the consolidated assets of the institutions making up the Spanish banking sector totalled EUR 4,315 billion, of which 90% corresponds to Spanish significant institutions (SIs), 6% to Spanish less significant institutions (LSIs) and the Official Credit Institute (ICO), and the remaining 4% to subsidiaries and branches in Spain of foreign credit institutions.

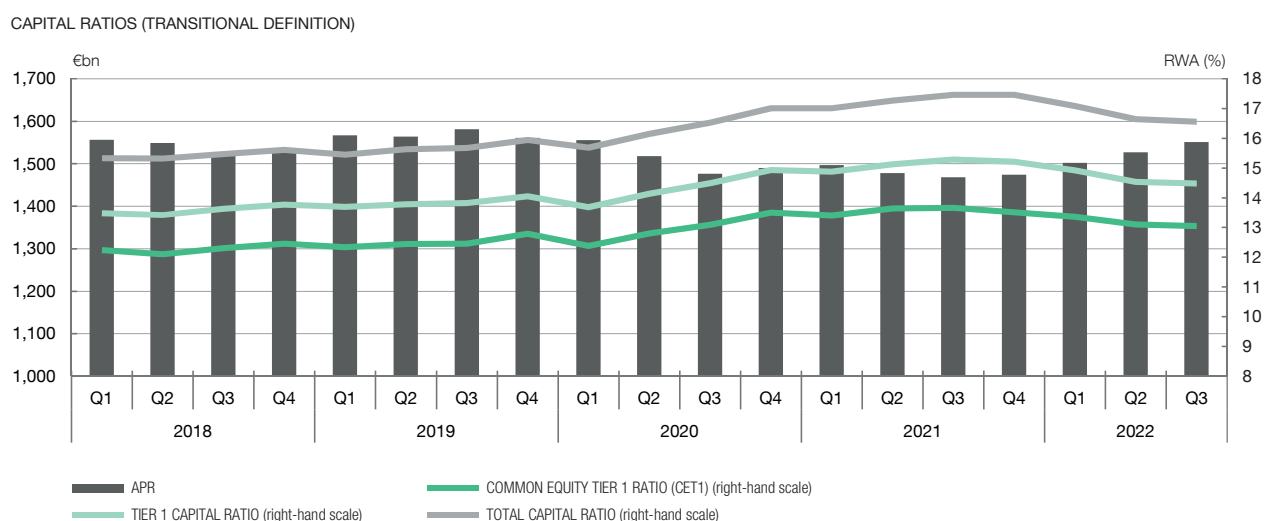
Spanish institutions maintain adequate solvency levels, above the levels reached in December 2019, prior to the health crisis (see Chart 2.1), although solvency ratios contracted slightly in 2022, particularly in the second quarter.

The growth trend in total lending by Spanish institutions continued throughout 2022 (see Chart 2.2), with an increase in lending activity at foreign subsidiaries of banks with a significant international presence, but stability in transactions in Spain. Balances at central banks also increased.

The deterioration of the macroeconomic environment was not reflected in the credit quality indicators, whose NPL ratio decreased slightly in 2022 (see Chart 2.3)

Chart 2.1
CAPITAL RATIOS (PHASED-IN)

Capital ratios exceeding pre-pandemic levels. Contraction in 2022 due to higher risk-weighted assets (RWA) and, to a lesser extent, due to the market impact on financial instruments at fair value with changes in capital and share buybacks.



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

Chart 2.2

LOANS AND CREDIT. DEVELOPMENTS

Growth continued in loans and credit at the consolidated level.

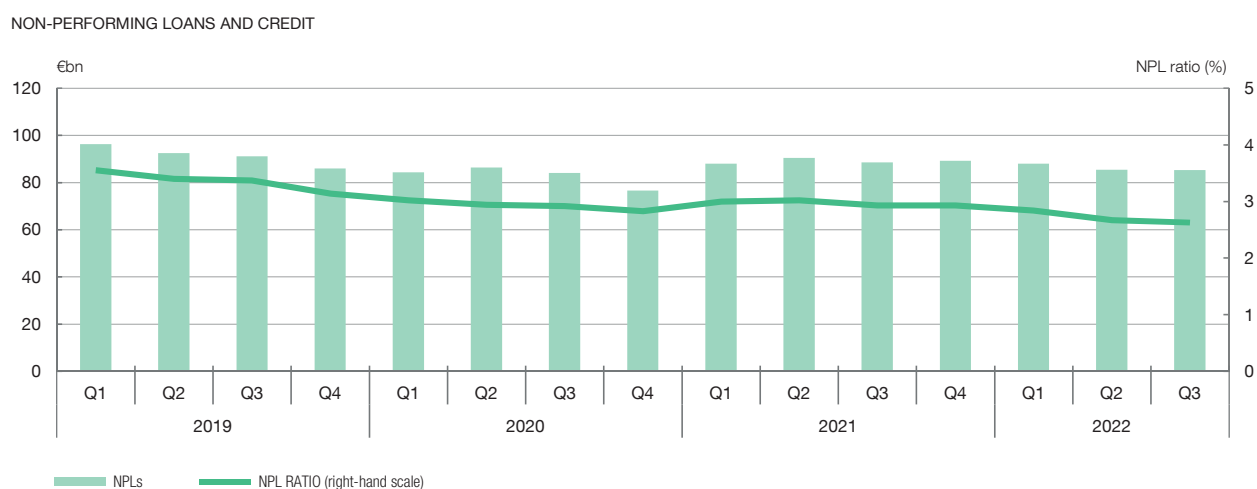


SOURCE: Banco de España (supervisory statistics on credit institutions).

Chart 2.3

NPLs AND NPL RATIO

Decrease in the NPL ratio in 2022, despite the current macroeconomic environment.



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

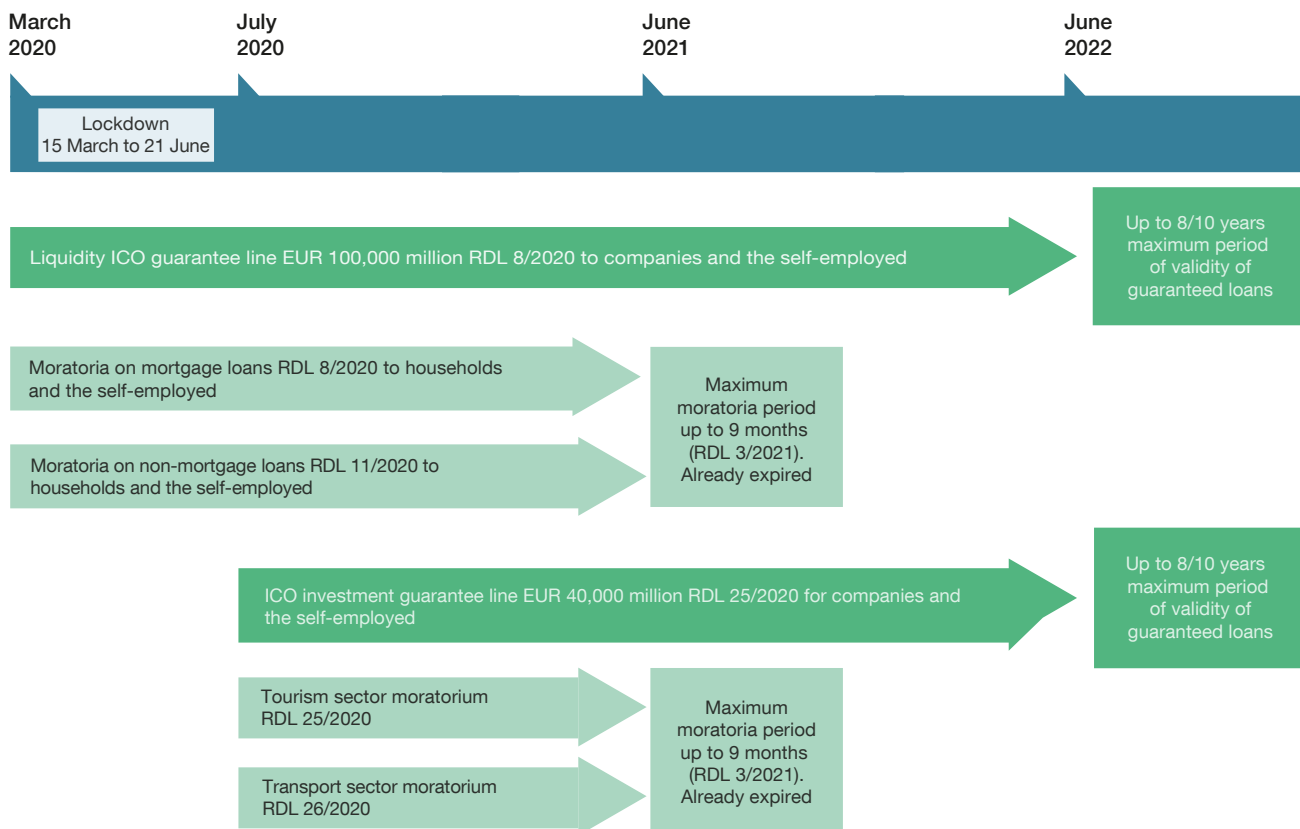
partly due to portfolio sales, mainly in Spain. An increase in the near future cannot be ruled out, to the extent that borrowers' payment capacity may deteriorate due to the negative effects of the current macroeconomic environment.

In this respect, it is worth recalling that, once the health restrictions were overcome, there was a withdrawal of the COVID-19 public support measures

Figure 2.1

MORATORIA AND GOVERNMENT SUPPORT RELATED TO THE PANDEMIC. PERIODS

The arrows represent the application period of the measures (all already finalised), while the boxes indicate the period of validity of the moratoria and guaranteed loans.



SOURCE: Banco de España.

aimed at maintaining the financing of households and companies in the form of moratoria and of loans backed by the ICO, the only loans outstanding being those guaranteed by the ICO with a repayment period of up to ten years (see Figure 2.1, which summarises the process). This support provided liquidity to sustain lending during the lockdown period and boosted the investment necessary for the subsequent reactivation of the economy. Currently, following the outbreak of the war in Ukraine, the macroeconomic environment is facing new challenges.

Spanish institutions maintain higher profitability levels than in 2019, before the pandemic crisis, for the second consecutive year (see Chart 2.4). Profit from ordinary business increased in 2022, due to the greater contribution to net interest income from foreign activity, while recognised impairment losses remained moderate, despite the macroeconomic environment of high uncertainty.

The efficiency ratio performed favourably (see Chart 2.5), due to the improvement in operating profit and the moderate increase in overhead costs following the restructuring of workforces and the commercial network in the previous year.

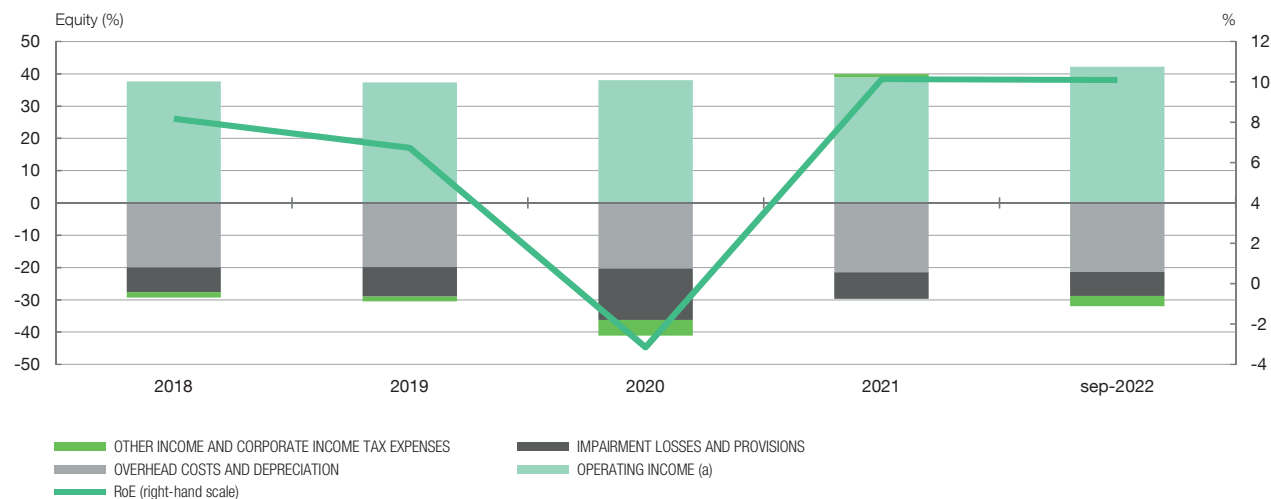
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Chart 2.4

RoE BY COMPONENTS. ANNUAL CHANGE

Second year of recovery in return on equity (RoE) (following the pandemic crisis), which already exceeded pre-pandemic levels in 2021 and remained stable in 2022, with improvements in ordinary business and containment of overhead costs and impairment losses.

RoE - BREAKDOWN BY COMPONENTS



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

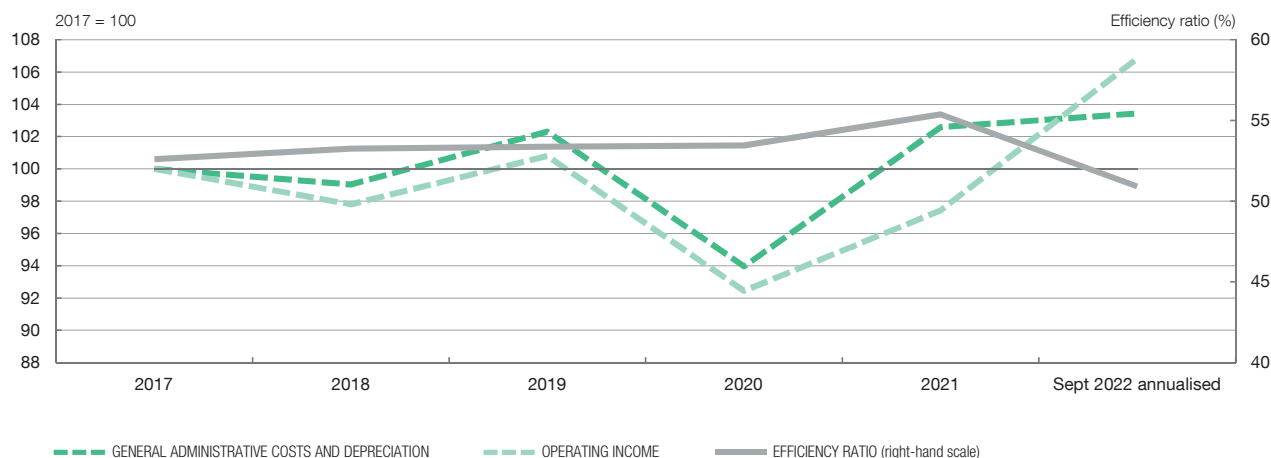
a Operating income is the sum of net interest income, net fee and commission income, net income from financial operations, net exchange differences and other net operating income.

Chart 2.5

EFFICIENCY RATIO

Improvement in the efficiency ratio due to the improvement in operating income and the containment of overhead costs.

EFFICIENCY RATIO AND DEVELOPMENTS IN ITS COMPONENTS



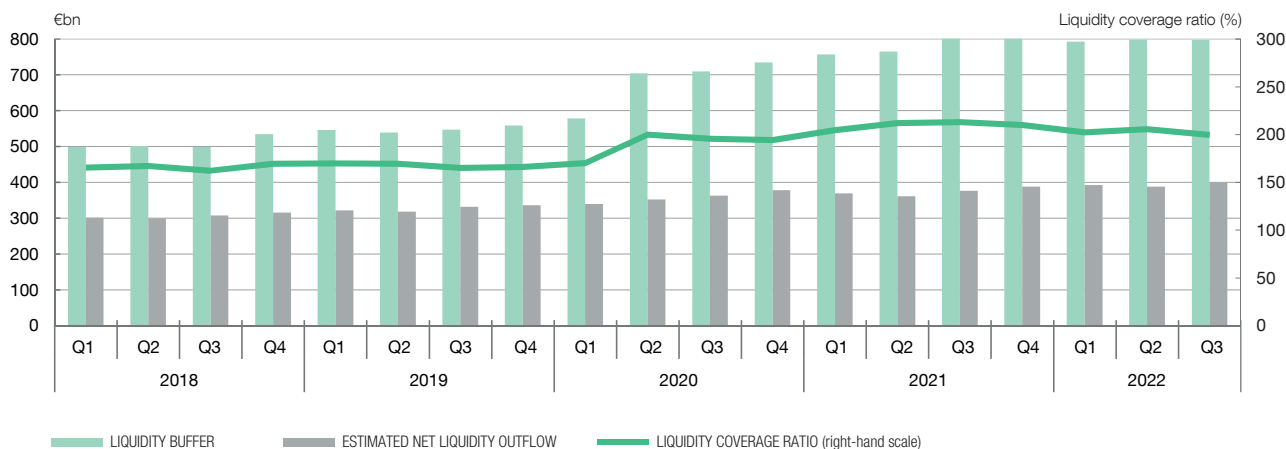
SOURCE: Banco de España (supervisory statistics on credit institutions).

Chart 2.6

LIQUIDITY COVERAGE RATIO

The liquidity coverage ratio remained high, at around 200% on average, in the first three quarters of 2022.

LIQUIDITY COVERAGE RATIO AND COMPONENTS



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

Recent monetary policy changes and upcoming TLTRO III (Targeted Longer-Term Refinancing Operations III) maturities will reduce institutions’ liquidity surpluses. The liquidity coverage ratio of Spanish institutions basically remained stable until September 2022 (see Chart 2.6). The change in the ECB’s monetary policy stance (see Box 2.1) stemming from inflationary pressures arising from the war in Ukraine has resulted in the elimination of the financial incentives associated with TLTRO III operations. The early repayment and upcoming maturities of these operations determine a new environment in which institutions will operate with liquidity coverage ratios that are less cushioned than those maintained recently.

Lastly, in the current context, it is necessary to mention operational risk, for which no upturn in losses has been observed, despite the increase in the number of events. The losses due to operational risk at Spanish institutions have remained within the levels recorded in recent years. However, there was a considerable increase in the number and diversity of operational events —mainly in the conduct and customer, technology and fraud risk categories— in an environment of greater potential risk due to digitalisation and outsourcing processes, remote working, the war in Ukraine and other salient factors, such as the new conduct regulations and rulings.

Consequently, Spanish banks’ financial statements have not yet been negatively affected by the growing uncertainties. However, the inflationary process and the rise in interest rates could lead to a reduction in the medium term in

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EFFECTS OF MONETARY POLICY NORMALISATION (INTEREST RATE RISES AND WITHDRAWAL OF MONETARY SUPPORT)

The intensification of inflationary pressures as a result of the war in Ukraine has led to a faster than expected normalisation of the European Central Bank's (ECB) monetary policy following a long period of low or negative rates and generous monetary stimulus.

Thus, in the course of 2022, the monetary policy decisions of the ECB Governing Council envisaged, inter alia, the following measures:

- a) Interest rate rises. They started in July, and represented an increase of 300 basis points overall through February 2023, with the deposit facility rate rising from -0.50% to 2.5%.
- b) Change in the conditions of TLTRO III (Targeted Longer-Term Refinancing Operations III). In October, the ECB changed the system for calculating the interest rates applicable to these operations from 22 November 2022, eliminating some of the incentives for their use. At the same time, it established three additional early repayment windows, two of which (in November and December) have already been used by credit institutions. Taken as a whole, the TLTRO III balance of Spanish institutions fell by EUR 155.7 billion, or 50%, from October to December 2022.
- c) Modification of debt purchase programmes. Net purchases in the Pandemic Emergency Purchase Programme (PEPP) and the Asset Purchase Programme (APP) have been discontinued, limiting the amount of purchases to the reinvestment of maturing principal. In the case of the PEPP, the period in which reinvestments may be made will be extended until at least the end of 2024, while in the case of the APP, such reinvestments will be reduced from the beginning of March 2023, so that the portfolio of debt acquired by the ECB under this programme will be reduced by an average of EUR 15 billion per month until the end of June 2023.

In addition, on 21 July, the ECB approved the Transmission Protection Instrument (TPI) for monetary policy, which provides for government bond purchases in the secondary market when it is deemed that there is an unwarranted deterioration in a country's financing conditions.

As regards the possible impact of these monetary policy measures on financial institutions' liquidity, the progressive reduction in TLTRO funding, due to early repayments or maturities, will entail a reduction in the high-quality liquid assets held by institutions for the short-term liquidity coverage ratio (LCR). In this regard, it should be noted that significant excess liquidity resulted in unusually high LCR coverage. In the Single Supervisory Mechanism as a whole, the reduction in liquidity may generate greater competition for re-sources and affect the conditions for obtaining funding in capital markets.

Moreover, interest rate rises could have opposing effects on the income statements of financial institutions. On the one hand, an improvement in net interest income is expected, since, in general, Spanish institutions are positively positioned in the face of interest rate rises because the rates on assets, as a whole, change earlier and to a greater extent than those on liabilities. On the other hand, the intensity and speed with which these rates have risen may lead to an economic slowdown that will ultimately affect the quality of loans and generate the need to increase loan-loss provisions.

Lastly, an additional risk that could affect institutions' income statements or their capital ratios is the possible increase in sovereign debt risk premiums if the recessionary environment and the increase in fiscal deficits generate a fragmentation of debt markets, despite the reduction of debt portfolios that may be affected by being valued at market prices and the existence of the aforementioned TPI agreed by the ECB, which tends to balance risk premiums in situations of stress.

the financial capacity of households and companies, with impairment in institutions' loan portfolios, a tightening of financial conditions and a certain contraction in credit, that are all the more significant the more persistent the uncertainties are. Therefore, it would be desirable for institutions to apply prudent policies in their capital planning and credit risk coverage, as discussed in Box 2.2.

IMPROVING PROFITABILITY AS AN OPPORTUNITY TO STRENGTHEN RESILIENCE IN A CONTEXT OF HIGH UNCERTAINTY

In 2022, the Spanish banking sector showed a positive overall performance. Aggregate profitability in the sector recovered significantly following the health crisis, with return on equity (RoE) standing at around 10% for the second consecutive year, above the cost of capital. Net interest income improved in 2022 and, to a lesser extent, fee and commission income (noteworthy in both items is the contribution of foreign subsidiaries of Spanish banks), while recognised impairment losses remained moderate. Although the Common Equity Tier 1 (CET1) ratio fell around 46 basis points in 2022 to 13.1%, solvency ratios remained above pre-pandemic levels (the CET1 ratio stood at 12.8% at December 2019). The main quality indicators of Spanish banks' balance sheets performed positively, with the NPL ratio continuing to fall slightly in 2022.

However, the outlook for the banking sector for 2023 and beyond is shaped, in the shorter term, by the uncertainty associated with the macroeconomic and financial scenario, and, in the medium and long term, by the structural and business model changes facing Spanish institutions.

Although the latest economic forecasts point to upward revisions for growth and downward revisions for inflation, there are still huge uncertainties, in a context affected by geopolitical tensions, rising and persistently high inflation and a return to a tighter monetary policy intended to stabilise prices. If the economy develops in line with current forecasts, interest rate rises can be expected to have a positive effect on banking business in the short term, thanks to higher net interest income, and a possible

negative effect on loan loss provisions if the increased financial pressure on companies and households leads in the medium term to a deterioration in the debt repayment capacity. These effects could be particularly significant in macroeconomic scenarios that are more adverse than expected.

Moreover, the banking sector is facing other types of uncertainties that may generate additional impacts in the medium and long term, which in some cases are difficult to estimate. Among these risks are those associated with the growing digitalisation of the financial sector and with climate change, which may reduce institutions' organic capital generation capacity in the coming years.

Given these uncertainties, institutions should adopt a prudent stance and take advantage of the current increase in profitability to strengthen their resilience. In this respect, in addition to allocating resources to further the implementation of sound strategies to address the sector's structural challenges, they should also be extremely rigorous and prudent in their accounting policies, adapting their provisioning levels to future economic forecasts. Also, they should be cautious in their capital planning, defining sound internal solvency targets, with minimum thresholds based on available evidence with prospective effect. The return on capital (either through share buybacks or dividend distributions) should be analysed taking into account credible, bank-specific baseline and adverse scenarios that adequately reflect the potential impact of economic forecasts.

2.2 Supervisory priorities

The SSM establishes a set of supervisory priorities for SIs with a medium-term horizon of three years, reviewable annually, or more frequently if necessary, following a process that revolves around the identification of the risk sources and vulnerabilities specific to the banking sector, strengthening risk-based supervision, and the effectiveness and efficiency of supervisory activities. This materialises in a multi-year plan of supervisory activities.

The Banco de España uses a similar process to set the supervisory priorities for LSIs on an annual basis.

2.2.1 Supervisory priorities in 2023

The pandemic crisis has given way to a new environment, characterised by geopolitical tensions, high inflation and rising interest rates, increased public and private indebtedness, volatile asset valuations and potential deterioration of credit quality in a context of withdrawal of institutional support measures. There are increasing concerns about the possible deterioration of asset quality and the cost of bank funding, and the focal points identified the previous year need to be partially refocused.

On the other hand, pre-existing challenges related to more structural aspects remain relevant, including the development and implementation of digital transformation strategies, or challenges stemming from climate change.

The supervisory priorities identified for 2023-2025, both by the SSM for SIs (see this [link](#) for more details) and by the Banco de España for LSIs, share the three major objectives highlighted in Figure 2.2, with certain differences.

The action priorities established by the SSM for the SIs are described below:

1 Increase resilience to macro-financial and geopolitical shocks in the short term.

This priority consists of two major lines of action:




Firstly, to continue to review credit risk. The worsening economic conditions are likely to finally have a negative impact on companies and households, given the vulnerability of certain sectors to the current situation. This implies the need to continue strengthening credit risk management, as detailed in Box 2.5, in line with the priorities established in 2022.

Secondly, funding risk will be reviewed for the first time as a supervisory priority. The normalisation of monetary policy, after a period of abundant liquidity at low costs, implies higher funding costs and wider spreads in wholesale markets, as well as the gradual repayment of TLTRO funding (see Box 2.1). The priorities of the supervisory action plan include funding risk, with a greater focus on banks with more vulnerable funding structures or weaker liquidity and funding risk management practices. An examination of TLTRO repayment strategies and a horizontal analysis of liquidity and funding plans are planned.

In addition, the stress test to be conducted at EU level, coordinated by the EBA, will support this first objective of increasing resilience to shocks.

Figure 2.2

SI SUPERVISORY PRIORITIES FOR 2023

	<p>1</p> <p>MACRO-FINANCIAL AND GEOPOLITICAL SHOCKS</p>	Credit Risk	<ul style="list-style-type: none"> – Worsening economic conditions likely to finally have negative impact on companies and households – Continue strengthening credit risk management, as detailed in Box 2.5
		Financing Risk	<ul style="list-style-type: none"> – The normalisation of monetary policy implies higher funding costs and wider spreads in wholesale markets – Greater focus on banks with more vulnerable funding structures or weaker liquidity and funding risk management practices
	<p>2</p> <p>DIGITALISATION AND MANAGEMENT CAPABILITIES</p>	Technology Risks and Digital Transition	<ul style="list-style-type: none"> – Digital transformation and greater reliance on new technologies and service providers have increased the complexity and interconnectedness of the financial and banking system – Supervision will continue to interact with institutions through horizontal reviews and onsite inspections, with the aim of strengthening their IT security and cyber resilience frameworks, and their digital transformation strategies
		Governing Bodies	<ul style="list-style-type: none"> – Effective governance is a key element in ensuring that the bank can address the growing challenges it faces! – Shortcomings in the functioning and composition of governing bodies and in the area of risk data aggregation and reporting will be specifically addressed
	<p>3</p> <p>CLIMATE RISK</p>	Climate and Environmental Risk Management	<ul style="list-style-type: none"> – The supervisory commitment is reinforced with improvements to climate and environmental risk management – Analysis, with a long-term perspective, of institutions' progress in incorporating these risks into their business strategy, governance and risk management frameworks

SOURCE: Banco de España.

2 Increase efforts to address institutions' structural vulnerabilities

This is a medium- and long-term priority which includes several aspects:

Technological risks and the implications of digital transition will continue to be addressed. Digital transformation and greater reliance on new technologies and technology service providers have increased the complexity and interconnectedness of the financial and banking system. In addition, recent geopolitical tensions make it necessary to exercise extreme caution and improve the monitoring of technological risks, especially cyber risks. In this context, supervision will continue to interact with institutions through horizontal reviews and onsite inspections, with the aim of strengthening their IT security and cyber resilience frameworks. Also, digitisation strategies and banking's adaptation to new consumer trends through digital channels and competition from new players will be closely monitored, with the aim of maintaining the sustainability of their business models in the future (see Box 2.3).

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SUSTAINABILITY OF THE BUSINESS MODEL. RISKS AND OPPORTUNITIES OF FINANCIAL DIGITALISATION

The financial sector is undergoing a process of change that may affect banks' business model. Historically, institutions have faced structural difficulties, such as excess installed capacity and cost inefficiencies. On top of this there are other more recent challenges, such as digital transformation or sustainable finance. All of this in a highly competitive environment.

Institutions can adopt different strategies to tackle this new environment; however, in any case, they will need to adapt their processes and distribution channels to the new digital environment and changing customer preferences. Digitalisation, as it became clear during the pandemic, is no longer an option for institutions, but a necessity, and banks that lag behind in this area may find their medium-term viability compromised.

Investment in digitisation can offer institutions new opportunities and avenues for income growth, and serve as a driver to improve their efficiency. It will also allow them to keep pace with technological innovations applied to the financial sector, and thus be able to compete with other players, such as FinTech or large technology companies, where innovation makes a competitive difference.

However, there are also very significant risks and transition costs in the digital transformation process that banks will need to take into account when making their decisions. Also, institutions will need to analyse how these changes affect their customer segments, their business model and their risk management. Among other challenges, institutions need to step up controls to prevent and detect digital fraud, manage the risks associated with the increased volatility of deposits collected through non-traditional channels, adapt know-your-customer

procedures to the new environment, and strengthen the granting and monitoring of risks taken through digital channels, where there is limited interaction with the institution's interlocutors. In parallel, institutions should have solutions adapted to customers who are not fluent in the digital environment.

The banking supervisor is not oblivious to these changes and is stepping up its efforts to be on a par with the initiatives that institutions are adopting and to encourage them to make appropriate decisions in this strategic area. Supervisors need to assess the robustness, profitability and long-term sustainability of institutions' digitisation strategies to ensure that they have the appropriate mechanisms in place (e.g. governance, resources, capabilities, risk management, etc.), but without interfering with management.

To this end, in 2022 a series of surveys were conducted at institutions on their digitalisation strategies and a peer comparison was carried out. Specific monitoring and on-site inspections were also conducted.

In short, banks need to deal decisively and effectively with the profound structural changes that the sector is undergoing. There is a lot of work to be done, with certain matters to be addressed in the short term (e.g. cost rationalisation) and others in the medium term (such as digital strategy). In any case, institutions need to make the necessary assessment of opportunities and risks in order to undertake a sound digital transformation and have the appropriate mechanisms and instruments in place to make their business models sustainable in the long term. The supervisor, in turn, will need to monitor this process closely and, therefore, digital transformation is a supervisory priority in the coming years.

The focus will continue to be on shortcomings in the functioning, supervision and composition of governing bodies. Effective governance is a key element in ensuring that the institution can address the growing challenges it faces. As part of the governance review, persistent shortcomings identified in the area of risk data aggregation and risk reporting will be specifically addressed.

3 Continue to adapt the business strategy and risk management framework to climate risk.

In line with the previous year, the supervisory commitment is reinforced with improvements to climate and environmental risk management.

With these new priorities, in general, certain supervisory focal points that guided the 2022 activities lose relative importance, including most notably the review of sensitivity to interest rate and credit spread risk, and counterparty risk, allowing for an efficient use of available resources. In any case, these activities form part of the recurring reviews, and shortcomings identified by the Joint Supervisory Teams (JSTs) will be monitored.

Bearing in mind the SSM risks and priorities, the Banco de España identified the risks particularly affecting Spanish LSIs. On this basis, the following priority areas were established:

- **Credit risk:** particular attention to the identification of shortcomings in granting, monitoring, accounting classification and loan-loss provisioning policy, and to possible concentration of risk in vulnerable sectors.
- **Business model and profitability:** focused on the analysis of its medium-term sustainability and the institution's preparedness to adapt to technological change (digitalisation of business).
- **Operational risk and, in particular, technology risk:** cross-institutional analysis of institutions' responses to the information technology risk questionnaire submitted in 2022 and on the outsourcing of critical functions, to assess: i) the capacity of the institution's IT systems to generate quality management information intended for its persons in positions of responsibility and to provide reliable and timely statement reporting to the supervisor; ii) the adaptation of systems to identify, assess, manage and mitigate their exposure to undesirable events (attacks, critical business disruptions, etc.); and iii) the management of the outsourcing of critical functions (see Box 2.4 on the importance of third-party risk management).
- **Governance:** monitoring the remedying of the shortcomings identified in the horizontal review carried out in 2021 and the implications of the entry into force on 31 December 2021 of the Guidelines on internal governance (EBA/GL/2021/05) and on sound remuneration policies (EBA/GL/2021/04).
- **Capital planning:** proactive monitoring of compliance with the institution's forecasts and budgets, in particular any projections made in its capital planning during 2022, and checking that the assumptions and hypotheses used are updated as frequently as necessary.

THE IMPORTANCE OF TECHNOLOGY PROVIDER RISK MANAGEMENT IN THE FINANCIAL SECTOR

It is a fact that financial institutions around the world rely on external providers for the delivery of their services. The agreements with these third parties are often complex and may involve various providers located in different jurisdictions. This trend was augmented by the COVID-19 pandemic, which forced institutions to quickly adopt technology services provided by third parties in order to continue offering their services to customers. This increased institutions' exposure surface and thus the operational risk they face.

Moreover, it is common for external technology service providers to offer their services through an outsourcing chain, where at each link a different third party provides one part of the service. The complexity of these provider chains makes management difficult and reduces the risk mitigation capacity of both institutions and supervisory or resolution authorities, as it is extremely difficult to identify all the participants involved and, therefore, very difficult to properly assess the potential impact of an incident or the disruption of the service provided by one of them, not only on a given institution, but on the financial sector as a whole.

In recent years the various European authorities, concerned about these risks, have issued regulations to mitigate the risk of outsourcing —European Banking Authority (EBA) Guidelines EBA/GL/2019/02 on outsourcing arrangements and Banco de España Circulars 2/2016 and 3/2022, among others— which both institutions and providers have been incorporating into their arrangements. Given their significance for enabling institutions to adequately manage risks, all three regulations establish various requirements for outsourcing agreements, especially for those that refer to critical services or functions, such as including access and audit right clauses for the institution and for the supervisor or termination and exit clauses. Consequently, the assessment of these arrangements on critical services or functions has been incorporated into institutions' microprudential supervision.

However, supervisory authorities and regulators see a need to broaden the regulatory scope to include all third-party

relationships and, in particular, to focus on the oversight of critical service providers to the financial sector. This is illustrated by the initiatives of the European Supervisory Authorities —EBA, European Securities and Markets Authority and European Insurance and Occupational Pensions Authority— to compile technological third-party registers, or the Financial Stability Board's public consultation on issues relating to outsourcing and third-party relationships, which, among other aspects, highlights the need to establish a common terminology (lexicon) with global consistent definitions.

In addition, the forthcoming implementation of the Digital Operational Resilience Act (DORA) will establish additional requirements for institutions and a framework for the oversight of critical technology providers for the entire European financial sector.

Why are we so concerned about the potential risk posed by these external technology service providers? The answer is immediate: in addition to the risks associated with this dependence, there is the threat posed by supply chain attacks, which have proliferated in recent years, usually targeting suppliers and software developers, with the aim of reaching a company through its third-party relationships. The number of potential victims in such an attack can be significant, sometimes affecting thousands of companies.

These attacks are harder to detect if suppliers do not implement a proactive security approach, with adequate security policies and detection and response tools that make it possible to identify and act upon suspicious activity. Also, it is important that suppliers have in place an incident response procedure for supply chain attacks, and that this ensures that institutions and their customers are notified, where appropriate, with accurate and timely information.

In conclusion, in order to determine an institutions' level of exposure it is essential to identify, supervise and manage the risks arising from the relationships with its external technology service providers.

- **Environmental, social and climate change risks:** analysis, with a long-term perspective, of institutions' progress in incorporating these risks into their business strategy, governance and risk management frameworks. Assessment of their capacity to mitigate and report these risks and comply with regulatory requirements.

2.2.2 Supervisory focal points in 2022

The identification of risks for 2022 was based on an economic environment of recovery following the pandemic, albeit still with several uncertainties. Euro area gross domestic product (GDP) was expected to recover to near pre-pandemic levels, which was confirmed in early 2022, although a number of vulnerabilities were identified related to the health crisis and its potential impact on credit quality in the face of the withdrawal of support measures, rising public and private debt, and market valuations and volatilities.

In this environment, three major objectives were established that guided supervisory activity for the SSM as a whole in 2022, with the logical adaptations in view of developments in the geopolitical and macroeconomic environment, which have generated negative effects in terms of inflation and interest rate rises.

To promote the post-pandemic strengthening of institutions, actions were carried out in the area of credit risk, including reviews of shortcomings in credit risk management, of more pandemic-sensitive exposures such as the commercial real estate sector, and of compliance with International Financial Reporting Standard 9 on financial instruments. In addition, the focus was placed on exposures to leveraged finance and reviews were carried out of interest rate and credit spread management in both the trading book and the banking book.

In order to address structural weaknesses through effective digital transformation strategies and improvements in governance, two types of actions were carried out: i) a study of the digital transformation strategies of all SSM institutions, to gain insight into the situation of each institution and to improve the focus of the work performed; and ii) specific inspections of management bodies, seeking to assess their effectiveness.

Lastly, to address emerging risks, actions were carried out on three fronts: climate risk, counterparty risk and operational risk. In order for banks to develop strategies mitigating the long-term impact of climate risk, horizontal supervisory activities (including a climate stress test) were carried out, which served to gain experience both for the banks and for the supervisor. Moreover, there were reviews of governance and counterparty risk management vis-à-vis non-bank financial institutions, as well as supervisory activities focusing on the outsourcing of critical functions and security against cyber attacks.

Following a similar process, the Banco de España identified the key risks affecting Spanish LSIs and focused its work in 2022 on the following elements:

CREDIT RISK UNDER SUPERVISORY SCRUTINY, IN A CONTEXT OF UNFAVOURABLE MACROECONOMIC EXPECTATIONS AND GEOPOLITICAL TENSIONS

Euro-area credit institutions' operations have been disrupted by the macro-financial consequences of Russia's invasion of Ukraine. The significant rise in energy and other commodity prices has, in the first instance, fuelled an escalation in the prices of other consumer products, including notably a number of market basket goods (especially foodstuffs), thus generating an increase in inflation to unexpected levels, followed by a rapid rise in interest rates in response by the major central banks. All this implies a deterioration in the growth outlook for the euro area and increased uncertainty in financial markets and, as a consequence, heightened risks for the European financial sector.

Against this background, the European Central Bank (ECB), the European Banking Authority and the Banco de España have set as a supervisory priority for the 2023-2025 period that credit institutions "strengthen their resilience to immediate macro-financial and geopolitical shocks", fearing that higher funding costs and lower disposable incomes of companies and households could lead to a deterioration in loan quality.

Non-performing loans of all European significant institutions (SIs) under ECB supervision continued to fall to 2.3%¹ on average in the third quarter of 2022. This reduction was also observed in the Spanish banking system, resulting in NPLs of 3.2%² for the total Spanish banking system at that date.

However, there are early warning indicators that could point to a deterioration in loan quality –for example, the ratio of loans of SIs under ECB supervision classified as stage 2 stood at around 9.8% in the third quarter of 2022.

This potential deterioration would affect both households and companies, albeit to a different extent, depending on

their level of indebtedness and their exposure to the current macroeconomic shocks. In companies, the impact is expected to be greater in sectors related to the production and processing of raw materials, and in energy-intensive sectors, e.g. agriculture and transport. In the real estate sector, less impact is expected in the residential segment than in the commercial segment.

In this context, a strategic objective has been set whereby both SIs and LSIs remedy any shortcomings they may have in credit risk management, with a focus on exposures to vulnerable sectors. This includes potential structural weaknesses in the entire credit risk management cycle, from loan origination to risk mitigation and monitoring, including accounting classification and provisioning. In this way, banks should be able to quickly identify and mitigate any increase in risk in their exposures to sectors that are more sensitive to the current macroeconomic environment, especially those affected by the war in Ukraine and real estate portfolios.

The supervisor's work programme on this priority will focus on the sectors most affected by the consequences of the war in Ukraine and by the macroeconomic environment. Some of the main activities planned in the work programme for 2023-2025 are: (i) specific reviews of loan origination and monitoring (with a particular focus on residential real estate portfolios); (ii) specific reviews of International Financial Reporting Standard on financial instruments (IFRS-9) on supervisory expectations included in the 2020 "Letter to the CEO" and its modelling (including overlays); (iii) exhaustive analyses of the refinancing and restructuring practices set out in the aforementioned letter; (iv) on-site inspection campaigns on IFRS-9 and commercial real estate; and (v) monitoring of leveraged finance.

1 NPL ratio calculated without including demand deposits placed with central banks in the denominator.

2 NPL ratio calculated without including demand deposits placed with central banks in the denominator. If they had been included, the ratio would be 2.63%, as shown in Chart 2.3.

- i) **Credit risk management.** Both the potential increase in credit risk and the incorporation of the necessary loan-loss provisions.
- ii) **Business model and sustainability.** A horizontal business model review was carried out for 41 LSIs with business models focused on the retail activity.

- iii) **Governance.** Continuing the analysis of the results of the 2021 cross-institutional review of credit cooperatives, focussed on the composition, size and functioning of decision-making bodies and committees, and of control functions, in addition to the results of the ECB's analysis of a sample of institutions.
- iv) **Capital strength.** Monitoring the quality of capital, capital concentration in cooperatives (in order to detect whether there are members with high percentages of capital), and dividend policies.
- v) **Technological innovation.** Work on detecting and resolving cyber attacks and the outsourcing of critical functions.
- vi) **Risks linked to climate change.** We analysed the questionnaires submitted by institutions in the first quarter of 2022, updated with a new request for information in October, and participated in a horizontal analysis by the ECB on a sample of institutions.

2.3 Supervision of credit institutions

Since the launch of the SSM in 2014, the ECB has been leading the microprudential supervision of credit institutions in participating countries, acting in cooperation with the national competent authorities (NCAs).

To perform this function, the ECB classifies institutions as SIs or LSIs. The ECB is responsible for the direct supervision of SIs and carries out indirect supervision of LSIs, the direct supervision of which corresponds to the Banco de España.

Figure 2.3 describes the distribution of the main supervisory tasks in the SSM.

At the end of 2022 there were 10 significant groups in Spain (out of a total of 115 groups in the SSM), which accounted for 90.5% of the total assets of the Spanish banking system. Also, there were 56 Spanish LSIs, which accounted for 5.5% of the total assets of the Spanish banking system, as detailed in Table 2.1.

In addition, Table 2.2 classifies the individual institutions operating in Spain by institution type in 2022 and 2021.

The supervision of SIs and LSIs is mainly performed through two complementary channels: ongoing (off-site) supervision and on-site supervision.

The objective of ongoing supervision is to keep the institutions' risk profile up to date. In this regard, the Supervisory Review and Evaluation Process (SREP) is

Figure 2.3

DISTRIBUTION OF CREDIT INSTITUTIONS' MICROPRUDENTIAL SUPERVISORY POWERS

	Tasks assigned to the ECB within the SSM	Tasks assigned to the NACs 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 SIs	Direct supervision of LSIs
Common procedures	Common procedures are the responsibility of the ECB, with proposals from the NACs: authorisation for credit institutions and the withdrawal of such authorisation, 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, after instruction from the ECB, for non-compliance with national legislation transposing EU directives; for infringements attributable to its 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 after instruction</p>

SOURCE: Banco de España.

Table 2.1

BANKS OPERATING IN SPAIN

	2021		2022	
	Number of groups	% of assets	Number of groups	% of assets
Spanish SIs	10	90.2	10	90.5
Other SSM SIs in Spain via subsidiary/branch	26	3.6	29	3.6
Spanish LSIs	57	5.7	56	5.5
Branches of other SSM LSIs	40	0.3	38	0.3
Branches of non-EU banking groups	4	0.2	4	0.2
TOTAL	137	100.0	137	100.0

SOURCE: Banco de España.

carried out annually with a single methodology and harmonised tools that allow for a comprehensive evaluation of institutions.

On-site supervision includes inspections and internal model investigations.

While the former allow for an in-depth analysis of any risk that may affect institutions, the latter relate to the review and, where appropriate, authorisation of the internal models for calculating the capital requirements necessary to cover credit, counterparty, market and operational risks.

Table 2.2
REGISTER OF CREDIT INSTITUTIONS

Data at 31 December

	2021	2022
Credit institutions	195	194
Banks	48	48
Savings banks	2	2
Credit cooperatives	61	61
ICO	1	1
Branches of EU credit institutions	79	78
Branches of non-EU credit institutions	4	4
Financial holding companies		3
Mixed financial holding companies		1
TOTAL	195	198

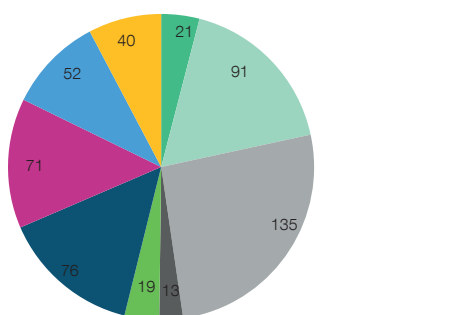
SOURCE: Banco de España.

Chart 2.7

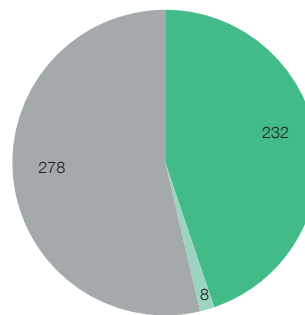
DISTRIBUTION OF THE ECB DECISIONS AND ACTIONS IN 2022 NOTIFIED TO THE EXECUTIVE COMMISSION

In 2022, there was a slight increase in SREP decisions and there was also an increase in governance decisions, whereas there was a decrease in solvency decisions.

1 BY CATEGORY



2 BY TYPE OF INSTITUTION



- COMMON PROCEDURES
- GOVERNANCE
- CRISIS MANAGEMENT
- SREP
- RELATIONS WITH THIRD PARTIES
- SOLVENCY
- CHANGES IN PERIMETER AND SIGNIFICANCE
- OTHER ACTIONS
- ORGANISATIONAL MATTERS

SOURCE: Banco de España.

The Banco de España makes an essential contribution to the supervision of Spanish SIs, both through its presence in the JSTs, which are responsible for ongoing supervision, and through its participation in on-site inspections and in model investigations.

A key element is the SSM working groups and expert networks in which the Banco de España actively participates. These groups analyse and develop

technical and supervisory policy proposals with a view to improving the functioning of the SSM.

Also, the Banco de España participates in decision-making regarding all credit institutions under SSM supervision through the presence of the Deputy Governor and the Governor on the ECB Supervisory Board and Governing Council, respectively. In 2022, the Supervisory Board adopted a total of 2,362 decisions, of which 518 affected Spanish institutions, as shown in Chart 2.7.

2.3.1 Ongoing supervision

2.3.1.1 Ongoing supervision of significant institutions

The JSTs are responsible for the ongoing supervision of SIs. The Banco de España participates in the JSTs for the 10 groups of Spanish credit institutions classified as significant pursuant to the SSM's criteria, and likewise in 6 JSTs for 28 significant banking groups from SSM countries that have a presence in Spain (through 5 subsidiaries and 42 branches). At the end of 2022, the Banco de España contributed a total of 136 employees to the JSTs of Spanish banks.

The objective of ongoing supervision is to maintain an up-to-date opinion on institutions' risk profile and situation. To this end, supervisory tasks are planned annually, and their frequency and intensity are determined by the institutions' importance and profile.

The ongoing supervisory tasks include most notably those related to the SREP, applying EBA guidelines (EBA/GL/2014/13) and SSM supervisory manuals.

The SREP findings provide a snapshot of the situation of each bank with respect to risk, capital and liquidity, and also a suitability assessment of their governance and their risk management and controls. This annual analysis process helps to determine the supervisory intensity for each institution, as part of the next Supervisory Examination Programme, and to set the additional supervisory capital requirement (P2R) and supervisory capital guidance (P2G) for each institution for the following year.

The P2R is a specific requirement intended to cover risks that are underestimated or not covered by the minimum capital requirement (known as Pillar 1). The P2R is binding, any breaches can have legal consequences, and it is a very important figure for the market. Since 2021, the P2R has included coverage shortfalls in non-performing exposures, determined in line with supervisory expectations, to the extent that these have not been deducted from capital.

Already in 2019 the ECB recommended institutions to publish the quantity and composition of their P2R, and since 28 January 2020 the ECB has published the specific P2R of each institution under its supervision. As a result of the 2022 supervisory exercise, the P2R levels required in 2023 of Spanish SIs, which incorporate, if appropriate, the aforementioned coverage shortfalls in non-performing exposures based on ECB expectations, have remained practically stable in aggregate terms, increasing at only three institutions.

Supervisory work also leads to the setting of the P2G, a bank-specific guideline reflecting the level of capital that the ECB expects it to hold. The P2G is not legally binding, it acts as an additional buffer to ensure that banks withstand a stressed period, and is determined by applying the supervisory methodology, based on the Capital Requirements Directive (CRD-V) and EBA inputs, on the basis of the results of regular stress tests, which examine the impact of an economic shock on banks' capital.

In 2022, the P2G quantified for each bank in 2021 was generally maintained, following the supervisory practice of conducting a comprehensive analysis of the overall impact of a stress scenario on banks every two years and dedicating the intervening year to conducting a stress test focused on a specific risk (in 2022 the stress test was focused on climate and environmental risks —see section 2.3.3). In the last overall stress test, conducted in 2021, the average reduction in the CET-1 ratio of Spanish SIs was 3.1 pp, as compared with 5.2 pp for all SSM SIs.

In addition, as a result of the SREP, requirements and qualitative recommendations can be made to institutions regarding a variety of areas for improvement. In 2022, these requirements and recommendations were broad in scope and included most notably those related to credit risk, governance and capital. In credit risk, the most widespread recommendation refers to coverage shortfalls in non-performing exposures, while in governance, the specific case of each institution gave rise to a very varied set of recommendations.

The capital and liquidity decisions resulting from the SREP, which were approved by the SSM decision-making bodies, were formally communicated to institutions before the end of 2022, following the period to make representations, became effective on 1 January 2023 and will remain in force until the next capital and liquidity decision, which is expected to be communicated at the end of 2023. Also, the ECB expects institutions to remain prudent in their dividend distribution and share buyback decisions and remuneration policies, and assesses these decisions in the context of the supervisory dialogue with each institution.

Dialogue between the supervisor and the supervised institution is a cornerstone of ongoing supervision. It is essential for conveying weaknesses detected, the assessment of the institution, and supervisory priorities and expectations, for

fostering the exchange of opinions, and for engaging in dialogue on the main areas of attention. JSTs maintain fluid contact with institutions, at different levels of the hierarchy, including the Board of Directors and senior management.

Moreover, the JSTs conduct institution-specific in-depth reviews (deep dives) to analyse the areas that may be of greater supervisory concern or to obtain more in-depth knowledge of specific aspects and verify the functioning of certain policies or procedures. In 2022, 14 deep dives to Spanish SIs were conducted, the main areas analysed being lending, business and governance.

Also, the JSTs participate in cross-institutional reviews, which are conducted uniformly for all or several SSM institutions in areas that represent a priority from a supervisory point of view. Worthy of note in 2022 are the following:

- Analysis of the degree of implementation of the EBA guidelines on loan origination and monitoring, which establish supervisory expectations on policies and procedures for loan origination and monitoring, collateral applications and pricing.
- Performance of two specific credit risk reviews. The first review was to assess risk management practices in commercial real estate financing (including, inter alia, climate risk). The second was to analyse the degree of alignment with the ECB's expectations regarding leveraged finance operations.
- Analysis of the impact of the conflict between Russia and Ukraine, focussed on three aspects: i) classification and provisions; ii) vulnerable sectors; and iii) internal ratings-based (IRB) models.
- In the area of structural risks, two specific reviews were performed in relation to the governance and management of counterparty risk, on the one hand, and interest rate exposure and credit risk spreads, on the other.
- Review, through a questionnaire, of banks' digitalisation strategy and the use of new technologies in their business model, as a preliminary step to the thematic review planned for 2023.
- Thematic review on climate risk with the objective of analysing the degree of alignment of institutions' practices with the ECB's Guide on climate risk (see Box 2.6). A stress test was also conducted to assess institutions' internal climate stress test frameworks.
- Review of recovery plans, including most notably the assessment of overall recovery capacity, which provides an overview of the extent to which the institution could restore its financial situation after a significant deterioration.

CLIMATE RISK SUPERVISION: THEMATIC REVIEW OF THE EUROPEAN CENTRAL BANK

Since the publication in November 2020 of its Guide on climate-related and environmental risks¹, the European Central Bank (ECB) has been analysing institutions' situation with regard to the management of these risks. In the first half of 2021, the ECB requested 112 significant institutions (SIs) to conduct a self-assessment exercise on the alignment of their banking practices with the supervisory expectations set out in the guide, and to submit their implementation plans to improve this alignment.

In 2022, as a follow-up to this exercise and in cooperation with eight national competent authorities, including the Banco de España, the ECB conducted a thematic review. The objective of this review was to check whether institutions adequately identify and manage climate-related and environmental risks, and to analyse their governance strategies and frameworks.

The thematic review was conducted on a total of 186 institutions (107 SIs, including the 10 Spanish SIs, and 79 LSIs, including 4 Spanish LSIs). The main conclusions of this exercise were published in a report in November 2022² and included most notably the following:

- The institutions showed significant progress with respect to the situation in 2021. A high percentage of institutions consider that climate risk has a material impact on their risk profile and business strategy.
- The vast majority of institutions have at least basic practices in place for half of the expectations, and some of them have started to use their transition plans to improve the resilience of their business models over longer time horizons..
- Certain institutions have already started work to address environmental risks in a broader sense (biodiversity loss, increased pollution, etc.).
- On the contrary, institutions generally lack sophisticated methodologies and granular information on climate and environmental risks. Also, the ECB

expresses concern about institutions' implementation capacity, as around half of them have designed practices but have not implemented them effectively.

In short, the thematic review has shown that, despite the progress made, institutions are still far from adequately managing climate and environmental risks. The ECB communicated the results of its assessment to the institutions individually, describing the main shortcomings identified and setting specific deadlines for remedying them, compliance with which will be closely monitored. In general, institutions should achieve, at least, the following milestones:

- As a first step, the ECB expects institutions to adequately classify climate-related and environmental risks and to carry out a complete assessment of the impact of these risks on their activities by March 2023 at the latest.
- In a second step, by the end of 2023 at the latest, the ECB expects institutions to include these risks in their governance, strategy and risk management.
- As a final step, institutions are expected to meet all other supervisory expectations by the end of 2024, including full integration into the internal capital adequacy assessment process and stress tests.

As a result of this thematic review, the ECB imposed qualitative requirements on several institutions in the supervisory review and evaluation process (SREP).

Together with the conclusions report, in November 2022 the ECB published a compendium of observed good practices³, with the aim of guiding institutions to come progressively into line with supervisory expectations.

In addition, in 2022 the ECB undertook the following supervisory actions focused on climate and environmental risks: i) a stress test, intended as a learning exercise to assess institutions' preparedness for tackling climate risks; ii) a specific review of commercial real estate loan portfolios; iii) on-site inspections of a small sample of

1 "ECB Guide on climate-related and environmental risks", published by the ECB in November 2020. <https://www.bankingsupervision.europa.eu/ecb/pub/pdf/ssm.202011finalguideonclimate-relatedandenvironmentalrisks-58213f6564.en.pdf>

2 "Results of the 2022 Thematic Review on climate-related and environmental risks", published by the ECB in November 2022. <https://www.bankingsupervision.europa.eu/ecb/pub/pdf/ssm.thematicreviewcerreport112022-2eb322a79c.en.pdf>

3 "Good practices for climate-related and environmental risk management", published by the ECB in November 2022. <https://www.bankingsupervision.europa.eu/ecb/pub/pdf/ssm.thematicreviewcercompendiumgoodpractices112022-b474fb8ed0.en.pdf>

significant institutions; and iv) a gap analysis of institutions' disclosures on these risks⁴. In turn, at the end of 2022 the Banco de España started the process of assessing the degree of progress of less significant institutions in coming into line with the supervisory expectations issued by the Banco de España in 2020⁵.

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- 4 "Supervisory assessment of institutions' climate-related and environmental risks disclosures", published by the ECB in March 2022. https://www.bankingsupervision.europa.eu/ecb/pub/pdf/ssm.ECB_Report_on_climate_and_environmental_disclosures_202203~4ae33f2a70.en.pdf?2e88c1605db8adf0b748ad4aeb8721d7
- 5 "Banco de España supervisory expectations relating to the risks posed by climate change and environmental degradation", published by the Banco de España in October 2020. https://www.bde.es/f/webbde/INF/MenuVertical/Supervision/Normativa_y_criterios/Recomendaciones_BdE/Expectativas_supervisoras_sobre_riesgo_medioambiental_27102020.pdf

For Spanish SIs, 24 cross-institutional reviews were carried out in 2022¹.

Another significant area of activity is the collaboration of JSTs in on-site activities (described in detail in section 2.2.3), through the preparation and definition of the objectives of each visit, the drafting of the letter sent to the institution, the monitoring of the shortcomings identified and the implementation of the measures to resolve them, and even through the integration of some members of the JSTs in the inspection teams, in order to share knowledge about the entity.

In addition, there are other tasks included in the area of ongoing supervision, such as:

- The processing of authorisations, including most notably those related to merger processes, acquisition of qualifying holdings and senior officer suitability assessment procedures.
- Coordination with other supervisors, mainly through supervisory colleges. Specifically, in the case of Spanish SIs with a presence in non-SSM countries, the JSTs participate in supervisory colleges (chaired by the ECB and with the Banco de España as observer), collaborating and sharing information with other supervisory authorities, with which the JSTs also hold regular bilateral meetings, thus maintaining fluid communication among them. In 2022, two Spanish SI supervisory colleges were held in Madrid.

With data up to 15 September 2022, 595 activities were planned by the JSTs for Spanish SIs, which were largely performed within the SREP framework, including, inter alia, analysis of institutions' capital planning process, ongoing risk analysis,

1 For the purpose of calculating the total number of reviews, a review is considered to be the analysis of one of the above matters for an institution.

supervisory dialogue, horizontal reviews, monitoring of internal models and activities related to the crisis management framework. All of the above with attention to the principle of proportionality and guided by the supervisory priorities set for 2022. In the last quarter of the year, supervisory activity continued as normal and around 200 further actions were added. The outcome of supervisory activities is communicated to the institutions concerned in capital and liquidity decision letters as a result of the SREP and in specific letters known as operational acts. In 2022, 22 operational acts were sent.

2.3.1.2 Ongoing supervision of less significant institutions, non-EU branches and the Official Credit Institute

The Banco de España is responsible for the direct supervision of Spanish LSIs, while the ECB is responsible for their indirect supervision. There are 67 individual institutions which, as shown in Table 2.1, are grouped into 56 institutions or groups. The Banco de España likewise performs supervisory functions on the branches in Spain of LSIs from other SSM countries and the rest of the EU, along with the branches of non-EU credit institutions. All these institutions account for 6% of the Spanish banking system's assets (Chart 2.8 shows the breakdown of these assets by type of institution). The Banco de España also supervises the ICO.

The action plan, which details the following year's supervisory activities, is prepared on the basis of the supervisory priorities. As part of ongoing supervision, each institution's progress is monitored periodically. The monitoring may vary in depth and is conducted in accordance with the principle of proportionality, considering factors such as each institution's risk profile, size, volume of retail deposits and business model.

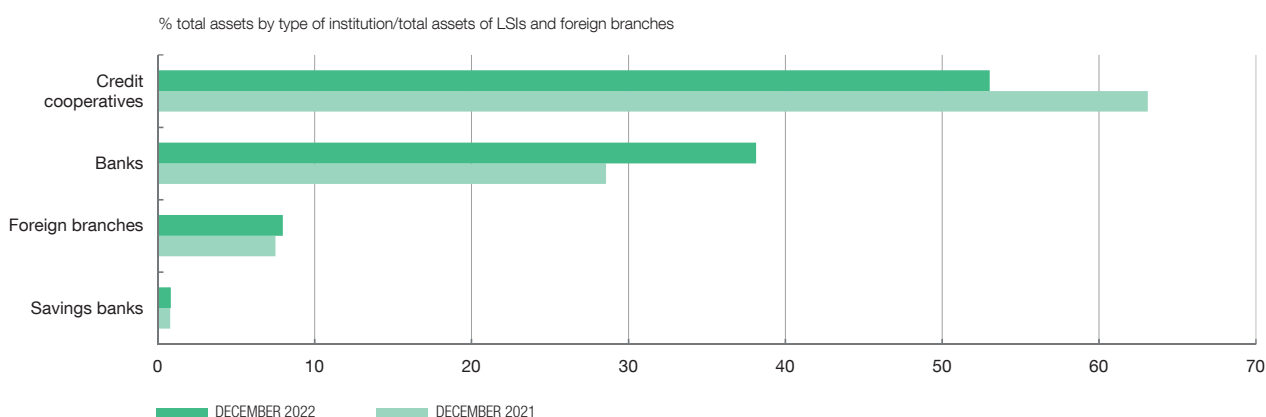
In 2022, regular quarterly monitoring was carried out of the 56 Spanish LSIs or groups of LSIs to which the SREP is applied, corresponding to 35 credit cooperatives, 19 banks and 2 savings banks. Various indicators and alerts are used for monitoring. Specifically, the following are used: indicators developed internally on the basis of confidential information, indicators defined by the ECB to identify situations of financial deterioration, other indicators related to the SREP methodology that identify possible changes in the rating of the items analysed in this process and, lastly, indicators that institutions include in their recovery plans. The ultimate objective of regular monitoring is to detect potential future problems relating to liquidity, solvency or business model sustainability.

Supervisory monitoring efforts were focused on the supervisory priorities set for 2022 and, to this end, the supervisor requests institutions to submit regular and ad hoc information. Likewise, ongoing contact with institutions is maintained through numerous meetings.

Chart 2.8

WEIGHT OF THE VARIOUS TYPES OF LSIs AND NON-EU BRANCHES

In absolute terms, the assets of LSIs and foreign branches taken as a whole decreased by 4%. As regards the distribution of these assets among the various types of institutions, credit cooperatives lose relative weight, especially as compared with banks.



SOURCE: Banco de España.

In addition, in 2022 the following horizontal reviews were carried out:

- A horizontal review of the business model of 41 retail LSIs. The main weaknesses identified are set out in section 2.3.4.
- The update of notifications of the delegation of critical functions or services (commonly known as outsourcing) in the framework of the Banco de España Circular 2/2016 and the EBA Guidelines on outsourcing arrangements (EBA/GL/2019/02). These guidelines further specify the definition of critical functions or services, which had hitherto been unclear. According to the guidelines, institutions should review and amend accordingly outsourcing arrangements of critical functions with a view to ensuring that these are compliant with these guidelines before 31 December 2021. As a result of this action, 63 LSIs were notified that they should update certain unreported outsourcing arrangements for critical functions.
- A technology risk assessment based on the responses to an information technology risk questionnaire, developed by the ECB and based on the EBA Guidelines on ICT Risk Assessment under the SREP (EBA/GL/2017/05), applicable from January 2018. The outcome of this assessment has been incorporated into the analysis of technology risk, within operational risk, of the 2022 SREP.
- The analysis of the responses to a second climate risk questionnaire (the first was sent in 2021) in order to assess the solidity, exhaustiveness and

effectiveness of practices in relation to climate and environmental risks, as well as the degree of progress made in meeting the Banco de España's supervisory expectations regarding the risks arising from climate change and environmental deterioration.

In addition, other tasks as part of ongoing supervision include reviews of external audit reports, reviews of internal capital and liquidity adequacy assessment reports, review of recovery and resolution plans, meetings with the external auditor and regular meetings with persons in positions of responsibility at the institutions.

As is the case for SIs, the SREP is one of the central tasks of ongoing off-site supervision. The SREP process follows the SREP methodology for LSIs approved by the ECB and it incorporates all the information obtained in the various ongoing supervision activities. Once the related 2022 SREPs had concluded and the institutions' representations had been considered, the Banco de España adopted the capital and liquidity decisions, including the P2R, for the 56 LSI institutions and groups. Following the 2022 supervisory exercise, the average P2R required in 2023 for LSIs has increased slightly.

P2G guidance which, as a new development, was set for the first time in 2021 to be applied in 2022, has remained unchanged and will be updated again in the 2023 SREP. To this end, the results of the stress test known as the Forward-Looking Exercise on Spanish Banks (FLESB) (see section 2.3.3), together with the quantitative results of the stress tests performed by the institution within its internal capital and liquidity adequacy assessment report, will be taken into account.

In addition, the annual letter sent to institutions contains other requirements and recommendations arising from the supervisory process carried out during the year. The weaknesses identified are discussed in section 2.3.4.

Also, attention continued to be paid to dividend distribution and share buy-back decisions and to remuneration policies.

The Banco de España has continued to cooperate with another NCA in the context of a supervisory college of an LSI in other SSM countries with subsidiaries in Spain. It contributed to joint decisions at the supervisory college on capital and liquidity requirements. Also, in its capacity as supervisor of LSIs, the Banco de España has participated in four² supervisory colleges of foreign central counterparties³.

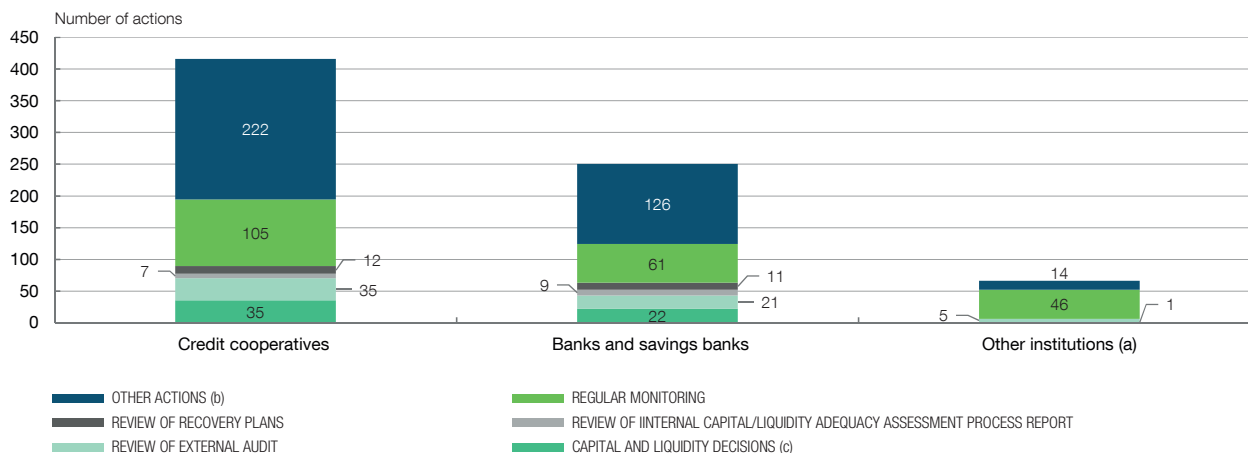
² It participated in three in its quality as member and in one as observer.

³ 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 contributions to the default fund.

Chart 2.9

NUMBER OF ONGOING OFF-SITE SUPERVISORY ACTIONS AT LSIs, NON-EU BRANCHES AND THE ICO

In 2022, the usual reviews continued, as well as a cross-institutional review of the business model, technology risk and climate risk, and a review of outsourcing.



SOURCE: Banco de España.

- a "Other institutions" include foreign branches and the ICO.
- b "Other actions" includes meetings with institutions, monitoring of requirements and recommendations, and ad hoc monitoring generally relating to the supervisory priorities defined in the year and to each institution's characteristics, risk profile and performance.
- c There were 58 capital and liquidity decisions in total, corresponding to the 56 LSI institutions or groups (in one case, a decision was issued for a subsidiary of an LSI group in addition to the group itself) and to the ICO.

In 2022, the assessment of the recovery plans of 46 LSIs submitted in the last quarter of 2021 was completed.

Lastly, the list of institutions considered to be small and non-complex institutions (SNCIs) is updated on an annual basis⁴. According to the latest assessment performed in 2022, 40 individual LSIs are deemed SNCIs.

Since the branches in Spain of institutions with head offices in other EU Member States (including those of countries not participating in the SSM and those of LSIs of other SSM countries) are not subject to prudential or liquidity requirements, periodic monitoring of the branch's performance is conducted.

Direct supervision of LSIs is supplemented with indirect supervision by the ECB, which has the following objectives:

- Ensure consistent application of high standards of supervision.
- Ensure consistency of supervision results across SSM participating countries.

⁴ This assessment is performed in accordance with the criteria defined in Article 4(1)(145) of Regulation (EU) No 575/2013.

As in previous years, the execution of these two functions by the ECB benefited from the full cooperation of the Banco de España, through participation in various working groups, meetings, information exchange, workshops, etc.

In 2022, a total of 732 on-going supervisory actions were carried out for these institutions, which lead to 114 letters being sent, including the capital decision letter issued to the ICO, which are detailed in Chart 2.11 by type and subject matter.

2.3.2 On-site supervision

On-site supervision supplements the ongoing supervision of institutions. It is carried out by different teams to those tasked with ongoing supervision with the aim of reinforcing their independence and the objectivity of the conclusions of their work.

In 2022, inspections and internal model investigations were mainly conducted using a hybrid working model combining visits by inspectors to institutions' head offices with off-site work.

Table 2.3 details the visits to SIs carried out in 2022 that are most important for the Banco de España (i.e., all inspections relating to Spanish institutions and those relating to institutions in other SSM countries led by Banco de España staff).

In 2022, 20 inspections were conducted at SSM SIs, of which 18 were conducted at Spanish group institutions. 14 of these inspections were led by the Banco de España, 3 by the ECB and 1 by the Banque de France. The Banco de España has participated in all teams of inspections at Spanish institutions, as well as in 2 inspections at financial groups from other SSM member states, without leading them.

By type of risk, 6 of the 18 inspections at Spanish SIs in 2022 focused on credit risk, with the remainder dedicated to technology risk (3), capital (3), governance (3), business model (2) and market risk (1).

A significant percentage of these inspections of SIs — 44% — were part of so-called “campaigns”. The most important campaign for Spanish institutions in 2022 was the commercial real estate collateral review, in which two Spanish institutions were included, and, for the first time, a climate and environmental risk review was conducted, in which one Spanish institution was included.

The shortcomings detected in the course of the inspections are summarised in the findings. Institutions must correct these shortcomings in accordance with the indications of the JSTs, and the JSTs are responsible for monitoring them until they are remedied. In 2022, 15 on-site inspection reports were submitted to Spanish

Table 2.3

ON-SITE SUPERVISION AT CREDIT INSTITUTIONS. NUMBER OF ACTIONS

	2022		
	SIs	LSIs	Total
On-site inspections	20	10	30
At Spanish credit institutions	18 (a)	10	28
At credit institutions of other SSM countries	2		2
Model investigations	12 (b)		12
At Spanish credit institutions	11 (c)		11
At credit institutions of other SSM countries	1		1
TOTAL	32	10	42

SOURCE: Banco de España.

a 14 led by Banco de España staff and 4 led by staff from other authorities.

b In addition, 1 model investigation was carried out on the Spanish branch of a European institution.

c 8 led by Banco de España staff and 3 led by staff from other authorities.

SIs, with a total of 176 findings. The bulk of the findings stem from credit risk inspections, which are the most numerous, followed by technology risk inspections. The most serious shortcomings were detected in relation to the estimation of the parameters used by the internal models for accounting provisions, to the identification of exposures with a significant increase in risk and to the quality of the databases reviewed.

With regard to model investigations, 12 missions were undertaken in 2022, 11 of which were at Spanish institutions. Of these, 8 were led by the Banco de España, 1 by the Banco de Portugal, 1 by the Bundesbank and 1 by the ECB.

By type of risk, most of the investigations were focused on credit risk models, while 1 was focused on market risk.

In terms of content, the bulk of missions were aimed at reviewing material changes to models emerging from adaptations to the new EBA guidelines (mainly PD and LGD guidelines and the new definition of default) and from the resolution of outstanding obligations arising from previous missions.

In 2022, 13 model investigation reports including 251 findings were submitted to Spanish institutions. The most significant reports were focused on the area of downturn LGD estimation and the determination of the long-term horizon on the basis of which the probability of default (PD) is calculated.

Lastly, the supervisory plan for LSIs is approved by the Banco de España's Executive Commission, since they are subject to the Banco de España's direct supervision. However, the ECB is kept apprised of the content of the plan. In 2022,

10 on-site inspections were conducted at LSIs, with a special emphasis on the assessment of credit quality, foreclosed assets, governance and solvency, along with IT-related matters.

The results of the inspection visits to the LSIs are discussed with the institutions themselves by means of the so-called “preliminary findings report”, which sets out the most salient points arising from the inspection visits, after which the corresponding final reports and the letters of requirements and recommendations to the institutions are drafted, and submitted to the Executive Commission of the Banco de España for approval at the proposal of the DG.SUP (see section 2.3.4).

On-site inspections of Spanish SIs and LSIs in the area of AML/CTF are covered in section 2.3.6.

2.3.3 Stress tests

In the first half of 2022, the ECB conducted a climate risk stress test, which was intended to advance the analysis of climate risk, identified as a supervisory priority for 2022-2024.

It was a test in which the most important aspect was the learning component, both for the institutions and for the supervisor, with no direct impact on capital. The objective was to ascertain the degree of development at the institutions, to foster awareness of the importance of this risk, and to take note of both best practices and the main shortcomings detected.

The 10 Spanish SIs participated in the exercise. It was a very wide-reaching test, in which a total of 104 institutions took part.

The methodology used was specially developed for this purpose, and it consisted of three modules for each institution: 1) a qualitative analysis of the degree of progress of climate stress testing, with a block questionnaire that sought to assess its existence and implementation; 2) an analysis of the degree of the extent to which the business model is dependent on greenhouse gas intensive sectors through the use of two metrics (income sustainability and degree of exposure); and 3) a study of the potential impact of short- and long-term transition risk, and of physical risks of drought and flooding. While all institutions in the sample participated in modules 1 and 2, only one institution that was considered to be advanced in its climate risk practices provided projections for module 3. For the remaining institutions, a top-down approach was used.

The qualitative analysis of the questionnaire provided an overview of the degree of progress by institutions in their climate stress testing. In addition, the approach

Figure 2.4

CLIMATE STRESS TEST METHODOLOGY

Module 1 QUESTIONNAIRE	<ul style="list-style-type: none"> – Climate ST framework: 11 blocks including governance, integration in management and ICAAP, methodology, scenarios, data, future plans, internal audit, stress test
Module 2 PEER BENCHMARKS	<ul style="list-style-type: none"> – Metric 1: sensitivity of the business model (income) to greenhouse gas emitting industries – Metric 2: degree of exposure (financing) to carbon-intensive companies
Module 3 BOTTOM-UP ST	<ul style="list-style-type: none"> – Transition risk <ul style="list-style-type: none"> – Short term (3 years): static balance sheet, two scenarios – Long term (until 2050): dynamic balance sheet, three scenarios – Physical risk: drought and floods (1 year): static balance sheet – Scenarios based on the scenarios proposed by the NGFS with additional preparation by the ECB (stressed macroeconomic parameters)

SOURCE: Banco de España.

Figure 2.5

CLIMATE STRESS TEST LESSONS LEARNED

Lessons learned banks	<ul style="list-style-type: none"> – Most banks have not integrated climate risk into their stress tests – Difficulties in data availability and modelling techniques. This affects the results – Sensitive to credit losses due to transition and physical risks – Their transition to a green economy are not adequately reflected in their long-term strategies
Lessons learned supervisors	<ul style="list-style-type: none"> – Reflect on the development of stress scenarios – Improve methodological factors – Help banks overcome difficulties in data availability – Provide "best practice" guidelines

SOURCE: Banco de España.

followed made it possible to score banks on a relative basis using a four-tier system and to see their position relative to their peer group.

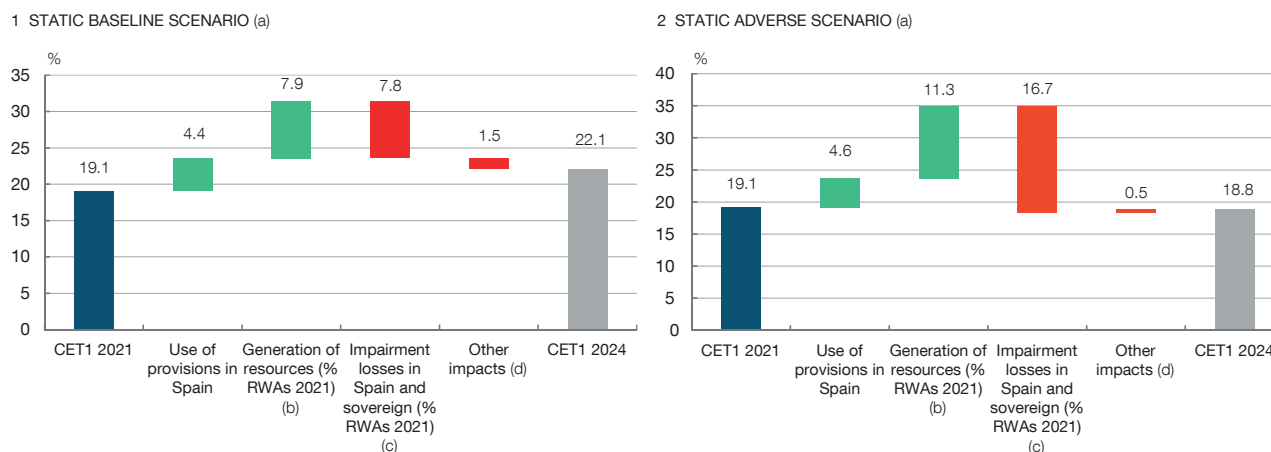
Although the institutions have made progress, the results showed that there is still some way to go. The majority of the sector has not yet integrated climate risk into its stress testing framework, and shortcomings were detected in data quality and modelling techniques. It was also noted that institutions need to improve strategies to take advantage of the opportunities of ecological transition. In any case, the exercise showed reasonable progress in the implementation of the climate stress testing framework in Spanish institutions, especially in those aspects related to governance, scenario design and information availability.

The ECB published in December 2022 a report with observed best practices, with the aim of facilitating institutions' development of an adequate climate stress testing framework. This framework should consider the importance of the portfolios concerned, their sectoral dimension and the design of physical and transition

Chart 2.10

LSI STRESS TESTS. RESULTS

The test points to a 3 pp increase in the CET1 ratio in the baseline scenario, while there is a 0.3 pp decrease in the adverse scenario.



SOURCE: Banco de España.

- a The red/green colour of the bars indicates a negative/positive contribution of the item corresponding to the change in the CET1 ratio at the end of the forward-looking exercise (2024) as compared to the beginning of the exercise (2021).
- 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.

scenarios under both a static and a dynamic balance sheet approach. In this regard, it is essential to have adequate information on emissions and energy performance certificates, obtained directly from counterparties or external suppliers, or deduced through the use of proxies, provided that it is granular and verifiable, as this will facilitate the integration of climate risk into credit risk models. This modelling should consider, for different time horizons, the use of climate variables and their impact on the various credit metrics and factors.

The Banco de España conducts annual stress tests of LSIs⁵ with the aim of measuring institutions' capacity to cope with potential macroeconomic and financial risks and to feed the SREP and, in particular, the P2G estimate. These tests are conducted in the same framework and under the FLESB tool, which is mentioned in Chapter 3.

The aggregate results of the test, with the baseline and adverse scenarios of that section using the static balance sheet method recommended by the ECB, point to an increase in the CET-1 ratio of 3 pp in the baseline scenario and a decrease of 0.3 pp in the adverse scenario. In the baseline scenario, the generation of new loss-absorbing resources (7.9% of RWA) and the use of provisions (4.4%) more than offset impairment losses (7.8%) and the other impacts (-1.5%). In the

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

adverse scenario, the new resources generated are positive (11.3%) thanks to the increase in the interest margin favoured by the interest rate rise; however, this effect, together with the use of provisions (4.6%) and the positive effect of the other impacts (0.5%), does not offset the significant impairment losses (16.7%).

The aggregate solvency of all the LSIs in both scenarios would be high and above regulatory requirements.

2.3.4 Letters sent to less significant institutions, non-EU branches and the Official Credit Institute

As a result of the supervisory actions described above that were performed in 2022, the Banco de España sent 114 letters to the LSIs and the ICO. Chart 2.11 provides a breakdown of these letters by type of institution and origin. Of these, 58 related to capital decisions following the prior submission of drafts for representations, 46 to recovery plan reviews and 10 to on-site inspections.

Also, Chart 2.12 shows the breakdown by subject matter of the 520 requirements and recommendations contained in the 114 letters sent to credit institutions. As shown in this Chart, the largest number of requirements and recommendations made to LSIs in 2022 are classified under the area called “Global and others”. They are mainly recommendations made as a result of the assessment of recovery plans, and others relating to improvements to internal capital and liquidity adequacy assessment process reports included in the capital decision letters. The other recommendations relate mainly to the area of solvency, mostly P2R and P2G requirements included in capital decisions; to the area of business models, which have been included in capital decision letters; and to the areas of governance and credit, arising from both capital decisions and inspections. In fact, most of the requirements arising from the inspections related to credit risk, followed by governance.

Most of the weaknesses related to the business model were identified in the horizontal review of the first half of 2022 on the 41 institutions with retail business. All the requirements and most of the recommendations in this area deal with qualitative aspects and aim to ensure that institutions: improve their analysis of profitability by business line; have adequate cost allocation and pricing procedures; correctly monitor their strategic plan and projections; involve both management bodies and internal control functions sufficiently; and extend the scope of actions carried out by internal audit.

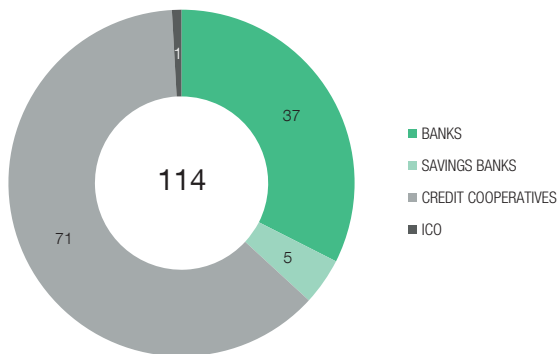
Credit risk requirements are explained by the kind of business model carried out by the institutions concerned (retail banking) and relate mostly to reclassifications to non-performing and to the need to increase loan loss provisions, and to improve the

Chart 2.11

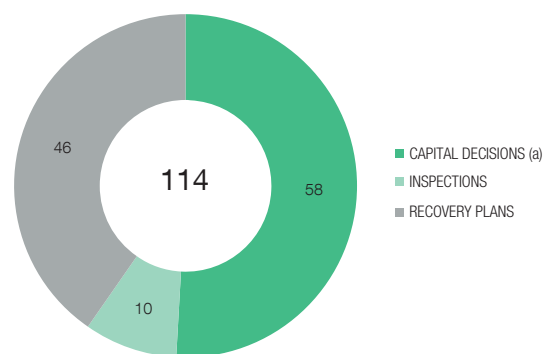
NUMBER OF LETTERS ADDRESSED TO CREDIT INSTITUTIONS

The majority of letters were addressed to credit cooperatives, since this group has the highest number of LSIs, and capital decisions and recovery plans were most commonly at the origin of the letters.

1 BY TYPE OF INSTITUTION (2022)



2 BY ORIGIN (2022)



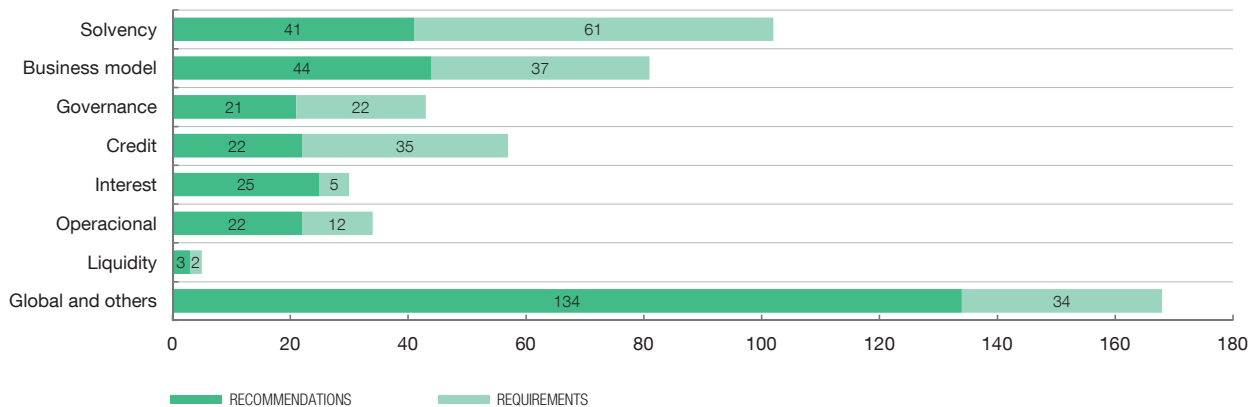
SOURCE: Banco de España.

a The 58 capital decision letters addressed to the 56 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.

Chart 2.12

NUMBER OF RECOMMENDATIONS AND REQUIREMENTS NOTIFIED TO CREDIT INSTITUTIONS

By specific areas, the requirements and recommendations on solvency risk, business models and credit stand out.



SOURCE: Banco de España.

NOTE: "Global and others" mainly comprises recommendations set out in 46 letters on recovery plans and in others relating mainly to improvements to internal capital and liquidity adequacy assessment process reports.

specific internal controls in place for credit risk. The governance requirements were issued to improve the composition and functions of management body committees and internal control.

On a quarterly basis, within the LSI monitoring framework, the situation of the requirements and recommendations not yet complied with by each institution is assessed.

2.3.5 Covered bond supervision

8 July 2022 saw the entry into force of Royal Decree-Law 24/2021⁶, transposing Directive (EU) 2019/2162 on covered bonds.

This directive establishes 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 entry into force of Royal Decree-Law 24/2021 led to the creation of two categories of covered bonds: “European covered bond (premium)” and “European covered bond”. The former are subject to additional, more demanding requirements, including most notably the imposition of a minimum level of overcollateralisation of 5%. Mortgage, internationalisation and public sector covered bonds can benefit from the designation “European covered bond (premium)” if they meet all the requirements.

Royal Decree-Law 24/2021 increases protection for covered bonds investors by strengthening the supervisory regime for these instruments and reducing their level of risk by requiring, among other new developments, the creation of a liquidity buffer and the segregation of cover assets through their entry in a special register.

The strengthened supervisory regime is underpinned by two new developments: the Banco de España is tasked with the ongoing supervision of covered bonds and, therefore, it must authorise both the covered bond programmes issued under it and the issuance monitors; and issuing institutions are required to appoint a cover pool monitor, which oversees compliance with legal and contractual requirements.

Due to the entry into force of Royal Decree-Law 24/2021, the Banco de España authorised, for the 19 issuing institutions, 5 companies as monitors and 27 bond programmes covering the outstanding issues at that date (the aggregate amount of which totalled EUR 240 billion) and possible subsequent issues during the term of the programme and up to the maximum authorised amount.

At December 2022, the Spanish covered bond market represented slightly more than 225 issues and an outstanding amount of around EUR 212 billion, of which 91% corresponded to mortgage covered bonds, 6% to public sector covered bonds and 3% to internationalisation covered bonds.

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

⁶ Royal Decree-Law 24/2021 was amended by Royal Decree-Law 29/2021 of 21 December and Royal Decree-Law 11/2022 of 25 June.

The forthcoming publication of the circular on information to be submitted to the Banco de España on covered bonds (see Section 8.2) will facilitate the performance of this new supervisory function, through the submission of a flow of stable and reliable data by issuing institutions. This information will make it possible to determine, as early as 2023 and on an annual basis, a compliance profile for these institutions, without prejudice to any other verification, control and inspection tasks that may be carried out.

2.3.6 Anti-money laundering and counter-terrorist financing

The Banco de España's powers in the area of AML/CTF are confined to the supervision of certain AML/CTF obligations (due diligence, internal control and reporting) at the regulated institutions within its scope of supervision⁷. These powers are exercised within the framework of the provisions of Spanish legislation and the agreement entered into with the CPMLMO in 2021 for the coordination of their respective supervisory and inspection activities, through close cooperation with its two bodies, the Secretariat of the CPMLMO and SEPBLAC, and with the CNMV and the DGSFP. This cooperation allows synergies to be exploited and contributes to institutional efficiency.

In 2022 supervisory cooperation continued to advance. In this respect, progress was made in the development of a methodology for the joint assessment with SEPBLAC of ML/TF risk at credit institutions, the results of which will be an essential element for the preparation of the Joint Inspection Plan⁸, which follows a risk-based approach. Also, work was performed on the development of common supervisory criteria and procedures, in coordination with the Secretariat of the CPMLMO, SEPBLAC, the DGSFP and the CNMV.

In the course of 2022, the Banco de España completed 4 general inspections, reviewing compliance with AML/CTF obligations at 3 LSIs and 1 SI. In addition, 2 inspections were launched, 1 with a general scope on an SI and the other with a specific scope focusing on the review of the group's internal control systems of an SI in the AML/CTF area of the activity carried out by its branches and subsidiaries abroad. Also, a thematic inspection is underway on foreign exchange activity, which has been identified as a ML/TF risk operation. It should be noted that this latter inspection is a joint action with SEPBLAC which extends to 2023 and affects credit institutions and other institutions providing foreign exchange services.

7 Credit institutions, branches of foreign credit institutions, specialised lending institutions (SLIs), mutual guarantee societies (MGSs), Pls, ELMIs and currency-exchange bureaux.

8 Annual inspection plan, referred to in Article 44(2)(g) of Law 10/2010, approved by the CPMLMO Standing Committee, which includes the inspections that all the supervisors will conduct.

Moreover, monitoring actions were carried out reviewing compliance with the recommendations and requirements arising from 5 inspections conducted in previous years, and the degree of progress made in the implementation of an AML/CTF action plan established by an SI. In addition, the ML/TF risk profile of credit institutions incorporated in Spain was updated in accordance with the methodology defined in the DG.SUP. Also, the CPMLMO Standing Committee was informed of the performance of our supervisory actions.

At the international level, as in previous years, the Banco de España continued to cooperate closely with other supervisors and to participate in international fora. In cooperation with SEPBLAC, cooperative relationships were maintained with AML/CTF supervisors from other countries, either bilaterally or through supervisory colleges. In 2022, the Banco de España and SEPBLAC participated jointly in 65 AML/CTF supervisory colleges and organised the colleges for 6 credit institutions and 8 Spanish PIs. Additionally, active participation continued in international and European fora, notably in the EBA's Standing Committee on anti-money laundering and countering terrorist financing (AMLSC).

Lastly, in regulatory matters, the Banco de España has contributed technically to the negotiations on the EU's AML/CTF legislative package of July 2021⁹, which aims, among other things, to create the European Anti-Money Laundering Authority (AMLA), with direct and indirect supervisory functions over regulated institutions, and a more harmonised regulatory framework in the EU, which will include a new European regulation and a sixth AML/CTF directive. In June 2022, the Council agreed its partial position on the proposal for a regulation that will govern the creation of the new European authority¹⁰ and on 7 December 2022 it agreed its position on the sixth directive and the European ML/TF regulation¹¹. At the beginning of 2023, the trilogue phase of the legislative package was launched in order for the co-legislators to reach agreement on the definitive version of the text. The city of Madrid has applied to be the seat of the new European AML/CTF authority, which will commence activities in 2024.

2.3.7 Common procedures, suitability and other procedures

Common procedures are those relating to the authorisation to carry on the activity of credit institutions, the withdrawal of such authorisation and the acquisition of qualifying holdings. They are set out in ECB Regulation (EU) No 468/2014 establishing

9 https://ec.europa.eu/commission/presscorner/detail/es/ip_21_3690

10 <https://www.consilium.europa.eu/en/press/press-releases/2022/06/29/new-eu-authority-for-anti-money-laundering-council-agrees-its-partial-position/>

11 <https://www.consilium.europa.eu/en/press/press-releases/2022/12/07/anti-money-laundering-council-agrees-its-position-on-a-strengthened-rulebook/>

Table 2.4

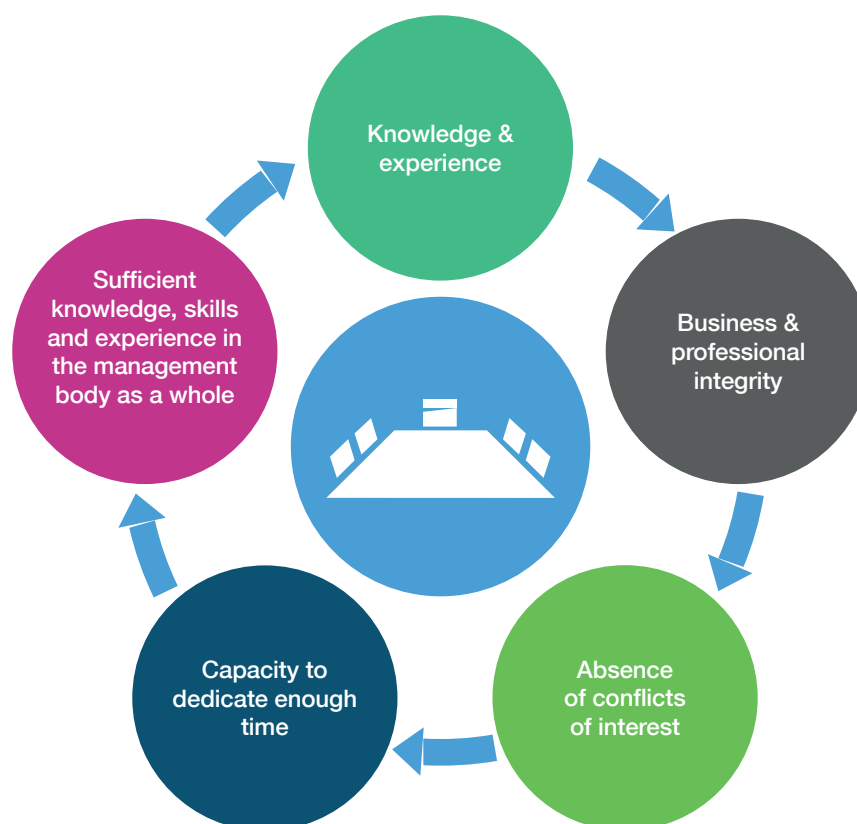
PROCEDURES IN RESPECT OF CREDIT INSTITUTIONS INVOLVING THE BANCO DE ESPAÑA

	Total number
Qualifying holdings, merger, spin-off and other significant acquisitions	11
Cross-border activity of Spanish credit institutions	38
Branches in the EU	16
Branches in third countries	0
Freedom to provide services	22
Representative offices	0
Cessation of business	0
Loans to senior officers	23
Suitability of senior officers (a)	253
Procedures relating to capital	80
Amendments to articles of association	32
Communications with other supervisory authorities or institutions	12
Other procedures	78
TOTAL	527

SOURCE: Banco de España.

a Includes 15 suitability assessments on senior officers of mixed financial holding companies.

Figure 2.6

FIT AND PROPER REQUIREMENTS ASSESSED FOR DIRECTORS WITHIN THE SSM

SOURCE: Banco de España.

the framework for cooperation within the SSM between the ECB and NCAs. In these procedures, for Spanish institutions, the Banco de España makes an initial assessment and formulates a draft decision for each specific case. Subsequently, on the basis of this proposal and any additional work it deems appropriate, the ECB adopts a definitive decision. Noteworthy among the rest of the procedures is the suitability procedure.

Table 2.4 shows the details of the other common procedures and the rest of the procedures on credit institutions in which the Banco de España has participated.

Following a public consultation process and its approval by endorsement by the Supervisory Board and the Governing Council of the ECB, the “[Guide to fit and proper assessments](#)” and the new “[Fit and proper questionnaire for senior bank officials in the SSM](#)” were published on 8 December 2021. The national specificities of the new questionnaire were published in 2022.

2.4 Supervision of institutions other than credit institutions

The Banco de España is the competent authority for registering, and granting and withdrawing the licenses of, SLIs which provide payment services (SLI-PIs) or which issue electronic money (SLI-ELMIs), ELMIs, PIs, exempt PIs pursuant to Article 14 of Royal Decree-Law 19/2018¹², ¹³account information service providers (known as “aggregators”) and currency-exchange bureaux. The Banco de España is also the competent authority for the official recognition of appraisal companies.

Also, the Banco de España is tasked with issuing the mandatory report on the authorisation of SLIs, MGSs and reguarantee companies, the granting of which is the prerogative of the Ministry of Economic Affairs and Digital Transformation.

Table 2.5 shows the number and performance of these institutions other than credit institutions.

With regard to applications for authorisation and registration of new payment service providers, noteworthy is the relatively low number of applications for the extension of activity with respect to the total number of authorisation and registration applications. As a result, the observed trend leads to the consolidation of a payment service provider ecosystem which has ever more participants and, therefore, is

¹² Royal Decree-Law 19/2018 of 23 November on payment services and other urgent financial measures.

¹³ These are Small Payment Institutions (SPIs), which are subject to a registration process in the PI register, conditional on compliance with lower requirements than in a PI authorisation process, insofar as the average total value of payment transactions performed in the preceding 12 months, including possible agents for which it assumes full responsibility, does not exceed EUR 3 million per month.

Table 2.5

REGISTER OF INSTITUTIONS OTHER THAN CREDIT INSTITUTIONS

Data at 31 December

	2020	2021	2022
SLIs	26	23	24
SLI-PIs 8 9 9	8	9	9
Branches of financial institutions subsidiaries of EU credit institutions	1	1	1
MGSs and reguarantee companies	19	19	19
Appraisal companies	32	32	32
Currency-exchange bureaux (a)	17	16	16
PIs	47	49	52
PIs exempt under Article 14 of Royal Decree-law 19/2018	1	9	10
Payment service providers excluded under Article 4 of Royal Decree-Law 19/2018	3	15	18
Account information service providers	1	1	3
ELMIs	9	9	10
Branches of EU PIs	14	7	9
Branches of EU ELMIs	8	3	4
TOTAL	186	193	207

SOURCE: Banco de España.

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

increasingly heterogeneous, with an associated increase in the number of institutions to be supervised.

The number of PIs and ELMIs increased from 49 in December 2018 to 75 at the end of 2022 (52 PIs, 10 ELMIs, 10 exempt PIs pursuant to Article 14 of Royal Decree-Law 19/2018 and 3 aggregators). In line with this increase, the number of payment service providers excluded under Article 4 of Royal Decree-Law 19/2018¹⁴ continues to grow.

It is worth noting that in 2022 progress was made in streamlining the implementation processes of the various authorisation and registration procedures, with the publication of an informative guide on these processes and an update of certain forms, all of which are available on the Banco de España's Virtual Office. Also, the Banco de España has joined the electronic notification system, Single Enabled Electronic Address (DEHú), to offer interested parties the opportunity to send communications and notifications by electronic means.

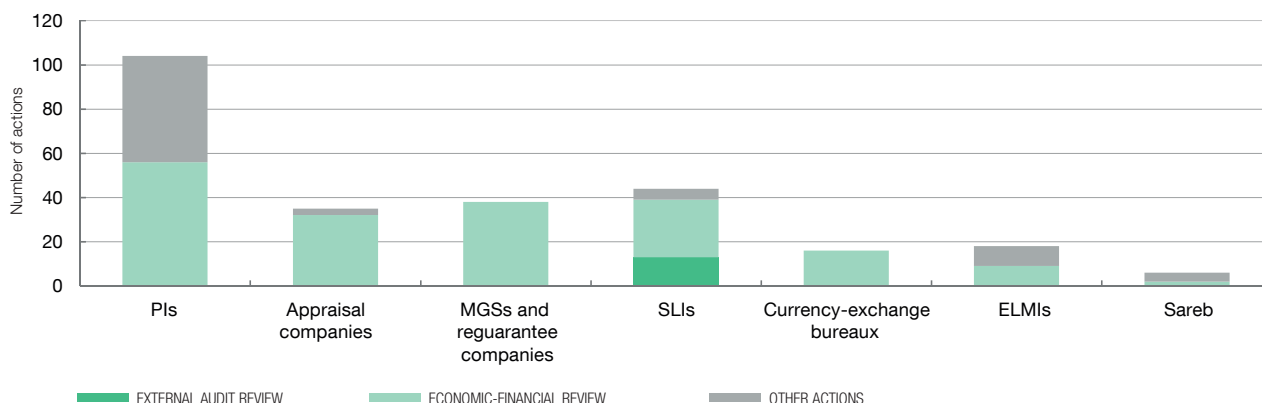
With regard to supervisory powers, the Banco de España has exclusive microprudential supervisory powers over the following institutions that provide financial services or perform functions related to the financial sector: SLIs, mutual guarantee societies (MGSs), reguarantee companies, appraisal

¹⁴ The payment service providers excluded under Article 4 of Royal Decree-Law 19/2018 that are included in Table 2.5 are subject to a separate registration regime in the Banco de España and only certain regulatory provisions of Royal Decree-Law 19/2018 are applicable to them.

Chart 2.13

NUMBER OF ONGOING OFF-SITE SUPERVISORY ACTIONS AT OTHER INSTITUTIONS

In 2022, the external audit review ceased to be an independent action, as its assessment became included in economic-financial monitoring, except for SLIs.



SOURCE: Banco de España.

companies, Pls, exempt Pls, account information service providers, ELMIs, currency-exchange bureaux, Sareb (the asset management company for assets arising from bank restructuring)¹⁵ and banking foundations¹⁶. The legal basis under which the Banco de España supervises these institutions and the approach to the tasks differ from case to case.

Moreover, although the weight of Pls and ELMIs in the financial system is not comparable to that of credit institutions, they need to have in place an effective regulatory and supervisory model to promote the fluidity of financial intermediation mechanisms and to generate a climate of trust in financial institutions. Section 2.6 describes the Banco de España’s oversight of the operational aspects of the provision of payment services, including institutions’ security and fraud control.

In 2022, 261 ongoing off-site supervision actions were performed by various means: periodic monitoring, external audit report reviews and other activities, as detailed in Chart 2.13.

Also, in 2022, 2 on-site inspections were carried out at appraisal companies, and 1 inspection at an ELMI, and 2 inspections at appraisal companies were

15 The Banco de España supervises fulfilment of Sareb’s sole corporate purpose, in order to identify deviations therefrom jeopardising the attainment of Sareb’s overall statutory objectives.

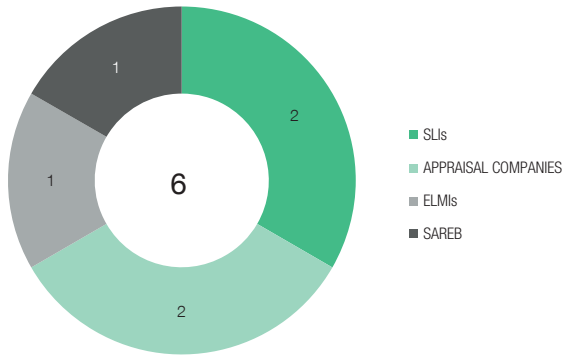
16 Law 26/2013 of 27 December 2013 on savings banks and banking foundations confers on the Banco de España control of compliance with certain rules related to the influence of the banking foundation over the sound and prudent management of the investee credit institution, in the event that the foundation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

Chart 2.14

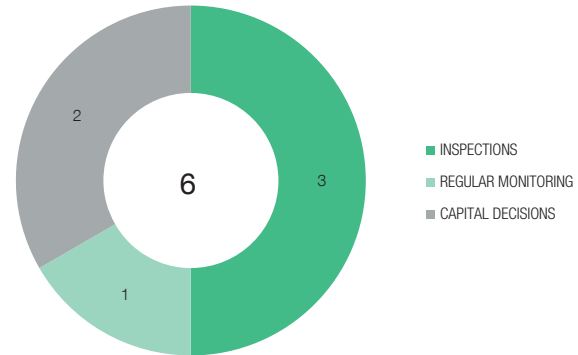
NUMBER OF LETTERS ADDRESSED TO OTHER INSTITUTIONS

Of the letters addressed to other institutions, half relate to inspection visits.

1 BY TYPE OF INSTITUTION (2022)



2 BY SUBJECT MATTER (2022)

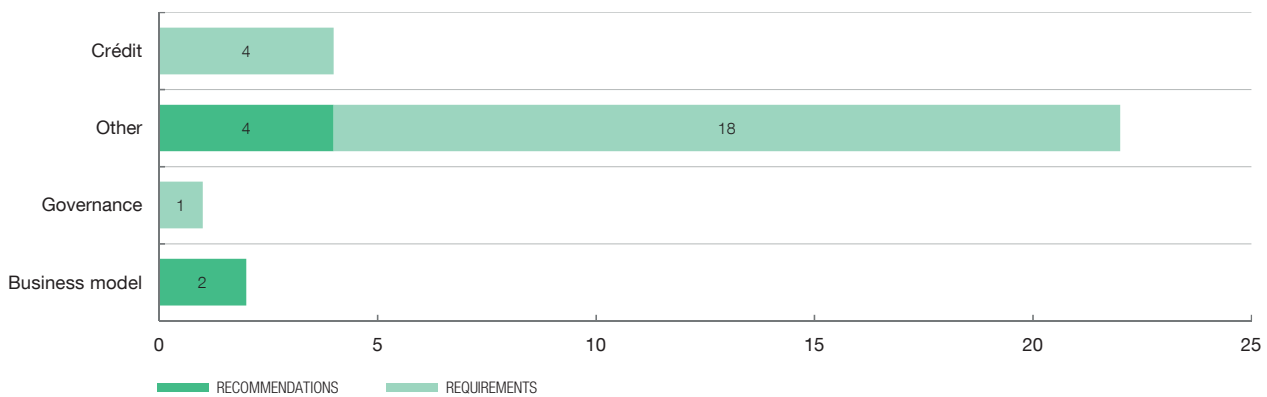


SOURCE: Banco de España.

Chart 2.15

NUMBER OF RECOMMENDATIONS AND REQUIREMENTS NOTIFIED TO OTHER INSTITUTIONS

By specific areas, the requirements and recommendations relating to credit risk and business models stand out.



SOURCE: Banco de Espa a.

completed, and requirements letters were sent to them. Chart 2.14 shows the number of letters sent to supervised institutions other than credit institutions as a result of ongoing monitoring or inspections conducted. For 2023, inspection visits are planned to 2 appraisal companies, 1 ELMI and 1 MGS.

Chart 2.15 shows the number of recommendations and requirements, by area, contained in these letters.

Table 2.6

OTHER PROCEDURES CONDUCTED BY THE BANCO DE ESPAÑA IN RESPECT OF OTHER INSTITUTIONS

	PIs	ELMIs	SLIs	MGSs	Appraisal companies	Currency-exchange bureaux	Sareb	Banking foundations	Total other institutions
Qualifying holdings, merger, spin-off and other significant acquisitions	11	5	3		2				21
Cross-border activity of Spanish credit institutions	2,298	55	1						2,354
Branches in the EU	10	1	1						12
Branches in third countries									0
Freedom to provide services	140	51							191
Agents	2,148	3							2,151
Cessation of business									0
Suitability of senior officers	52 (*)	29	65	55	8	3			212
Procedures relating to capital	2	2	6	1					11
Amendments to articles of association	3		2	4					9
Authorisation of management protocol and financial plan								11	11
Communications with other supervisory authorities or institutions					1				1
Other procedures	3	1	2			1			7
TOTAL									2,626

SOURCE: Banco de España.

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

(*) Includes 5 account information service providers' senior officer suitability procedures.

Similarly, in 2022 a further 2,622 procedures were performed within the remit of the supervisory powers over these institutions, as detailed in Table 2.6.

In addition to the high number of register entries for PI agents, noteworthy are the supervisory procedures in the PI and ELMI area, with 16 qualifying holding procedures, 4 return to compliance plans relating to capital and the above-mentioned authorisation processes for new activities or licences.

The oversight of compliance with capital requirements through the information collected from these institutions by means of ad hoc templates that they have been submitting since 2020 until the development of a prudential circular that allows for regular reporting on their solvency situation has led to the detection of 22 situations of non-compliance with capital requirements, which has required the injection of capital by their shareholders.

These capital needs generally arise from two situations of a very different nature: on the one hand, the limited generation of capital by some institutions in the sector, which does not cover their own business expectations, and, on the other, the limited solvency buffer with which some of these institutions operate, which hinders the

absorption of the higher capital requirements arising from increased activity or from greater investment in technological systems.

Lastly, it is worth mentioning these institutions' senior officer suitability processes, which amounted to 212 procedures in 2022, mainly in the most important institutions in the sector, such as PIs, ELMIs and SLIs.

2.5 Compliance with vetted access to activity

Under Spanish legislation, several financial activities are subject to vetted access to activity, i.e. they can only be carried out by the legal entities and individuals legally authorised to do so. The Banco de España's functions include overseeing compliance with this legislation, taking action on those seeking to break into the financial market without meeting the conditions of access, whether by conducting activities legally restricted to credit institutions, payment service providers or other types of institutions supervised by the Banco de España, or through the use of generic names restricted to those institutions or any other name that may confuse the public.

In 2022, 13 supervisory actions were performed in relation to legal entities which may have been carrying out activities restricted to credit institutions and/or currency-exchange bureaux without authorisation or simply making undue use of a name pertaining to supervised institutions, the outcome of which could lead to the adoption of penalties.

In addition, in the area of payment services, the analysis commenced in 2022 of 13 cases of possible non-compliance with the vetted access to activity established in Article 5 of Royal Decree-Law 19/2018. In most of these cases, formal irregularities were detected in the activity of commercial establishments which, in reality, operate as agents or distributors in Spain of payment service providers, as well as institutions which depend on other payment service providers to carry out their activity, as a prior step to applying for authorisation as a payment service provider, without this information being clearly stated on their websites. Also, innovative business models were identified that are not always an easy fit within the regulations.

2.6 Supervision of payment service providers

This section covers the supervisory activity related to the operational aspects of the provision of payment services, as set out in Royal Decree-Law 19/2018 and its implementing regulations, by payment service providers¹⁷.

¹⁷ Payment service providers include the PI and ELMI sector, including account information service providers, and also credit institutions and SLIs, which accompany the provision of payment services with other activities which are also subject to their own regulations.

As in previous years, part of the supervisory work focused on the assessment and monitoring of problems reported by payment service providers relating to the proper functioning of the specific interfaces offered by the account servicing payment service providers. Most of these problems related to payment initiation services and consisted mainly of one-off outages and deteriorations in the interface service, as well as shortcomings in the information provided by the interfaces on the status of payment transactions initiated through them.

In addition, approval was granted for the communications submitted on two corporate payment processes for the purposes of the application of the strong customer authentication exemption in the provision of payment services, as provided for in Article 17 of Delegated Regulation 2018/389.

Also, the EBA's Guidelines on major incident reporting under PSD2¹⁸ became applicable on 1 January 2022. This review of the guidelines simplified the reporting process and criteria, with the aim of allowing a greater number of security incidents to be captured and reducing the number of operational incidents (often without significant impact on payment service providers) that need to be reported. The Banco de España carried out the adaptations required in order to allow payment service providers to report major incidents under the revised procedures in 2022. In terms of volume, since the date of entry into force of the new guidelines, a total of 36 major incidents reported by 27 institutions were received, analysed and transferred to the EBA, affecting, to varying degrees, around 1,500,000 users and a total of more than 2 million transactions. In general, the incidents were due to internal factors within the institutions, although a minority were due to external causes. Of the latter, only 20% were due to malicious actions.

With regard to other supervisory activities in the area of payment services, in accordance with Article 23 of Royal Decree-Law 19/2018 and implementing regulations, 14 communications were received regarding the delegation of operational functions from PIs and ELMIs, most of which were related to critical functions. In addition, in accordance with Article 22 of the aforementioned Royal Decree-Law, in year 2022, 28 communications from Spanish PIs and ELMIs were assessed and reported favourably, of which 15 corresponded to the request for the freedom to provide services and the other 13 corresponded to the exercise of the right of establishment (6 through branches, 4 through agents and 3 through distributors), mainly in EU countries. 4 communications were also received from various European supervisory authorities regarding applications for the establishment of branches in Spain by European SPIs and/or ELMIs, all of which, bar 1, were reported positively.

18 EBA/GL/2021/03, which repealed the previous EBA/GL/2017/10.

Also, progress was made in 9 actions regarding possible regulatory non-compliance, relating mainly to the scope of the right of access to payment account services offered by credit institutions to other payment service providers and the delegation of important operational functions.

Fraud data corresponding to 2021 and reported by payment service providers over the course of 2022 were analysed. The main findings show that, although the highest fraud rates continue to occur in e-money transactions and e-commerce card-based payment transactions, the comparison with previous 6-month periods shows a positive and material effect on fraud reduction, especially in card transactions, following the widespread implementation of strong customer authentication technical solutions. However, in quantitative terms, bank transfers are the transactions with the highest fraud volumes, although, in percentage terms, money transfers and, above all, direct debits show lower fraud rates than bank transfers. This is likely to be due to the growing impact of fraudulent transactions materialised through various social engineering techniques aimed at initiating and/or authorising false payment transactions through customer manipulation.

In addition, Box 2.7 describes the evolution in 2022 of certain payment services provided by SPIs and ELMIs.

Lastly, in the area of international coordination in the supervision of payment service provision, in order to simplify the operational flow of the reporting of statistical data on payments and fraud, and to reduce as far as possible the regulatory burden associated with this reporting obligation, on 26 October 2022 the Banco de España signed a memorandum of understanding with the ECB, the EBA and other NCAs involved. This memorandum enables a single, sequential flow in the transfer of information between reporting payment service providers, NCAs, the ECB and the EBA for compliance with Royal Decree-Law 19/2018.

Also in the area of international cooperation, a period of analytical review was opened, mainly in the areas of: i) payment fraud data reporting under PSD2, with the publication by the EBA of a Discussion Paper, which presents the main conclusions reached in relation to the data reported in 2019 and 2020¹⁹; ii) the authorisation of specialised payment service providers, through the development of a peer review, which concluded with the publication by the EBA, in January 2023, of a report which sets out the conclusions of that exercise and establishes a series of recommendations²⁰; and iii) incident reporting.

19 “Discussion Paper on the EBA’s preliminary observations on selected payment fraud data under PSD2, as reported by the industry” (EBA/DP/2022/01).

20 “EBA Report on the peer review on authorisation under PSD2” (EBA/REP/2023/01).

DEVELOPMENTS IN PAYMENT SERVICES

The way in which payment institutions and electronic money institutions have been providing certain payment services evolved over the course of 2022. Although these changes are due to multiple factors, they were driven mainly by technological developments and regulatory changes introduced recently.

Thus, the payment initiation service has attracted a high level of interest, in particular among payment service providers geared towards the provision of services to merchants, in order to complement their payment service offerings for commercial transactions. In this respect, certain initiatives have been observed that seek to make the payment initiation service available to users at the physical points of sale.

Also, there has been ongoing interest in the provision of account information services, where it is increasingly common to find business models in which the information gathered through this service is used to complement, enrich or add value to a third party's activities not directly related to payment service provision. In such cases, promoters often opt to set up a company that will carry out this payment service for the benefit of other group companies interested in holding the information obtained by the specialised entity.

As regards money transfer services, not only has the already traditional trend towards their provision through

digital channels (websites and apps) continued, but there has also been growing interest in the possibility of providing them through new technologies, in particular those based on distributed ledgers or cryptoassets, although there is still no specific regulatory framework to cover them.

It is also worth noting the interest in the provision of payment and e-money services through what are known as "own brand models", where, although payment institutions and electronic money institutions are responsible for carrying out these services, the services are made available to end-users through third party institutions, which offer them to their customers through their digital channels alongside their own products and services.

Lastly, in 2022 the National Electronic Clearing System (SNCE) Regulation was amended to allow payment institutions and electronic money institutions to access the system through the "accessible institution" figure. This figure enables payment and electronic money institutions to settle their customers' payment transactions through a direct participant in the SNCE, using the IBANs of the payment accounts they open for their customers, as these are now recognised by the system. This allows payment and electronic money institutions' customers to order and receive transfers on their payment accounts, and to issue and receive direct debits, under the same conditions as the customers of any other payment service provider participating in the SNCE.

2.7 Application of financial technology innovation to supervisory functions. Sandbox: controlled digital innovation testing space

Traditionally, the Banco de España has pioneered the creation of multidisciplinary teams comprising inspectors, supervisory experts, IT auditors and modelling experts with experience in reviewing inventories and reconciling them against confidential returns. This has generated a breeding ground for the creation of supervisory tools for bulk data processing.

In this context, the term "SupTech", which can be broadly defined as the use of innovative technology (e.g. machine learning and big data) by supervisory authorities to support their work²¹, has become popular in recent years in various international

21 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>

fora. In this respect, the Banco de España's 2022-2024 Strategic Plan sets the objective of becoming a benchmark in prudential supervision, particularly in credit and technological risks (strategic objective 4.2.ii). This requires the incorporation of new technologies into the supervisory activity.

The main pillars on which the SupTech strategy is based are as follows:

- **In-house creation of SupTech tools.** There are currently two major lines of work:
 - Graphical representation of large amounts of data that facilitates interpretation and analysis by supervisors. Examples include choropleth maps regarding confidential returns and a tool²² for interactive visualisation of many-to-many (n:m) relationships (e.g. economic groups from the FINREP 40 return).
 - Predictive capability search on the basis of the Banco de España's Central Credit Register (CIRBE) using transition matrices and machine learning algorithms.
- **Fostering a culture of innovation.** One of the first initiatives established was the creation of a multidisciplinary SupTech forum within the DG.SUP to exchange best practices and foster the culture of innovation. Moreover, as part of a general drive by the Banco de España, it benefits from the collaboration of Information Systems through the digital transformation programme.
- **Participation in the SSM SupTech initiative.** The Banco de España collaborates very actively with the ECB's SupTech initiative, contributing specialised staff, participating in its various fora and sharing tools developed at the Banco de España.
- **Training in data science and machine learning.** Lastly, the Banco de España promoted several training programmes, that were given by DG.SUP staff on various subjects, such as R, Python and machine learning. These courses are being shared with other bodies, such as the Association of Supervisors of Banks of the Americas and the SSM itself.

In line with the priority given to this matter, it was decided to include the SupTech function in the Banco de España's evaluation programme. This

²² A more detailed description can be found in Box 6 of Kenton Beerman, Jermy Prenio and Raihan Zami. (2021). «Suptech tools for prudential supervision and their use during the pandemic». FSI Insights, 37. <https://www.bis.org/fsi/publ/insights37.pdf>

CONTROLLED DIGITAL INNOVATION TESTING SPACE: SANDBOX

The controlled testing space¹, known internationally as Sandbox, continued to offer promoters the opportunity to test their technology-based financial innovations securely under the monitoring of the competent financial authorities. Over the course of 2022 there were two new calls for applications to Sandbox.

The third call was published by resolution of the General Secretariat of the Treasury and International Financing on 22 December 2021 and set the application submission period between 1 March and 12 April 2022. There was a total of five applications, of which two corresponded to the Banco de España and obtained a favourable prior assessment by the latter.

The fourth call was published on 22 July 2022, with an application submission period between 1 September and 13 October 2022. In this call, the number of projects submitted rose slightly to seven, of which three were assigned to the Banco de España and two obtained

favourable prior assessment (one of the projects, in the capacity as observer authority, together with the National Securities Market Commission)².

Therefore, since not all testing of projects from previous calls has been completed, in 2022 projects from the first four calls coexisted in the regulatory Sandbox. These projects were at different stages of the process, depending on the date on which they applied for entry into the controlled testing space.

In the course of 2022, testing was completed on the six projects from the first call that signed a protocol with the Banco de España, and the documents with the supervisor's conclusions on the results of the tests carried out were published (see Figure 1 for a brief summary of the topic of these projects). Therefore, with the publication of these documents, the participation of all the projects from the first call monitored by this institution was deemed to be complete. In most cases, added value was found in these

Figure 1
PROJECTS FROM THE FIRST CALL MONITORED AT THE BANCO DE ESPAÑA

Project	Description of the project
Rings	Business-to-business payment clearinghouse that uses distributed ledger technology and artificial intelligence to execute business-to-business transactions, creating customer-supplier rings for simultaneous collection and payment of all balances in the ring
Digital Custody in Blockchain	A solution that uses distributed ledger technology and digital fingerprint aggregation techniques to record documents that are signed digitally by customers in a distributed ledger, allowing verification of their integrity
Dalion	Decentralised self-managed digital identity solution based on distributed ledger technology that allows the user to maintain control over their personal data, managing it directly and autonomously both to share them with third parties and to recover them
Ithium 100	Solution that uses distributed ledger technology to record all relevant information on order financing transactions (including the agreed sale and purchase estimate, product characteristics or the bank's financing offer), adding transparency and assurance to the process
Neurodecision Technology	Artificial intelligence algorithm for risk management with a predictive capacity that is potentially superior to those traditionally used in the financial sector, addressing the problems of explainability inherent to artificial intelligence algorithms
Vottun Intercompany	Platform that uses distributed ledger technology to allow the companies in the same group operating in different countries to settle and reconcile, through the use of digital tokens, the resulting positions between them in real time

SOURCE: Financial Sandbox Annual Report 2021 (General Secretariat of the Treasury and International Financing).

1 The 2021 *Supervisory Report* details the characteristics of the Spanish regulatory Sandbox.

2 The projects of the fourth call finally assigned to the Banco de España and with a favourable prior assessment were Money EURM and Multilateral Trading System, based on decentralised ledger technology.

Box 2.8

CONTROLLED DIGITAL INNOVATION TESTING SPACE: SANDBOX (Cont'd)

projects, and a very wide range of technologies was used, such as distributed ledgers, artificial intelligence or digital identity in the financial system, and it was concluded that they may represent a potential benefit to financial service users, as well as an increase in efficiency of institutions or markets. The most significant challenges for the development of these proposals included most notably the existence of regulatory gaps or barriers that may hinder the launch of these projects on the market, and the technological, governance and third-party dependency risks.

Also, in the course of 2022, the protocols were signed and testing began for two projects from the second and third calls that had obtained a favourable prior assessment by the Banco de España (ContractID and Eurocoinpay, respectively). In particular, ContractID completed its tests and it is currently awaiting the publication of the conclusions document prepared by the Banco de España.

If we take into account the projects from the four calls in which the Banco de España has participated (alone or together with other supervisory authorities) in the prior assessment, the promoters belong to different sectors, mainly consultancy firms, FinTechs and banks (see Chart 1.1). As regards the technologies of the projects that obtained a favourable prior assessment, distributed ledger technology continued to dominate, followed by artificial intelligence (see figure 1.2).

None of the various technological innovation projects tested in Sandbox have so far been identified as being applicable to the better performance of the supervisory functions carried out by the Banco de España.

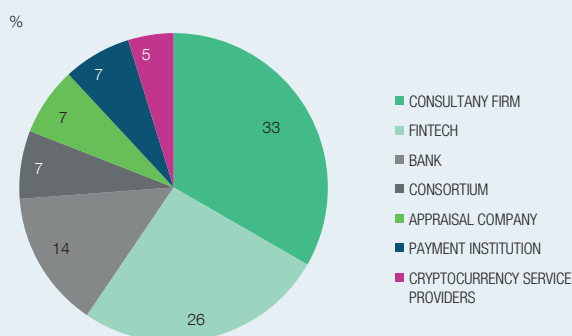
In 2022, the authorities responsible for Sandbox continued to work on improving its functioning. Firstly, the documentation to be provided by the promoter to justify compliance with data protection regulations has been simplified and the documentation related to money laundering and terrorist financing legislation has been further specified. Secondly, once the Sandbox process has been completed, the competent authorities have organised a discussion to assess the possibility of promoting regulatory changes to facilitate the secure development of innovation within the financial sector. As regards the impact of this tool on the promotion of financial innovation and, in particular, on the trajectory of the participating companies, it is still too early to make an assessment, as the testing of the projects that applied for the first call has just been completed.

As for the Banco de España, the communications channel for queries on financial innovation (provided for in Article 20 of Law 7/2020) was more widely disseminated, and communication and dissemination efforts continued on Sandbox at both national and international level.

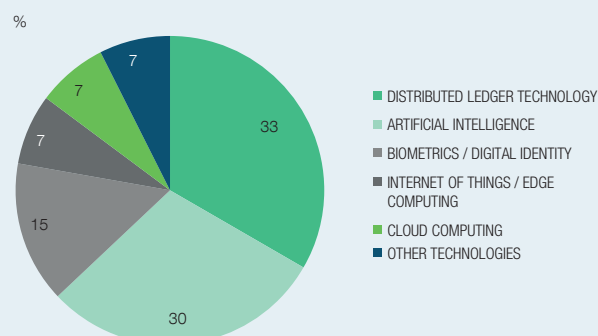
As part of this work, the Banco de España held a meeting with the financial community on 27 January at its headquarters in Malaga, which was attended by some of

Chart 1
PROMOTERS AND TECHNOLOGIES OF THE SANDBOX PROJECTS ANALYSED BY THE BANCO DE ESPAÑA

1 BY TYPE OF PROMOTER (ASSESSED PROJECTS)



2 BY TYPE OF TECHNOLOGY (PROJECTS WITH FAVOURABLE PRIOR ASSESSMENT) (a)



SOURCE: Banco de España.

a Projects can use more than one technology. Technologies in accordance with what is reported by the promoter in its application.

CONTROLLED DIGITAL INNOVATION TESTING SPACE: SANDBOX (Cont'd)

the promoters of the projects admitted to the first call of Sandbox and at which they shared their experience after participating in the controlled testing space.

Lastly, the European procedural framework for cross-border testing was launched in 2022, allowing promoters to test

their innovation simultaneously or in parallel in several Sandboxes in European Economic Area countries³. Once access to a Member State's Sandbox has been requested, promoters can request that other European authorities also monitor the tests, or that they are observers or have access to the test results.

³ <https://digital-finance-platform.ec.europa.eu/>

evaluation will be conducted by a team of independent international experts and will start in 2023.

Lastly, Box 2.8, which is dedicated to Sandbox, provides an update on the functioning of Sandbox, the projects that have participated in it and its improvements. In accordance with Article 26 of Law 7/2020 of 13 November on the digital transformation of the financial system, this document must reflect an assessment of the possible applicability and implementation for the better performance of the supervisory function of technological innovations that have been tested in the controlled testing space regulated in that law (Sandbox). According to the Banco de España's assessment, none of the projects that completed their passage through Sandbox in 2022 provided mechanisms for the better exercise of the supervisory function, so these assessments are not specifically included in Box 2.8.