

2

ACTIVITY REPORT

JANUARY



20 January

For the first time in the Bank's history, a live television programme was made and broadcast from the Cibeles headquarters: "La hora de la 1", on TVE, which included an interview with the Governor, Pablo Hernández de Cos

26 January

The Banco de España and the Ministry for Ecological Transition and the Demographic Challenge organised a conference on "The demographic challenge, rural depopulation and data"

FEBRUARY



15 February

Renewal of the Statement of Commitment to the FX Global Code by the ESCB, of which the Banco de España is a member

21 February

Extension until the end of April of the exhibition on the origins of its art collection associated with Goya

MARCH



3 March

Increase in the Banco de España's loan to the IMF Poverty Reduction and Growth Trust of SDR 350 million (€438 million)

25 March

The final of the Generation Euro school competition for students organised by the Banco de España and eleven euro-area central banks was held

APRIL



25 April

The Banco de España approves a raft of measures to strengthen the institutional approach to financial education

29 April

The Banco de España, the CNMV and other institutions sign up to the Action Plan against Financial Fraud

MAY



5 and 6 May

Organisation of the 112th meeting, co-organised by the Banco de España, of central bank governors of the Centre for Latin American Monetary Studies (CEMLA)

6 May

Signing of a cooperation agreement between the Banco de España and the Banco Central del Ecuador for the development of projects of interest to both institutions

JUNE



22 June

Publication of the principles for the supervision of climate risks by the Basel Committee on Banking Supervision (BCBS), in which the institution participates

30 June

Re-election of the Governor of the Banco de España as Chairman of the Advisory Technical Committee (ATC) of the European Systemic Risk Board (ESRB)

JULY



13 July

Publication of the six-monthly Latin American Economic Report, which analyses macro-financial developments in the region's economies

28 July

Signing of the cooperation agreement between the RTVE Corporation, the Banco de España, the CNMV and the Ministry of Economic Affairs and Digital Transformation, as part of the development framework of the Financial Education Plan

AUGUST



1 August

Publication of the one-year Euribor rate for July, which rose to 0.992% from 0.852% in June

31 August

Release of data on the financing capacity of the Spanish economy at June 2022: €1.4 billion, compared with €1.5 billion a year earlier

SEPTEMBER



8 September

The Banco de España contributes up to €1,757 million to the Resilience and Sustainability Fund managed by the IMF

29 September

The ESRB, on which the Banco de España is represented, issues a warning to all Member States for the first time, on vulnerabilities in the Union financial system

OCTOBER



3 October

Staging of the main event of Financial Education Day at the CNMV headquarters in Barcelona, under the slogan "Education for Safer Finances"

31 October

The 7th Conference of Mediterranean Central Banks was held, co-organised by the Banco de España with the European Institute of the Mediterranean, the OECD and the Central Bank of the Republic of Turkey

NOVEMBER



2 November

Publication of the conclusions reached by the ECB in its technical review of banks' practices in relation to climate and environmental risks

29 November

Training seminar on monetary policy at the Banco de España's headquarters in Cibeles, organised in collaboration with the Spanish financial press association (APIE), which was attended by some thirty journalists

DECEMBER



5 December

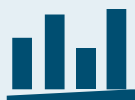
Launch of the call for proposals on collaborating on wholesale digital token experiments with the Banco de España

21 December

Presentation of the Banco de España's projections for the Spanish economy and analysis of the main economic challenges for the period 2022-2025

1 ECONOMIC ANALYSIS, RESEARCH AND STATISTICS

ECONOMIC ANALYSIS, RESEARCH AND STATISTICS



Analyses the economic situation in Spain and abroad, and compiles the statistical data necessary for such analysis.

Why is it important?

It is necessary to provide information on the ECB's monetary policy decisions, in which the Banco de España participates, as well as measures aimed at ensuring financial stability. It also makes it possible for the Banco de España to advise the Spanish Government.

What do we do at the Banco de España?

We prepare and publish reports, research and statistics on the current economic situation and future projections for both the real and financial sectors of the economy.

Our objective

Facilitate economic decision-making in the public and private sectors, and in particular decisions on monetary policy and financial stability.

1.1 Economic analysis and research

In 2020, the Banco de España defined the strategic framework for its medium-term research and analytical priorities. These priorities were structured around five main themes: central bank policies and their interactions; the main long-term trends in the Spanish economy; risks and opportunities arising from the international environment; the aggregate consequences of the heterogeneity of individuals and firms; and the challenges posed by new technologies.

For each of these priority analysis blocks, different lines of work were established in 2020. Consistent with a changing economic environment, these are reviewed as part of an annual monitoring and updating exercise. The [2022 update](#) established that, for the upcoming quarters, analytical efforts will focus mainly on:

- **The current inflationary episode and its implications** for the evolution of key macroeconomic aggregates and financial stability, the positioning and implementation of monetary policy and macroprudential policy.
- **The uneven impact of the inflationary spike**, the change in stance in terms of monetary policy and the energy crisis on certain groups of households and firms, and on the financial system.
- **The risks of trade and financial fragmentation at global level, and the European response to the current complex situation**, with

particular focus on the measures proposed in the field of energy policy and "open strategic autonomy", and in the framework of the review of European fiscal rules.

- **The structural reforms recently approved** – or under discussion – in Spain and the **implementation of the European Next Generation EU programme**, as well as the capacity of both developments to increase the potential growth of the Spanish economy in the medium and long term.
- **The challenges and opportunities for financial institutions, consumers and for the stability of the financial system as a whole posed by various technological innovations** currently at the development phase, such as the digital euro, or which have already been gradually introduced in financial operations.

Research work related to the monitoring and analysis of the economic and financial impact of the energy crisis gained importance in 2022. In addition, the usual research activities at the Banco de España's headquarters continued, such as seminars (37 seminars by external speakers and 42 by internal researchers) and conferences (12 organised or co-organised by the Banco de España), which were held in either on-site or hybrid formats. The 2022 annual research conference focused on the medium- and long-term consequences of the pandemic and the policies required to address them. In addition, 2022 saw the first edition of a new annual conference dedicated to issues of particular relevance to the Spanish economy. Mention should also be made of the involvement of researchers from Banco de España in Eurosystem and international research initiatives and networks, such as the Eurosystem Research Clusters (this year with a new one on



Research work on the economic and financial impact of the energy crisis gained importance in 2022.

climate change), the annual CEMLA joint research, and numerous top-level specialised seminars and conferences.

Box 2.1 provides a summary of the main publications relating to economic analysis and financial stability in 2022.

Research activities throughout 2022 covered a wide range of areas.

In relation to the analysis of the economic situation in Spain, once the worst of the pandemic was over, the priorities for analysis were directed towards the effects of the reopening of the economy, with particular emphasis on the recovery of international tourism flows. Issues related to economic players' spending decisions also received attention. From February onwards, issues related to the war in Ukraine and the energy crisis gained particular importance. Of particular note in this context was the analysis of inflation, specifically, the effects of persistently high price increases in energy and food components on the more stable components and the knock-on effect of inflation on margins and labour costs. Work also began to determine the impact of inflation on tax revenues. In addition, the impact on the economy of potential gas supply problems was analysed in detail.

On a longer-term horizon, resources were given over to further study the factors affecting the economy's potential growth. In this respect, work was carried out to study the role of the Next Generation EU funds and the associated structural reforms as essential levers of dynamism. On the fiscal side, the characteristics of the measures taken to limit the effects of inflation were studied, and specifically whether their design is focused on helping the most vulnerable agents.

In the area of international economics and the euro area, a priority focus was the analysis of the effects of the war in Ukraine in various dimensions. First, the effects on economic activity and prices as a result of the energy and other commodity crises. Second, the implications of possible de-globalisation due to geopolitical reasons. Thirdly, the push for the agenda for greater EU strategic autonomy.

Inflation received particular attention in preparation for the ECB Governing Councils. Numerous analyses were conducted to gain an insight into the source of consumer price increases in the euro area from different angles. Work focused on pressures from energy – including electricity and natural gas – and also on the food component. In the case of underlying inflation, the relevance of the items most affected by the pandemic and energy costs was identified. The differing influence of supply factors such as bottlenecks or energy was also quantified, as opposed to the upward shift in demand following the lifting of pandemic restrictions. This analysis was partly supported by the construction of a new text indicator for monitoring supply problems in global value chains. In this context, particular attention was also paid to the effects of inflation on public finances, as

PUBLICATIONS RELATED TO ECONOMIC ANALYSIS AND FINANCIAL STABILITY

- In 2022, 43 [working papers](#) and 24 [occasional papers](#) were published. In terms of external publications, a total of 41 articles were published in peer-reviewed academic and professional journals, with a further 21 articles accepted and awaiting subsequent publication at the end of the year; seven articles were published in other journals and books (and seven more were accepted and await publication)..
- The [Annual Report](#) contains numerous original analytical contributions both in chapters 1 and 2 – on recent developments in the Spanish economy and the challenges facing economic policies in Spain, respectively – and in the thematic chapters. In 2022 these dealt with [rising global inflation](#) and [the Spanish economy and the climate challenge](#).
- Four times a year the Banco de España publishes its [macroeconomic projections for the Spanish economy](#), through which it offers its vision of the outlook over a time horizon of around three years. On the same day as their publication, these projections are presented to the media at a press conference. The uncertainty implicit in the projection exercises was heightened in 2022 as a result of the energy crisis, the Russian invasion of Ukraine and developments in the pandemic.
- The [Economic Bulletin](#) of the Banco de España, besides including the “[Quarterly report on the Spanish economy](#)” with the most recent projections and developments concerning both our economy and its external environment, contains links to the publications published during the quarter in the series of [Analytical Articles](#) and [Economic Notes](#), which aim to convey the Bank’s analysis to a wider audience. In 2022, 31 analytical articles and ten economic notes were published.
- Twice a year the Banco de España publishes the [Report on the Latin American Economy](#), which analyses the keys to recent macro-financial developments in Latin American economies, particularly those with which the Spanish banking system is most involved. The July 2022 report examined issues such as the effects of the war in Ukraine on Latin America, the surge in inflation being felt in the region and the rapid and intense monetary policy response, as well as its external and fiscal vulnerabilities.
- Also on a half-yearly basis, in spring and autumn, the Banco de España publishes the [Financial Stability Report](#) (FSR), which appraises the main risks and vulnerabilities affecting the stability of the Spanish financial system, analyses the resilience of banks and reviews the main macroprudential analysis and policy issues. The FSRs published in 2022 analysed, in particular, the impact on risks to households, firms and banks of the backdrop of economic uncertainty and heightened geopolitical tensions, prevalent since the start of the Russian invasion of Ukraine. Particular attention was also paid to the monitoring of imbalances in the real estate sector, both in terms of real estate activity and mortgage lending standards.
- In 2022 two editions of the [Financial Stability Review](#) (REF) were published, in the spring and autumn, with ten articles by in-house researchers and experts from the Banco de España as well as external ones. In addition to addressing recent developments, such as the growth of the weight of fees in bank earnings and the stock market impact of bank dividend restrictions during the pandemic, the REF dedicated several articles to structural issues in the banking sector, in particular the effects and challenges of digitalisation, and the development of non-cyclical systemic risk indicators. Other papers published in this issue analysed the European Systemic Risk Board since its inception and the adaptation of the supervisory approach to the changing business model of banks in Europe.



For more information on the publications of the Banco de España see [Sections 5.1 y 5.2](#) of Chapter 1 of this Report.

well as to discretionary measures taken by governments to moderate the impact of the energy shock on household incomes.

Projects aimed at the analysis of the most significant emerging economies for Spain in terms of banking system exposure, particularly in Latin America, and those related to climate change, continued to play a major role.

With regard to **research on financial issues**, the financial vulnerability of companies was studied in 2022, in terms of the varying impact of the COVID-19 crisis and their exposure to rising energy prices. Several studies were also conducted on recent developments in business margins and the characteristics of companies that would explain these developments, and the line of research that assesses the business liquidity and solvency support programmes rolled out in Spain during the COVID-19 crisis continued. As regards bank intermediation, a series of studies were conducted on the transmission of the increase in benchmark interest rates to the cost of financing for households and companies in Spain and in the Economic and Monetary Union (EMU). Particular attention was paid to the heterogeneity of the pass-through of the increase in interest rates to the cost of the various credit segments in the EMU countries, as well as to the impact of these rises on the financing burden of Spanish companies and households, especially those under high financial pressure.

Research in the area of monetary policy focused on the analysis of the normalisation of the Eurosystem's monetary policy, both conventional and unconventional. Work also continued on matters such as the effects of monetary policy on productivity, the interactions between monetary and fiscal and/or macroprudential policy, the redistributive effects of inflation, the implications for monetary policy of the hypothetical launch of a digital euro and the relationship between monetary policy and the risks associated with climate change.

Research work encompassed multiple projects **in the area of financial stability and macroprudential policy**, including, most notably, the following:

- The **study of growth-at-risk models of bank credit**, which allow the impact of various factors on future credit developments in central and adverse scenarios to be assessed, disaggregating heterogeneous effects across the household and business sectors, and studying the effect of the level of bank profitability, was continued.
- **Studies also continued to identify the effects of different policies and institutional designs** (government guarantee programmes, taxation, etc.) on the supply of credit.

- The **effect of uncertainty and contagion from tensions in interbank markets** was analysed, as well as the amplifying effect of information frictions on disruptions in securitisation markets.
- In relation to the real estate market, the **study of the effect of borrower entrenchment on mortgage credit characteristics** continued, and both empirical and heterogeneous agent model-based analyses of the effects of lending conditions (e.g. loan-to-value ratios or appraised housing unit values) on the growth and risks associated with mortgage credit, as well as the possible effect of macroprudential measures that constrain these conditions, were highlighted.
- The **capacity of systemic buffers to reduce the contribution of systemically important institutions** to systemic financial risk was analysed.
- The **negative and destabilising effect of environmental disasters** on price dynamics in the real estate sector was studied.

In terms of microeconomic research, the main contributions can be grouped into the following areas:

- **At the household and individual level**, internal migration dynamics in 2020 and accessibility to household banking services in Spain were analysed. This was followed by the measurement of household credit conditions and gender gaps in financial literacy and central banking. Lastly, the consequences of taxation on household spending were analysed and the minimum income scheme was monitored and evaluated.
- **In relation to firms**, work was published in conjunction with other central banks using micro data on end-consumer prices over the period 2008-2019 to document new results on price rigidities. The analysis of business innovation and its relationship with business acquisitions, advertising spending or research and development (R&D) subsidies was further explored. Work was also carried out on the factors that determine the use of unstable contracts by companies. Lastly, the news items chosen by media companies were studied and used to measure the anticipatory effects of monetary policy and uncertainty.
- **In relation to the labour market**, at institutional level, indicators were collected to assess the impact of the labour reform of December 2021, and the duration of vacancies and wage rates agreed in collective bargaining agreements were quantified. In addition, the effectiveness of Temporary Redundancy Programmes (ERTE) in getting workers back to work was



In the area of pensions, the impact of tax incentives on retirement savings, among other matters, was analysed.

analysed. With regard to new developments, an analysis was initiated of the challenges posed by the measurement of work on digital platforms, their effects on employment and future wages in Spain and several neighbouring countries, and the effects of the temporary nature of employment contracts.

- **In the area of education**, human capital formation during childhood - including foster care - and its persistence across generations were measured. Also, randomised experiments of teaching tutoring programmes for primary school teachers and financial education in secondary education were evaluated. With regard to higher education, work began on the creation of a database of university entrance qualifications in order to analyse the factors that explain the choice of career and university and to characterise the capacity of vocational training to meet increases in demand for certain professions.
- **In the field of energy and climate change**, the local macroeconomic impact of renewable investments and the distributional impact of subsidies for the purchase of electric vehicles and fuels were analysed. The study also included the energy expenditure and CO₂ emissions of Spanish companies and households, as well as their reaction to changes in temperature and prices.
- **In relation to pensions**, the impact of the regulatory base calculation period on the amount of new retirement pensions, pension expenditure in international comparison and the reaction of retirement according to the level of the expected pension, longevity, unemployment benefit and wages

were analysed. In the area of private pensions, the impact of tax incentives on retirement savings was analysed.



For further information on the macroeconomic projections prepared by the Banco de España, see the institution's [website](#).

1.2 Statistics

The statistical activity of the Banco de España, and of official institutions in general, faces challenges such as increasing demand for data and improving user accessibility to statistical information, while at the same time maintaining the quality thereof at all times. These challenges are increased by technological developments, which have changed the ways in which data can be accessed and used, and by the implications of the extraordinary globalisation and digitisation of economic and financial activities.

The emergence of new tools suitable for handling larger and more heterogeneous datasets, driven by the increasing presence of big data, can help to expand the statistical offering in certain domains, although it is still far from being the core of official statistical production. Another challenge that has emerged, closely linked to big data, is the incorporation of data science into more traditional statistical production processes. The possibilities that new tools offer in terms of automation and robotisation of processes that currently require some degree of manual work will contribute to improving the efficiency of statistical production.

Financial activities are constantly evolving. **Phenomena such as fintech, non-bank financial intermediaries and other new forms of financial innovation have required statistical tools to be adapted for their processing.** This is also the case with regard to climate change and economic sustainability in the field of financial activity, an area which is of particular interest to the Banco de España. In this area, the challenge faced is to compile standardised information and develop common methodologies that make it possible to approximate the impact that financial activity may have on climate change and its possible effect on the solvency of financial institutions.

COVID-19 and the invasion of Ukraine by Russia, as events **with a high impact on the world economy and on the Spanish economy itself, have given rise to new statistical information requirements,** both in terms of the availability of new indicators and the speed with which the data should be made available, which also calls for a response from the authorities.

The Banco de España is devoting considerable resources to this long list of challenges and certain fruits are starting to be reaped in the form of an improvement and increase in statistical production.

In particular, significant progress was made in 2022 for users of Banco de España statistics (see Schema 2.1). The statistical offering was broadened with greater detail on non-monetary financial sectors in the Financial Accounts and an expansion of the catalogue of historical data, with data on population and interest rates applied by the Banco de España. The data laboratory (BELab) incorporated new micro data sets and, in addition, the possibilities for remote access to these data were extended. **The Survey of Household Finances (EFF)**, for its part, published the main results of its 2020 wave, as well as its new website, from which it is possible to visualise, chart and download numerous descriptive results for all waves of the EFF in an interactive and straightforward way. Lastly, the fieldwork for the second edition of the **Survey of Financial Competences** was completed between November 2021 and July 2022, which, through face-to-face interviews, collected information on both the financial literacy of those randomly selected to take the interview and the level of financial literacy of their households.


Statistical communication and data dissemination continued to be a priority. In the case of the BELab laboratory, several dissemination sessions were held at Spanish universities. In addition, for the first time a newsletter was published to inform about the latest developments. As for the rest of the statistical offering, in 2022 the cycle of informative sessions for users continued and the catalogue of informative videos was expanded. Accessibility to the most important data was increased with the publication of tables with the latest data available on the various websites with





To foster interest in historical statistical information, an interactive dashboard was published with historical data on the main aggregates of the Spanish economy.

statistical information. Lastly, in order to foster interest in statistical information in general, and historical information in particular, an [interactive dashboard](#) was published with historical data on the main aggregates of the Spanish economy.





The Statistical Information Service handled more than 1,600 enquiries in 2022, mainly via telephone calls and the online contact form. The volume of enquiries was up 10% on 2021. The topics on which most information was sought were interest and exchange rates. The main user group for this service (with 40% of enquiries) was "lawyers, consultants and other professionals". Private individuals accounted for 20% of total enquiries. For some years now, this service of the Statistics Department has been managed via an application. This application makes it possible for competent experts to control incoming queries and resolve them swiftly.

 To gain an insight into the statistical offering of the Banco de España, the following video may be consulted:

[REPRODUCIR](#) 



DEVELOPMENTS IN THE BANCO DE ESPAÑA'S STATISTICAL ACTIVITIES IN 2022

 <p>BELab</p>	<ul style="list-style-type: none"> – New datasets: <ul style="list-style-type: none"> Spanish non-bank Fintech institutions; non-financial business groups with a parent company in Spain; general government debt by unit and financial instrument; data from the Banco de España survey on business activity (EBAE) combined with information from the Central Balance Sheet Data Office. – Remote access to the CCR dataset on loans to legal entities. – New Newsletter to inform users. – List available to the public of ongoing projects applied for. – Dissemination meetings at Spanish universities.
 <p>Statistical offering</p>	<ul style="list-style-type: none"> – Creation of the Synthesis of the real estate market indicators from the previous synthesis of the real estate market indicators and the publication of the latest information on the commercial property market. – Breakdown of the sector Other non-monetary financial institutions in the Financial accounts: other financial intermediaries, financial auxiliaries and captive financial institutions and money lenders (infographic). – New datasets on Historical statistics for researchers: population and the Banco de España's interest rates. – Main results of the Survey of Household Finances for 2020.
 <p>Statistical communication</p>	<ul style="list-style-type: none"> – Conclusion of the first cycle of Briefing sessions begun in 2021, with five sessions in total. – Increased offering of informative videos with one devoted to public debt according to the Excessive Deficit Procedure. – Inclusion of tables with the latest data on the statistical information websites. – Publication of a dashboard with the historical statistics of most interest. – Publication of the new website of the Spanish Survey of Household Finances that affords access and visualisation of all waves of the survey.
 <p>Publications</p>	<ul style="list-style-type: none"> – An estimation of the carbon footprint in Spanish credit institutions' business lending portfolio. Occasional Paper – Banco de España. 22020. – Statistical notes related to the historical series of interest rates applied by the Banco de España 1938-1998. Statistical Notes – Banco de España. 16. – Survey Of Household Finances (EFF) 2020: methods, results and changes since 2017. Analytical Article. Economic Bulletin, 3/2022.

SOURCE: Banco de España.

Figure 2.1

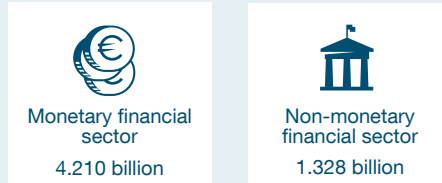
THE INFORMATION IN THE FINANCIAL ACCOUNTS OF THE SPANISH ECONOMY IS EXTENDED FOR BETTER ANALYSIS OF FINANCING AND INDEBTEDNESS



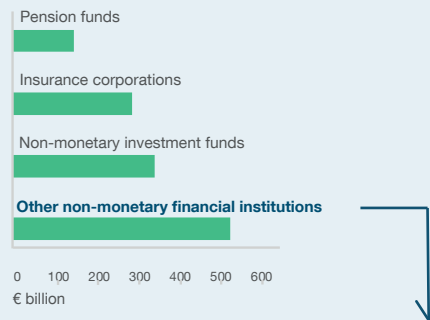
FINANCIAL SECTOR
Financial assets Q II 2022

5.538 billion

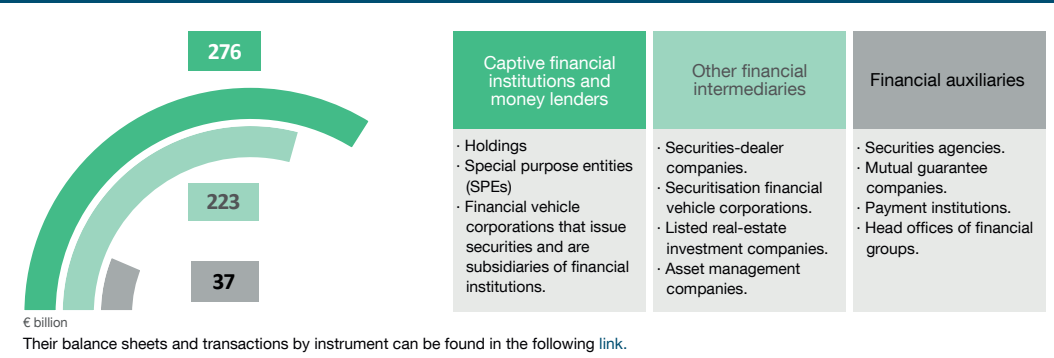
How are they distributed?



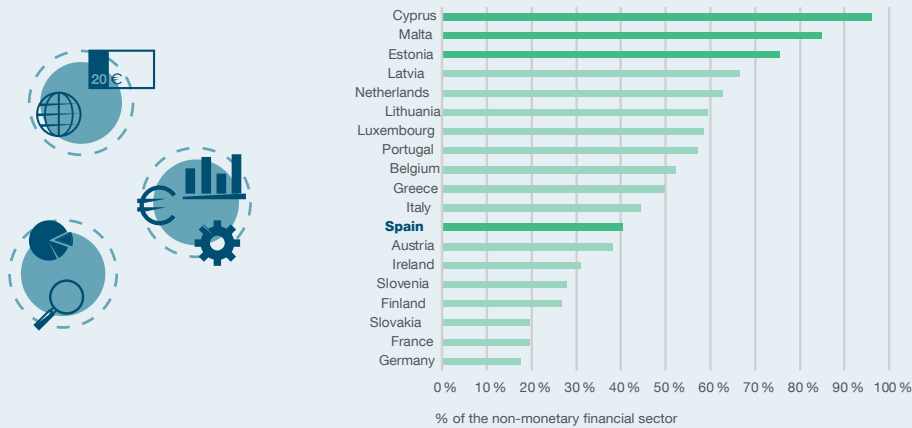
Which sectors include non-monetary financial assets?



New breakdown



How important are these sectors in the Eurosystem countries?



An initiative coordinated among Eurosystem central banks, as set out in Guideline (EU) 2021/827 of the European Central Bank of 29 April 2021 (ECB/2021/20).

SOURCE: Banco de España.

2 MONETARY POLICY IMPLEMENTATION, ASSET AND FINANCIAL RISK MANAGEMENT, AND PAYMENT SYSTEMS

MONETARY POLICY



Monetary policy is the set of decisions and measures taken by the monetary authority, the Eurosystem, to influence the cost and availability of money in the economy, with the primary objective of achieving price stability.

Why is it important?

Our economy functions better when prices remain stable, as money retains its value and people and businesses can better plan their spending and investments.

What do we do at the Banco de España?

As part of the Eurosystem, we work together with the ECB and the other central banks of the euro area in the design and implementation of monetary policy.

Our objective

The Eurosystem aims for an inflation rate of 2% at medium term.

Throughout 2022 we witnessed the gradual withdrawal of the easing measures introduced by central banks in the aftermath of the COVID-19 pandemic and the commencement of monetary policy normalisation. Monetary policy was conditioned by persistently high inflationary pressures, largely caused by sharply rising energy and food prices, as well as supply constraints that contributed to bottlenecks in manufacturing.

2.1 Monetary policy implementation

2022 saw a gradual withdrawal of the accommodative stance of the ECB's monetary policy in response to the strong and persistent rise in inflation in the euro area, which entered a phase of normalisation. This change mainly took the form of the end of net asset purchases, the end of the pandemic emergency purchase programme (PEEP) in March and the end of the asset purchase programme (APP) in July, and increases in key interest rates since July. Also, given the highly uncertain economic and geopolitical environment, the ECB abandoned forward guidance, which provided indications of the future path of policy rates, and adopted a more short-term, "meeting-by-meeting", data-driven approach to decision-making.¹

As regards key interest rates, the main instrument of monetary policy, July saw the first increase therein since 2011. The 50 basis point (bp) increase in July

¹ Every six weeks, the ECB Governing Council takes monetary policy decisions. These decisions are available on the ECB's website.



Monetary policy has been shaped by persistently high inflationary pressures.

marked the abandonment of negative interest rates. In addition, subsequent Governing Council meetings in September, October and December agreed further increases of 75 bp in each of the first two cases (an all-time high for an individual increase), and 50 bp in the last meeting. Following these changes, by the end of 2022 the main refinancing rate stood at 2.50% and the marginal lending facility and deposit facility at 2.75% and 2.00% respectively.

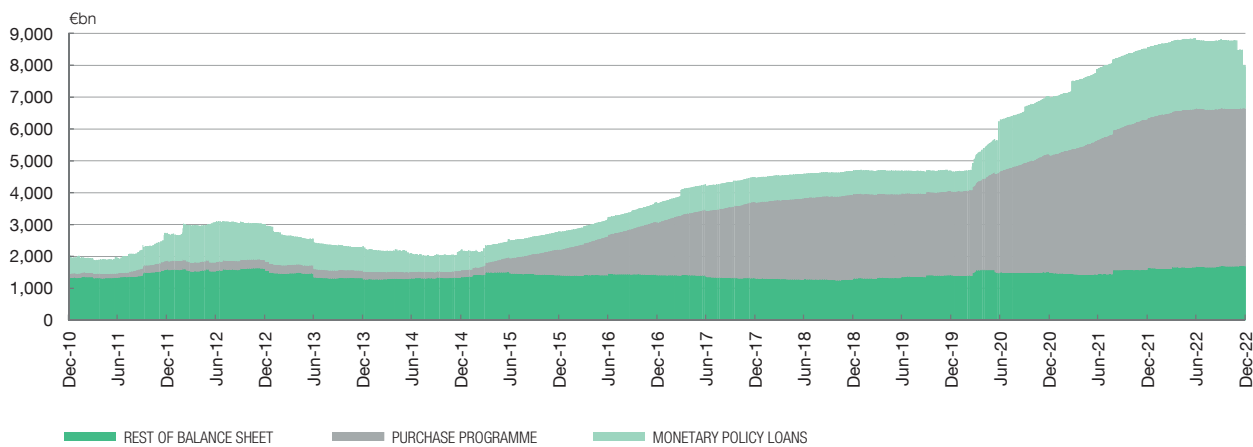
With the return to positive interest rates in September, the Two-tier System² for remuneration of reserves above the minimum reserve requirements for banks introduced in 2019 was suspended. Also, in October the remuneration of minimum reserves was set at the deposit facility rate, rather than at the main refinancing rate, in order to align it more closely with money market conditions.

a) Longer-term refinancing operations

In October the rates applicable to the third series of targeted longer-term refinancing operations (TLTRO-III) were adjusted and participating banks were offered three additional windows for voluntary early repayment of these operations, with the aim of ensuring consistency with the process of monetary policy normalisation and strengthening the pass-through of increases in key rates to bank financing conditions.

² In September, the BCE set the multiplier at 0.

Chart 2.1

THE EUROSISTEM'S BALANCE SHEET

SOURCE: Banco de España.

The first such additional early repayment window opened in November, resulting in a reduction in the outstanding amount of almost €300 billion for the Eurosystem as a whole, to which a further €450 billion was added in the December window. Together with the voluntary early repayments in March, June and September and the first two maturities of the TLTRO-III series of operations in September and December, this led to a reduction in the outstanding amount of TLTRO-III of 40% to €1,317 billion.

These TLTRO-III repayments contributed to the reduction in the Eurosystem's balance sheet, as shown in Chart 2.1.

b) Collateral framework

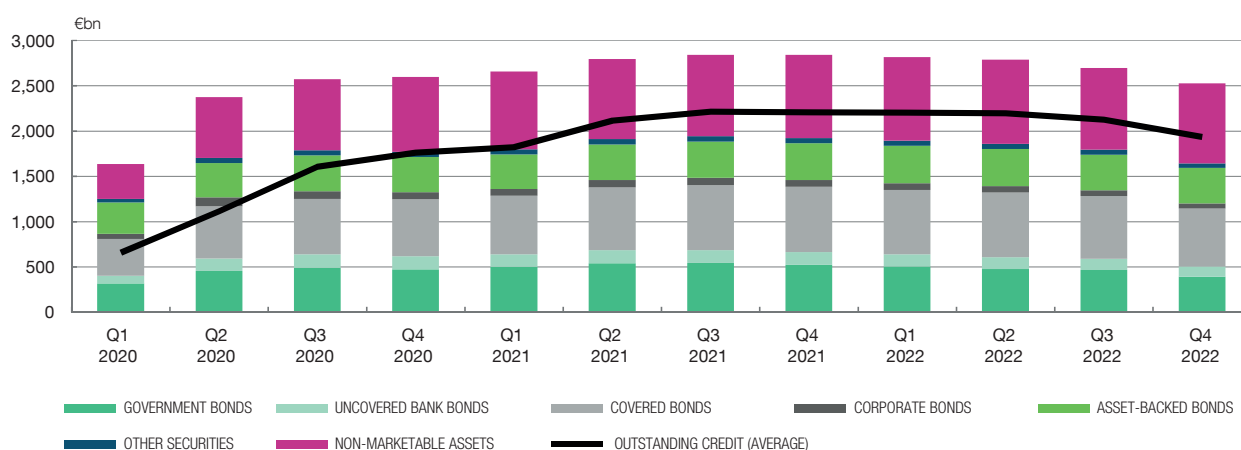
As regards the eligible collateral framework, the phasing-out of the collateral framework easing measures that were adopted in April 2020 to address the effects of COVID-19 began in 2022. Of particular note are the reduction from 20% to 10% in the temporary decrease of the valuation haircut applied to all eligible assets, the elimination of the loss of rating eligibility for marketable assets, or the return from 10% to 2.5% of the concentration limit for bank bonds.³

Chart 2.2 shows the decrease over the year in total collateral assets used (11 %), due mainly to the drop-off in the use of government bonds (25%), covered bonds (1%) and non-marketable assets (11%).

³ See the ECB [press release](#) of 24 March 2022 for further details.

Chart 2.2

USE OF COLLATERAL WITH THE EUROSYSTEM



SOURCE: ECB.

c) Asset purchase programmes

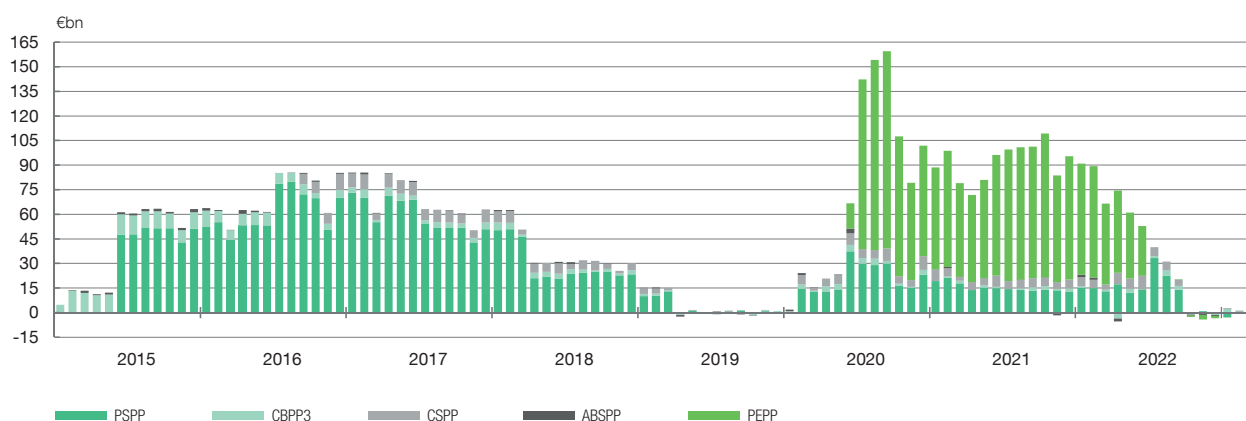
The asset purchase programmes were put in place to provide monetary stimulus to the economy, in a setting in which the key ECB interest rates were very low. They also helped to ease monetary and financial conditions, lowering funding costs for firms and households with the objective that inflation levels return to around the symmetric target of 2% at medium term. The programmes currently in force are the PEPP and the APP, whose net purchases ended in March and July 2022, respectively, with only reinvestments currently being made in accordance with the maturities of each programme. Their characteristics are as follows:

Asset purchase programme

The APP has been implemented since late 2014. It comprises several sub-programmes, defined by the type of asset acquired (public sector purchase programme (PSPP), covered bond purchase programme (CBPP3), corporate sector purchase programme (CSPP) and asset-backed securities purchase programme (ABSPP)).

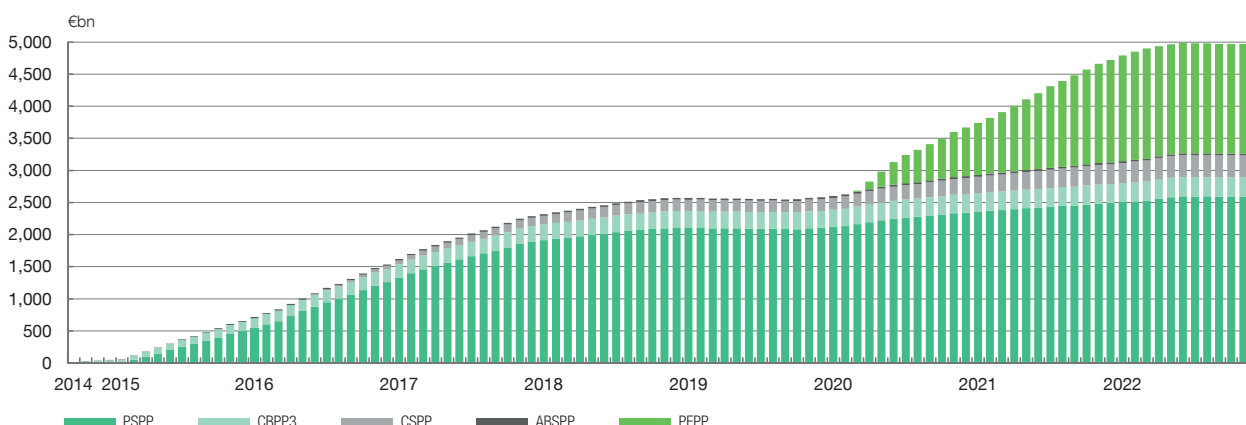
In June 2022 the Governing Council decided to suspend net asset purchases under the APP as of 1 July 2022 and to fully reinvest maturities for an extended period after the commencement of policy rate hikes and, in any case, for as long as necessary to maintain ample liquidity conditions and an appropriate monetary policy stance. In December 2022, it announced that the full reinvestment of maturities would continue

Chart 2.3
MONTHLY PURCHASES, BY PROGRAMME (APP AND PEPP)



SOURCE: ECB.

Chart 2.4
CUMULATIVE PURCHASES UNDER THE APP AND THE PEPP



SOURCE: ECB.

until February 2023, and that thereafter reinvestments would be reduced at a limited and predictable pace. Specifically, it stated that until the end of the second quarter of 2023, the reduction in reinvestment would amount to €15 billion per month on average, with the pace of reduction for subsequent periods to be determined at a future date.

In July 2022 the Governing Council resolved to take further steps to include climate considerations in the Eurosystem's monetary policy framework: (i) to adjust its holdings of corporate bonds in the monetary policy portfolios and its collateral framework; (ii) to introduce climate disclosure requirements; and (iii) to improve its risk management practices. The aim of these measures is to take into account the

financial risk associated with climate change in the Eurosystem's balance sheet and to support the green transition of the economy in line with the EU's climate neutrality objectives. The measures also aim to provide incentives for companies and financial institutions to reduce their carbon emissions and to be more transparent about them.

Pandemic emergency purchase programme

This programme was launched in March 2020 to counter the impact of the pandemic on the monetary policy transmission mechanisms and on the outlook for the euro area. Eligible assets for the PEPP are similar to those of the APP, however, the PEPP programme is endowed with greater flexibility. Its initial allocation was €750 billion, subsequently increased to €1,850 billion.⁴

Net purchases under this programme ended in March 2022, but the maturities of the securities purchased will be reinvested at least until the end of 2024. In the event of further pandemic-related market fragmentation, PEPP reinvestments can be adjusted at any time in a time-flexible manner across asset classes and across jurisdictions. This reinvestment adjustment mechanism is the first line of defence against fragmentation. In any case, the future roll-off of the PEPP portfolio will be managed so as to avoid interference with the appropriate monetary policy stance.

Also, with the aim of fostering the smooth functioning of markets, the Eurosystem has established securities lending facilities for APP and PEPP holdings, thereby helping to reduce tensions in the repo market, especially in the quarter-end and year-end periods. On 10 November 2022, the limit for securities lending against cash for the Eurosystem as a whole was raised from the previous €150 billion to €250 billion.

Transmission Protection Instrument

The Governing Council approved the establishment of the TPI in July 2022. This tool can be activated to counter disorderly market dynamics that jeopardise the effective transmission of monetary policy in the euro area as a result of unwarranted fragmentation of the central government, regional or agency debt markets.⁵ If certain criteria are met,⁶ the Eurosystem could make secondary market purchases of public sector bonds issued in jurisdictions experiencing a deterioration in their financing conditions that was not attributable to country-specific fundamentals. Purchases

4 Cumulative final net purchases under the PEPP totalled €718 billion out of this €1,850 billion envelope.

5 This programme is mainly oriented towards public sector securities with a maturity of between one and ten years; however, the possibility of including private sector securities is left open.

6 1) Compliance with the EU fiscal framework; 2) Absence of severe macroeconomic imbalances; 3) Sustainability of the country's public debt; 4) Sound and sustainable macroeconomic policy.



The best contribution monetary policy can make to economic growth and job creation is to maintain price stability.

under the TPI will be conducted in such a way that the programme does not have a permanent impact on the Eurosystem's balance sheet and, therefore, does not affect the monetary policy stance. The TPI programme will constitute the second line of defence against fragmentations.

Lastly, the OMT (Outright Monetary Transactions) programme announced in 2012 remains in place. This programme constitutes an additional line of defence to ensure appropriate monetary policy transmission and avoid fragmentation. The activation of OMT necessarily requires strict conditionality attached to a programme of the jurisdiction concerned by the EFSF/ESM.



Further information on the institution's monetary policy instruments can be found on Banco de España's [website](#).

2.2 Asset and financial risk management

As regards the management of own portfolios, the diversification of foreign reserves holdings continued in 2022, both across currencies and across issuers with high credit ratings. Likewise, the agent-brokered securities lending programme for the US dollar portfolio (in effect since 2020) continued, as did tasks undertaken for third parties, such as the management of a portion of the ECB's

foreign reserves and acting as a financial agency in relation to the portfolios of the Social Security Reserve Fund and the Deposit Guarantee Scheme.

As regards the management of the financial risks arising from these portfolios, a strict control process continued to be applied to ensure that these risks are prudently assumed and that the investments provide an efficient risk/return mix. The financial risks of own portfolios scarcely changed, with exchange rate risk being the most significant.

For the fourth consecutive year, and in response to the second of the recommendations published by the Network for Greening the Financial System (NGFS) in 2019,⁷ **sustainability and responsibility principles were applied in own-portfolio investment decisions, increasing the proportion of green bonds through the broadening of an impact portfolio.** This increase owed both to direct investment in green bonds denominated in eligible currencies and to shares held in investment funds (denominated both in US dollars and in euro) managed by the Bank for International Settlements (BIS), which aim to promote sustainable finance through investments in renewable energy and energy efficiency projects, inter alia, and to support the adoption of best practices to deepen the green bond market.

The inclusion of sustainability criteria in the Banco de España's management of its own portfolios is testimony to its commitment to the NGFS goal of



The inclusion of sustainability criteria in the management of own portfolios reflects the commitment to the objective of promoting sustainable finance.

⁷ For further detail see NGFS. (2019). *A call for action – Climate change as a source of financial risk*, April.

promoting sustainable finance, and to the common stance agreed by the Eurosystem in February 2021, whereby sustainable and responsible investment principles are to be adopted for non-monetary policy portfolios and disclosures based on the recommendations of the Task Force on climate change-related financial disclosures (TCFD) are to begin over the course of 2023. This common stance is the outcome of the work carried out by a high-level group within the Eurosystem, of which the Director General of Operations, Markets and Payment Systems is a member, and by other Eurosystem working groups in which other members of that Directorate General continue to participate. Within this area, the Banco de España continues to make progress in the process of identifying, assessing and managing the exposure of its own portfolios to climate change-related risks. These risks are monitored as part of the overall risk management process, which also includes the solvency analyses of non-financial corporations carried out by the Banco de España's in-house credit assessment system.



For more information on environmental sustainability at the Banco de España, see [Section 8](#) of this chapter, which summarises the main regulatory developments in environmental sustainability and the related work performed by the Banco de España in 2022.

2.3 Payment systems and market infrastructures

The Banco de España manages the Spanish component of the large-value euro payments system (TARGET2), which in 2022 settled a total of close to 7 million transactions, with a value of more than €16 trillion. With respect to 2021, these figures represented an increase of close to 4% in the number of transactions and of more than 12% in their total value.

In 2022 work intensified within the Eurosystem and with TARGET2 participants to prepare for the implementation of the T2-T2S consolidation project, scheduled for 20 March 2023.

As a service provider to other ESCB central banks in the area of market infrastructures, the Banco de España actively contributes to the construction of a single capital market through the Eurosystem's securities post-trading platform TARGET2-Securities, a service it provides alongside the central banks of Germany, France and Italy. In February 2022, the mechanism to calculate penalties for failed settlement instructions, which is offered centrally by the platform, came into effect. Also in 2022, TARGET2-Securities also made some changes aimed at consolidating the new TARGET2 service.

MAPS: ORIGINS AND EVOLUTION

In November 2012, the Executive Commission agreed on the development of the MAPS (Market Activities Process System) project, a system for the integrated management of central banks' capital market operations, including portfolio management, reserve management and foreign exchange operations, in cooperation with the Banque de France (2CB). MAPS went live in 2017 and has since been used, managed, maintained, operated and developed jointly by the two central banks.

From the outset MAPS was conceived as a project with a European vocation. The 2CBs have a programme to promote the incorporation as users of other national central banks belonging to the European System of

Central Banks. As a result of this work, in 2019 the Central Bank of Cyprus entered into an agreement with the 2CBs for its accession to MAPS, which took place in February 2020. In the same year, the agreement was signed with the Central Bank of the Netherlands, and in 2021 with the Central Bank of Malta. Both central banks effectively joined MAPS in 2022, when a new agreement was also entered into, this time with the Central Bank of Ireland; the latter is scheduled to join the MAPS community in 2024.

MAPS has therefore become a shared platform, designed by central banks for central banks, aimed at meeting common needs and maximising the benefits of a collective solution for the processing of market operations.



In addition, work continued on the project for the implementation of a common collateral management system for Eurosystem refinancing operations (ECMS) and user testing commenced, which will continue throughout 2023. The launch is scheduled for April 2024.

The common platform that the Banco de España and the Banque de France operate for central bank market operations (MAPS) handles the end-to-end processing of these operations from trading to final settlement and accounting. In 2022 the central banks of the Netherlands and Malta joined the central banks of France, Spain and Cyprus on the list of MAPS users. An agreement was also entered into for the Central Bank of Ireland to join in 2023. This will bring the list of user national central banks to six; the countries on this list account for almost 40% of euro area GDP. Box 2.2 provides more information on the origins and evolution of MAPS.

With regard to the digital euro initiative, the Banco de España continued to participate with the ECB and other Eurosystem central banks in the design and impact analysis thereof, as well as in the development of a prototype to allow experimentation with the various options. The current research period will foreseeably end in the third quarter of 2023, with the results to be reported to the ECB's Governing Council.

CRYPTO-ASSETS: SOME KEY RISKS

After reaching an all-time high in terms of capitalisation in November 2021, the crypto-asset market saw a visible downturn in 2022. Inflation, rising interest rates and worsening expectations for economic growth probably conditioned this price adjustment. The subsequent collapse of some leading *crypto* services and operators accentuated this development, significantly eroding public confidence in these assets.

These events further highlighted the diversity, nature and extent of the risks inherent in private digital assets. Consequently, financial authorities have stepped up efforts to ensure that investors are apprised of these risks and that they take them into account in their decisions.

Accordingly, in last spring's Financial Stability Report, the Banco de España pointed out that crypto-assets are prone to significant market, credit and liquidity risks, especially in those cases – such as bitcoin – where they lack the backing of traditional financial assets. The lack of maturity of the underlying technology, a high dependence on a small group of critical service providers, as well as inappropriate governance that dilutes responsibilities and hinders agile decision-making are, in turn, frequent causes of operational risks. These, by extension, have legal and reputational implications, and can also magnify the scale of the aforementioned problems.

The high environmental footprint associated with some of the mechanisms used to validate their transactions is also a major concern, due to their capacity to provoke

significant climate risks, both physical (an exacerbation of existing deterioration) and transitional (possible changes in regulations to endeavour to contain their impact).

Also, weaknesses in the protection of the users of these services and the opacity that characterises them are growing challenges. These circumstances not only leave users defenceless in the event of legitimate complaints or grievances, but also make it difficult for them to understand the risks and costs they incur. They also expose them to potentially harmful conduct, such as that resulting from inadequate management of conflicts of interest or the adoption of unsustainable and inefficient business and operating models.

Lastly, the anonymity or pseudo-anonymity surrounding crypto-asset transactions and the existence of transactions without intermediaries (person-to-person payments) configure them as a possible channel through which to try to evade money-laundering and terrorist-financing controls. These risks are compounded by the technical and legal difficulties encountered by the authorities in successfully completing the confiscation of assets associated with criminal activity.

In light of the foregoing, and in the absence of a developed and effective regulatory and supervisory regime, any increased interdependencies between crypto-assets and the traditional financial circuit will tend to give rise to risks of a systemic nature.

Box 2.3 explains some of the key risks of crypto-assets.



For further information on payment systems and market infrastructures see Banco de España's [website](#).

BANKNOTES AND COINS



The Banco de España's functions include the issuance of euro banknotes, carried out jointly with the Eurosystem, and bringing euro coins into circulation on behalf of the State.

Why is it important?

Cash fulfils two basic functions in society: it is a means of payment and a store of value. It is also accessible to all, is key to the social inclusion of vulnerable people, and permits payments to be settled without the intervention of third parties.

What do we do at the Banco de España?

Estimate future banknote and coin needs; control banknote production; safeguard and distribute cash; check cash for authenticity and its condition; and also destroy unfit banknotes.

Our objective

Ensure that the demand for cash is met throughout Spain and safeguard the integrity of banknotes and coins, thereby guaranteeing that they are in good condition and there are no counterfeits.

3.1 Banknote and coin management

The Banco de España, as a member of the ESCB, has functions that include issuing legal tender euro banknotes, which it does together with the ECB and the other euro area national central banks. **It also puts euro coins into circulation on behalf of the Spanish State.** Its objectives in this area are twofold: (i) to ensure that the demand for cash is met throughout Spain and (ii) to safeguard the integrity of banknotes and coins, i.e. to ensure that they are in good condition and there are no counterfeits.

a) Banknote production

As part of the euro banknote issuance function entrusted to it, each year the Banco de España, together with the ECB and the other national central banks, estimates future euro banknote production needs, quantities which, once approved by the ECB's Governing Council, are allocated to each national central bank for production on the basis of its share of the ECB's capital, with each institution bearing the costs corresponding to it.

For 2022, the Eurosystem estimated a requirement of 6,088 million banknotes, and instructed the Banco de España to produce its corresponding quota. On this occasion it was a single denomination – €50 – which the Bank ordered from its in-house printing works, IMBISA.

b) Banknote issuance

In 2022 the Banco de España delivered 2,584 million banknotes to credit institutions, for a total amount of €79,362 million, which represents an increase in the value of banknotes put into circulation of 0.4% on 2021. These banknotes were subsequently distributed by credit institutions over the counter and through ATMs both to the general public and firms to meet their payment needs (see Chart 2.5).

The euro value of both banknotes issued and withdrawn from circulation remained at 85% of the value of the years prior to the pandemic.

The withdrawal of banknotes from circulation increased as compared with 2021. In 2022 the Bank withdrew 2,866 million banknotes, amounting to €88,691 million, 10% more than in the previous period.

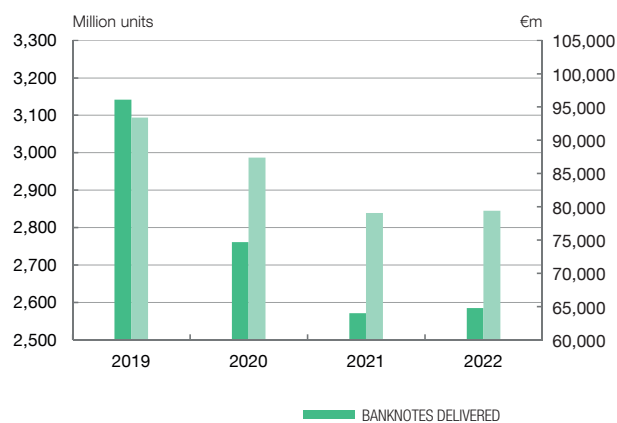
The difference between banknotes put into circulation and those withdrawn results in a **negative net issuance of 282 million banknotes, equivalent to €9,328 million**. This is due to the fact that in 2022 tourism picked up considerably, which affected cash flow, as tourists visiting Spain with money from their countries of origin contribute to the increase in currency in circulation (see Chart 2.6).

The most demanded banknotes in 2022 were those usually issued by ATMs: the €50 banknote, with 43% of the total, followed by the €20 banknote, with 28.6% (see Chart 2.6).

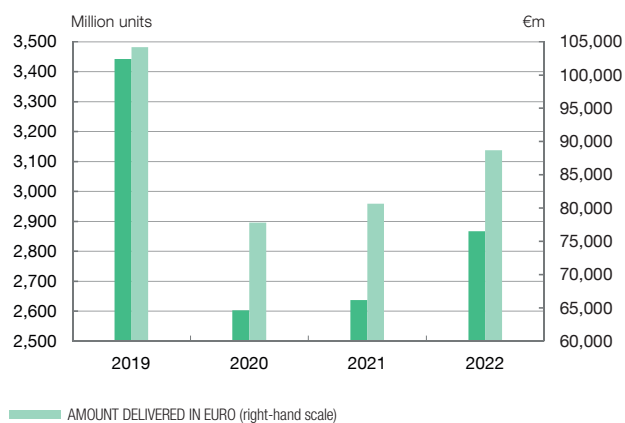
In order to ensure the quality of banknotes in circulation, the Banco de España: i) checks the authenticity and fitness of banknotes received from credit institutions,

Chart 2.5
EURO BANKNOTES

1 PUT INTO CIRCULATION



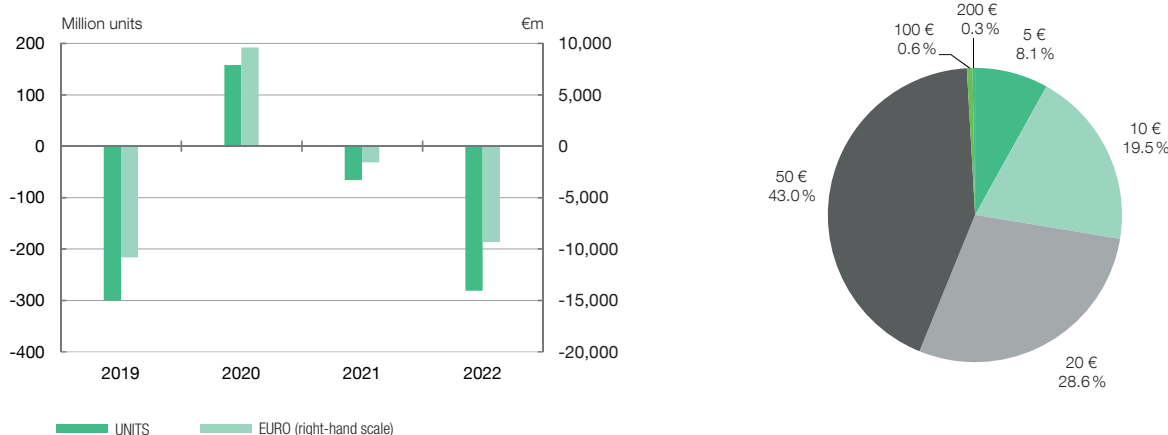
2 WITHDRAWN FROM CIRCULATION



SOURCE: Banco de España.

Chart 2.6

NET BANKNOTE ISSUANCE BY THE BANCO DE ESPAÑA. TIME SERIES AND BREAKDOWN BY DENOMINATION IN 2022



SOURCE: Banco de España.

companies and individuals, and ii) monitors the cash management carried out by cash-in-transit companies' sorting centres and credit institutions.

In 2022 the Banco de España checked approximately 2,781 million banknotes, using automated processing systems. Of these banknotes, 82.4 % were fit for recirculation and the rest were destroyed.

In addition, 514 control visits were made to the premises of cash-in-transit companies and 223 visits to bank branches, during which the operation of 724 processing machines was checked. These on-site visits verified, inter alia, compliance with applicable regulations and the procedures established for checking the authenticity and condition of euro banknotes and their recirculation.

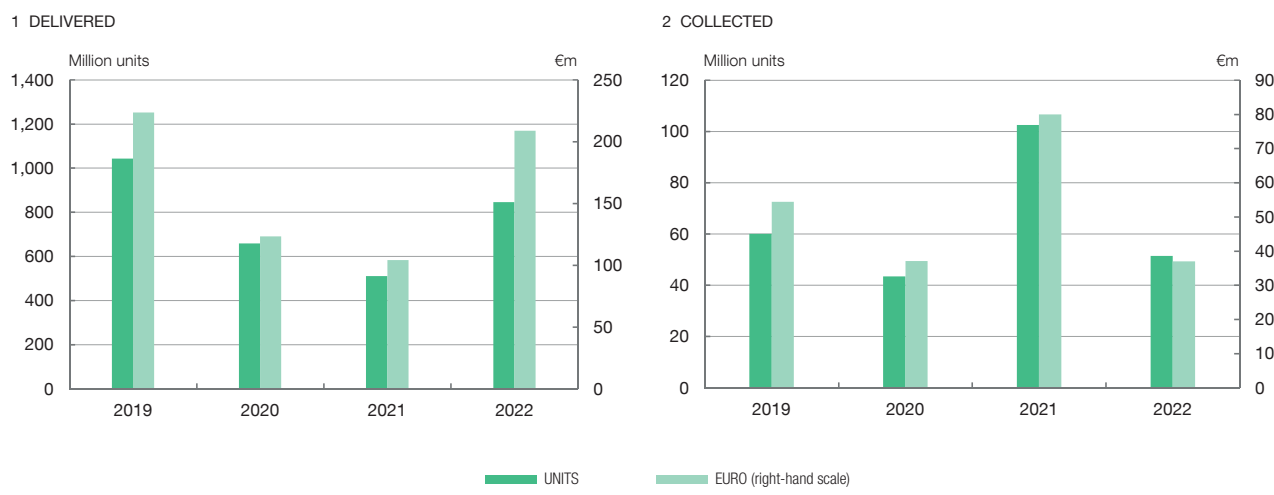
c) Coin issuance

The circulation of coins increased in 2022 compared with 2021. The Banco de España put 845 million coins into circulation, for a total of €208.8 million; this was up 65.5 % on 2021 and just 6.6 % down on 2019 in terms of pre-pandemic levels. The growth in the average value per unit issued, which amounts to €0.25, may be indicative of a slide in demand towards higher values as a result of inflation.

A total of 51 million coins, amounting to €36.9 million, were withdrawn from circulation; 50% less than withdrawals in 2021. High denomination coins (€1 or €2) accounted for most of the withdrawals, representing 87.6% of the total value but just 43.3 % of the total units (see Chart 2.7).

Chart 2.7

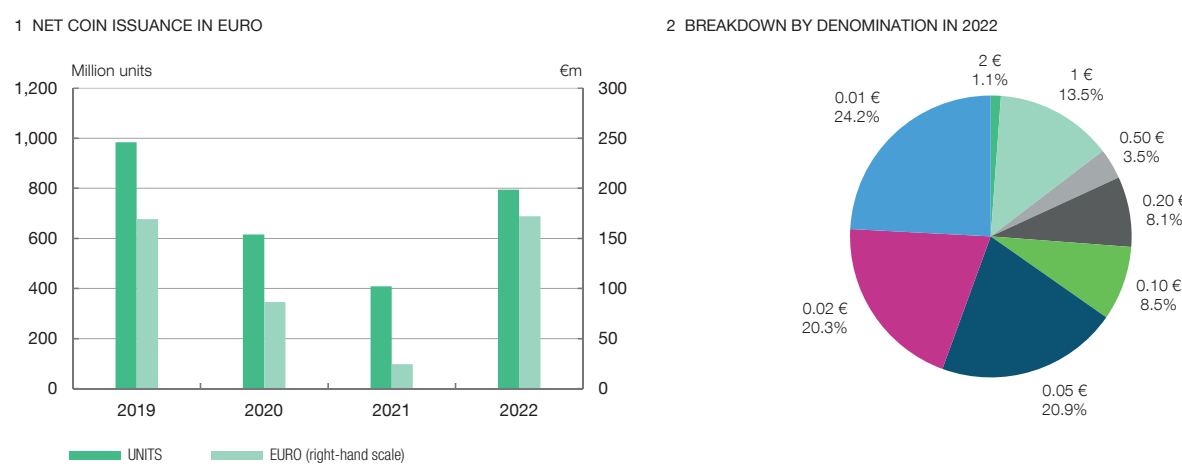
COINS DELIVERED AND COLLECTED BY THE BANCO DE ESPAÑA



SOURCE: Banco de España.

Chart 2.8

NET COIN ISSUANCE BY THE BANCO DE ESPAÑA. TIME SERIES AND BREAKDOWN BY DENOMINATION IN 2022



SOURCE: Banco de España.

The difference between the coins distributed and collected by the Banco de España, i.e. net issuance, was 794 million units, amounting to €172 million. As a result, in 2022 **the net issuance of coins in terms of units and euro value** saw two- and sixfold increases, respectively, on a year-on-year basis (see Chart 2.8).

Small coins of 1, 2 and 5 euro cents accounted for 65.3% of the year's net issuance. The most demanded coin (among those of high denomination) in Spain was the €1

coin (13.5 %). This is in contrast with other Eurosystem countries, which prefer the €2 coin (see Chart 2.8).

In order to ensure the authenticity and optimal condition of the coins in circulation, **in 2022 the Banco de España conducted inspection visits at 44% of coin processing centres** and checked the correct functioning of the coin processing machines. Overall, around 974 million coins of the three highest denominations (€2, €1 and €0.50 coins) were checked.



In the section [Banknotes and coins](#) of Banco de España's website, information on the issuance of banknotes and circulation of coins can be consulted.

3.2 Cash and other means of payment

Box 2.4

“STUDY ON CASH USE HABITS”

Spanish society is immersed in constant change with regard to the use of means of payment, influenced by digitalisation, the popularisation of new means of payment, the pandemic and rural depopulation. Against this backdrop, in 2022 the Banco de España launched the “**Study on cash use habits**” to analyse in detail the habits of the Spanish population, small businesses and the hospitality sector, as well as large retail outlets in relation to the most common means of payment and, in particular, to cash.¹ This study also gathered information on other alternative means of payment – such as Bizum –, awareness of the digital euro project and the new forms of cash withdrawal in shops (cash-back).

According to this study, cash was the most widely used means of payment in Spain in 2022, followed by cards and mobile devices. 64% of citizens use cash for purchases in physical establishments on a daily basis, while 32% of citizens use cards, although their use varies according to age, gender and level of education.

By age group, the daily use of cash increases with age, rising from 43% among the youngest respondents to 71% among those aged 54 and over. Cards, on the

other hand, are used more by people in the 25-34 age group, and the daily use of mobile devices is higher among the under 35s. Approximately half of the 18-24 age group believe that their use of cash will decrease in a year's time.

According to data published by the European Central Bank (ECB), between 2019 and 2022, Spaniards reduced their use of cash by 17.6 percentage points (pp) for purchases in physical stores and by 19.5 pp for payments between private individuals. The decrease in the use of cash is due mainly to two factors: firstly, to the increase in online shopping, which limits the possibilities of using this means of payment, and secondly, to a change in the payment habits of consumers, who have increased their use of digital means of payment in their purchases.

In relation to alternative means of payment, the study devotes a section to Bizum. Forty-four percent of all respondents have it, and 36% use it occasionally when making purchases in shops. Of note is the fact that among the youngest population group (18 to 24 years old), 5% use it on a daily basis. It is already an accepted means of payment in 38% of establishments.

¹ A quantitative study was carried out on a representative sample of each group for the population and small businesses and the hospitality sector, as well as on an oversample in municipalities without a stable bank branch. For large retail outlets, a qualitative study was carried out by means of in-depth interviews with cash managers.

“STUDY ON CASH USE HABITS” (cont'd)

As regards the digital euro, the study highlights that only two out of ten citizens are aware that the ECB is analysing the possibility of issuing the digital euro. Furthermore,

35% of the population would use the digital euro, 21% as a complement to existing means of payment, and young people are the most likely to use it.

Table 1
PERCENTAGE OF DAILY USE OF MEANS OF PAYMENT

	Cash	Card	Mobile devices	Internet platforms	Transfers	Bizum
Total	64	32	7	0	0	1
Men	68	29	7	—	—	1
Women	60	35	6	—	—	1
18-24 years	43	32	23	—	—	5
25-34 years	53	48	16	—	—	4
35-44 years	60	38	8	—	—	1
45-54 years	70	35	3	—	—	1
55-64 years	71	30	1	—	—	—
65 years and over	71	19	3	—	—	—
Basic education	72	22	4	—	—	—
Intermediate education	63	36	7	—	—	2
Higher education	55	42	11	—	—	2

SOURCE: Company awarded the study.



For more information on the “Study on cash use habits 2022” see the Banco de España’s website.

3.3 Combating banknote and coin counterfeiting

The Banco de España is tasked with analysing and identifying suspected counterfeit euro banknotes and coins in Spain. The detection of counterfeit banknotes and coins is coordinated with the Banco de España Monetary Offences Investigation Brigade (BIBE) and the police section attached to the Banco de España, which is responsible for investigating and prosecuting crimes related to the counterfeiting of national and foreign currency.

a) Banknote counterfeiting

A total of 58,593 counterfeit euro banknotes were withdrawn from circulation in Spain in 2022, up 3.8 % on the 2021 figure. In addition, in 2022 the NAC (National

Analysis Centre) recorded a further 28,557 counterfeit banknotes that were seized by the police before going into circulation.

In September, the BIBE (the Banco de España Monetary Offences Investigation Brigade) dismantled a printing works engaged in counterfeiting €500 banknotes; given the quality of the banknotes it produced, its dismantling had a major impact.

As in 2021, the bulk of the counterfeits identified in 2022 were unlawful reproductions of euro banknotes. These are banknotes that have inscriptions specifying that they are "copies", "not legal tender" or are to be "used only for films or as props".

Chart 2.9 shows developments in counterfeit euro banknotes withdrawn from circulation since 2017, and a breakdown by denomination in 2022.

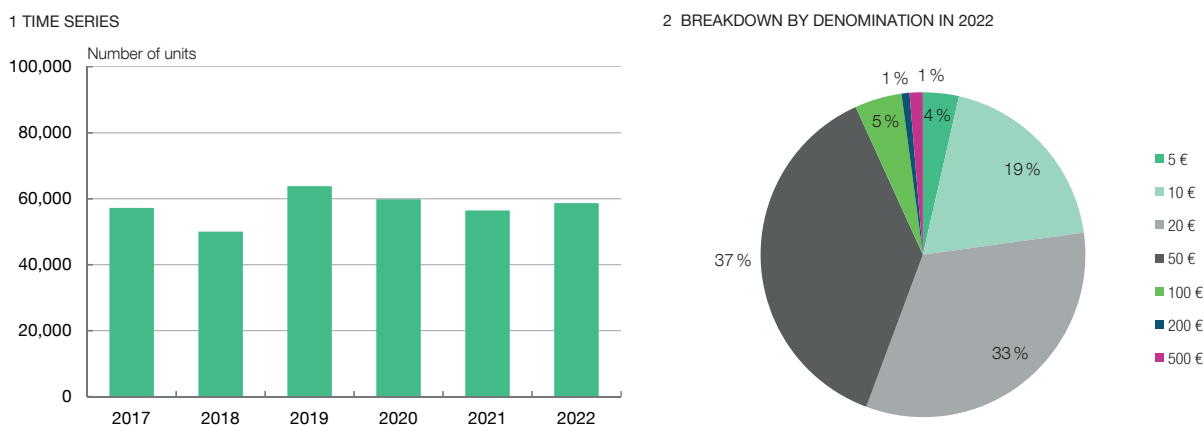
The €50 denomination is the most counterfeited banknote, followed by the €20 and €10 denominations; together, these account for approximately 89% of all counterfeits withdrawn from circulation.

The likelihood of receiving a counterfeit banknote was very low, with just 17 counterfeits per one million genuine banknotes in circulation.

In 2022 Spain ranked third in the Eurosystem for the identification and withdrawal from circulation of counterfeit euro banknotes.

Chart 2.9

COUNTERFEIT BANKNOTES WITHDRAWN FROM CIRCULATION IN SPAIN. TIME SERIES (2017-2022) AND BREAKDOWN BY DENOMINATION



SOURCE: Banco de España.

b) Coin counterfeiting

In Spain, **the total number of counterfeit coins withdrawn from circulation in 2022 was 26,175**, down 10% on the 29,218 units recorded in 2021. However, no counterfeit euro coins were withdrawn prior to them being put into circulation.

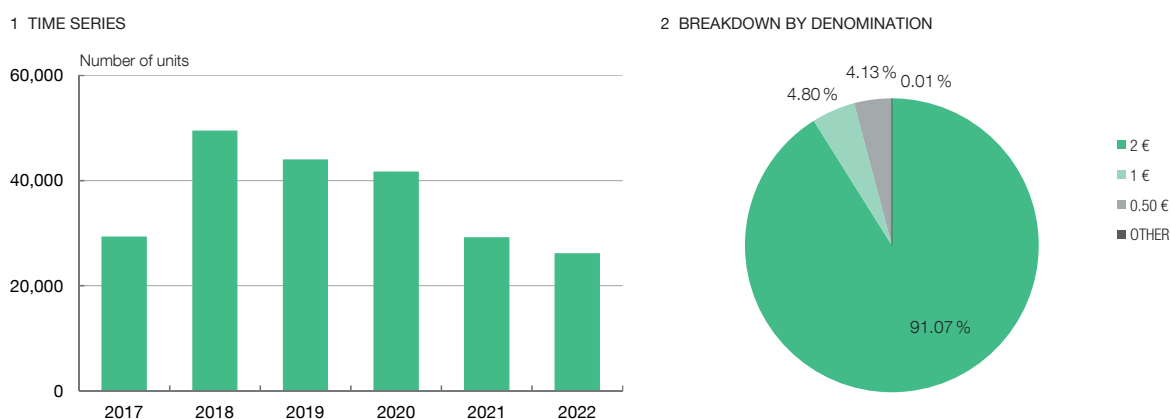
However, the counterfeit coins detected in 2022 are of a higher quality and more dangerous. This has made it necessary to monitor the reliability of the machines more closely and allocate more resources to training the professionals involved in coin recirculation.

Chart 2.10 shows developments in the amount of counterfeit euro coins withdrawn from circulation since 2017, and a breakdown by denomination in 2022.

The most counterfeited denomination continues to be the €2 coin, accounting for more than 91% of all counterfeit coins withdrawn from circulation in Spain. As with banknotes, the likelihood of receiving counterfeit coins is very low: the figure being seven counterfeits per million coins of the three highest denominations in circulation.

Chart 2.10

COUNTERFEIT EURO COINS WITHDRAWN FROM CIRCULATION IN SPAIN. TIME SERIES (2017-2022) AND BREAKDOWN BY DENOMINATION



SOURCE: Banco de España.



Further information on euro counterfeiting statistics in Spain can be found in the [Banknotes and coins](#) section of the Banco de España's website, using the following links for [banknotes](#) and [coins](#).



The Banco de España promotes knowledge of the characteristics and security features of the euro banknotes and coins, with face-to-face and online training.

c) Training on banknotes and coins


In order to contribute to the fight against counterfeiting, **the Banco de España promotes awareness of the characteristics and security features of euro banknotes and coins among professional cash handlers.** In 2022 the Banco de España continued its awareness-raising work in this area, providing training to over 9,000 specialist agents.

In addition to online and videoconference training, as a result of the improved health situation, the second half of the year saw the resumption of face-to-face courses for professional cash handlers. Among the most significant were the course on "Euro banknotes and coins" and the online course on "Manual cash selection".



For more information on courses on the design and security features of cash, for professional cash handlers and the general public, please consult the [Training Programme](#) on the Banco de España website

SUPERVISION OF FINANCIAL INSTITUTIONS



The supervisory activity carried on by the Banco de España is aimed at verifying that the financial system's operations comply with regulations and good practices.

Why is it important?

The financial system plays a key role in economic development, channelling money from savers to the businesses and households that need it. Furthermore, payment systems provide efficient mechanisms for the payment of any purchase of goods and services.

What do we do at the Banco de España?

Verify compliance with rules related to the financial situation and solvency of institutions, payment services and customer protection.

Our objective

Promote the smooth functioning of institutions and the payment system with the ultimate aim of safeguarding the stability of the financial system.

4.1 Authorisation and registration of institutions

In general, financial institutions subject to the powers and functions of the Banco de España require **authorisation in order to operate as such**. This is due to the fact that some of the activities they perform are reserved activities or have a **reserved name**.

The Banco de España's involvement in the authorisation processes of the various financial institutions is not the same in all cases. Thus, it can be indicated that:

- a) Following the launch of the Single Supervisory Mechanism (SSM), the ECB is the competent authority for authorising the establishment of credit institutions in any of the Member States that participate in the SSM. However, the Banco de España has a major role in this process, as it is responsible for submitting a motion for resolution to the ECB in relation to the creation of Spanish credit institutions.
- b) The Banco de España is the competent authority to grant and revoke the authorisation or registration of electronic money institutions (ELMIs), payment institutions (PIs), payment service providers exempt under Article 14 of Royal Decree-Law 19/2018, account information service providers, specialised lending institutions (SLIs) that provide payment services (SLIs-PIs) or issue electronic money (SLIs-EMIs), real estate lenders, real estate intermediaries, currency-exchange bureaux, and

providers of services for the exchange of virtual currency for fiat money and the safekeeping of custodial electronic wallets. It is also the competent authority to decide on applications for approval of appraisal companies. Similarly, it is responsible for carrying out certain verifications in relation to payment service providers.

- c) Lastly, the Banco de España must issue a mandatory report on the authorisation of SLIs, mutual guarantee companies (MGCs) and reguarantee companies, which is granted by the Ministry of Economic Affairs and Digital Transformation.

Moreover, the official registers of the Banco de España contain information on the authorised activities and contact details of the institutions registered therein. In addition, to the extent that institutions are entitled to an EU passport, the official registers also provide information on the EU countries in which they can provide services.

These registers are publicly accessible via the Banco de España's website, where both current and historical data can be consulted. Therefore, the registers are configured as a tool available to the public for consulting the main data on registered institutions (name, address, date of registration and deregistration, code, etc.).

Details of the institutions registered in the registers of institutions since 2020 are set out in Tables 2.1 (for credit institutions) and 2.2 (for institutions other than credit institutions).

Table 2.1
REGISTER OF CREDIT INSTITUTIONS

Year-end data	2020	2021	2022		
			Registrations	Deregistrations	Final
Credit institutions	193	195	4	5	194
Banks	51	48	1	1	48
Savings banks	2	2			2
Credit cooperatives	61	61			61
ICO	1	1			1
Branches of EU credit institutions	75	79	3	4	78
Branches of non-EU credit institutions	3	4			4
Financial holding companies			3		3
Mixed financial holding companies			1		1
TOTAL	193	195	8	5	198

SOURCE: Banco de España.

Table 2.2

REGISTER OF INSTITUTIONS OTHER THAN CREDIT INSTITUTIONS

Year-end data

	2020	2021	2022		
			Registrations	Deregistrations	Final
Specialised lending institutions	26	23	2	1	24
Specialised lending institutions - payment institutions	8	9			9
Branches of financial institutions subsidiaries of EU credit institutions	1	1			1
Real estate lenders	99	136	12	2	146
Real estate credit intermediaries	234	384	118	7	495
Branches of EU real estate credit intermediaries	2	2			2
Mutual guarantee companies and reguarantee companies	19	19			19
Appraisal companies	32	32			32
Currency-exchange bureaux (a)	17	16			16
Payment institutions	47	49	4	1	52
Payment institutions exempt under Article 14 of Royal Decree-Law 19/2018	1	9	3	2	10
Payment service providers excluded under Royal Decree-Law 19/2018	3	15	3		18
Account information service providers	1	1	2		3
Electronic money institutions	9	9	1		10
Branches of EU payment institutions	14	7	2		9
Branches of EU electronic money institutions	8	3	1		4
Virtual currency for fiat currency exchange service providers (b)			50		50
Electronic wallet custody service providers (b)			23		23
TOTAL	521	715	221	13	923

SOURCE: Banco de España.

a Excludes establishments authorised solely for the purchase of foreign currency with payment in euros.

b Law 10/2010, of 28 April, on the prevention of money laundering and terrorist financing, includes these providers as obliged parties for the purposes thereof and introduces an obligation to register with the Banco de España. This register was created for the purpose of ensuring compliance by registered entities with the requirements laid down in the regulations on the prevention of money laundering and terrorist financing. Law 10/2010 does not establish rules on financial supervision, prudential supervision, corporate governance, technological security, market conduct or information transparency.

As Tables 2.1 and 2.2 illustrate, the institutions registered in the Banco de España's registers are of a highly diverse nature. Their varying configuration and regulation also determine that the competencies that the Banco de España exercises over these institutions, by legal mandate, are also diverse.

4.2 Prudential supervision

Since November 2014, the institutions of countries participating in the banking union have been supervised by the SSM, which comprises the ECB and the different national supervisory authorities (NSAs). The ECB is responsible for direct supervision of the main credit institutions (“significant institutions – SIs –”), in close collaboration with the NSAs. All other credit institutions (“less significant institutions” – LSIs –) are directly supervised by the NSAs according to a common policy laid down by the ECB.

Besides being tasked with the direct supervision of Spain's LSIs, the Banco de España makes an essential contribution to the supervision of Spain's SIs, carrying out ongoing off-site supervision through the joint supervisory teams (JSTs) and on-site inspections and investigations of significant institutions' models.

At 31 December 2022, there were ten Spanish groups of significant institutions,⁸ which accounted for 90.5 % of total assets in the Spanish banking system, and 56 Spanish institutions or groups classified as less significant, accounting for 5.5 %. The remaining 4.0 % related to subsidiaries and branches of foreign credit institutions.

Supervisory activity in 2022, within a framework of continuity, was adapted to the backdrop of economic uncertainty, initially created by the pandemic and subsequently amplified by geopolitical tensions, with adverse effects in terms of spiralling inflation, rising public and private indebtedness, asset valuations, and potential deterioration of credit quality in a context of a withdrawal of institutional support measures. The supervisory work focused on three broad areas:

- Strengthening institutions by assessing credit risk and the management of interest rates and credit spreads.
- Business model, digital transformation strategy and governance, in order to address possible structural weaknesses and ensure the sustainability and viability of banking activity.
- Emerging risks, with particular emphasis on climate risk, cyber risk, risks arising from the outsourcing of activities, and counterparty risk vis-à-vis non-banking financial institutions.

The activities comprising the microprudential supervision of credit institutions are grouped into two distinct areas: ongoing off-site supervision and on-site supervision. Ongoing off-site supervision assesses the institutions' situation and risk profile in order to adopt, on a timely basis, the appropriate supervisory measures and plan the required work and the depth thereof. In turn, on-site exercises comprise two types of action: inspections and internal model investigations. The latter specifically review capital requirement calculation models, while inspections analyse in depth any other area relating to the institutions.

The ongoing off-site supervisory tasks notably include those relating to the supervisory review and evaluation process (SREP), which provide a comprehensive view of the institutions' risk profile. In 2022 the return to relative normality allowed the JSTs to once more apply the full SREP methodology, as set

⁸ Santander, BBVA, Caixabank, Sabadell, Unicaja, Bankinter, Kutxabank, Ibercaja, Abanca and Banco de Crédito Social Cooperativo

out in the European Banking Authority (EBA) guidelines (EBA/GL/2014/13) and in the SSM supervisory manuals. In addition, among other tasks, the ongoing supervision teams devoted their efforts to the cross-cutting review of areas of supervisory priority.

On-site supervision complements the off-site ongoing supervision of institutions. In order to reinforce the independence and objectivity of the findings of the work, both types of supervision are carried out by different teams. In 2022 the inspections and investigations of internal models were mostly carried out using a hybrid working model, which combines visits by inspectors to the institutions' headquarters with off-site work.

In 2022 Banco de España staff participated significantly in 20 inspections (around half of which were part of the so-called "specific subject-matter campaigns") at significant SSM institutions. It also participated in all the teams of the 18 inspections of Spanish group institutions. Of these, 14 were led by Banco de España staff, three by ECB staff and one by Banque de France staff. It also led two inspections of significant institutions in other SSM Member States.

Credit risk was the main focus, but technology risk, capital, governance, business model and market risk were also highlighted.

In 2022 the Banco de España participated in 12 model research missions (mainly on credit risk), 11 of which involved Spanish institutions. The Banco de España led eight, and the Banco de Portugal, the Bundesbank and the ECB led one each.



The Chair and Vice-Chair of the ECB's Supervisory Board, Andrea Enria and Frank Elderson, presented the results of the 2021 SREP at a press conference on 10 February 2022.

In addition, the supervisory plan for less significant institutions was approved by the Executive Commission of the Banco de España, as they are subject to its direct supervision; however, the ECB is informed of the content of this plan. **In 2022 ten on-site inspections were carried out**, with a particular focus on credit and foreclosed asset quality, governance, solvency and IT.

The Executive Commission of the Banco de España was briefed on the 518 decisions and actions of the ECB's Supervisory Board, on which the Banco de España is represented, which affected Spanish institutions in 2022: 240 addressed specifically to Spanish institutions (232 SIs and eight LSIs) and a further 278 decisions on more general matters or on SSM policy and/or organisational issues.

Following the different prudential supervisory tasks carried out on less significant credit institutions, the Banco de España issued 114 recommendation and requirement letters, of which 58 were on capital decisions, 46 on recovery plans and ten on on-site inspections.

In 2022 the Banco de España processed a total of 465 files concerning the **suitability assessment of senior officers**: 253 relating to credit institutions, 65 to specialised lending institutions, 52 to payment institutions, 55 to mutual guarantee companies, 29 to electronic money institutions, three to currency-exchange bureaux and eight to appraisal companies.

Beyond the scope of the SSM, the Banco de España also has exclusive supervisory powers over **institutions other than credit institutions** that provide financial services or perform functions related to the financial sector. In 2022 a total of 261 ongoing off-site supervision actions and five inspections were performed at these institutions, of which three were completed.

Six recommendation and requirement letters were sent as a result of these supervisory actions, of which three in connection with on-site inspections were completed.

Schema 2.2 presents the main types of institutions supervised by the Banco de España.

On 8 July 2022, Royal Decree-Law 24/2021 of 2 November came into force, transposing Directive (EU) 2019/2162 on **covered** bonds, which establishes a harmonised minimum regime in the EU regarding the conditions for the issuance and characteristics of this type of instrument, aimed at promoting the unified development of these markets. The Royal Decree-Law augments investor protection for covered bonds by shoring up the supervisory regime for these instruments and reduces their level of risk. The Banco de España has assumed new supervisory

MAIN TYPES OF INSTITUTIONS SUPERVISED BY THE BANCO DE ESPAÑA

CREDIT INSTITUTIONS		Any individual or legal entity, whether Spanish or foreign, wishing to pursue the activities of a credit institution in Spain (especially, taking deposits and other repayable funds from the public) must first obtain the necessary authorisation and be entered in the Banco de España's official registers of credit institutions. Credit institutions include commercial banks, savings banks, credit cooperatives and the ICO.
	BANKS	Public limited companies with an initial share capital of not less than €18 million whose business consists of taking deposits and other repayable funds from the public and granting credits for their own account.
	SAVINGS BANKS	Institutions organised as foundations and with a social purpose, whose financial business is essentially geared to taking repayable funds and providing banking and investment services to retail customers and small and medium-sized enterprises.
	CREDIT COOPERATIVES	Companies whose corporate purpose consists of serving the financial needs both of their members and of third parties by pursuing the business of credit institutions.
	BRANCHES OF FOREIGN CREDIT INSTITUTIONS	Having no legal personality, they are part of a foreign credit institution and directly pursue all or any of the operations inherent to the business of that institution.
SPECIALISED LENDING INSTITUTIONS	Enterprises which, while not classed as credit institutions, professionally pursue one or more banking business activities, such as granting loans or credits or providing guarantees. They are subject to a minimum share capital requirement of €5 million. They may also provide payment services or issue electronic money, subject to prior authorisation by the Banco de España and entry in the Banco de España's Special Register, in which case they will be considered hybrid payment institutions or hybrid electronic money institutions, respectively.	
ELECTRONIC MONEY INSTITUTIONS	Legal entities authorised by the Banco de España to issue electronic money. They must have minimum initial capital of €350,000 and sufficient own funds. They may also provide payment services, whether or not these are linked to electronic money.	
PAYMENT INSTITUTIONS	Legal entities authorised by the Banco de España to provide and execute payment services in Spain (e.g. payment transactions, issuance of payment instruments, money remittances, payment initiation, information on accounts, etc.) with minimum initial capital and own funds requirements according to the payment services provided.	
MUTUAL GUARANTEE COMPANIES	Business entities with variable capital established by small and medium-sized enterprises to facilitate their access to credit and related services and generally enhance their financial conditions. They may provide personal guarantees to their members, but they may not extend credit of any kind to them.	
REGUARANTEE COMPANIES	Companies whose purpose consists of reguaranteeing guarantees furnished by mutual guarantee companies, to provide sufficient guarantee and cover for the risks assumed by the latter and help reduce the cost of furnishing personal guarantees to members.	
CURRENCY-EXCHANGE BUREAUX AUTHORISED TO PURCHASE AND SELL FOREIGN CURRENCY	Individuals or legal entities, other than credit institutions, that purchase foreign banknotes and travellers' cheques. Public limited companies that purchase and sell foreign banknotes and travellers' cheques.	
APPRAISAL COMPANIES	Public limited companies that provide appraisal services. They are subject to prior authorisation, independence and secrecy requirements and to a minimum capital requirement of €300,506.	
SOURCE: Banco de España.		

powers, whereby it must authorise both the programmes with the characteristics of the covered bonds issued and the supervisory bodies of the issuances. For the 19 issuing institutions, the Banco de España authorised five commercial-law companies as supervisory bodies and 27 covered bond programmes of issuances that were in force at that date. The Banco de España discloses and regularly updates on its website the list of authorised issuing institutions, as well as the covered bonds issued under the programmes authorised.



Further information of the issuance of a [covered bond programme](#), can be consulted on the Banco de España's website.

The Banco de España cooperates closely with the Commission for the Prevention of Money Laundering and Monetary Offences (CPMLMO) and its Executive Service (SEPBLAC) in the supervision and inspection of compliance with **anti-money laundering and countering the financing of terrorism (AML/CFT) obligations** by institutions supervised by the Banco de España, pursuant to Spanish legislation and the cooperation and coordination agreement entered into with the CPMLMO. The Banco de España further strengthened this function in 2022. In addition, the Banco de España completed four general inspections, reviewing compliance with AML/CFT at three LSIs and one SI. In addition, the following actions were initiated: a general inspection at one SI; a specific inspection focused on the review of the internal control systems implemented by one SI to ensure the application of AML/CFT policies to its group abroad; and a thematic analysis of foreign exchange activity.

4.3 Supervision of institutions' conduct

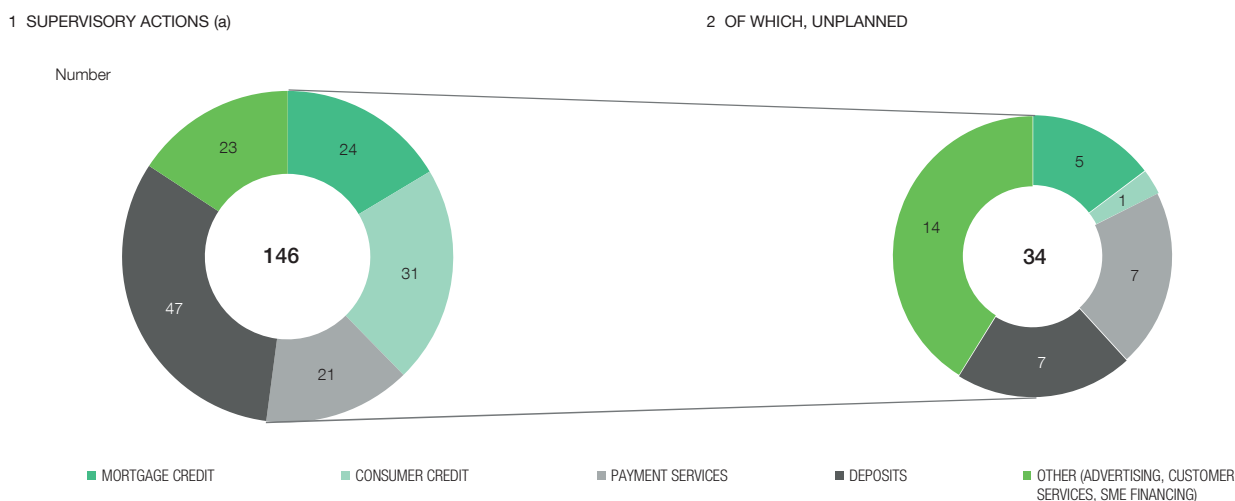
The banking conduct and reporting obligations imposed on supervised financial institutions by banking regulation and discipline legislation act as customer protection measures and seek to preserve public confidence in the banking system, thereby helping to promote the stability of the financial system. Conduct supervision actions focused not only on verifying effective compliance with these rules, but also on guiding a shift in the culture of conduct of institutions, as an essential complementary means of ensuring an appropriate financial relationship between institutions and their customers.

Ongoing conduct monitoring work aims to gain an insight into the institutions' business models and strategies, as well as of the market in general, in order to pre-empt potential conduct risks. This monitoring is performed on a case-by-case basis at institutions with the largest market share and retail activity, and in groups at other institutions, depending on the type of activity and business models; furthermore,

Chart 2.11

CONDUCT-RELATED SUPERVISORY ACTIONS IN 2022, BY TYPE

The supervisory actions chiefly focused on areas of activity relating to payment services, consumer credit, mortgage credit and deposits.



SOURCE: Banco de España.

- a A total of 99 of these supervisory actions were initiated before the start of 2022.
- b “Deposits” includes, inter alia, current accounts and savings accounts.

it is a very valuable tool for the design of a preventive supervisory strategy and adequate supervisory planning, as well as for the establishment of supervisory criteria in relation to certain aspects of conduct and the due transfer thereof, using the tools available, to the institutions themselves.

In addition, the new reporting of confidential conduct information established by Banco de España Circular 4/2021 of 25 November, for credit institutions and other supervised institutions, on confidential return models relating to market conduct, transparency and customer protection, and on the register of complaints, represents a milestone in the knowledge of business models and the definition of institutions' conduct profiles. The first confidential return models to be sent to the Banco de España will refer to the second half of 2022.

Similarly, specific matters are monitored on an ongoing basis, making it possible to specify the supervisory framework and supervisory planning, such as the advertising of banking products and services, complaints and enquiries, or the functioning of customer services and, in particular, the location of such information on their website. As a result of the monitoring of advertising activity, it was possible to observe a greater degree of clarity in the advertising messages disseminated, and an increase in the number of advertisements reviewed and classified as correct advertising.

In 2022 a significant portion of the supervisory actions, the distribution of which is shown in Graph 2.11, focused on the knowledge and verification of the

degree of compliance with regulations in the provision of payment services. Inspections were conducted to analyse the procedure for notifying changes in the current account terms and conditions of certain supervised institutions, and to verify compliance with the regulations on the basic payment accounts. In addition, actions were taken on the practical application of the contractual limits on drawdowns as risk mitigators in the event of potential fraud in payment services; and on the application of the mechanism envisaged in the regulations to ensure the swift transfer of payment accounts and of the services and direct debits linked thereto.

As in previous years, **visits were made to bank branches** in order to verify that customer service staff have sufficient knowledge of the regulations on payment accounts, and that this knowledge is conveyed with due clarity, through the appropriate explanations, to customers. These visits verify: i) the adequacy of the explanations and offer of the basic payment account; ii) the delivery of pre-contractual information in due time; iii) the information provided on the closing of accounts; or iv) the regime for unauthorised payment transactions, with the aim of ensuring that institutions correct any shortcomings identified.

An inspection was also carried out at an electronic money institution, where shortcomings were identified in the processes of contracting and termination of customer contracts.

As regards consumer credit, most of the actions were cross-institutional in nature, including in their subjective scope several institutions, such as those analysing responsible lending practices and policies; credit granted in the form of overdraft facilities on sight deposits; the various technological solutions, platforms and additional services associated with cards for deferring payments at points of sale; and the measures implemented to comply with the new transparency and solvency assessment obligations envisaged in the regulation of revolving credit.

Lastly, two inspections were carried out on consumer credit contracting in which deficiencies were identified in the marketing and product offering processes, the redress of which is necessary to ensure that the customer has sufficient information at the time of contracting and to avoid situations of debt overhang.

In relation to real estate lending, 2022 witnessed the conclusion of the inspection that has been conducted in recent years to check that the effective application by institutions of clauses limiting the downward variability of interest rates (known as "floor clauses") complies with the terms and conditions agreed upon in the corresponding contracts. This is the most extensive inspection carried out to date, both in terms of the number of institutions and the number of files reviewed.



The inspection on the correct application of the so-called "floor clauses" was completed.

To carry out this inspection, the Banco de España's supervisory teams used suptech natural language processing tools and machine learning techniques, which made it possible to increase the size of the samples of files analysed.


Also, the correct application of the Code of Best Practices (CBP) set out in the annex to Royal Decree-Law 6/2012 of 9 March, on urgent measures for the protection of mortgagors experiencing financial hardship (RDL 6/2012) by member institutions was verified.

Moreover, in an increasingly digitalised banking services environment, particular attention was paid to the way in which institutions complied with their transparency obligations according to the contracting channels used. As shown in Schema 2.3, banks adapted to comply with prior disclosure obligations in digital environments.

In 2022 inspections were also carried out to verify the information reported to the Banco de España by the supervised institutions in the return "Interest rates on lending transactions in Spain with the resident private sector" included in Annex 9 of Circular 5/2012, with a view to contributing to the determination of benchmark rates. The effective compliance with the reporting obligations for SMEs in the event of cancellation or reduction of the flow of financing was also assessed.


DISTANCE MARKETING OF BANKING PRODUCTS AND SERVICES

ADEQUATE EXPLANATIONS



The aim is to ensure that customers are adequately informed about the product, its risks and how it is contracted.

To guarantee these adequate explanations, even if customers are not attended in person, banks use various formulas:




- Explanatory videos.
- Chatbot.
- Simulators.

- FAQs.
- Flow charts.
- WhatsApp channel.


- Guides & infographics.
- Telephone.
- E-mail consulting services.

PRE-CONTRACTUAL INFORMATION



The aim is to enable customers to compare products offered by different institutions and to make an informed decision tailored to their needs.

To provide this information at a distance, institutions have taken into account:



The obligation to provide it in advance:

- At a stage or on a screen prior to and different from that at which consent to the contract is granted, or
- Send it by e-mail prior to signing the contract.

The obligation to have an adequate computerised registration to accredit compliance with all transparency obligations.

Also advisable is:

- Making it visibly available on their websites and apps so that it can be consulted.
- Use of scroll down mechanisms to avoid having to go through the entire content of the website.
- Mandatory download.
- A command for it to be read.

SOURCE: Banco de España.

4.4 Oversight and supervision of market infrastructures

In 2022 **oversight and supervision activities** were carried out at national level on the retail payment system – the National Electronic Clearing System (SNCE) – and on the Cards and Means of Payment System (STMP). Various actions were also carried out at Iberclear and BME Clearing, as part of the oversight activity, and as the central bank of issuance of the currency in which these infrastructures clear and settle their transactions on behalf of the Eurosystem.

At European level, **the Banco de España assumed leadership, together with the ECB, of the Eurosystem group responsible for the oversight of the American Express card scheme**, whose operations in Europe are conducted mainly through two Spanish payment institutions, which are also under the supervision of the Banco de España. In addition, the Banco de España continued to participate in the Eurosystem's pan-European payment systems co-operative oversight groups.



At the national level, oversight activities were carried out on the National Electronic Clearing System (SNCE) and Sistema de Tarjetas y Medios de Pago, S.A. (STMP).

The supervisory work on the provision of payment services focused on four types of actions. On the one hand, a comprehensive on-site inspection of an electronic money institution was performed. To this should be added the supervisory activity related to various non-compliances in the area of payment institutions and electronic money agents. Also significant was the assessment of compliance with the Regulation on strong customer authentication and open, common and secure communication standards, as well as the monitoring of the handling of serious operational and security incidents, statistical reporting of fraud, delegation of operational functions and cross-border activity.

Lastly, **numerous authorisation procedures were carried out for new specialised payment service providers** – mainly payment institutions, account information service providers and low activity institutions partially exempted from certain requirements –.

4.5 Sanctioning activity

Sanctioning powers, as a corollary of supervisory powers, continued to be exercised in 2022, both in the prudential area and in the areas of transparency and customer protection.

In the prudential area, nine open proceedings were conducted against institutions and their directors and management (a total of 90 individuals), of which four were resolved in 2022.

For example, four proceedings were brought against appraisal companies for conduct relating to their organisation, quality control, valuation methodologies and internal control mechanisms, three of which were resolved in 2022.

The same need to ensure the adequacy of internal control mechanisms is reflected in three further proceedings: one resolved in 2022 against a savings bank; another against a special lending institution, which was initiated in 2021 and continued in 2022; and a third, initiated in 2022, against a credit cooperative.

In the prudential field, sanctioning powers also focused on electronic money institutions. Two proceedings are under way. The first was initiated against the institution, its officers and certain shareholders for failing to comply with the regime for the acquisition and notification of significant holdings. The second, initiated at the end of the year against the institution and its officers, for undercapitalisation, failure to safeguard customer funds and internal control.

In the area of transparency and customer protection, one proceeding was initiated against an electronic money institution and its management and directors, and four others (a total of seven individuals) were sanctioned. The breaches relate to deficiencies in credit card financing policies, the charging of undue fees, the inclusion in loan applications of credit lines unrelated to the financing intended by the customer, or inaccuracies in the information reported to the Banco de España in the return "Interest rates on lending transactions in Spain with the resident private sector" included in Annex 9 of Circular 5/2012.



Further information on the Banco de España's supervisory functions can be found in the [Supervision Report](#).

5 FINANCIAL STABILITY AND PREVENTIVE RESOLUTION

FINANCIAL STABILITY AND PREVENTIVE RESOLUTION



The Banco de España contributes to maintaining the stability of the Spanish financial system. To this end, it has an analytical framework, supervisory and preventive resolution mechanisms, and the possibility of adopting macroprudential policy decisions.

Why is it important?

If a financial system is stable, it will be able to absorb the impact of shocks and the materialisation of risks without affecting the process of financial intermediation and causing significant damage to economic activity.

What do we do at the Banco de España?

We identify systemically important Spanish credit institutions and set their capital buffers, conduct stress tests, participate in the preparation of preventive resolution plans, etc.

Our objective

Continue to work to ensure financial stability, which is key to social welfare.

5.1 Financial stability and macroprudential policy

One of the Banco de España's responsibilities is **to contribute to maintaining the stability of the Spanish financial system**, to which end the regulations in force assign it, in the case of credit institutions, macroprudential policy powers. The macroprudential policy instruments to prevent the build-up of risks and imbalances that pose a threat to financial stability and to mitigate their impact should they come about are varied. Some allow limits to be set on lending conditions, while others enable specific solvency requirements to be imposed on institutions. The activities undertaken in this field are set out in the section [Financial stability and Macroprudential Policy](#) on the Banco de España's website.

The Banco de España sets the **countercyclical capital buffer (CCyB) percentage** for banks on a quarterly basis. In 2022 the decision was taken to maintain the CCyB at 0% for lending exposures in Spain, in a context where the economic recovery after COVID-19 was affected by the consequences of the war in Ukraine, rising inflation and tighter financial conditions.

In addition, the Banco de España identifies **systemically important Spanish credit institutions on an annual basis, and sets their macroprudential capital buffers**. An institution is considered systemic – globally or at the domestic level – if, in the event of solvency problems, it can have a highly adverse impact on the financial system and the real economy. Therefore, an additional capital requirement is required for these institutions to strengthen their resilience, to encourage prudent risk-taking and also to correct the potential competitive advantage of these institutions in the

funding market due to their systemic nature. In 2022 the Banco de España identified one institution – Banco Santander, S.A. – as a global systemically important institution (G-SII) and four – Banco Santander, S.A., Banco Bilbao Vizcaya Argentaria, S.A., CaixaBank, S.A., and Banco de Sabadell, S.A. – as other systemically important institutions (O-SIIs) at the domestic level. For information purposes, although it corresponds to 2023, it should be noted that the required buffers in 2023 for O-SIIs remained stable with respect to those established the previous year, with the exception of CaixaBank, S.A., whose buffer was increased following the merger by absorption with Bankia, SA.

Also, the publication of Circular 3/2022⁹ completed the transposition of Directive (EU) 2019/878 (CRD V), on banking solvency, including its macroprudential aspects. As regards macroprudential policy, the main changes introduced relate to: (i) the possibility of applying the systemic risk buffer to specific sectors; (ii) methodological adjustments to the determination of capital buffers for systemic institutions; and (iii) the simplification of the regime for notifications of proposals for macroprudential measures to European bodies by national authorities.

In addition, **the Banco de España is a member of the Spanish Macroprudential Authority Financial Stability Council (AMCESFI),¹⁰** which has oversight powers over the Spanish financial system as a whole. The AMCESFI focused its work in 2022 on further developing the analysis of direct and indirect interconnections between sectors of the financial system, studying the regulatory approach to crypto-assets, as well as advancing work on the preparation of the first biennial report on climate change risks for the Spanish financial system in 2023.

Within the Single Supervisory Mechanism, the Banco de España collaborates with other national authorities on macroprudential analysis and policy through the ECB's Financial Stability Committee (FSC). The institution participated in the discussions on risks and vulnerabilities to financial stability and in other regulatory and methodological lines of work on systemic risk measurement and stress testing. In connection with the work of the FSC, the ECB issued three macroprudential policy statements in 2022, on: (i) the measurement of the systemic importance of institutions headquartered in the Banking Union; (ii) vulnerabilities in the financial system in Europe and the macroprudential policy response thereto; and (iii) the review of the minimum capital buffer framework for O-SIIs from 2024 onwards.

⁹ Banco de España Circular 3/2022, of 30 March, amending Circular 2/2016, of 2 February, to credit institutions on supervision and solvency, which completes the transposition into Spanish legislation of Directive 2013/36/EU and Regulation (EU) No 575/2013; Circular 2/2014 of 31 January to credit institutions on the exercise of various regulatory options contained in Regulation (EU) No 575/2013 of the European Parliament and of the Council of 26 June 2013 on prudential requirements for credit institutions and investment firms and amending Regulation (EU) No 675/2013 of the European Parliament and of the Council of June 2013, on prudential requirements for credit institutions and investment firms, and amending Regulation (EU) No 648/2012; and Circular 5/2012 of 27 June 2012 to credit institutions and payment service providers on transparency of banking services and responsible lending.

¹⁰ AMCESFI publishes annual reports on its [website](#) providing updated information on its activities. .



One of the responsibilities of the Banco de España is to maintain the stability of the Spanish financial system.

The macroprudential stress tests conducted by the Banco de España on Spanish credit institutions in 2022 assessed their resilience to the macro-financial risks identified in the last year. The results showed an adequate aggregate loss absorption capacity of Spanish institutions, both in the baseline and adverse scenarios, but also advised prudent provisioning and capital planning policies in an environment of extraordinary uncertainty.

5.2 Preventive resolution

In 2022 resolution plans were drafted for a total of 41 Spanish credit institutions¹¹ and four foreign groups with Spanish subsidiaries, in close collaboration with the Single Resolution Board (SRB) and other resolution authorities in the euro area. In this connection, 42 workshops were organised, with the participation, at the level of the significant institutions, of the members of the respective Internal Resolution Teams (IRTs) to discuss the most important aspects of resolution planning and to set new objectives to improve institutions' resolvability. In addition, as has been usual practice in recent years, the SRB sent a team to Spain to conduct face-to-face meetings with the representatives of all significant institutions.

In this context, **the Banco de España participates in the resolution colleges and crisis management groups** that are organised on a regular basis for the most internationally active institutions with the objective of discussing resolution planning matters. Specifically, in 2022 participation was limited to the respective crisis

¹¹ They total ten significant institutions and 31 less significant institutions.

management groups of one Spanish significant institution and the resolution colleges of two Spanish significant institutions, two foreign significant institutions with subsidiaries in Spain and one foreign significant institution with an important branch in Spain. As a result, the SRB and the non-euro area EU resolution authorities signed joint decisions in relation to the resolution plans and resolvability assessment, as well as the minimum requirement for own funds and eligible liabilities (MREL) decisions of two Spanish significant institutions and three foreign significant institutions with important subsidiaries or branches in Spain, in whose colleges the Banco De España participates as an observer.

In addition, in relation to **resolution planning in 2022**, 43 credit institutions were notified of their MREL. Also, the recovery plans of ten Spanish significant credit institutions were reviewed (in collaboration with the SRB), as were those of 23 Spanish less significant credit institutions.

Furthermore, in order to develop resolution plans and promote the effective implementation of legislation in force, **the Banco de España participated actively in the development of preventive resolution criteria and strategies**. Notable among the actions carried out were: i) monitoring of compliance with current MREL objectives; ii) collaboration with the Fund for the Orderly Restructuring of the Banking Sector (FROB) and the Deposit Guarantee Fund, which included participation in committees of both institutions; iii) research and analysis of matters relating, inter alia, to liquidity and to the development of a tool (heatmap) to measure the degree of progress in the resolvability of less significant institutions with a resolution strategy; iv) the review of the operationalisation of the bail-in tool and business continuity aspects in resolution; v) the execution of a simulation exercise, jointly with the SRB, regarding the operationalisation of the single point of entry resolution strategy; or vi) the public interest analysis under a systemic crisis scenario.

Further information on this area can be found in the [resolution section on the institutional website](#).

5.3 Financial reporting and reporting to the Central Credit Register

The Banco de España requires supervised institutions to send all the information necessary for the exercise of their functions, inter alia, for statistical and supervisory reasons. In 2022 the regulatory development of a new macroprudential tool – the countercyclical capital buffer on one or several sectors – by means of [Circular 5/2021](#),¹² made it necessary to include a new reporting requirement for credit institutions:

¹² Banco de España Circular 5/2021 of 22 December 2021, amending Circular 2/2016 of 2 February 2016, to credit institutions, on supervision and solvency, completing the transposition into Spanish legislation of Directive 2013/36/EU and Regulation (EU) No 575/2013.

the quarterly submission, from March data onwards, of the CCAS1 statement "Breakdown of credit exposures for the calculation of the sectoral component of the countercyclical capital buffer by country and sector and percentage thereof". This information provides information on the sectors in which most of the systemic risks are concentrated.

Subsequently, Circular 1/2022¹³ established prudential and liquidity rules and reporting obligations for special lending institutions. Thus, the Banco de España determined how these establishments should comply with the prudential requirements. Accordingly, prudential reporting requirements were brought into line with those of credit institutions, while a degree of proportionality was applied to liquidity reporting. Special lending institutions started to report liquidity information from the May 2022 data onwards, and the other prudential information from the June 2022 data.



In 2022 close to 400 institutions supervised by the Banco de España were obliged to submit a total of 769 financial, statistical and supervisory statements, with varying frequency. In order to ensure that this information complied with high quality standards, 23,983 accuracy and consistency validations were applied.

The granular transaction-by-transaction reporting of all the risks that reporting institutions hold with their customers (Central Credit Register – CCR –) has proved to be very useful, which has generated a growing demand for this detailed data. This interest in granular information was reflected in different aspects, which profoundly affected the modus operandi of the CCR.

In January 2021 the **Revolving Credit Ministerial Order** (ETD 699/2020) came into force, reducing the threshold of information that the CCR returns to institutions and account holders from €9,000 to €1,000. This gave rise to a substantial increase, in 2021, in the information that the Banco de España provides to account holders and institutions, a level that was maintained in 2022.

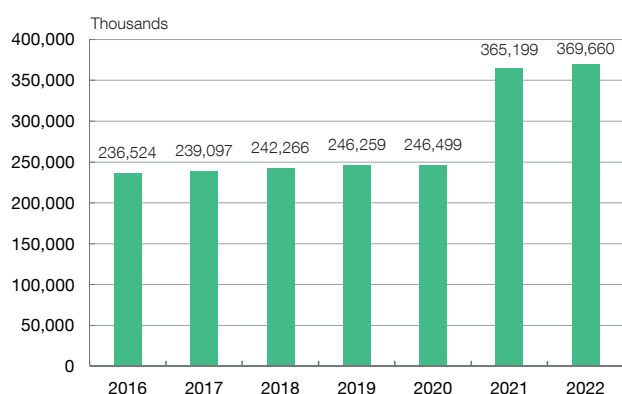
Moreover, the use of CCR data is increasingly important for the **ex ante design of various economic policy measures and for the ex post assessment of their effectiveness.** Thus, as in previous years, when new characteristics of operations under certain measures to alleviate the crisis arising from COVID-19 were included, those arising from the war in Ukraine were included in 2022.

¹³ Banco de España Circular 1/2022 of 24 January, to specialised lending institutions, on liquidity, prudential rules and reporting obligations, amending Circular 1/2009 of 18 December, to credit institutions and other supervised institutions, in relation to information on the capital structure and equity shares of credit institutions, and on their branches, as well as on the senior management of supervised institutions, and Circular 3/2019 of 22 October, exercising the power conferred by Regulation (EU) 575/2013 to define the materiality threshold for past due credit obligations.

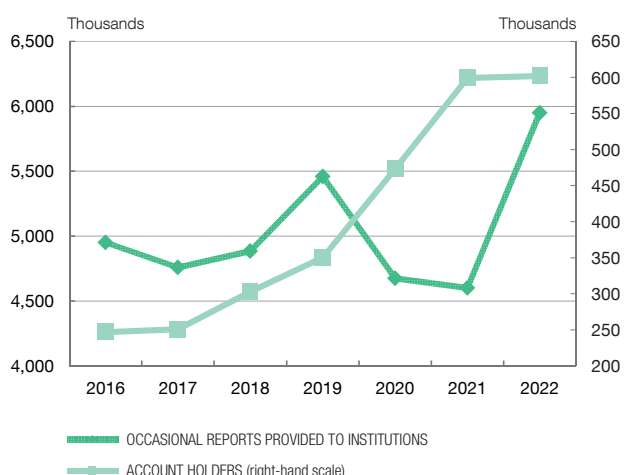
Chart 2.12

RISK REPORTS PROVIDED TO INSTITUTIONS AND ACCOUNT HOLDERS

1 MONTHLY REPORTS PROVIDED TO INSTITUTIONS



2 REPORTS REQUESTED BY INSTITUTIONS AND ACCOUNT HOLDERS

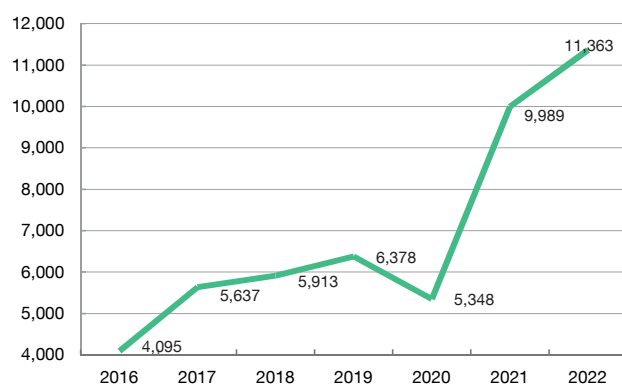


SOURCE: Banco de España.

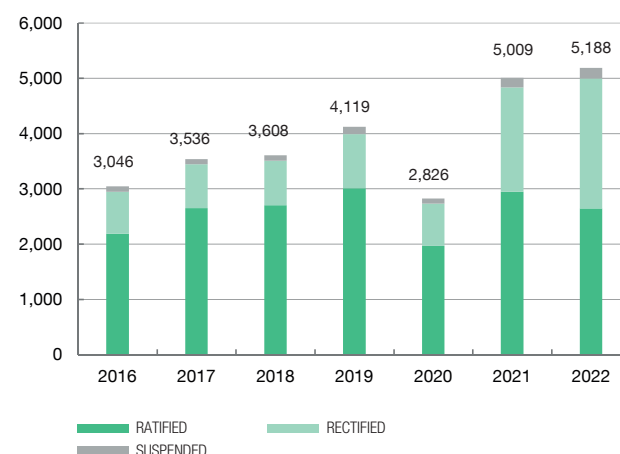
Chart 2.13

EXERCISE OF THE RIGHT TO RECTIFY OR DELETE DATA DECLARED TO THE CCR

1 CLAIMS RECEIVED



2 CLAIMS RESOLVED



SOURCE: Banco de España.

In addition, **following the Banco de España's strategic initiative to facilitate the research community's access to high quality microdata**, in October 2022 the CCR microdata on legal persons available in the Data Laboratory (BELab) were updated and now include information on the status of the operation and are accessible to researchers both in person and off-site.

The increase in the information included in the reports distributed by the CCR and the marked increase in litigation detected in recent years were reflected

in a significant increase in the number of complaints filed with the CCR. In 2022 they increased by 18% compared to those received in 2021. The more than 11,000 complaints received in 2022 represent a twofold increase in the number received in 2020.



In December 2022, the 336 reporting institutions to the CCR submitted information on more than 22.7 million natural or legal account holders accounting for €50.4 million loans and other risky transactions for a total drawn risk of €3.2 trillion. The CCR provided more than 375 million reports to institutions, up 1.6% on 2021, and more than 600,000 reports to account holders, slightly more than in the previous year.

RESOLUTION OF COMPLAINTS AND ENQUIRIES RECEIVED FROM BANK CUSTOMERS



Resolution of **complaints** submitted by users of financial services of supervised institutions and of their **enquiries** on transparency and customer protection regulations, as well as on the legal channels for exercising their rights.

Why is it important?

This function has a key role to play both in settling individual disputes and in obtaining information for taking regulatory and pre-emptive supervisory action aimed at ensuring that banks conduct themselves better and appropriately with their customers.

What do we do at the Banco de España?

In 2022, 35,800 complaints were filed, which represents 4.3% more than those processed in 2021.

In addition, 50,566 enquiries were handled (42,500 by telephone and 8,066 in writing). All data are provisional at 31 December 2022.

Our objective

Increase transparency and the protection of bank customers through the resolution of disputes between users of financial services and supervised institutions, establishing criteria for good banking practices while contributing to the development of supervision of the institutions' conduct.

2022 was a year of intense activity in terms of complaints filed. During the year, the number of complaints received by the Banco de España totalled 35,800, higher than in 2021 and close to all-time highs, only being surpassed in 2017.

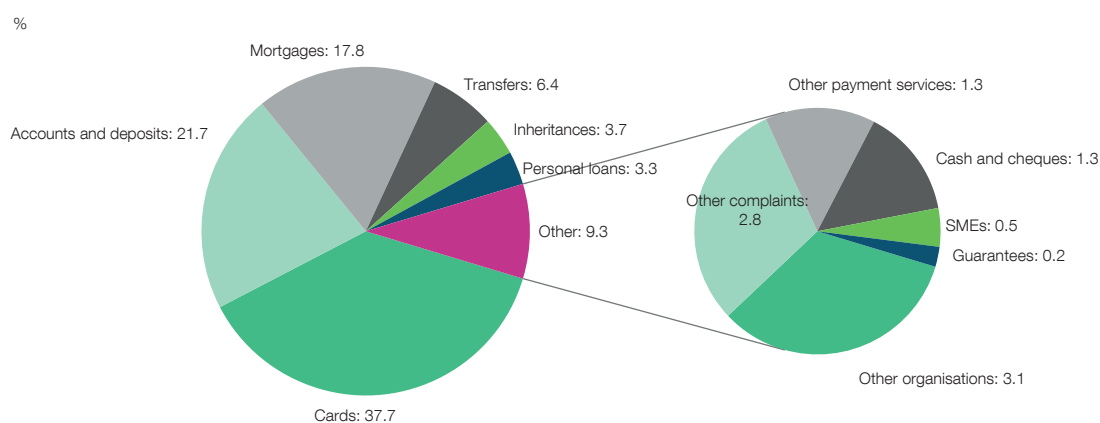
As in 2021, **the type of complaints processed in 2021 varied.** As can be seen in Chart 2.14, 77.2% of the complaints received related to incidents with: i) cards (37.7%); ii) accounts and deposits (21.7%); and iii) mortgage loans (17.8%).

Credit, debit, revolving and prepaid cards were the product for which most complaints were received. Of particular note in this category were those arising from allegedly fraudulent transactions or where claims were made for failure to provide the customer with documentation, such as a copy of the contract signed and the history of settlements made, a particularly significant circumstance in the case of revolving cards.

In second place, **after cards, complaints relating to current accounts and deposits predominated in 2022.** In this respect, there were numerous complaints in which users of financial services expressed their disagreement with the charging of account fees, both in relation to current and savings accounts and accounts linked to mortgage loans.

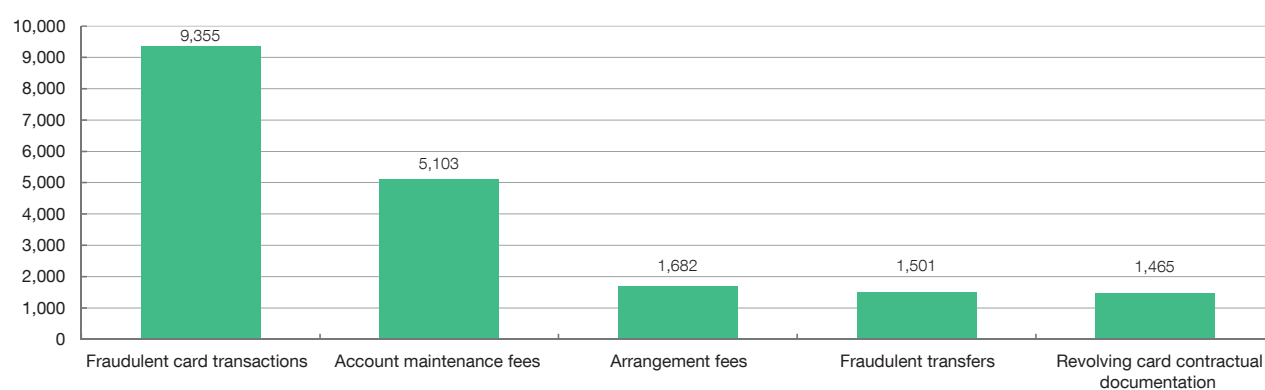
Lastly, in third place, there was a notable number of complaints about mortgage loans, due essentially to the payment of arrangement fees and the contracting of linked products.

Chart 2.14

TYPES OF COMPLAINT (Provisional data as at 31 December 2022)

SOURCE: Banco de España.

Chart 2.15

MOST FREQUENT TYPES OF COMPLAINT IN 2022. PROVISIONAL DATA AS AT 31 DECEMBER 2022

SOURCE: Banco de España.

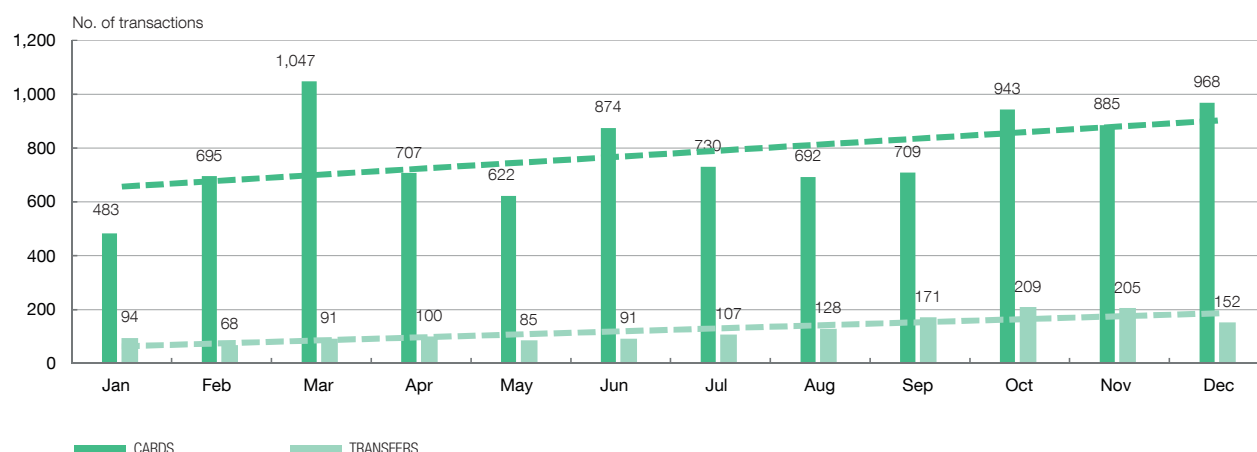
Chart 2.15 identifies the five specific matters for which most complaints were received in 2022.

Apart from the foregoing, the **high volume of complaints relating to fraud in financial transactions**, both with cards and transfers, mainly due to the growing use of digital channels, should be highlighted. In this respect, in those cases in which the customer's diligence in respect of the security measures associated with the use of their digital channels must be determined, the Banco de España may not be competent, as such a determination falls to the law courts.

Chart 2.16 shows the **monthly upward trend in 2022 of complaints about fraudulent transactions**. Approximately one in three complaints received (30.3%

Chart 2.16

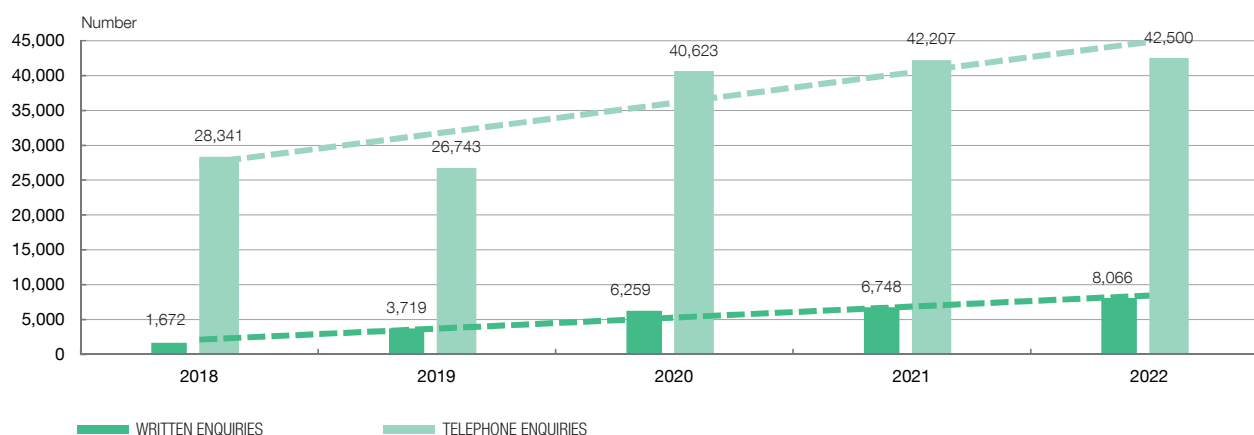
FRAUDULENT TRANSACTIONS: CARDS/TRANSFERS. PROVISIONAL DATA AS AT 31 DECEMBER 2022



SOURCE: Banco de España.

Chart 2.17

WRITTEN ENQUIRIES AND TELEPHONE ENQUIRIES IN THE LAST FIVE YEARS. PROVISIONAL DATA AS AT 31 DECEMBER 2022



SOURCE: Banco de España.

of the total) were related to fraud. If one looks at the instrument through which the fraud was carried out, 86.2% were card transactions and 13.8% were transfers.

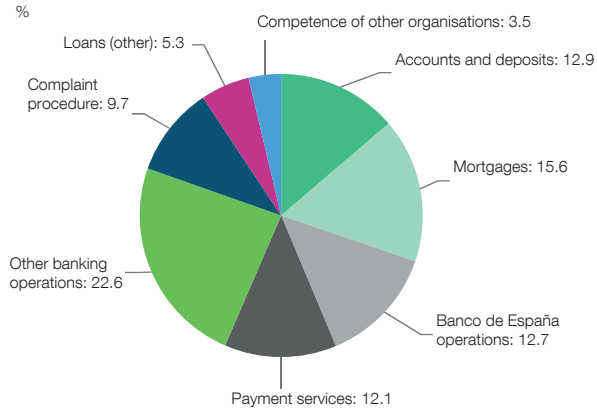
In terms of **enquiries**, a total of 50,566 enquiries were received in 2022: 42,500 by **telephone** and 8,066 **in writing**, which implies a stabilisation of the significant increase that took place in 2020 and 2021 (46,882 and 48,955, respectively).

Chart 2.17 shows the changes in written and telephone enquiries in the period from 2018 to 2022.

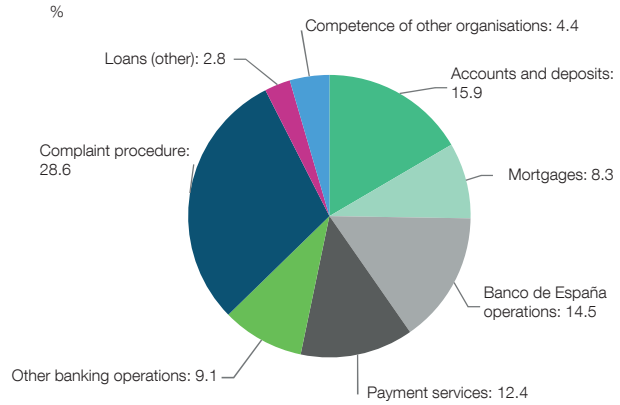
Chart 2.18

WRITTEN ENQUIRIES AND TELEPHONE ENQUIRIES RECEIVED IN 2022

1 WRITTEN ENQUIRIES



2 TELEPHONE ENQUIRIES




SOURCE: Banco de España. Provisional data as at 31 December 2022.

Chart 2.18 illustrates the type of enquiries received in 2022. As can be seen, approximately one third of the telephone enquiries that were made by interested parties focused on the **complaints handling procedure** and, particularly, on the status of the processing of their case file. Among the written enquiries, requests for information on **account holders and the inclusion of debtors in delinquency files** were of particular note.

Also common in both telephone and written enquiries were enquiries on other matters, such as those relating to accounts and deposits; mortgage loans; information on the Banco de España's services in general; and incidents in payment services, especially cards. Every year the *Complaints Report* contains a detailed analysis and summary of the most frequent and significant queries, with the criteria contained therein.

FINANCIAL EDUCATION



Activity aimed at promoting greater economic and financial literacy among Spanish citizens to improve their financial health and contribute to the stability of the system as a whole.

Why is it important?	It favours better decision-making in personal finance management, improving citizen's financial well-being and reducing the risks of exclusion, and also contributes to the stability of the financial system.	What do we do at the Banco de España?	We guide the national financial education strategy as promoters of the Financial Education Plan and we carry out dissemination activities in various areas such as personal finance and knowledge of euro banknotes and coins.
Our objective	Continue to strengthen the Banco de España's contribution to the financial education of Spanish citizens in order to improve individual and social well-being.		

7.1 Promoting financial education

Financial education is an essential tool for strengthening consumer and user protection in relation to financial products and services. Indeed, product knowledge and financial literacy facilitate responsible decision-making and contribute, in turn, to the proper functioning and stability of the financial system. Moreover, basic knowledge of the fundamentals of the economy and monetary policy enables us to understand and forecast the impact of economic variables on our financial situation and to gain a better insight into the Banco de España's action in its general financial education stability objectives.

In 2021 the Banco de España's Institutional Report included, for the first time, a specific chapter devoted to financial education activity. Although this aspect has been part of the institution's action for years, it **was the 2024 Strategic Plan that contributed to endowing it with greater projection, by expressly including the promotion of financial education among its initiatives.** Thus, on 25 April 2022, the Executive Commission of the Banco de España approved a series of measures aimed at strengthening the Banco de España's institutional commitment to financial education (see Box 2.5).

The aim of the institutional restructuring and of the other actions envisaged in the financial education initiative of the Strategic Plan 2024 is **to strengthen and transform the Banco de España's activity in this field.** This transformation involves coordinating the Banco de España's actions in various areas, such as

STRENGTHENING OF THE FINANCIAL EDUCATION STRATEGY OF THE BANCO DE ESPAÑA

One of the objectives of the Banco de España's Strategic Plan 2024 is to promote financial education.

However, given the volume and variety of the subjects covered and the commitments assumed – under the Financial Education Plan and the communication strategy of the European System of Central Banks, among others –, **it was considered necessary to strengthen the institutional approach** to financial education and bestow it with suitable organisation and coordination.

This new organisational model is based on two structures:

- A **coordination structure**, through a cross-departmental internal Financial Education Committee, which will enable the participation of all the areas involved and will be responsible for the design of the financial education strategy, its monitoring and evaluation, as well as for ensuring the coordination of the Banco de España's actions in this field.
- A **functional area** to develop the strategic lines established by the Financial Education Committee

and to manage and execute the actions derived therefrom, which resulted in the creation of the new Financial Education Division, within the Department of Conduct of Institutions.

In addition, the Banco de España defined the **basic strategic lines** that should guide financial education activities.

This included **the integration of various actions to disseminate** content on the management of personal finances, the economy and monetary policy, and banknotes and coins.

These strategic lines also recognised the **need to develop content adapted** to specific groups, aimed at the most vulnerable, sustainability, digital training for financial operations and entrepreneurship. All of this, along with the **necessary evaluation of the effectiveness and efficiency of the use of resources allocated** to the promotion of financial education.



The basic strategic lines that should guide the Banco de España's financial education activities were defined.

personal finance, economic education, the use of means of payment and training on banknotes and coins, reinforcing the current framework and relying on the regional presence of the branch network.

In this context, **it commits to intensive solutions based on new technologies and new channels.** Thus, in 2022 work was carried out to reinforce the channels through

SIGNING OF THE COOPERATION AGREEMENT WITH RTVE TO PROMOTE FINANCIAL EDUCATION

The signing of this agreement endeavours to achieve greater dissemination of the initiatives of the Financial Education Plan

In 2022 the RTVE Corporation, the Banco de España, the CNMV and the Ministry of Economic Affairs and Digital Transformation entered into an agreement to achieve greater dissemination of the initiatives of the

Financial Education Plan (PEF), with the aim of **promoting financial literacy among citizens** so that they can make financial decisions in consonance with their personal situations and better manage the risks posed by the financial system.

The agreement also aims to strengthen the channels for disseminating financial education. In this respect, the signing of the agreement will entail the joint development of resources and materials for the programmes, as well as content for dissemination by the RTVE Corporation's communications channels and publication on the Plan's website (Spanish version only): <https://www.finanzasparatodos.es/>. It also includes participation in programmes and the production of audiovisual content to disseminate financial literacy.



For more information on the financial education initiatives see the [Finanzas Para Todos](https://www.finanzasparatodos.es/) website.

which financial education dissemination activities are carried out. In this respect, of particular note was the signing of the Financial Education Plan agreement with Radio Televisión Española, under which a commitment was acquired to carry out joint actions to disseminate financial literacy (see **Box 2.6**).

7.2 The Banco de España's financial education initiatives

In 2022 financial education was consolidated as one of the priority spheres of the action in Banco de España's Strategic Plan. The main financial education-related initiatives carried out in 2022 are summarised below.

a) Initiatives aimed at the education community

In 2022 the Banco de España worked, together with the Spanish National Securities Market Commission (CNMV) and the Ministry of Economic Affairs and Digital Transformation, and within the framework of the Financial Education Plan, on maintaining dialogue with the national and regional education authorities **to**

coordinate the incorporation, on the basis of the LOMLOE (Fundamental Law on Education), **of financial education competences.**

Of note in this area is the activity of the Financial Education Plan, articulated around the **School Financial Education Programme**, which makes training resources and teaching materials – games, activities, videos, etc. – available to secondary schools, baccalaureate and intermediate vocational training cycles to support teachers. More than 350 educational centres and 12,000 students participated in the programme in 2022.

This programme is best reflected in the development of the **Financial Literacy Competition**, one of the activities of the Financial Education Plan that arouses most interest. In 2022, 354 educational centres registered for an edition that brought back the face-to-face phases of the quarter-finals and semi-finals, held at Banco de España branches, as well as the final, which took place at the CNMV's headquarters in Barcelona as part of the main event of Financial Education Day.

Another educational pillar developed by the institution is the **Generation Euro Students' Award competition on monetary policy**, organised by the Banco de España and eleven other euro area central banks for students in upper-level secondary education and vocational training. In the first half of 2022, the final phase of the 11th edition took place, with the final being held on 25 March; subsequently, in the second half of 2022, the 12th edition was launched, with the participation of around 2,000 students from all over Spain. Of the 417 teams enrolled, 115 made it to the second round of the competition. At the end of November, the teachers of the teams that qualified in the first round took part in a training day delivered by Banco de España experts at the Madrid central headquarters.

Also in 2022, the Banco de España participated in the **promotion of awareness-raising activities aimed at young people within the framework of Global Money Week**, an initiative promoted by the Organisation for Economic Co-operation and Development (OECD). In 2022, 16 Spanish organisations promoted more than 100 activities – workshops, online competitions, videos, webinars, visits, and posts on websites and social networks – which had a direct impact on more than 4,000 children and young people, and an indirect impact on more than 50,000 young people and adults. At the Barcelona branch, the institution organised a workshop for fourth-year secondary school pupils on the functions of the Banco de España and the CNMV and how they work.

Special mention should be made of the **activities aimed at schoolchildren on banknotes and coins**, in which more than 1,800 pupils received training. The educational workshops on this subject organised in 2022, both in the face-to-face format – which resumed in September – and by videoconference and via the online platform, focused on providing the tools to distinguish suspected counterfeit



The finalists of the 11th edition of the Generation Euro competition had the opportunity to take a heritage tour of the headquarters building in Madrid.

banknotes and coins from genuine ones through design features and security measures.

In addition to these Financial Education Plan initiatives, other notable activities included those pursued under the Banco de España's **Central Bank and Supervision Programme**, which aims to provide a further understanding of monetary policy and the functioning of the financial system, focused on familiarising the education community with the Banco de España's mission as a Eurosystem-member central bank and a supervisory authority within the framework of the SSM.

As part of the Central Bank and Supervision Programme, the Banco de España makes a range of educational resources aimed at students and teachers available via its Education Portal, which received 45,806 visits in 2022, with 190,851 page views.

This programme also includes the **Economics Teachers' Days**, which aim to establish a close environment in which to share knowledge, ideas and experiences with the teaching community. Interrupted as a result of the restrictions arising from the pandemic, these days could not be resumed in 2022.

Meanwhile, the Central Bank and Supervision **Programme offers a programme of institutional visits** with the aim of familiarising the general public with the Banco de España. Visits to the central headquarters focus on the Banco de España's collection and history, whereas branch visits are educational in nature. Due to COVID-19, the Banco de España temporarily suspended the programme of visits to its buildings,



Two of the areas included in the route of the heritage tours of the Madrid headquarters building: the main floor dining room (left) and the Goya Room (right).



The visits to the Banco de España – guided and free of charge – must be booked in advance through the Education Portal.

which resumed in May 2022, and which in the last two months of the 2021-2022 academic year received more than 3,000 visitors.

b) Initiatives aimed at the public

In 2022 actions aimed at the general public and specific groups on various subjects and aspects of the economy and finance were promoted. .

Training of general interest

In 2022 the Banco de España, through its branch network and the partners involved in the Financial Education Plan, carried out **activities**, both face-to-face and in hybrid face-to-face/online format, aimed at **various groups** – consumer associations, senior citizens, university lecturers and students, etc. –, on **various matters of interest to the general public**: from the functions and services offered by the institution to current issues such as fraud, the digital euro and sustainable finance, as well as conferences on more specific issues. Also, since one of the objectives of financial education in the field of cash is **to promote awareness of the characteristics and security features of the euro banknotes and coins**, thereby contributing to the fight against

counterfeiting, in 2022 the institution provided training to more than 500 members of the public and retailers on this subject.

The Banco de España's Bank Customer Portal

This portal contains general information and also has a knowledge-building function. Thus, together with the general information blocks on products, services and banking practices, it includes useful tools to help users to better understand and make decisions in relation to their most common transactions. By way of example, **the financial simulators allow the public to find out the impact that repricing**, resulting from the current situation of rising interest rates, **may have on their loan repayments**, especially mortgages.

In addition, some queries and complaints **are channelled through this portal, and topical content is published through blogs, posts and short videos** with informative messages in a flexible and accessible format. All of which kept visitor traffic to the portal on a rising path, reaching a new all-time-high of around eight million visits in 2022, representing an increase of 20 % with respect to 2021.

Other digital resources

The educational activity carried out through talks, workshops and visits is complemented by **access to the educational content made available to the general public** through the specialised portals on the Banco de España's website – Education Portal and Bank Customer Portal –, as well as on the website Finance for All (which includes the initiatives of the Financial Education Plan), of which the Banco de España is one of the promoters. The Education Portal includes educational materials on aspects of monetary policy and the functioning of the Banco de España, as well as other materials relating to banknotes and coins. The institution also produces educational material aimed at teachers and students.

c) Institutional initiatives

Of particular note are the initiatives undertaken around **Financial Education Day**, which is held on the first Monday of every October. The 2022 edition had the slogan "Education for safer finances", with the aim of raising public awareness of the need to take extreme precautions in the face of the increase in fraud, which is becoming increasingly sophisticated. The main event was held at the CNMV headquarters in Barcelona, and was also streamed online.

The activities carried out on Financial Education Day increased considerably compared to the previous year, from 99 in 2021 to 173 in 2022. **The actions promoted included participation in radio programmes, training workshops, talks and conferences.** Sessions were also held at various branches of the Banco de España to raise awareness of the problems associated with fraud in financial transactions and to present the Complaints Report for 2021.



For further information, visit the websites of [Finance for All](#) and the [Bank Customer Portal](#).

ENVIRONMENTAL SUSTAINABILITY



The Banco de España, which is an active part of the global commitment to the fight against climate change, has undertaken a series of actions to address these challenges.

Why is it important?	Climate change is an increasingly important concern because of its potential implications for financial stability, price stability and economic growth.	What do we do at the Banco de España?	Within the scope of its powers, it acts to address the risks posed by climate change and to promote the ecological transition.
Our objective	Guide prudential supervision and necessary regulation, enhance analytical capacity, analyse the implications for monetary policy and boost the institution's sustainability.		

8.1 Main regulatory developments

Environmental sustainability and, more specifically, climate change are high on the European and international regulatory agenda. Supervisors and regulators continue to make headway in analysing the risks arising from climate change, to understand how they impact the financial sector and to design possible measures to be implemented. Some of the most important initiatives worked on in 2022 are listed below.

a) International regulatory developments

The NGFS, a global network of supervisors and central banks, continued in 2022 to delve deeper into the topics it has been working on since its inception – essentially, scenario design, analysis of existing data gaps or research on the possible existence of a risk differential between green and non-green assets –. Regarding the latter, a [progress report](#) was published in May 2022, which concluded that there was still no clear evidence on the risk differential between green and non-green exposures. The NGFS recognised that forward-looking tools, such as stress testing or scenario analysis, are essential to assess the impact of climate-related risks on traditional financial risks.

For its part, **the Basel Committee on Banking Supervision (BCBS) is pursuing a holistic approach to addressing these financial risks arising from climate change.** Following the analytical reports published in 2021,¹⁴ in 2022 it focused its

¹⁴ "Climate-related risk drivers and their transmission channels" and "Climate-related financial risks - measurement methodologies".

endeavours on assessing the need for action in the area of banking supervision, regulation and disclosure. In June 2022, it published [high-level principles](#) for effective climate-related risk management and supervision, thereby establishing a mechanism for gauging progress. In the area of regulation, the BCBS published a [FAQ document](#) on this subject in December 2022. In addition, in 2022 it worked in coordination with the International Sustainability Standards Board (ISSB)¹⁵ and other international bodies to standardise and improve the disclosure of these risks in the market.

Lastly, the Financial Stability Board (FSB) published, inter alia, in October 2022 a report on regulatory and supervisory approaches to climate risks. It aims to help supervisory and regulatory authorities mitigate cross-sectoral and systemic risks from climate change and promote consistent approaches across sectors and jurisdictions.

b) European regulatory developments

In the field of European regulation, of particular note was the **progress made in certain legislative proposals by the European Commission, specifically in relation to the Banking Package and the Corporate Sustainability Reporting Directive (CSRD).** The Banking Package proposed by the European Commission in 2021, and currently under discussion, incorporates additional sustainability components into prudential banking regulation.

These include the introduction of climate risks in the SREP, the extension of disclosure requirements to all credit institutions, with proportionality, or the clarification – through a recital – of the possible use of the systemic risk buffer to address climate change risks. The Banking Package is being negotiated at European level, so the final text will depend on the agreements between co-legislators, which will foreseeably be reached in 2023.

Also, in relation to the CSRD, an agreement was reached in June 2022 between the Parliament and the Council on the text to enhance disclosure of non-financial information by a greater number of companies. In addition, the EFRAG (European Financial Reporting Advisory Group), which is responsible for setting the technical details of disclosure under the CSRD, published the first set of draft European Sustainability Reporting Standards (ESRS). These standards will apply to companies progressively. The first disclosure date for those companies already obliged under the current Non-Financial Reporting Directive (NFRD) will be January 2024.

¹⁵ In March 2022, the new ISSB, established in November 2021 by the IFRS Foundation, submitted several draft disclosure standards on climate change and sustainability for public consultation.



Panoramic view of the Berlaymont building, headquarters of the European Commission, in Brussels.

In turn, the EBA published a consultative document in 2022 in which it analysed options for integrating climate change risk into the minimum capital requirements to be met by credit institutions. The final report will foreseeably be published in the second half of 2023. Regarding disclosure requirements, large and listed banks will publish, for the first time in the first quarter of 2023, the information required by [Implementing Regulation 2022/2453](#) on disclosure of information on environmental, social and governance risks. This regulation is based on the implementing technical standard (ITS) published by the EBA in February 2022. It represents a significant milestone in the disclosure of the financial risks arising from climate change – and more generally of environmental, social and governance (ESG) risks – and will contribute to reducing the existing data gaps in this area.

8.2 Sustainability at the Banco de España

The main actions taken by the Banco de España in 2022 in various environmental sustainability-related areas are summarised below.

a) Financial stability, regulation and supervision

In 2022 the Banco de España worked on **identifying the risks associated with climate change in order to detect potential threats to the financial system at an early stage**, through stress tests. The institution continued with the development and practical application of these methodologies, both for risks linked to the energy transition and for damage arising from extreme physical events. It also made headway in the construction and use of granular databases of exposures to these risks.

Also, the ECB carried out a **climate stress test on significant institutions, including ten Spanish banks**. The results suggest that most European banks did not complete the integration of climate-related risk into their stress-testing frameworks. In addition, there are difficulties for institutions in terms of data collection and model development, as well as a degree of high sensitivity to credit losses due to banks' physical and transitional risks. In this regard, in December 2022, the ECB published a good practice report on climate stress testing to facilitate the design of its frameworks for the performance of these tests.

In the area of microprudential supervision, **in 2022 the ECB conducted a thematic review of institutions' practices relating to climate-related and environmental risks and their degree of alignment with the supervisory guidance published in 2020**.¹⁶ In November 2022, the ECB published the main findings of this review, which showed significant progress compared with 2021. Thus, more than 80% of European institutions considered that climate-related and environmental risks have a material impact on their risk profile and strategy. In addition, more than 85% of institutions already have core practices in place in relation to at least half of the ECB's supervisory expectations. While certain institutions started to use their transition plans to enhance the resilience of their business model and even to address environmental risks more broadly, less progress was detected in terms of implementation capacity, with around half of the institutions developing practices but not effectively implementing them. In this regard, the ECB published a **compendium of good practices** regarding the integration of climate-related and environmental risks into risk management strategies, internal governance frameworks and procedures, so that institutions could progressively come into line with supervisory expectations. Also, in the second half of 2022, the ECB commenced the first on-site inspections in relation to these risks.

The Banco de España began to assess, from the last quarter of 2022, the degree of progress of less significant institutions in aligning their practices with its supervisory expectations, following preliminary work in 2021 and the participation of four institutions in the ECB's thematic review.

b) Actions in the area of monetary policy and the Banco de España's own investment portfolio

Since 2019, the Banco de España has incorporated the principle of sustainability and responsibility as one of the core principles of its own-portfolio investment policy – complying with NGFS Recommendation No 2 –. In addition, it participates in the ECB's action plan for the inclusion of climate

¹⁶ In the thematic review 186 institutions were analysed: 107 significant institutions (including the ten Spanish institutions) and 79 less significant institutions (including four Spanish institutions).

considerations into the Eurosystem's monetary policy framework, and is further integrating sustainability and responsibility criteria into the management of its non-monetary policy portfolios. Accordingly, in 2022 the Banco de España worked on constructing an impact portfolio for sustainable and responsible investment, in the form of direct investment in green bonds denominated in various currencies, and holdings in green investment funds (USD and EUR) managed by the BIS.

The Banco de España also participated in the Eurosystem's joint work to fulfil its disclosure commitment. This was the common position agreed upon in 2021 with the other Eurosystem national central banks regarding the application of sustainable and responsible investment principles to their own portfolios. In 2022 the Banco de España worked on the report on climate aspects of its own portfolios, as recommended by the TCFD, to be published in 2023.

c) Research

High on the Banco de España's analytical priority and research agenda is analysis of the numerous implications that climate change and the transition towards a more sustainable growth model have for the economy as a whole and for the financial system – please see the recent [update of the work streams](#) for upcoming quarters –. It should be noted that the main results of the analysis of the Spanish economy in the face of the climate challenge were presented in [Chapter 4](#) of the *2021 Annual Report*.

d) Corporate sustainability

In 2022 a **comprehensive environmental inspection was carried out in the buildings at Cibeles and calle de Alcalá, 522**. Subsequently, a remediation plan was drawn up for the non-compliances detected, in which a series of deadlines were set – three, six and nine months – depending on the importance of the non-compliance. **From September onwards, building temperatures were brought into line** with the requirements of Royal Decree-Law 14/2022. The other measures approved in this regulation were also implemented, such as the automatic closing of doors to the outside of the buildings, bringing forward the mandatory energy efficiency inspections, turning off interior and exterior lighting before 10 p.m. except in safety zones, etc. In 2022 progress was made in drawing up the institution's Energy Saving and Efficiency Plan.

With regard to waste management, a study was carried out of all waste in central services for more efficient management thereof, and specific measures were implemented, such as training for employees involved in this task. In addition, **in 2022, a programme of events was carried out to raise awareness among the workforce about caring for the environment**. These included a series of conferences on



Progress has been made in the preparation of the Institution's Energy Saving and Efficiency Plan.

environmental volunteering, two round tables with experts on water management and the energy crisis, as well as an awareness campaign on water consumption.

In the area of cash, the following measures should be highlighted:

- Total elimination of the use of landfill and combustion in the disposal of banknote waste unfit for re-circulation; 100% is destined for waste-recovery solutions.
- Improvement in the environmental footprint of the Banco de España's share of euro banknotes, thanks to the use of more than 80% sustainable cotton, exceeding the minimum required by the ECB. By 2023 the percentage of sustainable cotton will be 100%.
- Submission of the Annual Packaging Declaration to the Waste Planning and Management Department of the Directorate General for the Environment, attached to the Madrid Regional Government's Department of the Environment, reporting on the quantity and types of packaging placed on the market as a result of cash circulation activities.
- Application for eligibility under the first additional provision of Law 11/1997, on Packaging and Packaging Waste, whereby responsibility for the correct environmental management of the packaging waste delivered is transferred to the end holder.
- Preparation of the Business Plan for the Prevention of Packaging Waste.



For more information on the Banco de España and sustainability, please visit the Bank's [website](#).

9 ACTIVITIES OF THE BANCO DE ESPAÑA AS A MEMBER OF THE EUROSISTEM AND OTHER INTERNATIONAL ORGANISATIONS

PARTICIPATION IN INTERNATIONAL ORGANISATIONS



The Banco de España is part of the European institutional framework and is represented in the main international monetary institutions, such as the IMF and the BIS.

Why is it important?

The Spanish economy is fully integrated into the world economy and especially the euro area. To fulfil its function, the Banco de España needs to incorporate the international environment in which the Spanish economy operates into its analysis.

What do we do at the Banco de España?

We participate in numerous working groups and committees, contributing our expertise, as well as in discussions and decisions in the field of global financial architecture.

Our objective

Continue to actively participate in decision-making in the most relevant institutions and fora, both at the European level and beyond, as well as promoting the transfer and exchange of knowledge, experiences and good practices.

9.1 The Eurosystem and other European Union institutions

Throughout 2022 the Banco de España continued to play a prominent role in the activities of the ESCB. The Governor attended the regular meetings of the Governing Council and the General Council of the ECB, at which monetary policy decisions and decisions relating to the functioning of the Eurosystem are taken. The Deputy Governor participated in the meetings of the Supervisory Board, which discusses, plans and implements the ECB's supervisory tasks in the area of the SSM, where draft decisions pertaining to the prudential supervision of credit institutions are submitted to the Governing Council for their approval.

The ECB's decision-making bodies are supported by the ESCB's various committees, such as, inter alia, the Monetary Policy, Market Operations, Market and Payment Infrastructures, Financial Stability, Legal, Statistics, Banknote and Risk Management Committees. As in previous years, in 2022 the Banco de España collaborated actively on these committees and in the working groups reporting to them. Among the most important issues agreed upon were those relating to the process of progressive normalisation of monetary policy. Rising energy and food prices, supply bottlenecks and the recovery in demand following the pandemic led to widespread price pressures and high inflation. In this context, among other measures, **the Governing Council took consecutive decisions to raise key interest rates and approved a new instrument,** the TPI, to provide enhanced support for the effective transmission of monetary policy to the euro area as a whole

in order to be able to fulfil more effectively its mandate of maintaining price stability. In addition, in 2022 the ECB continued with the implementation of an ambitious action plan to include climate considerations in its monetary policy.

In the area of other EU institutions, the Banco de España participated in various working groups and committees. As in previous years, it was represented at the two informal meetings of the EU's Economic and Financial Affairs Council (ECOFIN), in February and September, and participated in the meetings of the Economic and Financial Committee (EFC) and the Economic Policy Committee (EPC). The issues addressed in these fora included the actions taken in support of Ukraine and those resulting from the war, such as sanctions against Russia and Belarus, and measures to reduce the EU's energy dependence or to protect European citizens and businesses from rising energy prices.

Also, efforts to boost recovery and growth continued, with **progress on the implementation of the Next Generation EU instrument, and discussions on the adoption of new own resources for the EU.** A particularly relevant issue in this respect is **the review of the EU's economic governance framework**, with proposals for further simplification and transparency regarding fiscal rules – with a focus on public debt reduction and greater accountability at national level – while making them compatible with investment protection and the objective of sustainable growth. Negotiations also progressed over other key issues for the EU, such as sustainable finances, the development of a single market for digital services, the prevention of money laundering, and the work needed to achieve the capital markets union and, albeit as a lesser priority, the banking union. Lastly, initiatives aimed at strengthening the EU's strategic autonomy continued.



The Banco de España participated in the two informal ECOFIN meetings and in the meetings of the EFC and the EPC, addressing, inter alia, the actions in support of Ukraine and the sanctions against Russia and Belarus.

9.2 European Banking Authority

The Banco de España is the Spanish representative at the **EBA**¹⁷ and participates in the Authority's various working groups and decision-making committees, being represented on the Board of Supervisors, as well as on the Board of Directors, by the Director General of Financial Stability, Regulation and Resolution. In 2022 the EBA's agenda focused on the strategic priorities endorsed by the Board of Supervisors, taking into account the current and expected mandates of the co-legislators, and the tasks arising from its founding regulation. In this context, the EBA's work was largely a continuation of the work initiated in 2021.

The EBA worked actively to maintain a harmonised and consistent set of rules on prudential and resolution issues to ensure that financial institutions across the EU can operate on an equal footing. Of particular significance in 2022 were regulatory products related to interest rate risk in the banking book (IRRBB), securitisations and enhancing banks' resolvability. It also contributed to the development of the regulatory framework for payment services, in response to a request for advice from the European Commission on the review of the second payment services directive.

In addition, the EBA continued to make progress in the development of technical standards, guidelines and reports in the area of digital finance and emerging risks, including climate and environmental risk, cyber risk and money laundering and terrorist financing risk, as well as in the preparatory work to address the mandates envisaged under the Digital Operational Resilience Act (DORA) and the **Regulation on Markets in Crypto-assets**¹⁸ (MiCA), which are expected to enter into force next year. In the data area, work continued to strengthen the **EUCLID (European Centralised Infrastructure for Supervisory Data)** platform, which seeks to be an integrated EU-wide prudential data hub.

The EBA also worked on the design of the methodology for the conduct of stress tests in the EU, which in 2023 have incorporated for the first time, top-down elements in the analysis. The results thereof will be published at the end of July 2023. Specifically, **regarding the analysis of risks and vulnerabilities in the European banking sector,** of note is the monitoring of the measures to mitigate the impact of COVID-19 on the EU financial sector, and the contribution of the EBA, in relation to the Ukraine crisis, to ensure the proper implementation of the European sanctions regime, as well as monitoring its possible impact on bank balance sheets.

17 The EBA is an independent EU authority which works to ensure effective and consistent prudential regulation and supervision across the entire European banking sector. Its general objectives are to maintain financial stability in the EU and to ensure the integrity, efficiency and proper functioning of the banking sector. The EBA, together with ESMA, EIOPA and the ESRB, is part of the European System of Supervision. Further information on its functions can be found on its website.

18 Crypto-assets are digital assets that rely on cryptography and distributed ledger or similar technology.

9.3 European Systemic Risk Board

The ESRB is responsible for monitoring risks and vulnerabilities affecting the stability of the EU financial system.¹⁹ The ESRB brings together representatives of central banks, national financial supervisory authorities from all EU Member States and various community bodies. Notably, the Governor of the Banco de España was re-elected in 2022 as Chairman of the ESRB Technical Advisory Committee, the structure commissioned with preparing the work and discussions of the General Board, the highest body of this organisation.²⁰

In 2022 the ESRB focused its efforts on the analysis of issues of a structural nature for financial stability. The main work streams addressed the implications of climate change, cyber risks, the review of the macroprudential framework in community banking regulations, the macro-financial scenarios for the EBA stress tests of the banking system in 2023, the monitoring of systemic risks in the EU securitisation market and the commercial real estate markets of the Member States.

In September 2022, the ESRB issued for the first time a warning addressed to all EU Member States on vulnerabilities in the financial system. Specifically, the ESRB warned of the risks related to: i) the deterioration of the macroeconomic outlook and the tightening of financing conditions; ii) the sharp adjustment of the price of assets, and iii) the deterioration of the quality of the assets and the profitability outlook of financial institutions.²¹

9.4 Single Resolution Board

The SRB²² and the national resolution authorities (NRAs) form the Single Resolution Mechanism (SRM), whose mission is to ensure an orderly resolution of failing banks in the banking union, preventing or minimising adverse impacts on the real economy, the financial system, and the public finances of Member States.

The areas of work addressed by the SRM in 2022 are reflected in its Multi-annual programme 2021-2023 and in the SRB Work Programme 2022. Both programmes foresee that the SRB will work actively in three directions: continue with the progressive implementation of the so-called "Expectations for Banks" started in 2021; carry out a resolvability assessment of each institution with checks on their progress towards resolvability; and carry out crisis simulations to verify that

19 Further information on its functions can be found on its [website](#).

20 See Banco de España. (2022). "Pablo Hernández de Cos reappointed as Chair of the Advisory Technical Committee of the European Systemic Risk Board" [press release], 30 June.

21 See European Systemic Risk Board. (2022). "The General Board of the European Systemic Risk Board held its 47th ordinary meeting on 22 September 2022" [press release], 29 September.

22 For further information, see the SRB's website.

both the institutions and the NRAs are prepared to face a possible adverse situation, and extract lessons that can enrich the action protocols.

The SRM established and published its core policies, and, therefore, in 2022 the actions focused on improving and adjusting them to make the implementation of the resolution strategy more efficient and individualised. In June 2022, the update of the MREL policy was published to adjust it to the experience gained and the latest regulatory developments.

The SRB also carried out updates and developed guidelines on topics such as separability, business reorganisation plans or the operationalisation of the single point of entry strategy. Likewise, the SRM improved its internal protocols in order to be better prepared to implement the resolution schemes for the transfer strategies and made significant headway in the Ready for Crisis (R4C) ITC platform that will serve to guarantee a safe exchange of confidential information during a crisis.

The authorities that are part of the SRB actively participated in the regulatory activity of the European Commission, which is currently working on a legislative proposal to review the regulatory framework for banking crisis management and deposit insurance (CMDI framework). The proposal seeks to improve the tools to manage potential crises at small-medium banks; harmonise national insolvency laws, and align the European framework for State aid with the European regulations that regulate banking crises (BRRD/SRMR).

9.5 The Financial Stability Board, the Basel Committee on Banking Supervision and the Bank for International Settlements

a) Financial Stability Board

The Banco de España is a member of the FSB, whose Plenary and Steering Committee include the Governor of the Banco de España. In 2022 the FSB continued to monitor the risks associated with the non-bank financial intermediation sector. The focus of this year's work was to identify sets of activities and types of institutions that contribute to amplifying liquidity gaps and the transmission of shocks in times of stress.

The FSB also continued to work on analysing vulnerabilities associated with structural changes. In the area of financial innovation, the FSB is working on the regulatory framework for crypto-asset markets and updating the recommendations applicable to global stablecoins.²³ With regard to financial risks related to climate change, the FSB made progress in the analysis and high-level recommendations to

²³ "Stablecoins" are crypto-assets whose value is pegged to a traditional asset or to a basket of traditional assets through a stabilising mechanism.

promote consistency of approaches from a regulatory and supervisory standpoint, and issued a report on practices in relation to the analysis of climatic scenarios, and two reports²⁴ on disclosure by the financial sector of information on this type of risk.

b) Basel Committee on Banking Supervision

The Banco de España also forms part of the **BCBS**, which is chaired by the **Governor of Banco de España**. Of note was the publication of the **definitive standard** that provides a solid and prudent global regulatory framework for the exposures of internationally active banks to crypto-assets. Another especially important area of work was in the field of financial risks arising from climate change.

In the area of the evaluation of the Basel reforms, the Committee published two reports²⁵ on the operation of the framework, as well as a public newsletter that recognises the benefits of establishing a positive countercyclical capital buffer in times of normality. The evaluation reports show some indications of a positive relationship between the banks' capital margin and the granting of loans.

Lastly, the Committee completed the specific review of the treatment of cross-border exposures within the European Banking Union (EBU) in the methodology for G-SIBs, to acknowledge the degree of progress that has been achieved so far in the EBU.

c) Bank for International Settlements

The Banco de España participated in the **three committees of the Bank for International Settlements (BIS) that analyse the global economy and international financial markets:** the Global Economy Meeting, which the Governor attends every two months; the Committee on the Global Financial System, which the Deputy Governor attends quarterly, and the Markets Committee, in which the Director General of Operations, Markets and Payment Systems participates.

As a result of the meetings held in these committees, in 2022 a report was published on the situation of private sector debt and financial stability, and another on the dysfunctions of the markets and the tools of the central banks, in the preparation of which Banco de España participated. Also, the Deputy Governor chaired a working group on asset purchases for monetary policy purposes.

²⁴ *2022 TCFD Status Report: Task Force on Climate-related Financial Disclosures and Progress Report on Climate Related Disclosures.*

²⁵ *BCBS. Evaluation of the impact and efficacy of the Basel III reforms and BCBS. Buffer usability and cyclicity in the Basel framework.*

Lastly, the Banco de España also participated in the Committee on Payments and Market Infrastructures, in which the Associate Director General of Payments and Market Infrastructures and the Director of the Department of Payment Systems participate. This committee focused its efforts in 2022 on continuing the work related to the G-20 roadmap on cross-border payments.

9.6 The International Monetary Fund and the G20

In coordination with the General Secretariat of the Treasury and the Ministry of Economic Affairs and Digital Transformation, once again the Banco de España organised the two rounds of meetings held annually by the International Monetary Fund (IMF) team with economic authorities and the private sector to prepare the annual report on the Spanish economy, known as the Article IV report. In 2022 the meetings took place in June and November; the latter being held on-site.

The Banco de España also participated in the spring assemblies and in the annual assemblies of the IMF, in which the three main IMF reports (World Economic Outlook, Global Financial Stability Report and Fiscal Monitor) were presented and discussed. The Governor of the Banco de España participated as a representative of the Spanish seat before the International Monetary and Financial Committee of the IMF, the body representing the countries at the assemblies, in substitution of the First Vice-President and Minister for Economic Affairs and Digital Transformation, who acted as chair of said committee in 2022.

One of the initiatives promoted by the IMF in 2022 was **the channelling of a portion of the general allocation of special drawing rights (SDRs) made in 2021 towards the most vulnerable countries**. Also, the creation of a new trust administered by the IMF, called the **Resilience and Sustainability Trust (RST)**, was approved to finance measures against climate change and pandemic prevention policies in low- and middle-income countries.

The Banco de España supported this new fund with a contribution to its loan and deposit accounts of 1,400 million SDRs (around €1,800 million). The Banco de España also increased its loan to the **Poverty Reduction and Growth Fund** by 350 million SDRs (€438 million), for the provision of concessional financing to low-income countries.

Spain also participates in the G-20 where it enjoys permanent guest status. **The Banco de España collaborates with the Ministry of Economic Affairs and Digital Transformation in the working groups of the so-called "finance circuit", which currently number five: the Framework Working Group, dedicated to macroeconomic issues; the IFA Working Group, focused on issues of international financial architecture; the Infrastructure Working Group, dedicated to infrastructure**



The Banco de España participated in the spring assemblies and in the annual IMF assemblies (left). Leaders of G-20 at the summit organised in Bali, under the presidency of Indonesia, with the theme “Recover together, recover stronger” (right).

financing issues; the Global Partnership for Financial Inclusion, focused on financial inclusion issues, and, more recently created, the Sustainable Finance Working Group, dedicated to supporting the sustainable development goals and analysing the financial implications of climate change. Also of note is the Compact with Africa, which is of particular importance and promotes cooperation with that continent. In 2022, most of the meetings were held online, and its work, under the presidency of Indonesia, focused on the effects of the COVID-19 crisis and the war in Ukraine on the global economy, as well as on policies to address them and alleviate their repercussions on the most vulnerable countries.

India assumed the presidency of the G-20 at the end of 2022; its priorities for 2023 in the financial sphere most notably include the following: the consequences of energy and food insecurity; the macroeconomic impact of climate change and its mitigation from a distributive standpoint; the increased role of the Multilateral Development Banks (MDB) regarding climate change and pandemic management; channelling MDB and IMF resources to vulnerable countries and managing their debt; the continuation of the harmonisation of international taxation and information on crypto-assets; assessing the macro-financial consequences of central bank digital currencies; the regulation of unbacked crypto-assets, stablecoins and decentralised finance (DeFi); streamlining international payments; regulation of bigtech/fintech financial services; the reduction of vulnerabilities to cyber risks; the financing of infrastructures, especially in relation to cities and in dialogue with investors; and the effect of digitalisation on the financial inclusion of the general public and SMEs.



The following links can be consulted for more information on the Resilience and Sustainability Trust and on the contribution of the Banco de España to the Poverty Reduction and Growth Fund.

INTERNATIONAL COOPERATION



This allows the channelling of the external relations of the Banco de España and pursues the **establishment and development of stable ties to cooperate** with institutions with which interests and objectives are shared.

Why is it important?

It responds to the priority strategic objective of consolidating the Banco de España as a **benchmark for central banking in Latin America**. It expands and reinforces its **institutional projection in other regions of the world**. It promotes **high-level relationships**, the creation of **expert networks** and participation in **projects**, which actively contribute to its modernisation.

What do we do at the Banco de España?

In line with ESCB best practices, **we strengthen international relations** by developing multilateral activities, technical assistance and bilateral projects, as well as through the negotiation and adoption of Memoranda of Understanding (MoUs).

Our objective

Contribute to monetary and financial stability objectives through the **sharing of central banking standards, best practices and methodologies**.

The Banco de España continued to strengthen its international cooperation relations with numerous central banks and international financial institutions. **In May and October 2022, a memorandum of understanding was signed with the Central Bank of Ecuador and another with the Central Bank of Bolivia**, with the aim of reinforcing the close ties that the institution maintains with the central banks of Latin America.

Additionally, **in 2022, 26 scheduled multilateral activities were carried out – one more than in 2021 –. In relation to missions and visits to and from the Banco de España**, which were practically non-existent in 2021 as a result of the pandemic, in 2022 there was a considerable upturn, with 19 technical assistance missions being carried out to other institutions and 28 visits received. This increase in on-site activity also affected technical assistance that was provided in the form of videoconferences, interdepartmental collaboration exercises, specialised questionnaires, etc., and reached a total of 140 activities. In keeping with the strategic priorities of the Banco de España and in line with the trends of previous years, the international cooperation of the Banco de España was mainly oriented towards Latin America, to which 146 activities were channelled in 2022; Chile and Uruguay were the countries with the highest figures of cooperation, followed by Colombia and Costa Rica.

It should be noted that **the Banco de España is a member of the Working Group on International Cooperation**, attached to the ESCB's International Relations Committee, and participates, together with the ECB and another 20 ESCB national

central banks, in the Regional Programme of Strengthening Central Bank Competences and Banking Supervisors of the Western Balkans, financed by the European Commission. In this programme – which will last three years and began in Rome in September – **the Banco de España will play** a very active role and will be involved in the work of various teams: internal audit, operational risk, information systems and governance, among others.

Also, and **as part of the pilot project for strengthening the capacities of African central bank institutions, the Banco de España worked together with the central banks of Portugal, Germany, France, Belgium and Italy**, with the aim of developing a project coordinated with a structure similar to the EU twinning instrument. The Banco de España focused its efforts and collaborated closely with the Central Bank of Morocco, with the Bank of Central African States – together with the Central Bank of France – and with the Central Bank of Tunisia – together with the Central Bank of Italy –, to develop technical assistance programmes within the framework of European international cooperation, reflecting the current commitment of the community institutions to Africa.

The Banco de España organised on May 5 and 6 the 112th meeting of CEMLA central bank governors in Seville. This institution, which includes the central banks of Latin America and the Caribbean, is the main forum for cooperation between central banks in the region. The Banco de España also organised, together with the European Institute of the Mediterranean, the OECD and the Central Bank of the Republic of Turkey, the **7th Meeting of Central Banks of the Mediterranean**, which was held on October 31 at the OECD headquarters in Istanbul.



The international cooperation activities carried out by the institution can be consulted on the Banco de España [website](#).



CEMLA central bank governors' meeting held in Seville.

REGULATORY CHANGES



Although the Banco de España is autonomous in the pursuit of its activities and the fulfilment of its purposes vis-à-vis the central government, **it performs its functions in accordance with the provisions of the Law of Autonomy and the general law.** It also **has external regulatory powers.**

Why are they important?

The regulations approved at the national and EU level affect the functions and powers of the Banco de España, harmonising the provisions in force and guiding the institution's actions, in the service of the general interest. The external regulatory powers, which are reflected in the Circulars of this nature, complement these provisions.

What do we do at the Banco de España?

We incorporate into our activity the new regulatory developments and updates approved at national and supranational level, and promote and approve our own regulatory initiatives to adjust our actions to the current situation.

Our objective

Continue adapting the institution's actions to the changing external legal framework in which it carries on its activity, also exercising its external regulatory powers where necessary to **guarantee the powers entrusted to it by the regulations in force.**

In 2022, in exercise of its regulatory power, provided for in the Law of Autonomy (LABE) and implemented in the Internal Regulations (RIBE), the Banco de España approved three circulars. In addition, in 2022 various state and EU regulations were approved with an impact on the functions and powers of the Banco de España.

Schema 2.4 summarises the main regulatory developments in 2022.



Legal information resources related to the institution's activity can be accessed through the Banco de España [website](#).

MAIN REGULATORY DEVELOPMENTS OF 2022

CIRCULARS APPROVED UNDER THE BANCO DE ESPAÑA'S EXTERNAL REGULATORY POWERS

Banco de España Circular 1/2022 (Spanish version only) of 24 January on liquidity, prudential rules and reporting obligations to specialised lending institutions and to credit institutions and other supervised institutions amending Circular 1/2009 of 18 December on information on the capital structure and equity quotas of credit institutions, and on their branches, as well as on the senior management of supervised institutions, and Circular 3/2019 of 22 October, exercising the power conferred by Regulation (EU) 575/2013 to define the materiality threshold for past due credit obligations.

Banco de España Circular 2/2022 (Spanish version only) of 15 March, on rules for the submission to the Banco de España of payment statistics by payment service providers and payment system operators.

Banco de España Circular 3/2022 (Spanish version only) of 30 March, amending Circular 2/2016 of 2 February on supervision and solvency to credit institutions, which completes the adaptation of the Spanish legal system to Directive 2013/36/EU and Regulation (EU) No 575/2013; Circular 2/2014 of 31 January amending Regulation (EU) No 648/2012 to credit institutions on the exercise of various regulatory options contained in Regulation (EU) No 575/2013 of the European Parliament and of the Council of 26 June 2013 on prudential requirements for credit institutions and investment firms, and; and Circular 5/2012 of 27 June 2012 on transparency of banking services and responsible lending to credit institutions and payment service providers.

STATE-LEVEL LEGISLATION WITH A PARTICULAR BEARING ON THE BANCO DE ESPAÑA

Law 4/2022 (Spanish version only) of 25 February on the protection of consumers and users in situations of social and economic vulnerability, which foresees the creation, in coordination with the Banco de España as supervisor, of a Plan of Measures to favour the inclusion of the most vulnerable, especially the elderly, including, inter alia, provisions to ensure face-to-face attention and financial accessibility, particularly for the elderly.

Law 18/2022 (Spanish version only) of 28 of September on business creation and growth, which includes as new features: (i) **establishing reporting obligations of the Banco de España to the CNMV** in matters of participatory financing platforms harmonised by Community law; and (ii) the **publication** by the Ministry of Economic Affairs, on its own behalf or through the Banco de España, **of certain benchmark indices applied by credit institutions to floating rate loans**, especially mortgages.

Royal Decree-Law 19/2022 (Spanish version only) of 22 November establishing a Code of Good Practices to alleviate the rise in interest rates on mortgage loans on primary residences, which amends Royal Decree-Law 6/2012, of 9 March, on urgent measures for the protection of mortgage debtors without resources, and adopts other structural measures to improve the mortgage loan market. This regulation entrusts the Banco de España with (i) the preparation and publication of a **Guide of tools for mortgagors in payment difficulties**; as well as (ii) the provision of **two simulators on the Bank Customer Portal to provide information on the possibilities of being eligible** for the Code of Best Practices and, the impact of the measures of the Code of Best Practices on their mortgage loan.

EU-LEVEL LEGISLATION WITH A PARTICULAR BEARING ON THE BANCO DE ESPAÑA

Council Decision (EU) 2022/1211 of 12 July 2022 on the adoption by Croatia of the euro on 1 January 2023.

ECB Decision (EU) 2022/911, of 19 April 2022 concerning the terms and conditions of TARGET-ECB and repealing Decision 2007/601/EC (ECB/2007/7); and **Guideline (EU) 2022/912** of the European Central Bank on the TARGET system. The new TARGET system will come into operation on 20 March 2023.

SOURCE: Banco de España.