CNMV BULLETIN
Quarter I
2022

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Abbreviations

AA. PP.	Public administration service
ABS	Asset-Backed Security
AIAF	Spanish Market in Fixed-income Securities
AIF	Alternative Investment Fund
ANCV	Spanish National Numbering Agency
APA	Approved Publication Arrangement
APR	Annual Percentage Rate
ASCRI	Spanish Venture Capital & Private Equity Association
AV	Broker
BIS	Bank for International Settlements
BME	Spanish Stock Markets and Financial Systems
CADE	Public Debt Book-entry Trading System
CC. AA.	Autonomous regions
CCP	Central Counterparty
CDS	Credit Default Swap
CFA	Atypical financial contract
CFD	Contract For Differences
CISMC	CIS Management Company
CNMV	(Spanish) National Securities Market Commission
CP	Crowdfunding Platform
CS	Customer Service
CSD	Central Securities Depository
CSRD	Central Securities Depositories Regulation
DLT	Distributed Ledger Technology
EAF	Financial advisory firm
EBA	European Banking Authority
EBITDA	Earnings Before Interest Taxes, Depreciation and Amortisation
EC	European Commission
ECA	Credit and savings institution
ECB	European Central Bank
ECR	Venture capital firm
EFAMA	European Fund and Asset Management Association
EFSM	European Financial Stabilisation Mechanism
EICC	Closed-ended collective investment company
EIOPA	Occupational Pensions Authority
EIP	Public interest entity
EMIR	European Market Infrastructure Regulation
EMU	Economic and Monetary Union
ESFS	European System of Financial Supervision
ESMA	European Securities and Markets Authority
ESRB	European Systemic Risk Board
ETF	Exchange Traded Fund
EU	European Union
EUSEF	European Social Entrepreneurship Fund
FICC	Closed-ended collective investment fund

FII	Real estate investment fund
FIN-NET	Financial Dispute Resolution Network
FINTECH	Financial Technology
FOGAIN	Investment Guarantee Fund
FRA	Forward Rate Agreement
FROB	Fund for Orderly Bank Restructuring
FSB	Financial Stability Board
FTA	Asset securitisation fund
FTH	Mortgage securitisation fund
GDP	Gross Domestic Product
HF	Hedge Fund
HFT	High Frequency Trading
IAGC	Annual corporate governance report
IARC	Annual report on director remuneration
IAS	International Accounting Standards
ICIS	Collective investment company/scheme
ICO	Initial Coin Offering
IF	Investment Firm / Investment Fund
IFRS	International Financial Reporting Standards
IIMV	Ibero-American Securities Market Institute
IMF	International Monetary Fund
IOSCO	International Organization of Securities Commissions
IPO	Initial Public Offering (for sale/subscription of securities)
IPP	Periodic public information
IRR	Internal Rate of Return
ISIN	International Securities Identification Number
KIID/KID	Key Investor Information Document
Latibex	Market of Latin American Securities
LEI	Legal Entity Identifier
LIIC	Spanish Collective Investment Companies Act
LMV	Spanish Securities Market Act
MAB	Alternative Stock Market
MAD	Market Abuse Directive
MAR	Market Abuse Regulation
MARF	Alternative Fixed-Income Market
MBS	Mortgage Backed Securities
MEFF	Spanish Financial Futures Market
MFP	Maximum Fee Prospectus
MiFID	Markets in Financial Instruments Directive
MiFIR	Markets in Financial Instruments Regulation
MOU	Memorandum Of Understanding
MREL	Minimum Requirement for Own Funds and Eligible Liabilities
MTF	Multilateral Trading Facility
MTS	Market for Treasury Securities
NCA	National Competent Authority
NDP	National Domestic Product
OECD	Organisation for Economic Cooperation and Development
OIS	Overnight Indexed Swaps
OTC	Over The Counter
OTF	Organised Trading Facility
PER	Price-to-Earnings Ratio
PRIIP	Packaged Retail and Insurance Based Investment Product
PUI	Loan of last resort
RAROC	Risk-Adjusted Return On Capital

REIT	Real Estate Investment Trust
RENADE	Spanish National Registry for Greenhouse Gas Emission Allowances
RFQ	Request For Quote
ROA	Return On Assets
ROE	Return On Equity
SAMMS	Advanced Secondary Market Tracking System
SAREB	Asset Management Company for Assets Arising from Bank Restructuring
SENAF	Electronic Trading Platform for Spanish Government Bonds
SEND	Electronic Debt Trading System
SEPBLAC	The Executive Service of the Commission for the Prevention of Money Laundering and Monetary Offences
SGC	Portfolio management company
SGECR	Venture capital firm management company
SGEIC	Closed-ended investment scheme management company
SGFT	Asset securitisation fund management company
SIBE	Electronic Spanish Stock Market Interconnection System
SICAV	Open-ended collective investment company
SICC	Closed-ended collective investment company
SII	Real estate investment company
SIL	Hedge fund with legal personality
SME	Small and Medium Enterprise
SNCE	National Electronic Clearing System
SPV/SFV	Special purpose/financial vehicle
SRB	Single Resolution Board
SREP	Supervisory Review and Evaluation Process
STOR	Suspicious Transaction and Order Report
SV	Broker-dealer
T2S	Target2-Securities
TER	Total Expense Ratio
TOB	Takeover Bid
TRLMV	Recast text of the Spanish Securities Market Act
TVR	Theoretical Value of the Right
UCITS	Undertaking for Collective Investment in Transferable Securities
VCF	Venture Capital Firm / Venture Capital Fund
XBRL	Extensible Business Reporting Language

I Stock markets and their agents: situation and outlook

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1 Executive summary

- **2022 started off with a consolidation of the recovery in growth that followed the COVID-19 crisis in 2020, but a series of uncertainties of a different nature had already been perceived, some of which have become more serious as the year progressed.** First, there were still concerns about the evolution of the pandemic because despite the extensive roll-out of the vaccination process in many countries, new variants continued to appear, one of which ("omicron") led to fresh restrictions at the end of 2021. This was compounded by two other major uncertainties: i) the perception that the shift in monetary policy was going to be larger and earlier than expected, in view of the high inflation rates recorded in most economies, and ii) the possibility that Russia would invade Ukraine and this would lead to armed conflict – which effectively began at the end of February.

- **These factors triggered significant turbulence in the financial markets, especially in the commodities and energy sectors, accentuating the upward trend in inflation and making monetary policy decisions more complex.** This complexity derives from the need to address the rise in prices, which are close to 10% year-on-year in many countries (their highest levels in decades), while not undermining the growth path that will already be affected to a varying extent by the Russian invasion of Ukraine and the economic tensions that still persist after the pandemic, among other factors. Countries such as the United Kingdom or the United States have progressed further in the shift in monetary policy, as they have already started raising interest rates. In the euro area, a decision has been made to halt the asset purchase programme launched during the pandemic and gradually reduce the amount of purchases made under the other programmes.

- **The rise in inflation and the war between Russia and Ukraine have caused a slowdown in the economic growth path**. This slowdown will depend on the economy's direct exposure to the conflict zone and the impact of the sanctions that have been imposed, which will particularly affect countries such as Germany and Italy, which import a large amount of energy from Russia. It will also be shaped by the scale of the rise in inflation experienced by each country, which implies a large loss of purchasing power for agents and the bottlenecks and problems in supply chains, as well as the effects on spending and investment decisions of agents, which in situations of high uncertainty tend to be postponed. According to the latest forecasts made by the International Monetary Fund (IMF), world GDP growth will be 3.6% this year, 0.8 points lower than forecast a few months ago. Growth in advanced economies is expected to be 3.3% (3.9% forecast in January) and in emerging economies it is expected to be 3.8% (4.8% forecast in January). The lower expected growth for Germany and Italy (1.7 percentage points (pp) and 1.5 pp, to 2.1% and 2.3% respectively) stands out. Forecasts for the Spanish economy range between 4.5% (Bank of Spain) and 4.8% (IMF), lowering expectations by 1 percentage point.

– **The main international markets, which had ended 2021 with significant revaluations, started 2022[1] with losses and spikes in volatility due to the context described above**. In the United States, the stock indices marked falls that ranged between 4.6% for the Dow Jones and 9.1% for the Nasdaq (4.9% for the S&P 500), while in the euro area losses fluctuated between 3.1% for the Ibex 35 and 9.3% for the German Dax. Japan's Nikkei 225 and Topix indices fell 3.4% and 2.3%, respectively. Emerging market indices performed unevenly due to the differing impact of the war, with Latin American indices generally rising and Asian indices falling.

– **The Ibex 35, with this fall of 3.1%, marked three consecutive quarters of decline but presented the best relative performance among the large European indices, together with the British FTSE 100 (the latter was revalued)**. The performance of the index reflected, to a certain extent, the lower exposure of the Spanish economy to the conflict zones and the positive impact of the increase in energy prices and interest rates in specific sectors (e.g. banks). The largest price decreases were observed in the consumer goods, industrial and engineering sectors. Market volatility picked up to levels just below 40% and liquidity conditions deteriorated very slightly. Trading in Spanish shares, on the other hand, increased considerably, to stand at €222.26 billion, the highest figure since the first quarter of 2020. The proportion of the securities traded on markets and trading venues that are competitors of BME continued to rise this quarter.

– **In the fixed income markets, yields followed an upward trend in the first quarter of 2021 on expectations of an increase in official interest rates**. In addition, uncertainty and the impact of the war between Russia and Ukraine pushed up risk premiums, especially on private debt. In the United States, the increase in interest rates on 10-year public debt was 83 basis points (bp), to stand at 2.33% in the first quarter of the year. In euro area countries, the increase in sovereign bond yields was also large, ranging between 73 bp and 136 bp in Germany and Greece, respectively, and moved all yields into positive territory.

– **Medium- and long-term rates on Spanish sovereign debt also showed notable increases in the quarter**. Rises were observed in all sections of the curve, which began to show positive values from the 2-year term. The 10-year sovereign bond yield ended the first quarter at 1.45% (0.60% at the end of 2021). The credit risk premiums of public and private sector issuers also increased but to much lower levels than in other crisis periods. Lastly, the primary markets were buoyant in the first quarter of the year: fixed income issues registered with the CNMV stood at €42.86 billion, up by 81% compared to one year ago, due to issuances of mortgage- and regional covered bonds and securitisations.

1 The closing date for this report is 31 March, except for certain specific information.

– **In this context, the stress indicator for the Spanish financial markets is currently at medium risk level**, although it marked a substantial and progressive increase from January to early March, when it reached 0.46, close to the threshold that separates medium from high risk (0.49). The increase in volatility indicators, sparked by the uncertainties surrounding the Russian invasion, was the main determinant.

– **The growth in assets held by investment funds, which was interrupted in 2020 as a result of the pandemic, revived in 2021, standing at €324.70 billion at the end of the year, 16.1% more than in 2021**. 60% of this increase is explained by net subscriptions and the remaining amount by the revaluation of the portfolio, particularly equities. As in the previous two years, the largest investments corresponded to higher risk funds (35% in global and equity funds) and to other more conservative fund formats, such as fixed income funds (38%). In parallel, there was a considerable increase in foreign CISs marketed in Spain, whose assets ended 2021 at €276 billion, 43.5% of the total assets marketed. Specifically for open-ended investment companies (SICAVs), it should be noted that as a result of a regulatory change that requires shareholders to have a minimum share of €2,500 to benefit from the tax regime for these instruments, 77% of SICAVs have stated their intent to deregister.

– **In 2021, credit institutions remained the top providers of investment services and the shift in the business model of investment services firms towards services other than market trading continued.** Income received by credit institutions for different types of investment services accounted for more than 85% of total income. These fees, which increased by 22.1% in 2021, are increasingly significant for this type of entity, in a context of low interest rates spanning several years, which has eroded other items of their income statements. Broker-dealers and brokers saw an increase in pre-tax profit of 3.1% in 2021, with different behaviour between broker-dealers, whose profits decreased by 14%, and brokers, whose profits quadrupled. The ongoing trend shows that while processing and executing orders continues to account for the largest amount of fees, other services are playing a larger role in IF business models. These include the placement and underwriting of issues, portfolio management, investment advice and the marketing of collective investment schemes (CISs).

– This report contains four monographic exhibits.

  • The first describes the main effects of the Russian crisis on the financial markets and in particular on the commodities and energy markets.

  • The second refers to the first annual report on the supervision of non-financial information of issuers published separately by the CNMV.

  • The third exhibit summarises the key findings of a study carried out by the CNMV on the practice known as PFOF (payment for order flow), which raises some concerns in the area of investor protection.

  • Lastly, the new CNMV Circular on the advertising of crypto-assets for investment purposes is discussed.

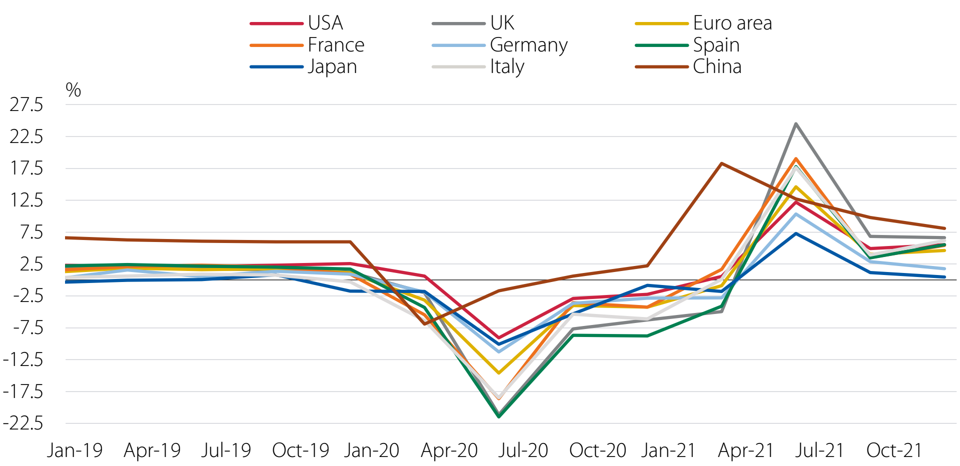
2 Macroeconomic environment

2.1 Financial performance

2021 was characterised by a robust economic recovery after the contraction experienced in 2020 due to the COVID-19 crisis. World GDP growth was 5.9%,[2] compared to a drop of 3.1% in 2020. However, economic recovery was uneven across the different regions depending on the extent the crisis affected each economy and the differences in the vaccination process, and shaped by the emergence of other uncertainties including problems in some supply chains, higher commodity prices and heightened geopolitical risk. In the United States, GDP grew by 5.7% in 2021, compared to a contraction of 3.4% in 2020. In the euro area, growth stood at 5.3% (-6.5% in 2020) with some differences between the different economies. In France, Italy and Spain, growth was stronger (7.0%, 6.6% and 5.1%, respectively) than in Germany (2.9%), as these countries were also recovering from larger falls in 2020 (of between 8% and 10.8%). The United Kingdom showed the largest increase of the advanced economies, going from a 9.3% contraction in 2020 to 7.4% growth in 2021.

In Spain, economic growth marked a strong recovery in 2021 after the COVID-19 crisis, with an increase of 5.1% (-10.8% in 2020), but this was somewhat lower than expected at the beginning of that year. The largest increase was recorded in the second quarter of the year (17.8% year-on-year, compared to a fall of 21.5% in the same quarter of 2020) and, subsequently, GDP growth was not as strong as expected (3.5% and 5.5% in the last quarters of the year) due to the different circumstances indicated above.

Annual change in GDP FIGURE 1



Source: Refinitiv Datastream. Year-on-year GDP rates are shown for each quarter in all economies except China, where growth rates accumulated in the year are represented in year-on-year terms.

Domestic demand contributed 4.7 pp to the 5.1% increase in GDP in 2021, while the foreign sector contributed 0.5 pp. A better performance was observed in all the components of domestic demand, especially in private consumption and gross fixed

2 *World Economic Outlook,* published by the IMF in January 2022.

capital formation, with increases of 4.7% and 4.3%, respectively, compared to the sharp declines of 12.2% and 9.5% recorded in 2020. Public consumption slowed slightly to 3.1% (3.3% in 2020), although the increases in the last two years are the highest since 2009. In the foreign sector, exports and imports both grew at a robust pace compared with last year's data (14.7% and 13.9%, respectively, compared with falls of 20.1% and 15.2% in 2020).

In the supply segment, increases were recorded in most sectors, notably the commerce, transport and hospitality sectors. This sector, which experienced the largest decline in 2020 (25.7%) due to the COVID-19 crisis and the consequent restrictions on movement, grew by 14.2% in 2021 following the improvement in the health situation and as many of these restrictions were lifted. Other sectors that performed significantly better than in the previous year were the industrial sector (5.2%), information and communication (5.1%), public administration, health and education (3.1%), professional activities (4.7%) and artistic and recreational activities (0.4%).

Spain: main macroeconomic variables (annual % change) TABLE 1

	2018	2019	2020	2021
GDP	**2.3**	**2.1**	**-10.8**	**5.1**
Private consumption	1.8	0.9	-12.2	4.7
Public consumption	2.3	2.0	3.3	3.1
Gross fixed capital formation, of which:	6.3	4.5	-9.5	4.3
Construction	9.5	7.1	-9.6	-2.8
Capital goods and others	4.7	3.2	-12.9	16.0
Exports	1.7	2.5	-20.1	14.7
Imports	3.9	1.2	-15.2	13.9
Foreign sector (contribution to growth, pp)	-0.6	0.5	-2.2	0.5
Employment[1]	**2.2**	**2.6**	**-7.6**	**6.6**
Unemployment rate	**15.3**	**14.1**	**15.5**	**14.8**
Consumer price index	**1.7**	**0.7**	**-0.3**	**3.1**
Current account balance (% GDP)	**1.9**	**2.1**	**0.8**	**0.9**
Balance of public administrations (% GDP)	**-2.6**	**-3.1**	**-10.3**	**-6.9**
Public debt (% GDP)	**97.5**	**95.5**	**120.0**	**118.4**
Net international investment position (% GDP)	**62.5**	**60.0**	**60.8**	**48.9**

Source: Refinitiv Datastream, Bank of Spain and INE.

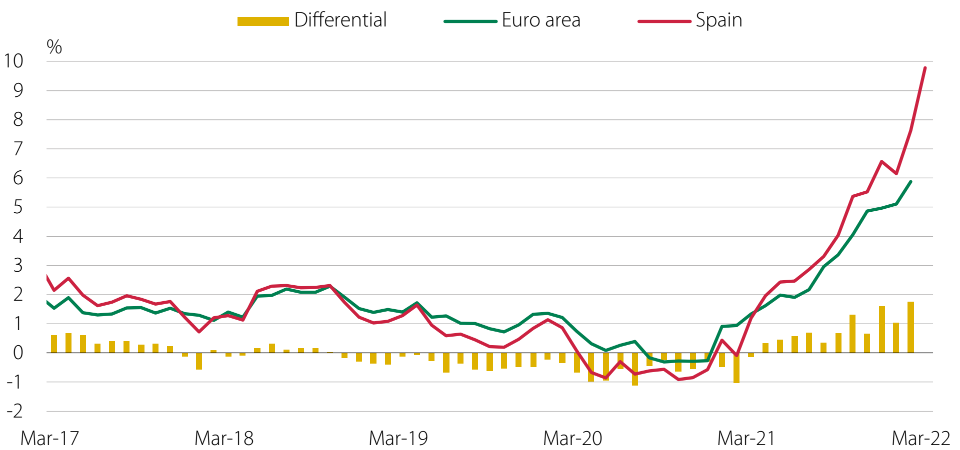
1 In terms of full-time equivalent jobs.

The Russian invasion of Ukraine has had negative consequences for growth in the different economies, although there is a large amount of uncertainty about the scale of the impact on economic recovery. The invasion triggered sharp rises (and volatility) in commodity and energy prices (see Exhibit 1), which has accentuated the upward trend in inflation. Apart from the repercussions on monetary policy discussed below, the emerging context is one of lower growth, especially for economies that are more dependent on raw materials and energy, those that are more dependent on Russian imports (energy) and those that are experiencing higher inflation (see the "Outlook" section).

Rising inflation in most economies in 2021 led to a change in the tone of monetary policy in many jurisdictions, most notably in the United Kingdom and the United States. During the COVID-19 crisis, most central banks launched multiple monetary stimuli strategies to attempt to mitigate the effects on the economy. The rise in inflation, initially caused by higher energy prices, continued in the early months of 2022 when it was exacerbated by the Russian invasion of Ukraine, leading to the stimuli being tapered at a faster pace.

The inflation rate in Spain also rose significantly in 2021, driven mainly by energy prices, and this trend continued in the first quarter of 2022. Thus, inflation grew from 0.5% in January 2021 to 6.6% at the end of the same year, and 9.8% in March 2022. The core inflation rate (IPSEBENE), which excludes the most volatile elements of the index such as energy and unprocessed food, also followed an upward path in 2021, although the rise was not as strong. The increase in this rate, which stood at 3.4% in March this year (2.1% in December 2021 and 0.1% in 2020), reflects how the increase in prices originally observed in the energy products is gradually spreading to other goods and services in the consumer basket. Inflation in the euro area was lower than in Spain for most of 2021 (excluding the one in the first quarter), reaching its highest differential in December (1.3 pp). In 2022, the difference widened even further (to 1.8 pp in February).

Harmonised CPI: Spain compared with the euro area (annual % change) FIGURE 2



Source: Refinitiv Datastream. Data to February for the euro area and to March for Spain.

The change in the tone of monetary policy led to a 25 bp rise in interest rates in the United States in March, to the range of 0.25-0.50%. This is the first increase since 2018 and its main purpose is to mitigate the rise in inflation (8.6% in March). The members of the Open Market Committee themselves predict six more rate hikes during the year, to place it between 1.75% and 2.0%. Furthermore, in early March the monetary authority ended its purchase plan for bonds and announced that it could start the process to reduce its balance sheet at its next meetings.[3]

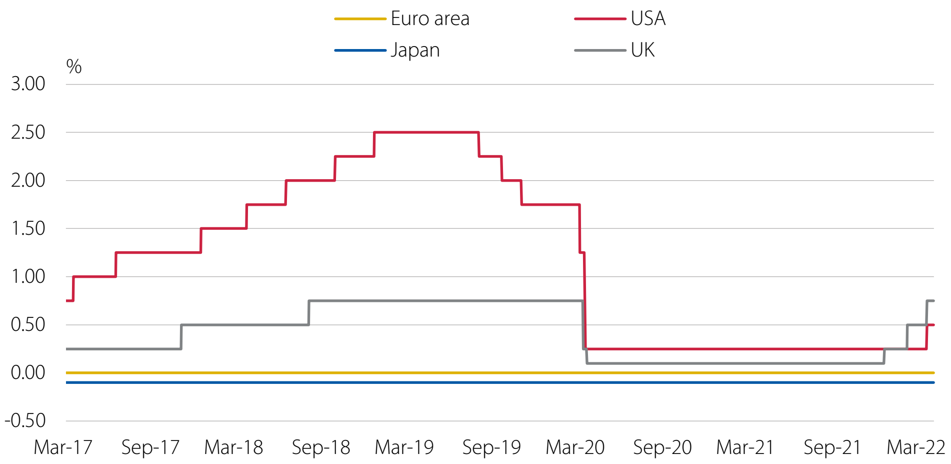
3 In March, the balance sheet of the Federal Reserve was almost US$9 trillion.

The Bank of England also increased its official interest rates. The central bank, which had already raised its rates in December last year and in February this year, did so again for the third time at its March meeting, by 25 bp to 0.75% (see Figure 2). In addition, it agreed to reduce government and corporate bond assets on its balance sheet, ceasing to reinvest maturing assets.

The European Central Bank (ECB) resolved to step up its reduction of monetary stimuli in 2022, but has not increased its official interest rates. At its last meeting in March, the ECB did not make changes to its official rates, keeping the rates for main refinancing transactions, the marginal credit facility and marginal deposit facility unchanged at 0%, 0.25% and -0.50%, respectively. However, its pandemic emergency purchase programme[4] (PEPP) ended in March and it reduced its asset purchase programme (APP) in the second quarter, from €120 billion to €90 billion.[5]

The shift in monetary policy in most of the regions observed gave rise to widespread increases in short-term interest rates, which were larger in the United States and United Kingdom. In these economies, 3-month interest rates rose by 76 bp and 77 bp in the first quarter of 2022, driven by rate hikes in both regions. The variation in short-term interest rates in the euro area and Japan with respect to the end of the year was less pronounced (11 bp and 8 bp to -0.46% and -0.0%, respectively, at the end of March).

Official interest rates FIGURE 3



Source: Refinitiv Datastream. Data to 31 March.

4 The PEPP has been endowed with €1.85 trillion after its extension at the December ECB meeting, with a completion date of March 2022 and the roll-over of the programme bond maturities until, at least, the end of 2023.

5 Monthly net purchases under the APP will amount to €40 billion in April, €30 billion in May and €20 billion in June.

The impact of the war between Russia and Ukraine on clearing infrastructures in Europe

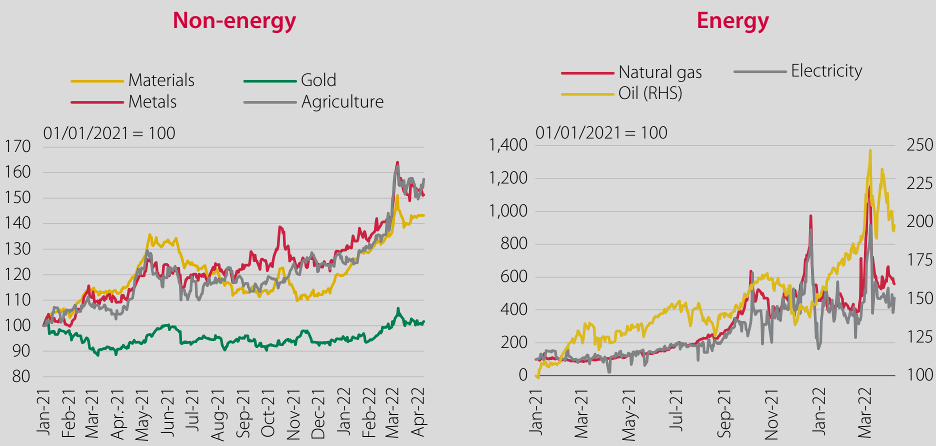
EXHIBIT 1

This exhibit focuses on the consequences of the war between Russia and Ukraine on the commodities markets (energy and non-energy) and, in relation to this, the impact on the clearing and settlement infrastructures of the financial markets, which are essential for their proper functioning.

The rise in the commodities prices, particularly energy, is part of a process that began in 2021 which was caused by rigidities that developed in the context of the COVID-19 crisis. As shown in Figure E1.1, the escalation of tensions between Russia and Ukraine in the first weeks of this year and the start of the conflict only accentuated this trend, which led the prices of these products to reach record highs in the week of 7 March. In that week, commodities prices were between 2.5 times (oil) and 11 times (natural gas) higher than those recorded at the beginning of 2021. Since then, prices have moved downwards, although they remain well above the levels of previous months, and this is a decisive factor in the sharp increase in volatility.

Commodities prices

FIGURE E1.1



Source: Refinitiv Datastream and CNMV.

The increase in prices and volatility in the commodity markets, together with other factors caused by the war, such as the implementation of sanctions and the increased probability of cyberattacks, have increased the market, credit and operational risks of central counterparties (CCPs) that trade with energy products in both the European Union and the United Kingdom. CCPs have adapted their risk management systems by stepping up monitoring market activity and margin calls, whose size and frequency have increased as a direct consequence of the high market volatility. The parameters used for the position margin or initial margin have also been recalibrated upwards.

The results of this monitoring have shown that CCPs have been able to satisfactorily manage the increase in the margins. However, liquidity problems have been identified by some non-financial clients of CCPs (basically energy intermediaries), who have had to resort to alternative sources of financing. Further, the impact of the exclusion of several Russian banks from the SWIFT system has been negligible for CCPs. Lastly, it has been observed that exposure to Russian clients or assets is very limited, so the sanctions have not had a significant impact. The most noteworthy incident in this area occurred in the United Kingdom, where a CCP had to suspend clearing of nickel-related derivatives in parallel with the suspension of trading of these products (on the LME).

The Spanish CCP (BME Clearing) has shown trends that are similar to those observed in the rest of the CCPs in the European Union. The CCP, which had implemented special risk control measures in the energy segment from the end of 2021, activated additional control mechanisms after the escalation of tensions between Russia and Ukraine. Some of the main measures are:

– A significant increase in the size of the guarantee fund for defaults in the energy segment.

– Extraordinary meetings of the Risk Committee to update parameters for margin calls.

– Sensitivity analyses in the energy segment to test hypothetical scenarios that are more adverse than the current ones.

In order to mitigate the hedging risk of the default fund, the CCP has made intraday margin calls based on the calculation of risk under stress. The intraday margin calls for active members in the energy segment have been for significant amounts, but all have been met without incident. As part of its supervisory work, the CNMV closely monitors the activity of the CCP and has applauded its initiatives, issuing some additional recommendations that have already been incorporated, e.g., with regard to the design of hypothetical scenarios in sensitivity analyses, which are recommended to be more tightly calibrated.

The performance of different indicators for the Spanish labour market reflected the scale of the economic recovery in 2021. For instance, employment grew by 7.2% in 2021, in line with the increase in economic activity and following the sharp drop experienced in 2020 (7.6%). Similarly, the unemployment rate fell from 16.1% at the end of 2020 to 13.3% in December 2021 (14.8% annual average compared with 15.5% in the previous year).[6]

The deficit of all public administrations stood at 6.87% of GDP in 2021 (10.27% of GDP in 2020).[7] This decrease of more than 3 pp of GDP, the highest since 2013,

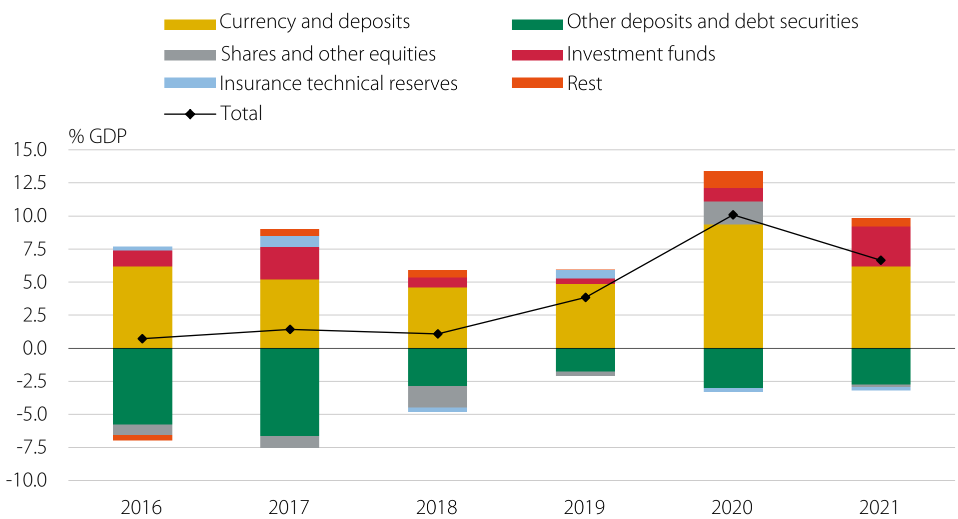
6 The data from the early months of 2022 indicate that this trend has continued. In March, the number of people registered as unemployed in the State Public Employment Service (SEPE) fell by 840,877 compared with the same month in 2021, to stand at 3,108,763. In addition, the total number of employment contracts registered in March increased by 19.1% compared to March last year. 30.7% of these hires were permanent, the highest number ever recorded.

7 The data include financial aid. Excluding this aid, the deficit of the public administration service as a whole would stand at 6.76% of GDP in 2021, compared with 10.08% in 2020.

is explained by the increase in public revenue (13.2%) which was larger than the drop in spending. The central government, which continues to bear most of the cost of the crisis, still has a large deficit, although this decreased from 7.7% of GDP in 2020 to 6.09% in 2021.[8] The figures reported by the autonomous regions also improved compared with 2020, above all thanks to the transfers received from the State, registering a deficit of 0.03% of GDP (0.22% in the previous year), as well as social security figures, which, as a result of the increase in social contributions, was reduced by 58%, to 1.02%. Meanwhile, the local government presented a surplus of 0.27% of GDP in 2021 (0.26% in 2020). In parallel with the drop in the deficit, public debt was lower than the figures seen at the end of 2020, down from 120% of GDP to 118.4% in 2021.

Unlike in 2020, the reactivation of the economy in 2021 and the opening of activities for households led to a decrease in the household savings rate to 11.4% of disposable income (14.9% in 2020). The average household savings rate in the euro area also decreased in 2021 but remained at a higher level than for Spanish households, standing at 18.5% of gross disposable income (GDI) in the third quarter of 2021. The household debt ratio fell slightly after the increase to 102.4% of GDI experienced in 2020 to stand at 101.6% at the end of 2021. Household wealth increased from 985% of GDI in 2020 to 1,033% in 2021 due to the increase in wealth in both financial and real estate assets.

Households: net acquisitions of financial assets FIGURE 4



Source: Bank of Spain, *Financial Accounts*. Cumulative data for four quarters.

Net acquisitions of financial assets by households fell in 2021, in line with the drop in savings. These stood at 6.6% of GDP in December 2021, compared with 10.1% in 2020. By asset class, investment in means of payment accounted for the largest portion, although the investment amount fell compared to 2020 (6.2% of GDP compared with 9.4% in 2020). A small divestment of shares (0.2% of GDP) was observed, which contrasts with the investment observed in these assets in 2020, in

8 The central government deficit excluding financial aid stands at 5.99% of GDP in 2021 (7.51% in 2020).

the context of the pandemic (1.7% of GDP). There was also some divestment of time deposits and fixed income securities, which was similar to that of the previous year (2.8% of GDP compared with 3.0% in 2020). Lastly, households increased their holdings in investment funds by 3.0% of GDP (1.0% in 2020), continuing the trend that began in 2012.[9]

The recovery of economic activity in 2021 translated into a strong increase in the earnings of non-financial Spanish listed companies. These went from losses of €100 million as a whole in 2020, due to the crisis associated with the pandemic, to profits of more than €31.28 billion in 2021 (see Table 2). In absolute terms, the largest increases occurred in the trading and services sector, where companies went from losses of €6.78 billion in 2020 to profits of €7.82 billion in 2021. The increase in profits of energy companies also stands out (close to €11.47 billion, 37% of total profit). The profits of companies in the construction and real estate sector were close to €7 billion, 5.4 times more than in 2020, and those of industrial companies were slightly above €5 billion, 2.6 times more than in 2020. A general improvement in earnings was observed, as nearly 80% of companies posted better figures than in the previous year, in some cases for a very large amount.[10] Despite this significant improvement in their profit and loss accounts, it should be noted that almost 25% of the companies presented negative earnings for 2021 as a whole.

Profit/(loss) by sector: non-financial listed companies TABLE 2

Millions of euros

	Operating profit		Profit before tax		(Consolidated) profit for the year	
	2020	2021	2020	2021	2020	2021
Energy	7,629	17,595	5,301	16,397	3,406	11,469
Manufacturing	3,271	7,572	2,672	6,800	1,972	5,041
Trading and services	-4,037	11,986	-7,438	8,853	-6,777	7,818
Construction and real estate	3,352	5,854	1,603	3,935	1,296	6,955
Aggregate total	**10,216**	**43,007**	**2,138**	**35,984**	**-101**	**31,284**

Source: CNMV.

Non-financial listed companies reported debt of €264.83 billion in 2021, 6.2% more than in 2020. The largest increase in debt in absolute and relative terms was observed in energy companies, with an increase of 8.4% to €95.89 billion (36% of the total). In the remaining sectors, the increase in debt ranged between 4.6% (trade and services) and 6.6% (industry). Despite the higher debt, the leverage indicator, measured as the ratio of debt to equity, fell to a varying degree in the different sectors, since companies' assets increased to a greater extent. For non-financial listed companies as a whole, the leverage indicator stood at 1.0 in 2021, down from 1.11 in 2020. Debt coverage indicators also improved as a result of the notable improvement in company margins (see Table 3).

9 For more details of the composition of investment funds flows, see Section 4.1.

10 The following companies presented an increase in profit for the year of more than €1 billion: Telefónica, Repsol, IAG, Inditex and Naturgy.

Indebtedness: non-financial listed companies

TABLE 3

Millions of euros

	Debt		Debt/equity		Debt/operating profit	
	2020	2021	2020	2021	2020	2021
Energy	88,495.1	95,887.4	0.91	0.90	11.60	5.45
Manufacturing	23,499.9	25,043.9	0.55	0.54	7.18	3.31
Trading and services	91,291.9	95,497.6	1.83	1.41	–	7.97
Construction and real estate	46,160.8	48,405.5	1.32	1.09	13.77	8.27
Aggregate total	**249,447.6**	**264,834.4**	**1.11**	**1.00**	**24.42**	**6.16**

Source: CNMV.

The CNMV publishes its annual report on the supervision of non-financial information of issuers

EXHIBIT 2

On 28 February, the CNMV published its annual report on the supervision of non-financial information of issuers, which has been published separately for the first time and can be viewed at the following link: http://www.cnmv.es/DocPortal/Publicaciones/Informes/EINF_2020.pdf.

The document describes the supervisory work carried out by the authority in relation to non-financial information statements (NFIS), for 2020, published by the issuers of securities traded on regulated markets in the European Union. It identifies good and bad practices that may be useful to improve the quality of the NFIS and includes certain priority areas for the purposes of the supervision that the CNMV will carry out on the NFIS for the year 2021.

In terms of the number of NFISs received, it should be noted that of the 145 issuers, 43 had to include an NFIS in their individual management report and 96 in their consolidated report (30% and 66% of the total, respectively).

It should be noted that no issuers received qualifications in their **NFIS verification report** (two in 2019), which is the first time that this has happened since this report become mandatory under Law 11/ 2018, of 28 December. However, most verifiers limited their work exclusively to the information required under Law 11/2018. In this area, the CNMV highlights the importance of verified and unverified information being perfectly identified and considers it advisable that verification be extended to the entire content of the NFIS.

The supervisory work of the CNMV on the NFIS follows a similar approach to the work on financial information. It carries out a formal review of compliance with presentation requirements and other specific aspects (10 companies), and a substantive review of a specific number of companies, focused mainly on the enforcement priorities issued by the European Securities and Markets Authority (ESMA) and the CNMV, and on the material aspects of each entity (10 companies).

In the formal review recommendations were sent to 14 issuers and requests for additional information were sent to three entities on: i) the location of the NFIS, ii) the frameworks used, and iii) the tables of contents.

In the substantive review, recommendations were sent to 16 issuers and requests for additional information were sent to 14 entities, mainly about the following aspects: i) the consideration of double materiality; ii) the definition of value creation and how the business model impacts and is impacted by non-financial matters; iii) the methodology and concepts used to calculate the wage gap, explanations of the data, performance and measures implemented; iv) impacts of COVID-19; v) the description of the main risks related to environmental issues and climate change, greenhouse gas (GHG) reduction goals and the calculation of key performance indicators (KPIs), and vi) exclusions in the scope considered.

In most cases, the explanations provided by the issuers in response to the CNMV's requests satisfactorily completed the disclosures required by law or recommended by ESMA and the CNMV in their enforcement priorities for the 2020 NFIS. However, it is considered that there is room for improvement in some areas, such as:

– *Business model and value creation:* The CNMV considers that this is a significant matter which puts the rest of the NFIS into context. Institutions must therefore continue to improve their disclosures, providing greater clarity and specificity: the goal is to explain what the institution does to create value, how it does it and why, and the role played by the different stakeholders in the value creation process.

– *Double materiality:* It has been observed that disclosures usually follow the "inside-out" or social and environmental materiality approach, and that some institutions state that their main objective is to provide information to their main stakeholders so that they are able to understand the impact of their activity with respect to non-financial matters. Issuers are reminded that they must expand the "outside-in" or financial materiality approach in their disclosures in order to draw up and publish a full materiality analysis; for example, the impact of carbon prices and climate change policies for companies that belong to carbon-intensive sectors.

– *Risks related to climate change and other environmental issues:* Practically all of the companies subject to substantive review include at least one GHG emissions indicator that provides scope 1 emissions, 90% provide scope 2 emissions and 55% provide scope 3 emissions. However, of those that provide scope 3 emissions, less than half show that this scope includes indirect emissions derived from the use of the company's goods and services by its customers. In accordance with its materiality, it is important to provide more details on the scope and methodology, and inputs used, also to segment emissions by geographical areas and line of activity.

– *Social and employment issues*: Greater segmentation of the wage gap would be desirable and that it be provided, at least, by professional category and country, since if it is disclosed, in aggregate, by company or group, this could lead to erroneous interpretations or fail to meet the objective of reflecting the institution's actions to promote diversity and eliminate gender bias. The CNMV highlights the importance of providing comparative data, an explanation of how the wage gap has evolved and, where relevant, a description of the plans and measures in place to close it.

- *Characteristics and presentation of the NFIS:* It is considered good practice to include a section containing the bases for the preparation of the NFIS, indicating framework applied, the scope, any changes with respect to previous periods and other observations that help provide a better understanding of the report. Issuers should give greater details of their policies, indicating whether they have been formalised and the bodies involved in their approval, including the board and any specialised committees involved.

- *Key performance indicators (KPIs):* Despite the recommendations made in recent years, information on KPIs remains an area for improvement. In some cases, comparative information for KPIs is still not provided. This should be restricted to specific cases and the reasons should be explained. There is also still a general lack of qualitative explanation accompanying the KPIs for various matters.

2021 NFIS enforcement plan. In October 2021 ESMA published its common enforcement priorities for 2021 NFIS, which refer to: i) the impacts derived from COVID-19, ii) climate-related issues, and iii) disclosures relating to the European Taxonomy for sustainable economic activities. Additionally, the CNMV has included as priorities in its review of the NFIS: i) a more detailed analysis of the disclosures related to the carbon footprint, ii) an analysis of the scope of the NFIS, iii) an evaluation of the disclosures of the participation of the entity and its stakeholders in the value chain and, iv) an analysis of the consistency between the financial statements and the EINF.

2.2 Outlook

The latest forecasts published in April by the IMF[11] lowered world growth expectations by almost 1 pp as a result of stronger increase in inflation in most economies and of the consequences of the war between Russia and Ukraine. The institution now expects world GDP to rise by 3.6% this year, compared to the 4.4% estimated in January. Expected growth for advanced economies stands at 3.3% (3.9% in January) and at 3.8% for emerging economies (4.8% in January). In the United States, the reduction is more closely linked to the rise in inflation, which is more severe and generalised than in Europe, while in Europe it is due more to the region's exposure to the conflict between Russia and Ukraine and the sanctions that have been imposed. The lower expected growth in Germany and Italy (down 1.7 pp and 1.5 pp respectively) stands out, as these countries are the most dependent on Russian energy imports.

11 https://www.imf.org/en/Publications/WEO/Issues/2022/04/19/world-economic-outlook-april-2022

Gross Domestic Product TABLE 4

Year-on-year % change

	2018	2019	2020	2021	IMF[1]	
					2022	2023
Global	3.6	2.8	-3.1	6.1	3.6 (-0.8)	3.6 (-0.2)
United States	2.9	2.2	-3.4	5.7	3.7 (-0.3)	2.3 (-0.3)
Euro area	1.9	1.3	-6.4	5.3	2.8 (-1.1)	2.3 (-0.2)
Germany	1.5	0.6	-4.6	2.8	2.1 (-1.7)	2.7 (0.2)
France	1.8	1.5	-8.0	7.0	2.9 (-0.6)	1.4 (-0.4)
Italy	0.8	0.3	-9.0	6.6	2.3 (-1.5)	1.7 (-0.5)
Spain	2.4	2.0	-10.8	5.1	4.8 (-1.0)	3.3 (-0.5)
United Kingdom	1.3	1.4	-9.3	7.4	3.7 (-1.0)	1.2 (-1.1)
Japan	0.3	0.7	-4.5	1.6	2.4 (-0.9)	2.3 (0.5)
Emerging	4.5	3.7	-2.0	6.8	3.8 (-1.0)	4.4 (-0.3)

Source: IMF.

1 In parentheses, the variation compared to the last published forecast (IMF forecasts published in April 2022 with respect to January 2022).

In Spain, GDP is forecast to grow between 4.5% (Bank of Spain)[12] and 4.8% (IMF) this year, estimates that are, in both cases, 1 point lower than the previous forecasts. The Bank of Spain's forecasts suggest that approximately one third of the decrease in growth would respond to energy and inflation trends, another third to factors related to agents' confidence and uncertainty, and the final third to financial factors and other matters. The inflation rate is estimated to fall between 7.5%, according to the Bank of Spain (which almost doubles the previous forecast) and 5.3% (IMF), and the unemployment rate is slated to decrease to 13.5% compared to 14.2% previously, according to the Bank of Spain. GDP growth in subsequent years is forecast to slow to rates close to 2.5% in 2024, and inflation to progressively moderate, to 1.3% in 2023 (IMF estimates).

There is a great deal of uncertainty surrounding these forecasts, mainly relating to the scale and duration of the price increase, which is much larger than expected a few months ago, and the duration of the war between Russia and Ukraine. The calendar set by the central banks to implement their monetary policy shift will be another decisive factor in shaping activity trends in the coming months. In Spain, there are positive factors, such as the recovery of tourism and associated services as COVID restrictions are lifted, but there are still elements of vulnerability, such as the need to consolidate public sector finances, particularly the level of indebtedness.

12 https://www.bde.es/bde/es/secciones/prensa/notas/Briefing_notes/proyeccciones-macroeconomicas-de-la-economia-espanola--2022-2024-.html

3 The performance of the securities markets

Although the stress indicator for the Spanish financial markets[13] is currently at moderate levels, it marked a substantial and progressive increase from January to early March, when it reached 0.46, close to the threshold that separates medium from high risk (0.49). Thus, the indicator rose from 0.23 to 0.46 in just over two months, fuelled by global uncertainties – especially the high rates of inflation and, above all, Russia's invasion of Ukraine. These factors triggered a generalised increase in volatility indicators, which was reflected in the level of stress of the financial system. The fact that a high risk level has not been reached, as occurred in previous crises, is due not only to the lower values registered by the indicators for each segment of the system, but also their correlation, which has held firm at medium-high values during this episode, standing well below the figures observed in other episodes of turbulence. From mid-March, the decline in volatility indicators, especially in the equity markets, led to a fall in the stress indicator, which has remained stable at around 0.36 as at the closing date of this report[14] (see Figure 5).

At the beginning of April, the highest stress levels were registered in the fixed income and financial intermediaries segments, followed by the derivatives market. The stress level in the fixed income market was above 0.60, driven mainly by the upward trend in sovereign bond interest rates. In the financial intermediary market, the high price volatility gave rise to stress levels that were somewhat lower than 0.60 and in the derivatives market (0.51), the highest level of stress was caused by oil price volatility. It is worth mentioning that this last segment registered the highest levels of stress during the quarter, reaching 0.88 at the beginning of March. The equity market showed a medium-high stress level at the beginning of April (0.48).

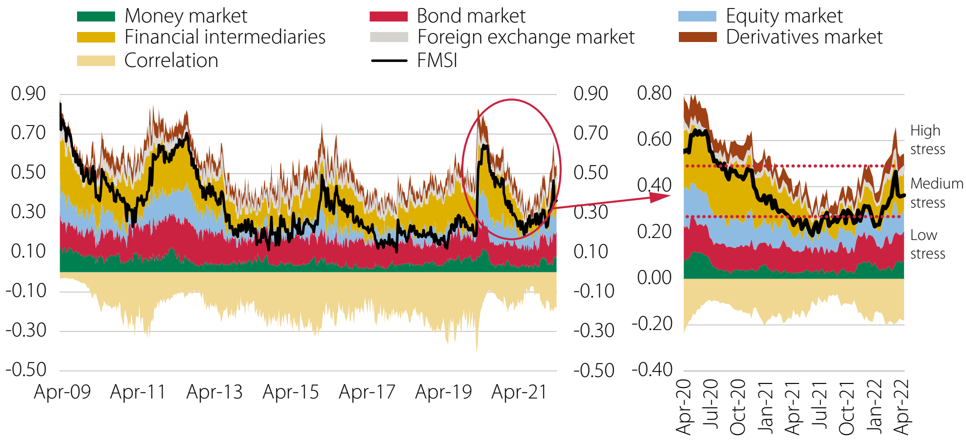
13 The stress indicator calculated by the CNMV provides a real-time measure of systemic risk in the Spanish financial system that ranges from zero to one. To do this, it evaluates stress in six segments of the financial system and makes an aggregate, obtaining a single figure that takes into account the correlation between these segments. Econometric estimates indicate that index values below 0.27 correspond to periods of low stress, while scores between 0.27 and 0.49 correspond to periods of medium stress, and values above 0.49 indicate periods of high stress. For further details on recent movements in this indicator and its components, see the quarterly publication of the *Financial Stability Note*, and the CNMV's statistical series (market stress indicators), available at http://www.cnmv.es/portal/Publicaciones/PublicacionesGN.aspx?id=51. For more information on the methodology of this index, see Cambón, M.I. and Estévez, L. (2016). "A Spanish Financial Market Stress Index (FMSI)". *Spanish Review of Financial Economics*, Vol. 14, No. 1, pp. 2341, or as CNMV Working Paper No. 60 (http://www.cnmv.es/DocPortal/Publicaciones/MONOGRAFIAS/Monografia_60_en.pdf).

14 This indicator has a weekly frequency. The last data presented in this report correspond to 8 April.

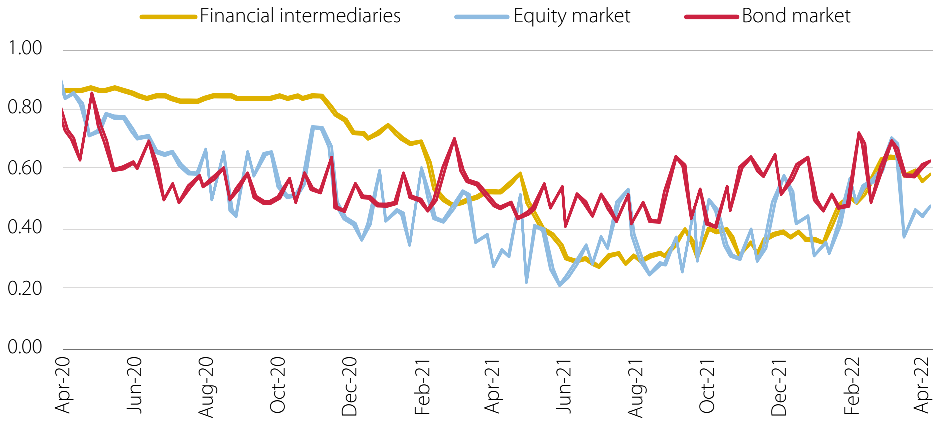
Spanish financial markets stress indicator

FIGURE 5

General indicator



Sector indicators



Source: CNMV.

3.1 The stock markets

The main international markets, which had ended 2021 with significant revaluations and had shaken off the effects of the pandemic, began 2022 with significant losses due to the prospect of a change in the interest rate cycle, compounded by the effects of the war in Ukraine. Even so, the declines became more moderate in the latter part of March due to the prospects that some type of agreement could be reached to mitigate the effects of the war and that the rise in energy prices could be moderated.[15] In this scenario, the markets remain attentive to how the war develops and to the cost of energy and commodities, which will reduce growth expectations for the year, in parallel with lower corporate profits in the coming months.

15 At the end of March, the US government ordered the release of one million barrels of oil per day from its strategic reserves for the next six months to curb the price rise.

Prices and returns

By jurisdiction, almost all the major international market indices fell in the first quarter, except for the UK FTSE 100 and some Latin American indices such as the Brazilian Bovespa, which also saw increases in volatility levels.

Although at first the falls in the US indices were larger than in European indices, the outbreak of the war reversed this trend. The larger drop seen by the US indices in the first weeks of the year can be explained by the expectation that monetary policy tightening would be faster in the United States than in Europe, as reflected by the first rise in the Federal Reserve rate. However, the outbreak of the war in Ukraine reversed this trend, since the economic impact of this conflict is expected to be more severe in Europe, which has fewer energy resources and is more dependent on energy imports from Russia. In the United States, the stock indices marked falls that ranged between 4.6% for the Dow Jones and 9.1% for the Nasdaq[16] (4.9% for the S&P 500), while in the euro area losses fluctuated between 9.3% for the German Dax (9.2% for the Eurostoxx 50) and 3.1% for the Ibex 35.[17] The UK FTSE 100 index rose 1.8%, while Japan's Nikkei 225 and Topix indices fell 3.4% and 2.3%, respectively.

Performance of the main stock market indices[1] TABLE 5

%

	2018	2019	2020	2021	II 21	III 21	IV 21	I 22
World								
MSCI World	-10.4	25.2	14.1	20.1	7.3	-0.4	7.5	-5.5
Euro area								
Eurostoxx 50	-14.3	24.8	-5.1	21.0	3.7	-0.4	6.2	-9.2
Euronext 100	-11.2	24.9	-3.6	23.4	5.8	0.9	6.7	-6.7
Dax 30	-18.3	25.5	3.5	15.8	3.5	-1.7	4.1	-9.3
Cac 40	-11.0	26.4	-7.1	28.9	7.3	0.2	9.7	-6.9
Mib 30	-16.1	28.3	-5.4	23.0	1.8	2.3	6.5	-8.5
Ibex 35	-15.0	11.8	-15.5	7.9	2.8	-0.3	-0.9	-3.1
United Kingdom								
FTSE 100	-12.5	12.1	-14.3	14.3	4.8	0.7	4.2	1.8
United States								
Dow Jones	-5.6	22.3	7.2	18.7	4.6	-1.9	7.4	-4.6
S&P 500	-6.2	28.9	16.3	26.9	8.2	0.2	10.6	-4.9
Nasdaq-Composite	-3.9	35.2	43.6	21.4	9.5	-0.4	8.3	-9.1
Japan								
Nikkei 225	-12.1	18.2	16.0	4.9	-1.3	2.3	-2.2	-3.4
Topix	-17.8	15.2	4.8	10.4	-0.5	4.5	-1.9	-2.3

Source: Refinitiv Datastream.

1 In local currency. Data to 31 March.

16 The Nasdaq technology index is more sensitive to the prospects of the Fed its tightening monetary policy, as well as to business growth projections, which have moderated since the situation caused by the pandemic has normalised.

17 At European level, the positive performance of the Portuguese PSI 20 index stood out, which accumulated a revaluation of 8.3%.

Emerging market stock indices performed more unevenly. Highlights include the revaluation of the main Latin American indices[18] and the fall of a large part of Asian bourses,[19] with the Chinese Shanghai Composite index dropping 10.6%. In Russia, the stock market was closed for almost one month due to the economic instability caused by the war and the main index plummeted by 36% in the first quarter.

The Spanish equity markets, which had closed the last part of 2021 with small declines in prices, began the year with further falls, following the wake of the main international markets. Even so, the quarterly balance was less unfavourable than for other indices, since the falls were lower in March due to the reduced exposure of Spanish companies and financial entities to the conflict area and the lower dependence on the Spanish economy on energy imports from Russia.

In Spain, the Ibex 35, which had risen 7.9% in 2021, ended the first quarter of this year with a fall of 3.1%, marking three consecutive quarters of decline but also presenting the best performance of the major European indices, together with UK FTSE 100.[20] The Ibex 35 stood at 8,445 points at the end of March, which was still lower than the levels seen before the outbreak of the pandemic. The performance of this index was better than the medium cap index, which registered larger falls (-5.9%), but notably worse than the small cap index, which posted gains (3.1%) thanks to the revaluation of renewable energy companies. Likewise, the indices that are representative of Latin American securities that trade in euros, the FTSE Latibex All-Share and FTSE Latibex Top, marked significant gains (32.7% and 26.2%, respectively) thanks to the growth of the main stock markets[21] and Latin American currencies,[22] which have been favoured by the higher raw materials prices.

Most sectors ended the quarter with losses, with the exception of some that have been boosted by the scenario of rising interest rates and energy prices. The falls were uneven between companies and sectors depending on the impact of the uncertainties on each one (see Table 6).

The most significant falls were seen in companies in the consumer goods sector, as well as in the industry, engineering and raw materials sector, which was affected by the drop in industrial activity[23] and the rise in commodities prices. In the consumer goods sector, it is worth noting the drop in the price of Inditex, which had a significant presence in Russia.[24] The drop in the quoted prices of companies

18 Index gains ranged between 6.1% and 18.2% for Mexican and Peruvian indices. The Venezuelan IBC saw the only fall (-12.3%).

19 The main indices of South Korea, Hong Kong and Taiwan fell by 7.4%, 6% and 2.9%, respectively, while the main Singapore index gained 9.1%.

20 See Table 5 of this report for further details. The UK FTSE 100 index was the only major international index to show a positive performance in the quarter, although at European level the good performance of the Portuguese PSI stood out, with an accumulated increase of 8.3%.

21 The main Brazilian stock market index, Bovespa, rose by 14.5% in the first quarter of the year, while the Mexican BMV IPC index gained 6.1%.

22 In the first quarter of the year, the Brazilian real depreciated by 20.8% against the euro, while the Mexican peso lost 5.9%.

23 In March, industrial activity was also affected by the strike in the transport sector, due to interruptions in supply chains.

24 The company suspended its activities in Russia due to the war.

in the energy sector also stood out, which were once again affected by the rise in the cost of energy and regulatory uncertainty, in addition to companies in the tourism sector, which, while favoured by the withdrawal of health restrictions, have been harmed by the uncertainties caused by the armed conflict. Likewise, the falls marked by food companies and insurance companies were also noteworthy, while the telecommunications and technology sector was largely stable.

Performance of Spanish stock market indices and sectors TABLE 6

Index	2019	2020	2021	I 21[1]	II 21[1]	III 21[1]	IV 21[1]	I 22[1]
Ibex 35	11.8	-15.5	7.9	6.3	2.8	-0.3	-0.9	-3.1
Madrid	10.2	-15.4	7.1	6.2	2.3	0.9	-0.6	2.3
Ibex Medium Cap	8.4	-9.7	8.6	8.3	0.4	-2.6	2.6	-5.9
Ibex Small Cap	11.9	18.9	1.8	9.3	-0.4	-6.4	-0.1	3.1
FTSE Latibex All-Share	16.3	-22.0	5.8	-2.1	24.1	-15.4	2.9	32.7
FTSE Latibex Top	15.3	-19.1	13.5	1.3	22.1	-7.4	-0.9	26.2
Sectors[2]								
Financial and real estate services	**-2.6**	**-26.4**	**20.3**	**14.8**	**10.0**	**3.0**	**-7.5**	**6.3**
Banking	-3.4	-27.5	20.7	15.0	10.5	3.1	-7.8	6.8
Insurance	-0.5	-23.6	7.3	13.6	-1.6	0.7	-4.7	-2.7
Real estate and others	-11.0	-16.0	7.4	4.6	2.8	4.3	-4.1	5.1
Oil and energy	**14.4**	**5.0**	**-1.6**	**-1.5**	**-4.1**	**-8.7**	**14.1**	**-1.1**
Oil	-1.1	-40.8	26.5	28.0	0.1	7.0	-7.6	14.3
Electricity and gas	18.4	14.2	-4.2	-4.5	-4.7	-11.4	18.8	-4.1
Basic mats., industry and construction	**24.9**	**-2.5**	**9.3**	**5.0**	**-1.3**	**-0.7**	**6.2**	**-10.2**
Construction	29.1	-16.3	15.2	3.8	-2.1	3.9	9.1	-5.8
Manufacture and assembly of capital goods	21.1	50.7	-20.4	-0.1	-9.0	-14.0	1.8	-19.4
Minerals, metals and metal products processing	4.4	-0.1	28.7	17.9	0.7	-1.2	9.7	-10.6
Engineering and others	19.1	-6.1	29.2	11.2	15.8	-0.1	0.1	-19.2
Technology and telecommunications	**4.5**	**-21.9**	**9.0**	**6.5**	**4.3**	**-0.5**	**-1.3**	**-0.5**
Telecommunications and others	-4.5	-25.8	15.7	10.3	8.7	0.8	-4.3	-0.8
Electronics and software	19.8	-18.8	1.2	1.7	-1.8	-3.1	4.6	-0.1
Consumer goods	**34.8**	**-15.3**	**0.9**	**5.6**	**4.0**	**2.3**	**-10.1**	**-21.3**
Textile, clothing and footwear	40.6	-17.3	9.5	7.9	5.7	7.1	-10.4	-30.6
Food and drink	1.8	10.6	-1.6	1.0	0.9	-4.5	1.1	-5.4
Pharmaceutical products and biotechnology	38.0	-18.3	-17.9	1.5	1.2	-7.0	-14.0	1.1
Consumer services	**8.6**	**-36.7**	**-1.9**	**10.5**	**-4.8**	**3.8**	**-10.2**	**3.3**
Leisure, tourism and hospitality	6.9	-27.8	27.5	11.3	4.0	6.0	4.0	-3.6
Transportation and distribution	12.5	-38.8	-2.6	10.3	-5.8	5.6	-11.3	4.2

Source: BME and Refinitiv Datastream.

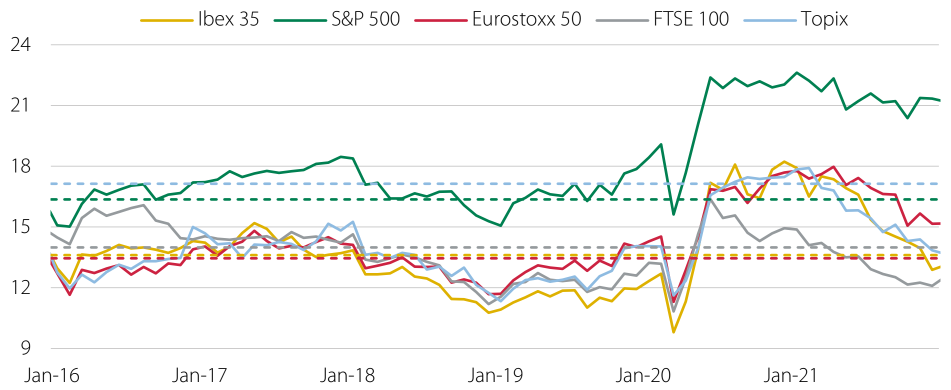
1 Variation compared to the previous quarter.

2 Sectors belonging to the IGBM (Madrid Stock Exchange General Index). The information corresponding to the most representative subsectors is displayed within each sector.

In the area of earnings, the best performance corresponded to oil companies (Repsol), boosted by the strong rise in oil prices,[25] banks and real estate companies. The latter are benefiting from the expected increase in interest rates, which will make it possible to increase their NII, and the higher prices of real estate assets. Likewise, transport and distribution companies showed small increases following the lifting of restrictions on air travel.

The expected price/earnings ratios per share (PER) of the main equity indices fell in the first quarter compared to mid-December 2021 (see Figure 13). The drop in prices in the quarter, together with stable or slightly lower earnings expected in the coming months, prompted the PER ratios of most indices to fall to the lowest values seen since the outbreak of the pandemic or even lower. The value of this ratio for the Ibex 35 fell from 12.9 in mid-December, its lowest in 2021, to 11.3 in March, slightly below the value of the ratio for the European Eurostoxx 50 index. As shown in Figure 6, the PER ratios of the main international stock indices presented a similar evolution in the quarter, standing below the average values reached in the last decade (except for the US S&P 500 index).

Price-earnings ratio[1] (PER) FIGURE 6



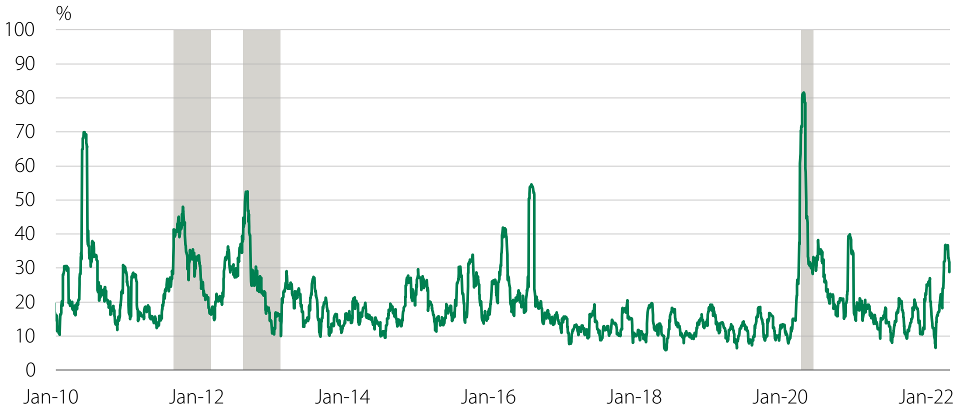
Source: Refinitiv Datastream. Data to 15 March. The dashed lines represent the historical average of the indicator since 2000.

1 With forecast earnings for 12 months.

The historical volatility of the Ibex 35, which had increased in the last quarter of 2021, continued to rise in the first three months of this year, exceeding 30% in March following the outbreak of the war. These values raise the quarterly average (22.15%) to above the average values for the previous quarter (18.05%) and for the whole 2021 financial year (15.9%). If the conflict continues over a prolonged period of time, it is likely that the indicator will remain at high levels, as occurred in March. This upward volatility trend was also observed in other international indices such as the US Dow Jones (15.81% on average in the quarter), but it was more noticeable in the European indices due to their greater economic exposure to the conflict area. Thus, the volatility of the European Eurostoxx 50 rose almost 10 pp in the first quarter, reaching an average of over 27%, and stood at over 40% in March.

25 The price of oil rose 38.7% in the first quarter, reaching around US$107.9, its highest level in the last decade.

Historical volatility of the Ibex 35 FIGURE 7

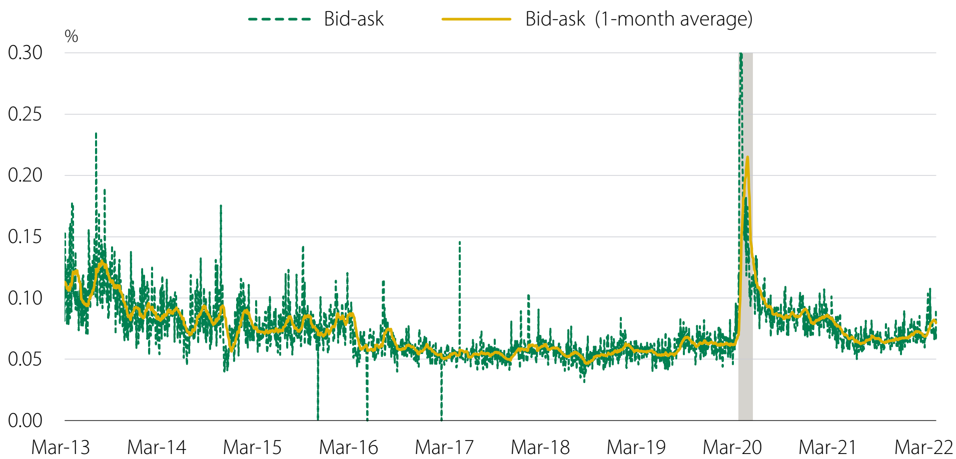


Source: Refinitiv Datastream and own calculations. The indicator is calculated as the annualised standard deviation of the daily price variations of the Ibex 35 over 21 days. The vertical lines of the graph refer to the introduction of restrictions on short-selling dated 11 August 2011, their subsequent lifting on 16 February 2012 (for financial institutions), the new restrictions of 23 July 2012 and their lifting on 1 February 2013, as well as the two most recent bans: the first for one day (13 March 2020), which affected 69 entities, and the second, adopted a few days later and lifted on 18 May 2020, which affected all entities.

Activity: trading, issues and liquidity

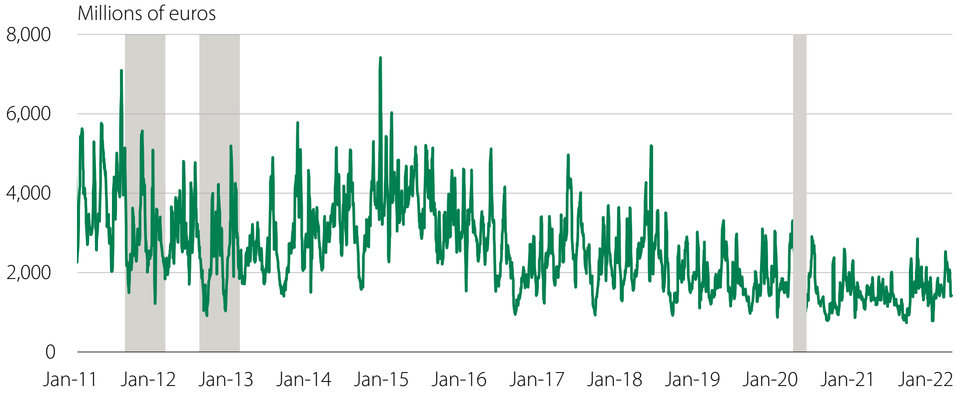
The liquidity conditions of the Ibex 35, estimated through the bid-ask spread, which had worsened slightly since the second half of 2021, continued to pursue this trend in the early months of 2022, although they remain at satisfactory levels. Despite the increase in the volume traded, the rise in volatility caused the spread to increase slightly in the quarter, reaching an average of 0.074%, above the average for the last two quarters (0.066% and 0.068% in the third and fourth quarter of 2021, respectively), although below the historical average (0.09%) (see Figure 8).

Ibex 35 liquidity. Bid-ask spread FIGURE 8



Source: Refinitiv Datastream and own calculations. Information on the bid-ask spread of the Ibex 35 and the average of the last month is presented here. The vertical lines of the graph refer to the introduction of restrictions on short-selling dated 11 August 2011, their subsequent lifting on 16 February 2012 (for financial institutions), the new restrictions of 23 July 2012 and their lifting on 1 February 2013, as well as the two most recent bans: the first for one day (13 March 2020), which affected 69 entities, and the second, adopted a few days later and lifted on 18 May 2020, which affected all entities.

Daily trading on the Spanish stock market FIGURE 9



Source: CNMV. The vertical lines of the graph refer to the introduction of restrictions on short-selling dated 11 August 2011, their subsequent lifting on 16 February 2012 (for financial institutions), the new restrictions of 23 July 2012 and their lifting on 1 February 2013, as well as the two most recent bans: the first for one day (13 March 2020), which affected 69 entities, and the second, adopted a few days later and lifted on 18 May 2020, which affected all entities.

In this context of rising volatility and falling prices, Spanish equity trading increased in the first quarter of the year to stand at €222.26 billion, the highest amount traded since the first quarter of 2020. This amount, which represents an increase both with respect to the previous quarter and the same period of the previous year, breaks the downward trend in trading volumes observed in Spanish equities in 2021. Average daily trading in the continuous market between January and March was €1.70 billion (16.1% more year-on-year), above the average for the previous quarter (€1.67 billion) and for 2021 as a whole (€1.45 billion).

Trading volumes on trading venues and competing markets exceeded the volume traded on the Spanish regulated market for the first time in history, whose market share reached a low of 48.3%.[26] This percentage is calculated as a percentage of total trading subject to non-discretionary market rules. Trading in competing venues was €115.70 billion, while trading carried out through BME stood at €106.56 billion. Although total trading grew by 24.8% year-on-year, the increase was larger in the markets and venues of BME's competitors (33.2%), while BME registered a rise of 16.8%. These data seem to indicate that the trend towards the offshoring of Spanish securities trading, which had stopped in the latter part of 2021, was revived in the early months of 2022.

Regarding the composition of the trading carried out through other trading venues and competing markets, Cboe Global Markets (Cboe) market once again stood out in terms of absolute value. This market, which operates from Amsterdam, shored up its clear leadership position, trading more than €90.2 billion in the quarter, which represents 78% of trading carried out abroad and almost 85% of trading carried out through BME. Among the other competing venues, both Turquoise and "Other" saw a slight loss of market share, to the benefit of Cboe, to levels of 5% and 17%, respectively (see Table 7).

26 BME's market share reached 55.5% of total trading subject to non-discretionary market rules in the fourth quarter of 2021, while it stood at 53.3% for the year as a whole.

Trading in Spanish equities admitted to trading on Spanish stock exchanges[1]

TABLE 7

Amounts in millions of euros

	2018	2019	2020	2021	III 21	IV 21	I 22
Total	**930,616.1**	**805,833.0**	**780,343.5**	**690,205.8**	**150,830.9**	**192,056.5**	**222,262.9**
Admitted to SIBE electronic platform	930,607.1	805,826.6	778,341.0	690,198.4	150,830.5	192,054.8	222,260.7
BME	579,810.4	460,267.4	418,512.6	365,170.2	77,726.6	105,892.4	106,560.5
Cboe Equities[2]	278,361.0	256,772.5	275,682.4	238,466.3	54,457.9	66,305.7	90,240.6
Turquoise	42,833.4	30,550.6	23,242.2	23,101.3	5,549.7	5,476.8	5,685.3
Other	29,552.2	58,236.1	62,903.8	63,460.6	13,096.3	14,379.9	19,774.3
Open outcry	8.2	6.2	2.5	7.4	0.4	1.6	2.3
Secondary market	0.8	0.1	0.0	0.0	0.0	0.0	0.0
Pro memoria							
Foreign equities traded through BME	3,517.1	3,480.5	4,273.8	4,236.0	1,106.5	1,118.3	2,167.5
BME MTF Equity[3]	4,216.3	4,007.7	3,929.0	3,536.5	639.8	1,110.4	933.0
Latibex	151.6	136.6	79.5	48.8	7.9	21.7	29.4
ETF	3,027.6	1,718.0	2,551.4	1,549.0	404.5	398.7	556.9
Total trading through BME	590,732.0	469,616.6	429,348.5	374,655.6	79,885.7	108,543.1	110,249.5
% Spanish equities traded through BME/total Spanish equities	62.6	57.4	53.9	53.3	51.9	55.5	48.3
Systematic internalisers[4]	**143,956.9**	**141,308.3**	**144,694.4**	**48,469.9**	**11,077.5**	**10,759.6**	**10,912.6**

Source: Bloomberg and own compilation by the authors.

1 This includes the trading of Spanish equities subject to market rules or MTF (lit plus dark). Spanish shares on Spanish stock exchanges are those with a Spanish ISIN that are admitted to trading on the regulated market of Bolsas y Mercados Españoles (BME), i.e., not including the Alternative Stock Market (MAB), currently BME MTF Equity. Foreign equities are those admitted to trading in the regulated BME market with an ISIN that is not Spanish.

2 Includes trading that until 2020 was carried out through Chi-X and BATS, which since January 2021 has moved to Amsterdam because of Brexit.

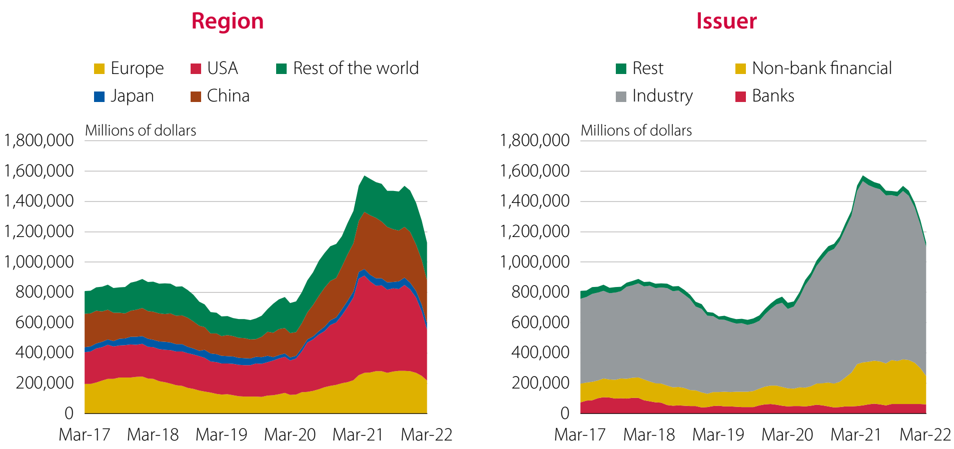
3 Called MAB (Alternative Stock Exchange) until September 2020. This MTF has three segments: BME Growth (on which growth companies and Spanish real estate investment funds are listed), BME IIC (on which open-ended collective investment companies (SICAVs) and hedge funds are listed) and BME ECR (on which venture capital firms are listed).

4 Data estimated by the CNMV with data from the transaction reporting.

Likewise, trading carried out through systematic internalisers was less than 5% of the total Spanish securities trading. This percentage, which is estimated taking the total trading as the sum of trading subject to non-discretionary market rules and that carried out through systematic internalisers, is the lowest value seen in recent years. In addition, it consolidates the downward trend of this type of trading observed in the past year and represents a significant advance towards meeting one objective of the MiFID II regulation, which is to shift part of the trading in equity securities to trading venues which operate according to non-discretionary market rules.

The volume of equity issues in international financial markets decreased significantly during the first quarter of the year (in year-on-year terms). This amount was close to US$133 billion in the quarter, well below the US$475 billion one year previously. Decreases were seen in all regions, with the United States and Europe standing out, where issued volumes stood at around US$28 billion and US$19 billion, respectively (vs. US$231 billion and US$82 billion, respectively, in 2021). The decrease was also noteworthy in other areas, with issues of equity instruments of around US$3.90 billion In Japan, US$37.70 billion in China (US$6.30 billion and US$90.10 billion in the first quarter of 2021, respectively). By sector, issues made by companies in the non-bank financial sector fell substantially (dividing by five with respect to the first quarter of 2021) as well as issues made by the industrial sector and utilities companies (dividing by more than three). The decline in the volume of equity issuance in the banking sector was less pronounced (14.5%). In absolute terms, it is worth noting the drop in issuance in the industrial sector and in the non-banking financial sector (almost US$231 billion and US$105 billion less, respectively).

International equity issues FIGURE 10



Source: Dealogic. Accumulated data for 12 months to 31 March.

Equity issues made in Spanish markets stood at €1,368.9 billion in the first quarter, less than half than one year previously. 70% of this amount corresponded to capital increases to raise funds (see Table 8). More than half of the amount of the capital increases was due to two accelerated book builds by Atrys Health and Edreams, while the rest were mostly transactions under the scrip dividend format to remunerate shareholders.

In the first quarter of the year, Atrys Health was listed on the continuous market by BME Growth. There were no initial public offerings (IPOs). The one IPO that had been announced, that of Ibercaja, was postponed due to market instability. Thus, while several IPOs are expected in the coming months, many of them might be delayed or cancelled while the current uncertainty persists. However, two takeover bids were announced: the first for Mediaset by Mfe-Mediaforeurope NV and the second for Metrovacesa by Fomento de Construcciones y Contratas, S.A.

Capital increases and public offerings

TABLE 8

	2019	2020	2021	II 21	III 21	IV 21	I 22
NUMBER OF ISSUERS[1]							
Total	**33**	**38**	**44**	**10**	**16**	**8**	**9**
Capital increases	33	38	44	10	15	8	9
Public offerings (for subscription of securities)	1	1	1	1	0	0	0
Initial public offering (IPO)	0	0	0	0	1	0	0
NUMBER OF ISSUANCES[1]							
Total	**52**	**38**	**52**	**14**	**19**	**9**	**10**
Capital increases	52	38	51	14	18	9	10
Public offerings (for subscription of securities)	1	1	1	1	0	0	0
Initial public offerings[2] (IPO)	0	0	1	0	1	0	0
CASH AMOUNT[1] (millions of euros)							
Capital increases with fund-raising	**8,240.6**	**8,903.1**	**13,673.0**	**8,752.8**	**2,567.4**	**156.2**	**946.1**
With pre-emptive right	4,729.8	6,837.2	7,060.4	7,032.8	6.3	21.2	0.0
No pre-emptive right	10.0	150.1	100.0	100.0	0.0	0.0	0.0
Accelerated book builds	500.0	750.0	0.0	0.0	0.0	0.0	741.0
Capital increases with non-monetary considerations[3]	2,034.2	233.0	3,525.3	56.0	1,390.1	0.0	17.4
Capital increases via conversion	354.9	162.4	109.5	68.0	41.4	0.0	0.0
Other	611.8	770.3	2,878.1	1,496.0	1,129.6	135.0	187.7
Scrip issue[4]	**1,565.4**	**1,949.0**	**1,264.9**	**195.8**	**131.1**	**165.5**	**422.8**
Of which, scrip dividends	1,564.1	1,949.0	1,243.6	195.8	131.1	144.2	422.8
Total capital increases	**9,806.0**	**10,852.1**	**14,938.1**	**8,948.7**	**4,898.8**	**321.7**	**1,368.9**
Initial public offering	**0.0**	**0.0**	**2,200.2**	**0.0**	**2,200.2**	**0.0**	**0.0**
***Pro memoria*: transactions on MAB[5]**							
Number of issuers	12	13	60	11	26	14	11
Number of issuances	17	14	77	15	32	19	14
Cash amount (millions of euros)	298.3	238.0	2,441.0	692.3	1,230.6	434.7	347.0
Capital increases	298.3	238.0	2,441,0	692.3	1,230.6	434.7	347.0
Of which, IPOs	229.4	173.0	1,654.0	405.5	869.6	379.1	216.5
Public offering for the sale of shares	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Source: BME and authors.

1 Trades registered with the CNMV. Does not include data from MAB, ETF or Latibex.

2 Transactions linked to the exercise of green shoe options are separately accounted for.

3 Capital increases for non-monetary consideration have been stated at market value.

4 In scrip dividends, the issuer gives existing shareholders the option of receiving their dividend in cash or converting it into shares in a bonus issue.

5 Trades not registered with the CNMV.

Study on the payment for order flow (PFOF) practice

EXHIBIT 3

In July 2021, the European Securities and Markets Authority (ESMA) issued a statement[1] warning of the risks involved in the payment for order flow (PFOF) practice for investor protection and its potential incompatibility with the MiFID II regulation. The European Commission subsequently proposed a ban on PFOF during the MiFID review. PFOF deals are payments that a financial intermediary receives if it sends the orders it receives from its clients to a specific trading venue.

In order to contribute to decision-making and the application of proper policies in this area, the CNMV carried out a study, published in March this year,[2] comparing the execution price of orders sent by a financial intermediary to a trading venue with which there is a PFOF agreement and the price of comparable transactions in other trading venues.

The database used in the analysis contained all transactions in Spanish shares carried out by a financial intermediary through a trading venue with which it had signed a PFOF agreement in the first half of 2021. The execution price of each transaction was then compared to the price of transactions on the same instrument executed at the same second on any of the ten most liquid trading venues for Spanish shares.

Specifically, 4,676 transactions carried out in the PFOF trading venue, with 50 unique ISIN codes, were included, and 48,773 comparable transactions were identified in the ten most liquid trading venues for Spanish shares.

The methodology applied in the analysis was based on the methodology proposed by the Dutch financial markets authority (AFM)[3] and compared the transaction price on the PFOF trading venue with the range of prices in comparable transactions carried out on the other ten trading venues. Transaction prices were classified as better, similar or worse based on the following criteria:

– In a buy transaction, the PFOF trading venue is considered to offer worse execution when the price obtained is higher than the maximum recorded in any of the comparable transactions carried out on the other ten trading venues. Likewise, the transaction is considered to offer better execution if the price is lower than the minimum registered for comparable transactions.

– In a sell transaction, the PFOF trading venue is considered to offer worse execution when the price obtained is lower than the minimum registered in any of the comparable transactions carried out on the other ten trading venues. Likewise, the transaction is considered to offer better execution if the price is higher than the maximum registered for comparable transactions.

– If a price is obtained on the PFOF trading venue that falls within the range of prices recorded for comparable transactions carried out on the other ten trading venues, then the quality of execution is considered to be similar.

The methodology provides a conservative ranking of better/worse execution as it requires the execution price of the PFOF trading venue to fall outside the range of all prices observed on the other ten trading venues for comparable transactions. The document published by the CNMV details some of the limitations of this methodology.

The results of the analysis are shown in Table E3.1. 86.4% of the transactions carried out on the PFOF trading venue are classified as offering worse execution, with a price deterioration of 0.14%. 10.2% are considered to be offer similar execution and only 3.3% fall into the category of better execution. On average, a trade executed on the trading venue with a PFOF agreement carries a loss of €1.09 for every €1,000 traded, when compared with the worse execution price observed on the ten most liquid trading venues for Spanish equities.

Execution prices on the PFOF trading venue TABLE E3.1

	Percentage of transactions (%)	Average price difference[1] (%)	Price difference per €1,000 traded[1]
Worse	86.4	-0.14	-1.41
Better	3.3	0.24	2.36
Similar	10.2	0.05	0.46
Total	**100.0**	**-0.11**	**-1.09**

Source: CNMV.

1 A positive number indicates a price improvement, while a negative number indicates a price deterioration.

Figure E3.1 shows the distribution of the differences in the execution prices.

Distribution of the difference in prices FIGURE E3.1

Source: CNMV.

The above suggests that this practice does not usually work for the benefit of end customers, although to determine the full effect of PFOF agreements for investors (worse execution prices, but lower or non-existent fees) both the implicit components (quality of execution) and explicit components (fees) should be included. Only implicit costs have been included in this analysis.

1 ESMA (2021). *ESMA warns firms and investors about risks arising from payment for order flow and from certain practices by "zero-commission brokers"*. Public Statement.

2 CNMV (2022). *Payment for order flow: an analysis of the quality of execution of a zero-commission broker on Spanish stocks.* Available at: https://www.cnmv.es/DocPortal/Publicaciones/OTROS/Analisis_PFOFen.pdf

3 AFM (2022). *Assessing the quality of executions on trading venues: The "Comparative Pricing Model".*

3.2 Fixed income markets

In the fixed income markets, yields followed an upward trend in the first quarter of 2022 on expectations of an increase in official interest rates. The end of the expansive monetary policy implemented by central banks in the world's leading economies took the form of a reduction or elimination of their purchase programmes and the increase (or expected increase)[27] of official interest rates. This has led to a

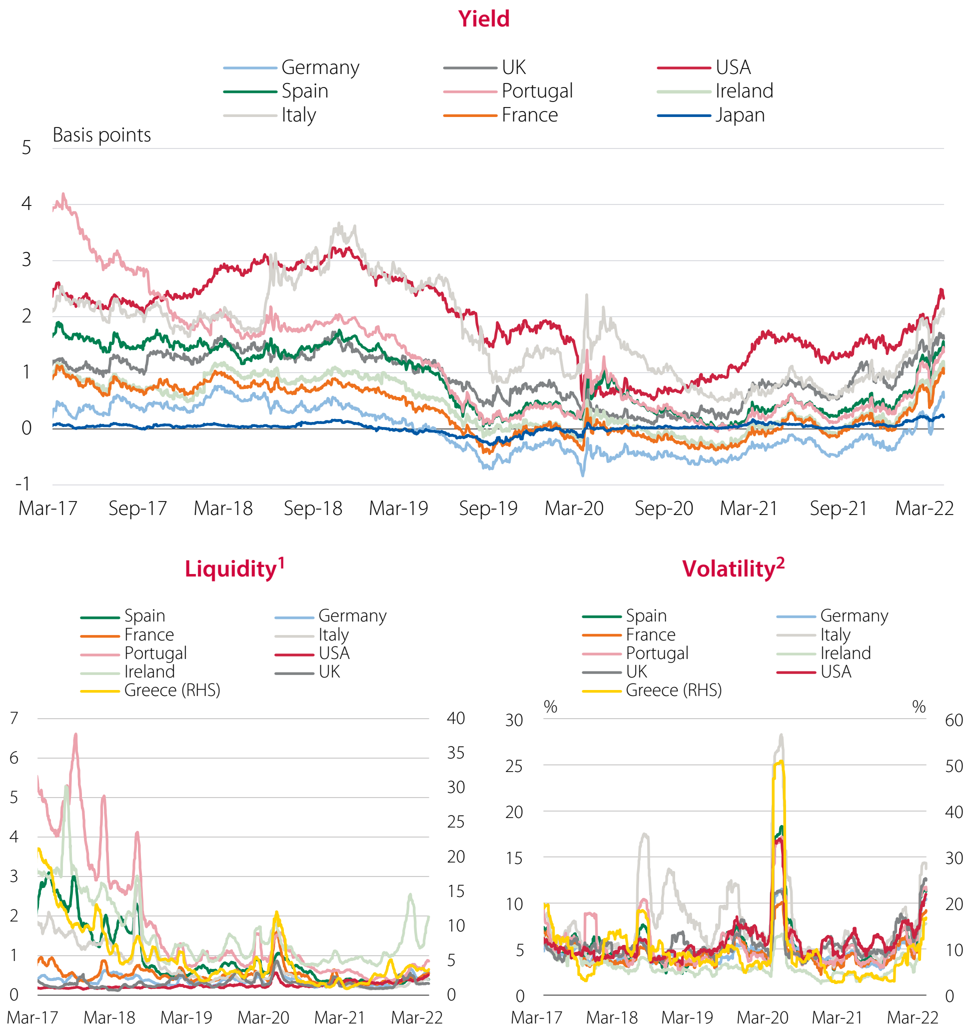
27 The ECB has not announced any rate hikes but the market has discounted up to two hikes this year.

rise in interest rates on public debt. Combined with the existing uncertainty and the repercussions of the war between Russia and Ukraine, it has triggered an increase public and private risk premiums.

Interest rates

The yield on the 10-year sovereign bond increased sharply in the main advanced economies in a context of rising inflation and a tougher message from central banks. In the United States, the interest rates on public debt were risen by 83 bp to 2.33%, in the first quarter of the year, driven by the rise in official interest rates in March and the expectation that more hikes will occur during the year. It should be noted that there the yield curve from the 2 year segments onwards flattened, which has signalled recession in the past.

10-year sovereign bond market indicators FIGURE 11



Source: Bloomberg, Refinitiv Datastream and own calculations. Data to 31 March.

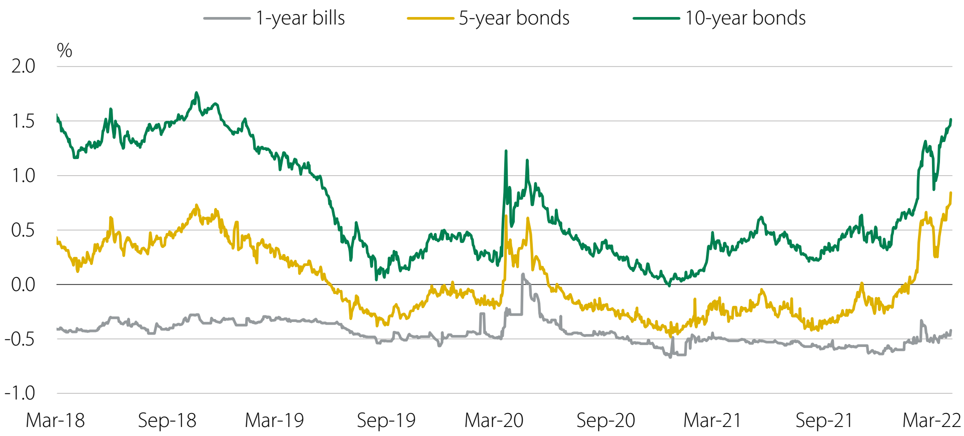
1 Monthly deviation of the daily bid-ask spread of 10-year sovereign bond yields.

2 Annualised standard deviation of daily changes in the prices of 40-day sovereign bonds.

In euro area countries, the increase in sovereign bond yields was also large, ranging between 73 bp and 136 bp in Germany and Greece, respectively. The yield on the German sovereign bond, which had been in negative territory since May 2019, turned positive in January 2022 and stood at 0.55% at the end of March (the yield closest to zero in the euro area). Yields of close to 1% were seen in the Netherlands (0.80%), Finland (0.89%), Austria (1.0%), France (0.99%), Ireland (1.06%) and Belgium (1.03%). In the peripheral euro area countries, the increases in long term sovereign debt yields were similar to those of the other the European countries, and their levels remain high. Thus, at the end of March these yields stood at 2.67% in Greece, 2.04% in Italy, 1.45% in Spain and 1.37% in Portugal. In the United Kingdom, the increase in the 10-year bond yield was 64 bp, standing at 1.61% in March, while the smallest rise was seen in Japan (14 bp), down to 0.21% at the end of the first quarter of the year.

In Spain, the yields on short term private fixed income and public debt saw different performances in the first quarter, with small rises and some drops, respectively. Despite the prospect of a forthcoming tightening of ECB monetary policy, short-term public debt yields continued to present negative values for the seventh consecutive year under the protection of the same, purely expansionary, monetary policy. Although the institution has announced a reduction in the size of its debt purchase programmes, it continues to purchase public debt for amounts that are still sizeable and has kept official interest rates unchanged. Thus, the secondary market yield on 3, 6 and 12 month treasury bills was -0.66%, -0.58% and -0.48%, respectively, an increase of between 5 and 12 bp on the values seen in December (see Table 9).

Interest rates on Spanish public debt FIGURE 12



Source: Refinitiv Datastream.

The performance of short-term private fixed-income assets was uneven, with decreases in the first quarter of the year. This is explained by the composition of the sample of companies available to calculate the averages. In previous quarters, a large amount of commercial paper was issued in the Alternative Fixed Income Market (MARF) by smaller companies, which, while financed at a low cost, have higher interest rates than those of large companies and raise the average interest rates of the sample. In the last quarter, the amount of the issues made by the smallest companies in the MARF was smaller, so the sample included a larger number of issues made by large companies that benefit from lower issuance costs and, consequently, reduce the average rates of the sample. Spanish market data show that in March the average issuance yields on commercial paper in the primary market ranged from 0.21% for the 3-month instrument to 0.68% for 12-month paper, values that were substantially lower than at year-end 2021 (see Table 9).

Short-term interest rates[1] TABLE 9

%

	Dec-19	Dec-20	Dec-21	Jun-21	Sep-21	Dec-21	Mar-22
Treasury bills							
3 month	-0.58	-0.70	-0.78	-0.58	-0.62	-0.78	-0.66
6 month	-0.47	-0.59	-0.63	-0.57	-0.59	-0.63	-0.58
12 month	-0.48	-0.63	-0.60	-0.54	-0.57	-0.60	-0.48
Corporate commercial paper[2]							
3 month	0.20	0.49	0.38	0.00	0.24	0.38	0.21
6 month	0.52	0.55	0.50	0.27	0.47	0.50	0.45
12 month	0.71	1.44	0.81	0.67	0.56	0.81	0.68

Source: Refinitiv Datastream and CNMV.

1 Monthly average of daily data.

2 Issuance interest rates.

Medium- and long-term debt rates rose sharply in the quarter, incorporating, as already mentioned, expectations of a tightening of monetary policy. The rate increases were observed in all sections of the curve, which began to show positive values from the 2-year term. Its performance was not only shaped by these expectations, but also by the volume of purchases made by the monetary authority.[28] The increases were greater in the middle and longer sections of the curve. As shown in Table 10, the yield on 3, 5 and 10-year government debt in March stood at 0.20%, 0.56% and 1.27%[29] (monthly average), respectively, which is between 37 and 90 bp more than in December.

The performance of private fixed income was similar, with significant increases in rates observed in most sections of the curve. Although a great many large corporate debt issuers have benefited from the ECB's debt purchase programmes,[30]

28 The PSPP (Public Sector Purchase Programme) is currently in force within the framework of the APP (Asset Purchase Programme), while the PEPP (Pandemic Emergency Purchase Programme) ended in March. Under the first, up until the end of March the ECB had acquired public debt for a net amount of €2.53 trillion, of which €307.66 billion corresponded to Spanish securities; while within the framework of the PEPP programme, it had acquired public debt for a net amount of €1.65 trillion, of which €189.66 billion corresponded to Spanish securities. Therefore, the amount of Spanish debt in the hands of the ECB was over €497 billion (45% of the balance of long-term State debt).

29 The 10-year rates exceeded 1.5% in March, reaching their highest level since the end of 2018.

30 Up until the end of March, the Corporate Sector Purchase Programme (CSPP) had accumulated a volume of purchases amounting to €328.70 billion, of which almost 23% had been acquired in the primary market. In the same period, the ECB had accumulated corporate bonds for the amount of €40.31 billion and commercial paper for a value of €5.86 billion acquired under the PEPP.

these will be substantially reduced from now on, which will push up both the yields on these issuers and the yields on issues that are not part of the range of eligible assets.[31] At the end of March, the yield on private debt assets at 3, 5 and 10 years stood at values of 0.49%, 0.78% and 1.46%, respectively, between 37 and 90 bp more than in December. In addition, they imply a risk premium of between 19 and 29 bp with respect to public debt assets.

Medium- and long-term bond yields[1]

TABLE 10

%

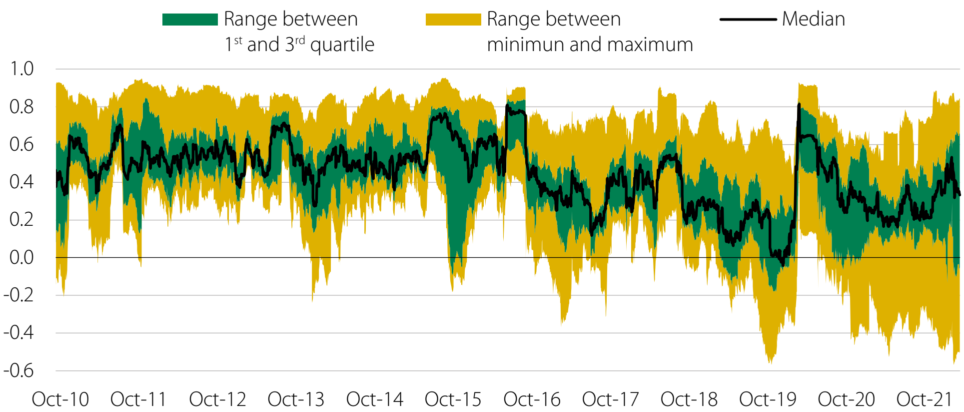
	Dec-19	Dec-20	Dec-21	Jun-21	Sep-21	Dec-21	Mar-22
Public sector fixed income							
3 year	-0.29	-0.53	-0.46	-0.42	-0.51	-0.46	0.20
5 year	-0.06	-0.42	-0.18	-0.22	-0.32	-0.18	0.56
10 year	0.45	0.05	0.43	0.44	0.36	0.43	1.27
Private fixed income							
3 year	0.20	-0.20	0.12	-0.16	-0.05	0.12	0.49
5 year	0.23	-0.13	0.13	-0.15	-0.02	0.13	0.78
10 year	0.79	0.41	0.56	0.58	0.44	0.56	1.46

Source: Refinitiv Datastream and own calculations.

1 Monthly average of daily data.

Correlation indicator between asset classes[1, 2]

FIGURE 13



Source: Refinitiv Datastream and own calculations. Data to 31 March.

1 The correlation indicator between asset classes includes pairs of correlations calculated using daily data in three-month windows. The asset classes are sovereign debt, private fixed income of financial and non-financial entities and securities of the Ibex 35, financial companies, utilities and other sectors.

2 As from 7 June 2017, the CDS of the 5-year senior debt of Banco Popular has been excluded from the calculation of ROI on the asset class corresponding to financial fixed income.

The correlation between the prices of the different classes of financial assets continued to follow an upward trend, as observed in the second half of 2021. In February, this indicator reached its highest levels since the end of 2020 (see Figure

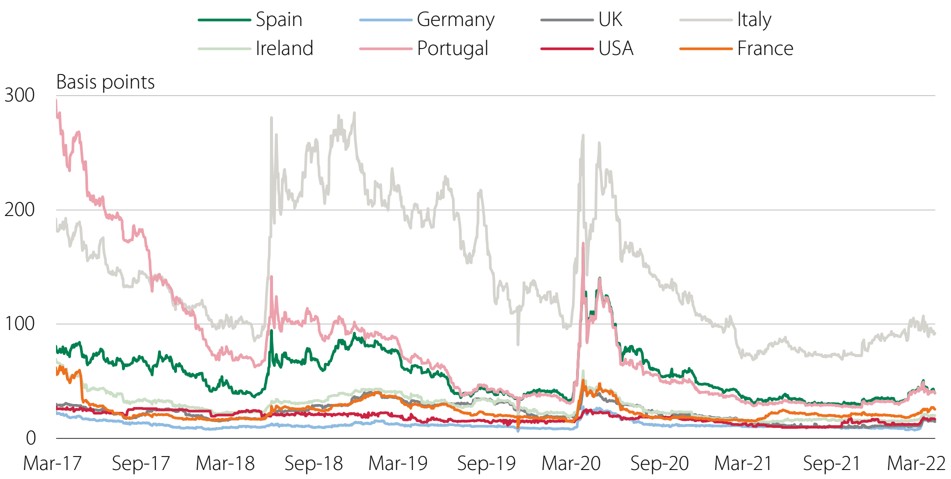
31 The ECB requires a minimum investment grade rating for purchases.

13). The increase in correlation is due to the similar performance of debt and credit asset prices with respect to the price of shares, since both correct their valuations and fall as expectations of an increase in interest rates grow.

Risk premiums

Sovereign credit risk premiums of developed countries (assessed through 5-year CDS contracts) increased slightly in the first quarter of 2022. This breaks the downward trend observed in 2021 after the highs prompted by the uncertainty caused by the COVID-19 crisis. These increases ranged from 1 bp in Japan to 18 bp in Greece. The highest risk premiums were observed during the first week of March, days after the start of the war between Russia and Ukraine, and subsequently decreased. In the euro area, although expectations of interest rate hikes could be expected to trigger larger increases in the risk premiums of the most indebted economies, this has not occurred and spreads remain relatively stable. In Spain, the risk premium grew by 5 bp in the quarter (to 40 bp) and in France and Germany by 6 bp (to 25 bp and 15 bp, respectively). In the United States and the United Kingdom, the increases were slightly lower March 2022 at 3 bp and 4 bp (to 17 bp and 15 bp, respectively).

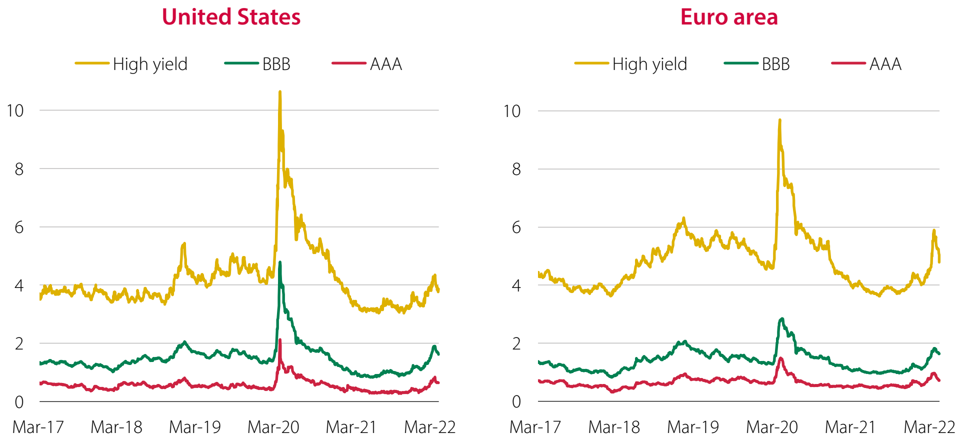
Credit risk premiums for sovereign debt (5-year CDS) FIGURE 14



Source: Refinitiv Datastream. Data to 31 March.

Credit risk premiums in the private fixed income markets of the developed economies showed increases in all debt tranches, which were somewhat larger than those observed for sovereign risk premiums. The increases were more significant in the euro area than in the United States for assets with lower credit quality while the opposite occurred for AAA-rated debt. In the United States, the risk premium on high yield debt increased by 46 bp in the first quarter of the year, to 387 bp and the premium on BBB-rated debt rose by 45 bp, to 162 bp, and that of AAA-rated debt increased by 29 bp, to 65 bp. In the euro area, the increase in corporate debt credit risk premiums was 64 bp in the high yield segment, to 479 bp; 47 bp in the BBB segment, to 164 bp, and less pronounced in the AAA tranche, 12 bp, to stand at 54 bp at the end of March 2022. As shown in Figure 15, like sovereign credit risk premiums, the most significant rise occurred during the first weeks of March, probably influenced by the start of the war between Russia and Ukraine, and a decrease was subsequently observed. In the high yield segment, risk premiums reached a high of 566 bp in the euro area and 436 bp in the United States, figures that were lower than the highs recorded in the COVID-19 crisis.

Private debt risk premiums FIGURE 15
Spread compared to 10-year sovereign debt[1]



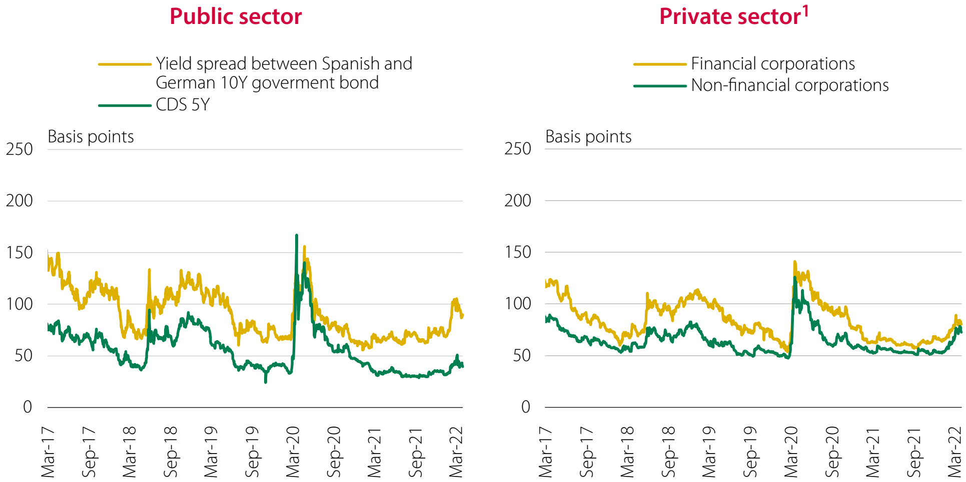
Source: Refinitiv Datastream and own calculations. Data to 31 March.

1 In the euro area in relation to the German sovereign debt.

In Spain, the sovereign risk premium, measured as the spread with the yield on German sovereign debt, closed the quarter at 89 bp, although it exceeded 100 bp during the period, the highest level recorded since the first half of 2020. This indicator, calculated as the difference between the 10-year Spanish and German sovereign debt yield, ended the quarter above the value recorded at the beginning of the year (77 bp). Similar increases in risk premiums (between 8 bp and 15 bp in most cases) were observed in other euro area countries. The performance of the risk premium, which is conditioned in the short term by the support provided by the ECB through its sovereign debt purchases, will be affected by the extent to which the size of these purchases are reduced, the evolution of the economic situation and the performance of public finances (where high levels of indebtedness are already being seen).

Risk premium of Spanish issuers

FIGURE 16



Source: Refinitiv Datastream and own calculations.

1 Simple average of the 5-year CDS of a sample of entities.

The risk premiums of the private subsectors of the economy also increased, although the scale of these rises was greater for non-financial companies than for banks. Although both types of companies are being negatively affected by the reduction in the ECB's debt purchases, the impact of the end of the PEPP programme is more significant for corporate debt than for bank debt.[32] Likewise, although both sectors are affected by the outlook for a slowdown economic growth, financial institutions will continue to benefit from financing under advantageous conditions and from the foreseeable positive impact of the rise in interest rates on their margins, which for non-financial companies represents an increase in financial expenses. As shown in Figure 18, the average CDS premiums of financial entities stood at 80 bp at the end of March, 16 bp more than at the beginning of the year, and those of non-financial companies stood at 72 bp, 19 bp more.

Issues

Gross long-term debt issues made in international markets in the first quarter of the year (half-yearly data) decreased by 20.8% year-on-year to stand at US$6.7 trillion.[33] This decline was mainly due to the decrease in issues from the non-financial sector and the public sector (close to 25% in both cases). By region, decreases were observed in the main economies, the most notable being that of the United States (26.7%, to US$3.2 trillion), followed by Europe (17.3%, to US$1.4 billion) and Japan (13.2%, to US$723 billion).

32 At the end of March, the PEPP purchase programme had accumulated corporate debt and commercial paper amounting to €40.31 billion and €5.86 billion, respectively, compared to €6.07 billion of covered bonds (mortgage covered bonds) issued by financial entities.

33 The decline in net long-term debt issuance was stronger (56.6%, to US$1.4 trillion) and was due the drop in gross issuance and to the slight increase in maturities as a whole .

International net fixed income issues FIGURE 17

Source: Dealogic. Half-yearly data. Data for the first haft of 2022 are to 31 March, but are shown as their half-yearly equivalent for purposes of comparison.

Gross sovereign debt issues fell by 24.5% as a whole compared with the first half of 2021, to US$4.1 trillion. This decrease is related to the lower financing needs of the public administration service in 2021 compared with 2020, a year in which the pandemic led to a substantial rise in spending. Declines were seen across all regions, the sharpest were in Europe and the United States, where they dropped by 30.7% and 27.5%, to US$647 billion and US$2.2 trillion, respectively. In Japan, the fall was less pronounced at 9.5%, to US$616 billion.

Gross debt issues by private sectors also decreased compared with the first half of 2021, especially in the non-financial sector. The decrease was 26%, to US$983 billion, with the reduction in long-term issues made by this sector in Japan standing out (41.8%, to US$54 billion). The United States and Europe also recorded declines compared with the same period in 2021, although to a lesser extent (34.3%, to US$275 billion and 25.1%, to US$461 billion, respectively). As we have already seen, gross issues in the financial area also fell, albeit to a lesser extent (4.4%, to US$1.6 trillion) and unevenly between regions. While the United States and Japan saw drops of 24.4% and 10.8%, to US$528 billion and $US53 billion, respectively, Europe saw gross issuance from the financial sector rise by 8.5%, to US$508 billion (47.1% in net terms).

The amount registered with the CNMV of fixed income issues made by Spanish issuers stood at €42.86 billion in the first quarter of 2022, 81% more than one year previously. In contrast, issues made abroad in the first two months of the year were €13.23 billion, less than half the figure recorded in the same period of 2021.

There was significant growth in the issuance of mortgage- and regional covered bonds and securitisations. Issues of these assets showed the largest increases in both absolute and relative terms: with volumes issued in the first quarter almost five and three times larger, respectively, than in 2021. Likewise, the decrease in bond and debenture issues also stands out, due to the lower amount issued by the SAREB,[34] which registered two issues for an aggregate amount of €4.24 billion compared with €9.47 billion in 2021. Issuance of mortgage covered bonds increased strongly, building on the trend seen in 2021, while the significant growth in securitisation issues could be associated with the use of these assets as collateral to obtain financing in forthcoming ECB liquidity auctions. Although the data corresponds only to one quarter, and it is too early to venture a strong conclusion, it would seem that the measures deriving from Law 5/2021, which exempts issuers from the obligation of preparing a prospectus for issues of commercial paper with a maturity less than 365 days, and others implemented by the CNMV to simplify and streamline the issuance process, are having a positive impact.

Issues made on the MARF totalled €3.11 billion in the first quarter, 22.5% more than in the same quarter of 2021. Most this figure corresponded to commercial paper (97%). The number of issuers stood at 70 (17 more than in the previous year), including companies such as El Corte Inglés, MásMóvil or Construcciones y Auxiliar de Ferrocarriles.

Debt issues made by Spanish issuers abroad in the first two months of the year fell to €13.23 billion. In the absence of a month of data, this amount lower than the amount observed in the first quarter of 2021, for both short-term debt and long-term debt. If this trend consolidates, it could be concluded that the large issuers, especially non-financial companies, have covered a large part of their financing needs in 2021 and that in the current context of rate hikes, lower ECB debt purchases and market volatility, have chosen to cut back their issues. Debt issues of subsidiaries of Spanish companies abroad stood at €13.61 billion (data to February), 9% less than in 2021. Of this amount, almost 60% corresponded to financial institutions and the rest to non-financial companies.

34 Sociedad de Gestión de Activos procedentes de la Reestructuración Bancaria (Asset Management Company for Assets arising from Bank Restructuring) .

Gross fixed income issues registered with the CNMV

TABLE 11

	2018	2019	2020	2021	2021		2022
					III	IV	I[1]
NOMINAL AMOUNT (millions of euros)	**101,296**	**90,161**	**132,111**	**101,171**	**25,485**	**27,320**	**42,858**
Mortgage covered bonds	26,575	22,933	22,960	28,700	9,450	6,750	14,300
Regional covered bonds	2,800	1,300	9,150	5,500	0	2,000	3,040
Non-convertible bonds and debentures	35,836	29,602	33,412	25,257	807	13,274	4,372
Convertible/exchangeable bonds	0	0	0	0	0	0	300
Securitisation bonds	18,145	18,741	36,281	18,376	7,184	488	14,022
Corporate commercial paper[2]	15,089	15,085	22,292	20,180	7,293	3,597	6,824
Securitisation	240	0	0	0	0	0	0
Other commercial paper	14,849	15,085	22,292	20,180	7,293	3,597	6,824
Other fixed income issues	0	1,500	6,266	623	0	0	0
Preferred shares	2,850	1,000	1,750	2,335	750	1,210	0
***Pro memoria*:**							
Subordinated issues	4,923	3,214	14,312	4,600	1,806	563	951
Secured issues	0	0	0	0	0	0	0
					2020		2021
Abroad by Spanish issuers	**2018**	**2019**	**2020**	**2021**	**III**	**IV**	**I[3]**
NOMINAL AMOUNT (millions of euros)	**87,846**	**100,321**	**90,201**	**123,250**	**26,726**	**34,063**	**13,231**
Long-term	36,913	53,234	46,122	60,644	11,001	16,535	6,968
Preferred shares	2,000	3,070	1,850	3,820	1,000	750	0
Subordinated debentures	2,250	1,755	0	1,350	0	750	0
Bonds and debentures	32,663	48,409	44,272	55,474	10,001	15,035	6,968
Securitisation bonds	0	0	0	0	0	0	0
Short term	50,933	47,087	44,078	62,606	14,657	17,520	6,264
Commercial paper	50,933	47,087	44,078	62,606	14,657	17,520	6,264
Asset securitisation	0	0	0	0	0	0	0
***Pro memoria*: gross issues of subsidiaries of Spanish companies in the rest of the world**							
	2018	**2019**	**2020**	**2021**	**2021**		**2022**
					III	**IV**	**I[3]**
NOMINAL AMOUNT (millions of euros)	**92,600**	**92,342**	**71,048**	**69,190**	**14,216**	**17,735**	**13,610**
Financial institutions	43,549	57,449	42,120	40,204	8,922	10,914	8,127
Non-financial companies	49,051	34,893	28,928	28,986	5,294	6,821	5,483

Source: CNMV and Bank of Spain.

1 Data as of 31 March.

2 The figures for corporate commercial paper issues correspond to the amounts placed.

3 Data as of 28 February.

The amount of ESG debt issues made by Spanish issuers stood at €3.74 billion in the first quarter (€3.82 billion in the same period of the previous year). It should be noted that although the amount issued was relatively similar in both years, five issues were made this year (four green and one social issue), which is lower than the 18 issues registered in 2021. All of these, except one, were carried out abroad.

In terms of activity registered in Spanish trading venues, the sharp drop in trading on the SEND market and the increase in trades made through organised trading facilities (OTFs) stand out. Trading on the SEND market stood at €5.18 billion in the first quarter of the year, about a quarter of the figure recorded in the same period in 2021. Almost 60% of this amount corresponded to foreign public debt and the rest almost entirely to Spanish public debt. In contrast, trading on the three OTFs authorised by the CNMV reached €397.05 billion in the first quarter, 2.5 times more than in the same period of the previous year, of which almost €132 billion corresponded to Spanish public debt. Likewise, it should be noted that almost 63% of total trading took place through the OTF "Tradition Financial Services Spain", which was authorised by the CNMV in July 2021.

4 Market agents

4.1 Investment vehicles

Financial CISs

Investment funds (IFs)

The assets of investment funds registered in Spain, which saw a discontinuation of their growth trend in 2020 as a result of the pandemic, staged a strong comeback in 2021, standing at €324.70 billion at the end of the year, 16.1% more than at the end of the previous financial year. More than 60% of this increase in assets was due to new inflows of funds, compounded by the high return offered by assets in their portfolios, mainly because of the good performance of the equity markets on a global level. Thus, for the year as a whole, the weighted average return of these funds stood at 6.3% (1.8% in the fourth quarter). Net subscriptions were also positive in all quarters and the cumulative inflow of funds in the 12 months totalled €27.62 billion, a figure that had not been seen since 2003. However, it is worth mentioning that after the second quarter, while still large, net subscriptions fell to €3.64 billion in the last three months of the year.[35]

As in the two previous years, the largest investments corresponded to high risk funds in a strategy of searching for yield (35% in global and equity funds) and to most conservative fund formats, such as fixed income funds (38%).[36] Thus, in the year as a whole, the global funds category attracted the greatest volume of net subscriptions, with a total of €22.76 billion, of which more than €18 billion were concentrated in the second quarter,[37] followed by the fixed income category, with a figure of €7.67 million. Mixed fixed income and international equity funds also saw strong net subscriptions, with €6.58 and €5.26 billion, respectively. Meanwhile, the largest redemptions (in net terms) corresponded to guaranteed equity funds, with an outflow of €2.94 billion,[38] and absolute return funds, with €3.04 billion (see Table 12).

35 In fact, provisional data for January seem to indicate that net subscriptions could have entered negative ground.

36 These percentages have been calculated gross and do not include subscriptions resulting from a change of fund category.

37 It is important to mention that just over €5.60 billion of this figure corresponded to existing investment funds that had previously belonged to other categories.

38 This category has been experiencing continuous outflows of funds for 12 years, and in this period has lost more than 70% of its assets under management, which stand at just over €8 billion.

The return offered by the fund portfolio in 2021 was 6.3%, with a positive performance in all four quarters of the year. Returns ranged between 0.1% in the third quarter to 2.34% in the first. As shown in Table 13, almost all categories obtained a positive return in the year as a whole, with the exception of fixed income funds (-0.3%) and guaranteed fixed income funds (-1.3%). In contrast, funds with the highest percentage of equities in their portfolios experienced the greatest revaluations thanks to the good performance of these markets at a global level in 2021. Thus, euro and international equity funds recorded returns of 16.7% and 21.1%, respectively.

Net investment funds subscriptions

TABLE 12

Millions of euros

	2019	2020	2021	2021			
				I	II	III	IV
Total investment funds	**2,467.5**	**660.3**	**27,620.3**	**7,009.8**	**10,633.7**	**6,337.3**	**3,639.6**
Fixed income[1]	10,732.6	2,062.6	7,674.2	1,324.9	1,237.0	2,632.1	2,480.2
Mixed fixed income[2]	-1,506.1	2,619.5	6,574.7	4,789.7	-705.8	761.9	1,728.9
Mixed equity[3]	3,288.8	1,601.4	-4,179.3	1,375.3	-8,279.2	1,091.9	1,632.7
Euro equity[4]	-3,588.2	-2,007.7	13.8	82.3	135.8	-88.8	-115.3
International equity[5]	4,113.8	2,633.1	5,260.9	2,082.0	1,257.6	600.9	1,320.5
Guaranteed fixed income	-282.6	-707.4	-1,787.1	-226.2	-335.5	-228.7	-996.8
Guaranteed equity[6]	-1,857.0	-2,254.2	-2,949.3	-299.6	-1,406.6	-943.3	-299.9
Global funds	-2,553.9	-1,501.2	22,755.0	1,075.3	18,527.0	4,878.0	-1,725.3
Passive management[7]	-3,026.8	-23.8	-2,700.6	-862.2	-294.8	-500.6	-1,043.0
Absolute return	-2,852.9	-1,761.9	-3,041.9	-2,331.7	498.4	-1,866.2	657.6

Source: CNMV.

1 Until I-2019 includes the following categories (CNMV Circular 3/2011): euro fixed income, international fixed income, money market and short-term money market. From II-2019 includes the following categories (CNMV Circular 1/2019): short-term public debt constant net asset value money market funds (MMF), short term low volatility net asset value MMF, short term variable net asset value MMF, standard variable net asset value MMF, euro fixed income and short-term euro fixed income.

2 Includes euro mixed fixed income and international mixed fixed income.

3 Includes euro mixed equity and international mixed equity.

4 Includes euro equity.

5 Includes international equity.

6 Includes: GIF and partial guarantee.

7 Until I-2019 includes passively managed CIS (CNMV Circular 3/2011). From II-2019 includes the following categories (CNMV Circular 1/2019): Passively managed CIS, CIS that replicate an index and CIS with a specific non-guaranteed target return.

Funds offered by management companies continued to decline in 2021, with the number of vehicles decreasing from 63 to 1,452.[39] Five new firms were registered and 139 were deregistered. As in 2020, the largest decreases were seen in passive management funds, with 30 fewer funds, and in guaranteed equity funds, with a reduction of 19. In contrast, international equity funds, which had increased in the two previous years (with 40 more funds in total), grew further in 2021 with 30

39 Between January and February this year, the number of investment funds remained constant.

institutions added. The supply of global funds also increased significantly, with 15 more than in 2020.

183 CISs had benefited from Articles 8 and 9 of the European disclosure regulation at the end of the year.[40] These articles indicate the pre-contractual disclosures that must be satisfied by financial products that promote environmental or social characteristics (Article 8) and financial products whose objective is sustainable investments (Article 9). 176 of these (170 investment funds, two hedge funds and four SICAVs) had adhered to Articles 8 and seven (six investment funds and one hedge fund) had adhered to Article 9. The number of unitholders in these vehicles was 5,057,460 and they had assets of €68.40 billion.

The number of unitholders increased by 24.9% in 2021, with a rise of more than one million investors in the last quarter alone, closing the year with a total of 15.8 million.[41] In line with the data on net subscriptions, the fixed income and global fund categories saw the greatest increases in 2021, with 1.3 million more unitholders in the former and just under 600,000 in the latter. In contrast, guaranteed equity funds marked the largest drop in the number of unitholders, with a decrease of more than 90,000 (-25.6%).

The liquidity conditions of the private fixed income portfolio of investment funds remained satisfactory in 2021, with the weight of assets with reduced liquidity dropping slightly to 3.8% (4.2% in 2020). It is important to note that this percentage has been gradually decreasing (with some fluctuations) from the high reached in 2010, when these assets represented more than 30% of the private fixed income portfolio. As of 31 December 2021, the total volume of assets considered to be of reduced liquidity was €2.47 billion, representing 0.76% of total investment fund assets. As shown in Table 14, in the year there was an increase, in absolute terms, in less liquid assets in the non-financial fixed income portfolio, which stood at €1.29 billion, €216 million more than in 2020. The weight of less liquid assets in the securitisation portfolio fell by more than 7 pp in 2021, accounting for 49.7% of the total (€353 million), after representing more than 90% in 2018. In general terms, the improvement in liquidity was a consequence of the large number of assets with a residual life of less than one year.

40 Corresponding to a total of 188 compartments.

41 It should be noted that the same unitholder is counted for each contract held in different funds, so that the registered increase could be sometimes due to diversification by the same investor into a greater number of funds.

Investment funds. Key figures*

TABLE 13

Number	2019	2020	2021	2021 I	II	III	IV
Total investment funds	**1,710**	**1,644**	**1,611**	**1,642**	**1,629**	**1,604**	**1,611**
Fixed income[1]	281	276	266	279	272	265	266
Mixed fixed income[2]	173	174	181	181	182	183	181
Mixed equity[3]	185	186	192	188	186	187	192
Euro equity[4]	113	104	94	100	98	96	94
International equity[5]	263	276	307	278	285	295	307
Guaranteed fixed income	66	55	43	53	51	50	43
Guaranteed equity[6]	155	133	114	130	125	117	114
Global funds	255	248	263	252	253	252	263
Passive management[7]	133	118	88	114	110	93	88
Absolute return	84	72	61	65	65	64	61
Assets (millions of euros)							
Total investment funds	**279,377.4**	**279,694.5**	**324,701.0**	**292,865.2**	**309,047.2**	**315,632.6**	**324,701.0**
Fixed income[1]	78,583.2	81,015.9	88,422.8	82,209.7	83,503.3	86,173.0	88,422.8
Mixed fixed income[2]	40,819.9	43,200.4	50,869.7	48,373.9	48,143.1	48,904.9	50,869.7
Mixed equity[3]	28,775.8	30,432.7	28,141.1	32,601.3	24,893.5	25,970.6	28,141.1
Euro equity[4]	10,145.1	7,091.1	8,279.6	7,771.9	8,232.2	8,180.2	8,279.6
International equity[5]	34,078.9	37,722.5	51,222.2	42,746.1	46,464.6	47,217.0	51,222.2
Guaranteed fixed income	4,809.3	4,177.0	2,346.7	3,929.5	3,585.6	3,356.7	2,346.7
Guaranteed equity[6]	13,229.1	11,037.1	8,094.9	10,745.2	9,339.3	8,394.1	8,094.9
Global funds	43,041.9	40,944.5	67,591.0	43,120.7	62,913.0	67,783.8	67,591.0
Passive management[7]	14,073.8	14,014.3	12,500.4	13,571.5	13,587.1	13,137.3	12,500.4
Absolute return	11,818.3	10,057.4	7,231.2	7,793.7	8,383.9	6,513.4	7,231.2
Unitholders							
Total investment funds	**11,739,183**	**12,660,100**	**15,816,557**	**13,586,390**	**14,325,481**	**14,783,710**	**15,816,557**
Fixed income[1]	3,668,324	4,135,294	5,476,096	4,435,899	4,621,057	4,766,153	5,476,096
Mixed fixed income[2]	1,087,881	1,203,280	1,459,004	1,364,227	1,406,147	1,411,225	1,459,004
Mixed equity[3]	707,159	745,112	721,346	806,042	648,612	681,278	721,346
Euro equity[4]	598,901	530,107	778,138	705,654	737,047	774,026	778,138
International equity[5]	2,655,123	3,043,542	3,882,184	3,298,703	3,545,847	3,671,230	3,882,184
Guaranteed fixed income	154,980	135,320	77,430	127,437	115,807	109,449	77,430
Guaranteed equity[6]	428,470	356,439	265,043	348,061	308,880	273,878	265,043
Global funds	1,359,915	1,409,759	1,989,428	1,506,594	1,920,588	2,046,838	1,989,428
Passive management[7]	429,428	511,251	505,514	513,333	530,215	522,529	505,514
Absolute return	646,042	587,040	659,411	477,482	488,319	524,138	659,411
Return[8] (%)							
Total investment funds	**7.12**	**0.78**	**6.31**	**2.34**	**1.93**	**0.10**	**1.81**
Fixed income[1]	1.38	0.62	-0.31	-0.16	0.07	0.05	-0.28
Mixed fixed income[2]	4.75	-0.03	2.49	0.85	1.04	0.02	0.56
Mixed equity[3]	9.25	0.59	7.18	2.56	2.42	-0.03	2.05
Euro equity[4]	14.27	-8.75	16.72	8.58	4.28	0.42	2.66
International equity[5]	22.18	2.83	21.14	7.87	5.74	0.42	5.77
Guaranteed fixed income	3.98	1.68	-1.29	-0.52	-0.22	-0.02	-0.54
Guaranteed equity[6]	3.62	0.70	0.06	0.08	0.00	-0.03	0.01
Global funds	8.45	-0.31	7.90	3.10	2.28	0.01	2.32
Passive management[7]	7.45	0.44	9.82	3.28	2.36	0.40	3.48
Absolute return	3.94	0.94	3.02	0.97	1.15	-0.07	0.95

Source: CNMV. * Information on funds that have sent reserved statuses (does not therefore include funds in the process of dissolution or liquidation).

1 Until I-2019 includes the following categories (CNMV Circular 3/2011): euro fixed income, international fixed income, money market and short-term money market. From II-2019 includes the following categories (CNMV Circular 1/2019): Short-term public debt constant net asset value MMF, short-term low volatility net asset value MMF, short-term variable net asset value MMF, standard variable net asset value MMF, euro fixed income and short-term euro fixed income.

2 Includes euro mixed fixed income and international mixed fixed income.

3 Includes euro mixed equity and international mixed equity.

4 Includes euro equity.

5 Includes international equity.

6 Includes: GIF and partial guarantee.

7 Until I-2019 includes passively managed CIS (CNMV Circular 3/2011). From II-2019 includes the following categories (CNMV Circular 1/2019): Passively managed CIS, CIS that replicate an index and CIS with a specific non-guaranteed target return.

8 Annual return for 2019, 2020 and 2021. Quarterly return not annualised for quarterly data.

Liquidity of fixed income assets TABLE 14

Asset type	Reduced liquidity investments[1]					
	Millions of euros			% of total volume of asset type		
	Dec-20	Jun-21	Dec-21	Dec-20	Jun-21	Dec-21
Financial fixed income with a AAA/AA rating	8	5	6	1.0	0.7	0.8
Financial fixed income with a rating below AA	986	852	817	3.3	2.8	2.7
Non-financial fixed income	1,078	1,204	1,294	3.9	3.9	4.0
Securitisations	398	365	353	56.8	50.8	49.7
AAA securitisation	128	107	91	86.3	92.0	91.5
Other securitisations	270	258	262	49.0	42.8	42.9
Total	**2,470**	**2,426**	**2,471**	**4.2**	**3.8**	**3.8**
% / FI assets	**0.88**	**0.79**	**0.76**			

Source: CNMV.

1 Reduced liquidity assets are considered to be private sector fixed income assets with a maturity greater than one year for which there is no representative number of intermediaries willing to buy and sell them with a normal market spread.

Open-ended investment companies (SICAV)

In line with the trend seen in the past five years, the number of SICAVs registered with the CNMV fell significantly in 2021, as there were 153 de-registrations and only six registrations, so at the end of the year there were 2,280 registered vehicles. The decrease was also reflected in the number of shareholders, which fell by 2.9% to 351,617. In contrast, the assets of these vehicles increased by 5.8%, to €28.50 billion, solely due to revaluation of the assets in their portfolios, particularly the equity portfolio. These variations caused average assets per SICAV to increase substantially, from €11.1 million at the end of 2020 to €12.5 million one year later. Almost all SICAVs were listed on the BME MTF Equity market (formerly MAB).

Between January and February this year, after the legislative change that affected these entities, around 77% of those that were operational announced their de-registration as SICAVs. This regulatory change, instrumented through Law 11/2021, of 9 July, on measures to prevent and combat tax fraud, requires shareholders to have a minimum share of €2,500, together with the existing requirement that there must be a minimum of 100 unitholders, in order to benefit from the previous tax regime, according to which they were taxed at a Corporation Tax rate of 1%, in the same way as investment funds.

Hedge funds

The total assets of hedge funds[42] have grown substantially in recent years (up 22.7% in 2021, to stand at €4.37 billion at the end of the year). This segment

42 This collective investment segment consists of two types of vehicles, depending on whether they invest in assets directly (hedge funds) or through other hedge funds (funds of hedge funds). Both types can be set up in the form of funds or companies.

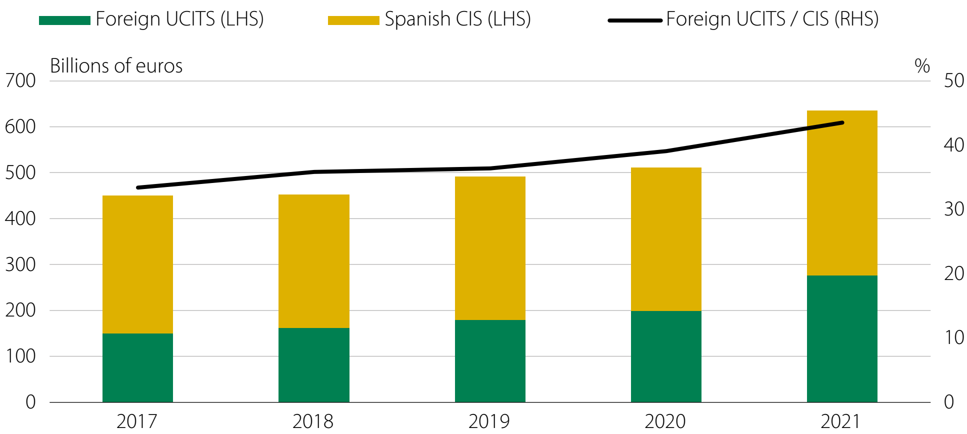
continues to represent a very small share of collective investment in Spain as they account for less than 1% of total assets. 81% of the combined assets of these institutions corresponded to hedge funds (81.7% one year earlier) and the remaining 19% to funds of hedge funds. The total number of these hedge funds registered with the CNMV in December 2021 was 83, seven more than at the end of 2020. As shown in Table 3.1 of the statistical annex, an increase was observed in the hedge funds segment, which closed the year with 73 institutions (ten registrations and six de-registrations), and in the funds of hedge funds segment, with three registrations, after three years with no movement, meaning that there ten at the end of December. In the first two months of this year there has been barely any movement, only one hedge fund registered and another one deregistered.

Portfolio returns tracked the market, with a positive performance in all quarters of the year for both types of vehicles. Thus, the hedge fund segment saw a gain of 5.9% on its investment portfolio to December, while funds of hedge funds increased by 9.3%. The total number of unitholders and shareholders of these institutions showed a trend similar to assets, rising by 31%, so that at the end of December there were a total of 14,171. This movement was especially pronounced in the funds of hedge funds where, thanks to the registrations made in the year, the number of unitholders rose by 88.4%, to 5,385. Hedge funds saw an increase of 10.4%, to a total of 8,786 unitholders at the end of the year.

Foreign CISs marketed in Spain

The volume of foreign CISs marketed in Spain has increased strongly in recent years, particularly in the past twelve months (+38.5%). Thus, at the end of 2021, the assets of these entities amounted to €276.23 billion. As shown in Figure 18, this strong growth rate has meant that the weight of foreign CISs in total CIS traded in Spain has increased significantly in the last few years, standing at 43.5% in 2021. In line with the trend marked by assets, the number of foreign CISs registered with the CNMV increased by 24 entities in 2021 (15 in 2020), so at the end of December there were a total of 1,072 vehicles of this type (417 funds and 655 companies). As in previous years, most of the registrations corresponded to vehicles from Luxembourg (25, to reach 497).

Assets of foreign CISs marketed in Spain FIGURE 18



Source: CNMV.

Outlook

The outlook for collective investment is complex due to the uncertainty surrounding the events that have taken place in recent months. The lifting of the restrictions imposed during the pandemic has led to an increase in household consumption, which has been detrimental to the savings rate and, consequently, to the funds available for investment in financial assets. In addition, the strong increase in inflation has reduced the availability of resources. It should be borne in mind that a context of uncertainty such as the present is likely to lead to delays in agents' the decision-making processes (consumption and investment). On the other hand, the expected increase in interest rates may change the composition of the financial asset portfolio of households in the medium term. Taking all these factors into account, the collective investment industry is likely to continue to receive investment flows, but in a lower amount than in previous years, and the marketing of foreign CISs will continue to play a predominant role.

4.2 Provision of investment services

Credit institutions are by far the largest providers of investment services in Spain and account for the bulk of fee income in the different types of services (more than 85% of the total). Broker-dealers and brokers, however, still account for a relatively significant weight, especially in the area of order processing and execution, although they also offer a wide range of services (see Table 15). In addition to these entities, financial advisory firms (EAF) and portfolio management companies (SGC) provide specialised investment services.

Fees and commissions received for investment services. 2021

TABLE 15

Amounts in millions of euros

	Investment services firms[1]	Credit institutions (CI)[2]	Total	% CI/total
Total Investment services	**716**	**4,634**	**5,350**	**86.6**
Placement and underwriting	89	426	516	82.7
Order processing and execution	271	650	921	70.5
Portfolio management	41	711	752	94.5
Investment advice	90	848	938	90.4
Marketing of CISs	223	2,000	2,223	89.9
Total ancillary services	**381**	**1,251**	**1,633**	**76.6**
Administration and custody	38	746	784	95.2
Other ancillary services	344	505	849	59.5

Source: CNMV and Bank of Spain.

1 Includes broker-dealers and brokers, financial advisory firms (EAF) and branches of foreign investment services firms.

2 Includes banks, savings banks, credit cooperatives and branches of foreign credit institutions.

Credit institutions

At the end of 2021, a total of 108 Spanish credit institutions (banks, savings banks and credit cooperatives) were registered with the CNMV to provide investment services, three fewer than in 2020.[43] Two of these de-registrations were the result of the integration of two banks.[44] The number of foreign credit institutions providing investment services in Spain at the end of the year stood at 416, 69 fewer than the previous year. This significant drop was due to the de-registration of entities in the United Kingdom as a result of Brexit. Of the total number of foreign entities, 361 operated under the freedom to provide services regime and 55 through branches, and almost all of them were from other EU Member States (411 entities).

Revenue of credit institutions[1] from the provision of securities services and marketing of non-bank financial products

TABLE 16

Amounts in millions of euros

	2018	2019	2020	2021	% of total CI fees[1]
For investment services	**1,735**	**1,847**	**2,166**	**2,635**	**16.2**
Placement and underwriting	217	296	354	426	2.6
Order processing and execution	510	498	642	650	4.0
Discretionary portfolio management	414	479	527	711	4.4
Investment advice	595	573	644	848	5.2
For ancillary services	**965**	**923**	**1,055**	**1,251**	**7.7**
Administration and custody	667	650	651	746	4.6
Financial reports and research	184	148	234	280	1.7
Other ancillary services	115	125	169	225	1.4
Marketing of non-bank financial products	**4,222**	**4,084**	**4,010**	**4,865**	**29.9**
Collective investment schemes	1,688	1,597	1,581	2,000	12.3
Pension funds	892	927	972	1,152	7.1
Insurance	1,507	1,437	1,377	1,604	9.9
Other	135	123	79	109	0.7
Total	**6,922**	**6,854**	**7,231**	**8,751**	**53.8**
***Pro memoria*:**					
For securities services and marketing of CISs	4,388	4,367	4,802	5,886	36.2
Total fee and commission revenue	**14,928**	**15,176**	**15,193**	**16,927**	**100.0**

Source: CNMV and Bank of Spain.

1 Includes banks, savings banks, credit cooperatives and branches of foreign credit institutions.

43 Of the 108 institutions, 98 were considered to be actively providing investment services.

44 These entities were Bankia and Liberbank, which were integrated into Caixabank and Unicaja Banco, respectively.

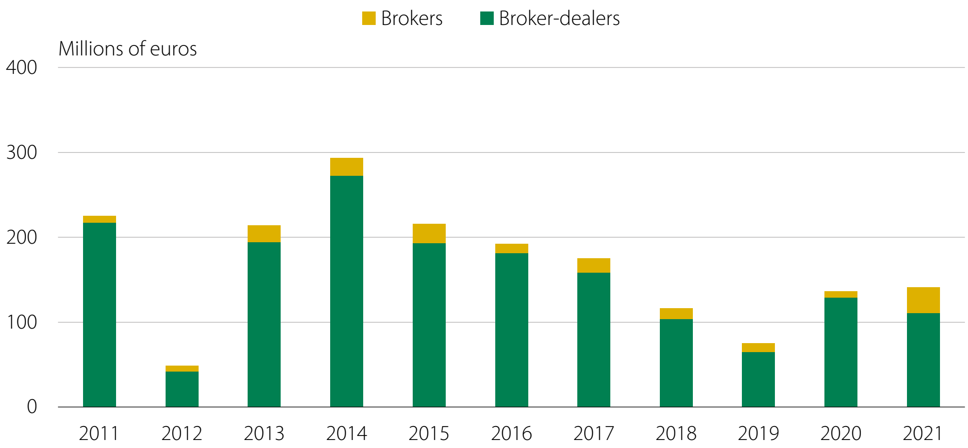
The aggregate amount of fees and commissions received for the provision of securities services and marketing of CISs increased by 22.6% in 2021, to €5.89 billion (see Table 16). The provision of investment services implied fees of €2.64 billion for credit institutions, 21.6% more than in 2020, with a substantial increase in all items, with the exception of fees for processing and executing orders, which remained largely stable. As regards fees for ancillary services related to investment services, credit institutions received €1.25 billion, which represents an increase of 18.6% compared to 2020.

Broker-dealers and brokers

In 2021, investment services provided by broker-dealers and brokers were similar, in quantitative terms, to those provided in 2020. However, a change in the business model of a large number of these entities appears to have been confirmed. Thus, their main traditional business, which was intermediation in the securities markets, is progressively losing weight as a consequence, at least in part, of the relocation of trading on Spanish stock exchanges to other venues outside the country. In contrast, activities involving marketing, management and advice to third parties are becoming increasingly important.

In 2021, broker-dealers and brokers reported a combined profit before tax of €140.7 million, 3.1% more than one year earlier. Although in aggregate terms there were no major changes, a significant redistribution was observed between the two types of entities: as broker-dealers saw a large growth in profits (4x), broker-dealers experienced a decline of 14% (see Figure 19).

Aggregate profit before tax of broker-dealers and brokers FIGURE 19



Source: CNMV.

At the end of 2021, a total of 91 broker-dealers and brokers were registered with the CNMV, four fewer than at the end of 2020, discontinuing the growth trend seen in recent years. This decline, which was the result of seven registrations and eleven de-registrations, was due, at least in part, to the integration of broker-dealers and brokers carried out by foreign banking groups. Additionally, many of the entities that were registered were linked to non-banking financial groups, reflecting the growing presence of independent entities and entities belonging to non-banking financial groups in this sector, altering its composition. Most entities that provided services in the European Union did so under the freedom to provide services regime, specifically 53 (two fewer than in 2020) and, and eight maintained branches in other countries (four more than in 2020).

The number of foreign entities that provide investment services in Spain dropped significantly in 2021 as a result of Brexit. Here, we note that entities in the United Kingdom lost their community passport to operate in Spain on 1 January 2021, and of that date, if they wish to continue to carry out their activity, they must register as a non-EC entity. Thus, the number of foreign entities operating under the freedom to provide services regime decreased throughout the year from 3,053 to 905, while those operating through a branch fell from 66 to 41.

Broker-dealers saw a significant decrease in income compared to 2020, caused by both the fall in gains on financial investments (-66.3%) and fees received (-8.3%). There was a notable decrease in fees for processing and executing orders, the most important segment for broker-dealers, which were down by 35.4% to €164.3 million.[45] Most other fee items rose – particularly fees for the placement and insurance of securities, which went from just over €5 million to €86.3 million. Income from investment advice (36.7%), the marketing of CISs (26.7%) and from portfolio management (20.8%) also increased. Operating expenses fell by 30.1%, reflecting more sluggish activity in the sector. However, this reduction and the notable increase in "other" gains did not compensate for the fall in income, so profit before tax decreased by 14%, to €110.7 million.

The aggregate profit of brokers, as mentioned above, increased substantially almost quadrupling to stand at €30 million in 2021. This increase was due to the growth in fees and commissions received (22.6%) of over €200 million. As for broker-dealers, fees for the processing and execution of orders fell by 35.8%, to just over €14 million. However, the rise in other fees and commissions more than offset this decline, with the rise in fees on the marketing of CISs (+47.1%, to over €90 million) standing out. Fees for investment advice (18.1%) and from portfolio management (57.2%) also grew. This increase in income resulted in a rise in operating expenses (+10.4%), although this did not hamper the aforementioned improvement.

The return on equity (ROE) before tax of the sector dropped sharply in the year, from 18.7% to 13.7% (in 2020 it had doubled). In line with profits, the performance of the two types of entities differed: while broker-dealers saw a drop in ROE from 19.7% in 2020 to 11.5% in 2021, for brokers this ratio rose from 12.5% to 24% (see left-hand panel of Figure 20). The number of loss-making institutions decreased by three, to 29: 13 broker-dealers (one more than in 2020) and 16 brokers (four fewer than in 2020), with total losses down from €27.7 million in 2020 to €25.2 million in 2021.

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45 This reduction was due mainly to the wind up of a broker-dealer that belonged to Credit Suisse, which became a credit institution, whose main activity was the processing and execution of orders.

Aggregate profit and loss account (Dec-21)

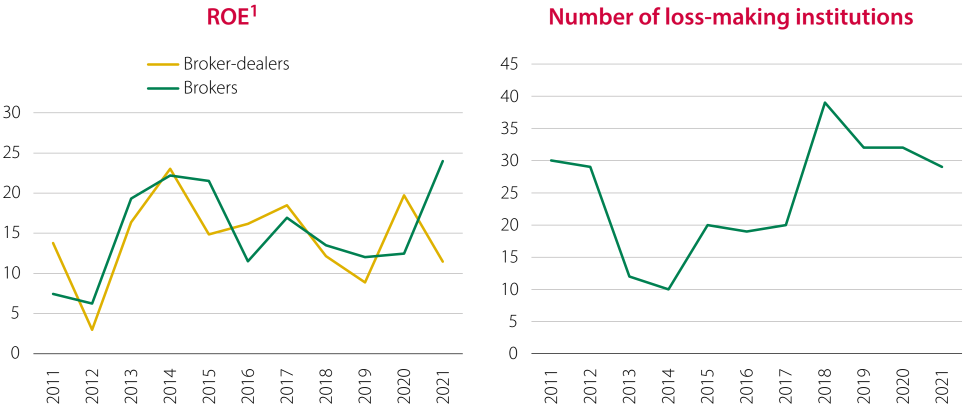
TABLE 17

Amounts in thousands of euros

	Broker-dealers			Brokers		
	Dec-20	Dec-21	% change	Dec-20	Dec-21	% change
1. Net interest income	35,957	41,565	15.6	932	454	-51.3
2. Net fees and commissions	310,868	265,790	-14.5	143,162	173,785	21.4
2.1. Fees and commissions received	525,812	481,945	-8.3	165,094	202,333	22.6
2.1.1. Processing and execution of orders	254,307	164,293	-35.4	22,035	14,140	-35.8
2.1.2. Issuance placement and underwriting	5,279	86,324	1,535.2	2,157	1,481	-31.3
2.1.3. Deposit and book-entry of securities	39,260	36,880	-6.1	754	425	-43.6
2.1.4. Portfolio management	13,128	15,860	20.8	14,554	22,874	57.2
2.1.5. Investment advice	5,813	7,944	36.7	33,990	40,142	18.1
2.1.6. Search and placement of block trades	1,960	5,306	170.7	0	0	–
2.1.7. Market credit transactions	0	0	–	0	0	–
2.1.8. Marketing of CISs	50,985	64,608	26.7	62,134	91,375	47.1
2.1.9. Other	155,080	100,728	-35.0	29,469	31,896	8.2
2.2. Fees and commissions paid	214,944	216,155	0.6	21,932	28,548	30.2
3. Gains/(losses) on financial investments	97,113	32,733	-66.3	-5,562	666	–
4. Net exchange differences	-981	972	–	-596	213	–
5. Other operating income and expense	92,259	34,398	-62.7	-372	-989	-165.9
GROSS MARGIN	**535,216**	**375,458**	**-29.8**	**137,564**	**174,129**	**26.6**
6. Operating costs	396,091	276,737	-30.1	132,069	145,812	10.4
7. Depreciation, amortisation and other charges	14,665	9,599	-34.5	2,130	2,200	3.3
8. Impairment losses on financial assets, net	-533	156	–	26	-38	–
OPERATING PROFIT/(LOSS)	**124,993**	**88,966**	**-28.8**	**3,339**	**26,155**	**683.3**
9. Other gains and losses	3,736	21,754	482.3	4,417	3,846	-12.9
PROFIT BEFORE TAX	**128,729**	**110,720**	**-14.0**	**7,756**	**30,001**	**286.8**
10. Tax charge	25,801	17,239	-33.2	4,920	7,199	46.3
PROFIT/(LOSS) FROM CONTINUING OPERATIONS	**102,928**	**93,481**	**-9.2**	**2,836**	**22,802**	**704.0**
11. Profit/(loss) from discontinued operations	0	-2,773	–	0	0	–
NET PROFIT/(LOSS) FOR THE YEAR	**102,928**	**90,708**	**-11.9**	**2,836**	**22,802**	**704.0**

Source: CNMV.

ROE before tax of investment services firms and number of loss-making institutions FIGURE 20

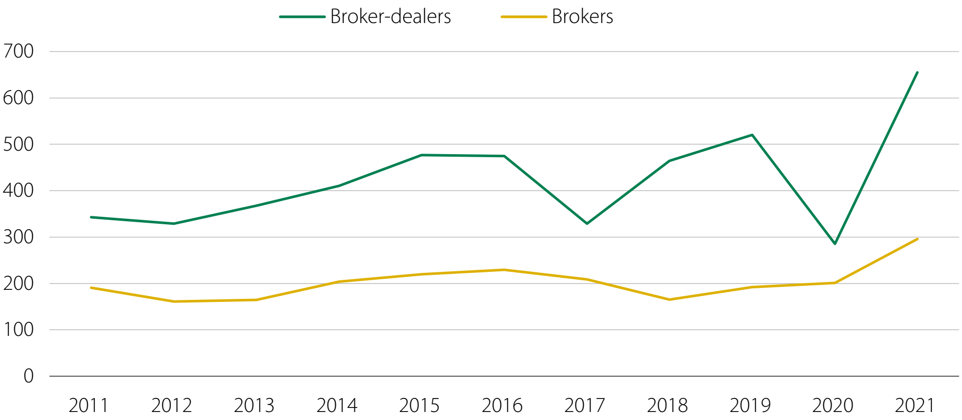


Source: CNMV.

1 ROE calculated with profit before taxes.

The sector as a whole continued to exhibit relatively high solvency levels (albeit with reduced absolute amounts) in 2021: at the end of the year the capital surplus was 5.4 times the capital requirement. This figure was considerably higher than in 2020 (2.8 times) mainly due to two factors. The de-registration of one large entity, the Credit Suisse broker-dealer, which had a solvency level that was lower than the average for the sector. And the entry into force of Regulation (EU) 2019/2033[46] which has led to lower capital requirements for most companies. As usual, the capital surplus was generally larger for broker-dealers than for brokers, standing at around 6.5, for the former, and 2.9 for the latter (see Figure 21). Four brokers closed the year with a capital deficit (no broker-dealers).

Solvency margin of investment services firms (capital surplus vs requirements) FIGURE 21



Source: CNMV.

46 Regulation (EU) 2019/2033 of the European Parliament and of the Council, of 27 November 2019, on the prudential requirements of investment firms and amending Regulations (EU) No. 1093/ 2010, (EU) No. 575/2013, (EU) No. 600/2014 and (EU) No. 806/2014.

Financial advisory firms

At the end of 2021, there were 140 financial advisory firms registered with the CNMV, a figure that has remained constant since 2019. Total assets under advisory services increased by 10.6% to €19.26 billion in 2021. However, it should be remembered that between 2018 and 2020 this figure was practically halved, which could have been due to greater competition from credit institutions in the investment advisory segment, a trend that could have already stabilised. As shown in Table 18, there was only an increase in assets under advisory services in the area of retail clients, up 29.5% to €8.86 billion. This trend, which has been observed for some years, appears to indicate that the model for this business is shifting towards one in which the retail segment plays a more prominent role.

The total profit of these types of entities increased sharply from €4.8 million in 2020 to €7.5 million in 2021. This was a reflection of the lower fees received from clients and, to a lesser extent, from income from rebates and fees from other entities. Specifically, fees charged directly to customers went from €37.4 million in 2020 to €44.7 million in 2021.

Main figures of financial advisory firms

TABLE 18

Thousands of euros

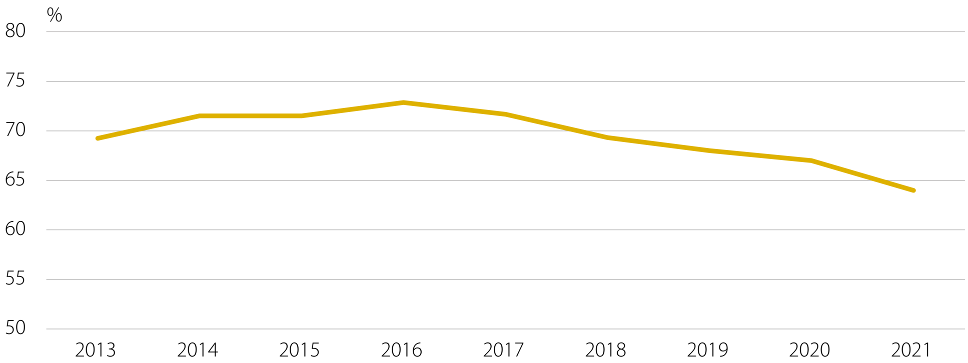
	2019	2020	2021	% change 21/20
NUMBER OF FIRMS	**140**	**140**	**140**	**0.0**
ASSETS UNDER ADVISORY SERVICES[1]	**21,627,677**	**17,423,050**	**19,263,515**	**10.6**
Retail clients	8,313,608	6,907,284	8,858,793	28.3
Professional clients and other	13,314,069	10,515,766	10,404,722	-1.1
NUMBER OF CLIENTS[1]	**6,437**	**7,264**	**9,317**	**28.3**
Retail clients	6,005	6,867	8,890	29.5
Professional clients	414	384	427	11.2
Other	18	13	–	–
FEE INCOME	**56,963**	**45,782**	**56,190**	**22.7**
Fees and commissions received	**56,029**	**45,153**	**55,657**	**23.3**
From customers	46,112	37,363	44,723	19.7
From other entities	9,917	7,790	10,934	40.4
Other income	**934**	**629**	**532**	**-15.4**
EQUITY	**32,089**	**30,177**	**34,140**	**13.1**
Share capital	5,770	5,454	6,125	12.3
Reserves and carry-overs	17,260	18,979	21,245	11.9
Profit/(loss) for the year	8,172	4,837	7,456	54.1
Other own funds	888	907	-686	-175.6

1 Data at market value at the end of the period.

A complementary view of the entities that provide investment services

It is useful to analyse the business relating to the provision of investment services according to the business model of the entity instead of the type of entity. Usually, information on the provision of investment services[47] is presented according to the type of entity that performs it (credit institution, investment services firm or CIS ,management company). However, a less formal approach would involve performing this analysis taking into account the business model of the entities providing these services and their relationship with commercial banks. This section provides a more precise definition of which part of the business related to the provision of investment services is carried out by banks that could be referred to as "commercial", whose income comes mainly from the provision of typical banking services (deposits, loans, etc.) and which part is carried out by entities specialised in the provision of investment services. This last group of entities would be formed by independent investment firms and CIS management companies (that is, not subsidiaries of commercial banking groups) and by banks specialised in the provision of this type of service.

Participation of financial institutions related to commercial banking[1] in total income from the provision of investment services[2] FIGURE 22



Source: CNMV.

1 This group of entities includes commercial banks (understood to be those that are not specialised in the provision of financial services) and the investment services firms and CIS management companies that belong to them.

2 Includes CIS management activity, although this is not an investment service from a legal point of view.

The calculations carried out reveal that in 2021 64% of the business related to the provision of investment services in Spain[48] corresponded to traditional commercial banks or their group companies. The remaining 36% corresponded to financial entities specialised in providing of investment services that are not linked to commercial banking. These figures confirm the downward trend in the weight of commercial banking in this sector, which was 67% in 2020 and had reached 73% in 2016 (see Figure 22).

47 Includes CIS management activity, although this is not strictly speaking an investment service from a legal point of view.

48 Measured through fees received and including CIS management fees.

Outlook

The investment services business appears to have consolidated several trends that have been observed for some years that are marked by the preponderance of credit institutions in the provision of these services and in the shift of investment services firms towards services that historically have been less relevant to them. The investment services business has been a strategic consideration for credit institutions, which have been largely and progressively incorporating the business carried out by their broker-dealers and brokers into the parent companies. This has taken place in a scenario of low interest rates which eroded interest margins in the sector and sparked interest in this business area. The broker-dealer and broker sector reflects a growing weight of independent entities (which are not under the umbrella of traditional commercial banks) that are more focused on providing services that had previously been less relevant. The main business of IFs, the processing and execution of markets orders, is still very important but it is progressively losing scope, in part due to the declines in trading volumes that have been observed in the markets for some years. In this context, activities such as financial advice, portfolio management or the marketing of CISs are likely to gain further importance.

New CNMV Circular on the advertising on crypto-assets for investment purposes

EXIHIBIT 4

On 17 February 2022, Circular 1/2022 of 10 January of the National Securities Market Commission regarding the advertising of crypto-assets for investment purposes entered into force. This document develops the rules, principles and criteria governing this advertising activity, which is subject to the supervision of the CNMV. The advertising of these products must contain true, understandable and non-misleading content, and visibly include the risks associated with them.

The new Circular 2/2020 establishes that advertising of crypto-assets must be clear, balanced and impartial, and the messages must provide information about the risks of the product that can be easily read and seen. Likewise, it must include the following warning in a format and position to ensure its importance is highlighted: "Investment in crypto-assets is unregulated, may not be suitable for retail investors, and the entire investment amount may be lost".

Additionally, the regulation defines the way in which the CNMV will supervise advertising activity and establishes a mandatory prior notification system for mass advertising campaigns, defined as those directed at 100,000 people or more. These campaigns must be reported to the CNMV with at least ten days' notice. All other advertising actions will be subject to the supervisory review of the CNMV, which may require their cessation or rectification, but they do not require prior notification.

The Circular establishes fairly detailed requirements on the content and format of advertising pieces. For example, there are restrictions to mention returns or superlative adjectives or, in terms of the format, the mandatory warnings are generally required to occupy at least one fifth of the space.

Failure to comply with the rules contained in the Circular may be construed as a serious infringement, in accordance with Article 292.4 of the Securities Market Act.

This Circular does not regulate the crypto-assets themselves, their issuance or the services provided in relation to them. Its objective is to strengthen the legal framework for the protection of citizens in the field of advertising, in a context in which advertising campaigns to encourage investment in these unregulated products have become more popular. The CNMV, together with other supervisors, has continued to warn of the risks of investing in this type of product.[1]

Under the subjective scope of application, the rule applies to:

– Crypto-asset service providers when they engage in advertising activities.

– Advertising service providers. This includes natural persons who, in exchange for remuneration, advertise and promote crypto-assets (products or services promoted by influencers).

– Any other natural or legal person who carries out this activity, at their own initiative or on behalf of a third party.

The Circular expressly excludes advertising activity on the following types of crypto-assets from its scope of application:

– Crypto-assets that have the nature of financial instruments included in the annex to the recast text of the Securities Market Act, in which case CNMV Circular 2/2020, of 28 October, on advertising of investment products and services will apply.

– Crypto-assets that are not for investment purposes.

– Utility tokens, provided they meet certain requirements.

– Unique non-fungible crypto-assets, provided they meet certain requirements.

The Circular also does not apply to:

– The explanatory documentation in issuances of crypto-assets or “white papers”.

– Corporate advertising campaigns when they meet certain requirements.

– Presentations addressed to analysts or institutional investors.

– Publications made by financial analysts or independent commentators.

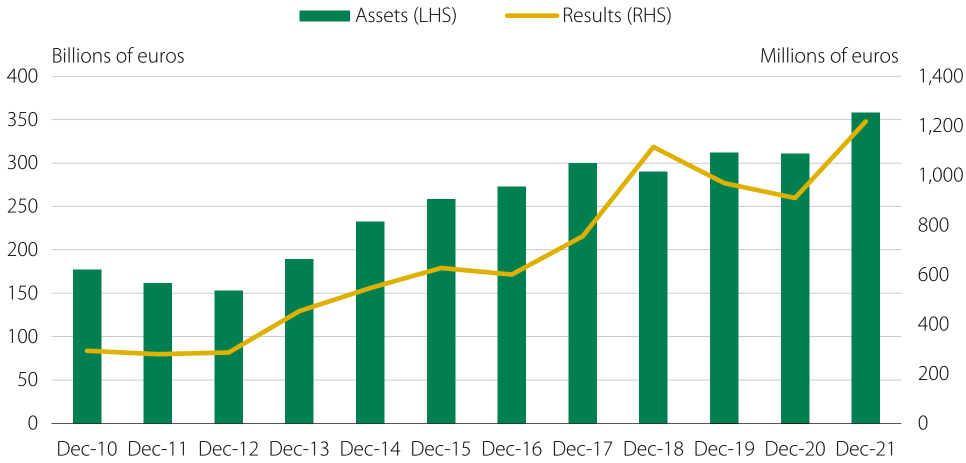
– Advertising about seminars or courses on crypto-assets, as long as they do not promote their acquisition.

1 https://www.cnmv.es/portal/verDoc.axd?t={17510971-c6cb-4b94-95d6-509b4061598f}

4.3 CIS management companies

In 2021, the number of CIS management companies remained stable (at 123), but not their managed assets, which experienced an increase of 15.2%, slightly exceeding the figure of €358 billion.[49] As in previous years, around 90% of these assets corresponded to Spanish investment funds, followed by SICAVs, with 8.2% of the total. It is important to note, regardless of these figures, that the management of foreign CISs by Spanish management companies grew robustly in 2021, reaching over €23 billion, which represents an increase of 48.2% compared with the previous year. The sector remained highly concentrated in 2021: the three largest management companies held a combined share of 49.5% of total assets, almost 6 pp more than in 2020.[50]

CIS management companies: assets under management and profit before tax FIGURE 23



Source: CNMV.

The aggregate profits before tax of CIS management companies increased by 34% in 2021 to €1.23 billion, thanks to the increase in fees and commissions received (20.6%). This trend was due mainly to fees and commissions for CIS management, which are by far the most significant, with around 85% of the total received by the management companies, which rose by 18.6% to €3.03 billion (see Table 19). This amount represented 0.84% of assets, slightly above the 0.82% seen at the end of 2020 and in line with the percentage observed in 2019. As a consequence of the higher growth in profits compared to the own funds of these entities, there was an increase in the aggregate return on equity (ROE) from 87.2% at the end of 2020 to 103.5% in 2021. The number of loss-making companies was halved, to 14, with a total value of €5.7 million.

49 This figure corresponds to the information obtained from the reserved statements that Spanish CISs submit to the CNMV.

50 This notable increase was largely a consequence of the merger between Caixabank and Bankia, which led to the removal of the CISMC that belonged to Bankia and the transfer of the management of all its assets to the CISMC of the Caixabank group.

CIS management companies: assets under management, CIS management revenue and average brokerage

TABLE 19

Amounts in millions of euros

	Managed assets	Revenue from CIS management fees	Average CIS management fee (%)	Fee ratio[1] (%)
2013	189,433	1,594	0.84	61.94
2014	232,232	2,004	0.85	61.80
2015	258,201	2,442	0.95	63.68
2016	272,906	2,347	0.86	61.67
2017	299,974	2,647	0.88	58.68
2018	290,364	2,649	0.91	51.24
2019	312,235	2,638	0.84	49.75
2020	311,043	2,551	0.82	49.72
2021	358,349	3,026	0.84	47.74

Source: CNMV.

1 Relationship between costs from commissions for the marketing of funds and revenue from CIS management fees.

4.4 Other intermediaries: venture capital firms and crowdfunding platforms

Venture capital firms

In 2021, private equity and venture capital activity continued to mark the same upward trend seen in recent years, with a large number of new entities, which was much higher in terms of vehicles than management companies. Thus, the number of investment vehicles registered with the CNMV increased by 125 (88 in 2020), after 143 registrations and 18 de-registrations, while the number of management companies increased by only three (13 in 2020), with seven registrations and four de-registrations.

Traditional venture capital entities,[51] saw 101 registrations and 13 de-registrations, for a total of 276 venture capital funds and 231 venture capital companies at the end of the year. In the case of SME venture capital entities, there were five registrations and three de-registrations, all companies, and as of 31 December 2021 there were a total of 33 vehicles (13 funds and 18 companies). 13 European venture capital funds (EuVECA) and one European social entrepreneurship fund (EuSEF) were also registered, which meant that at the end of the year there were a total of 44 and six firms of these types, respectively.[52]

51 Traditional entities are understood to be those that existed before the entry into force of Law 22/2014, of 12 November.

52 EuVECA and the EuSEF are entities regulated under Regulation (EU) No. 345/2013 of the European Parliament and of the Council, of 17 April 2013, on European venture capital funds and Regulation (EU) No. 346/2013 of the European Parliament and of the Council, of 17 April 2013, on European social entrepreneurship funds.

Closed-ended collective investment schemes were largely buoyant in 2021, as in the two previous years, and there were 81 vehicles of this type at the year end. This figure, which was comprised of 43 funds (FICC) and 38 companies (SICC), represents an increase of 20 vehicles compared with the closing figure for 2020, thanks to the 22 registrations and 2 de-registrations in the year. It should be mentioned that this type of collective investment scheme enjoys high flexibility both in its investment policy and in terms of compliance with investment ratios, which are more restrictive in the case of venture capital firms.

Registrations and de-registrations in the venture capital registry in 2021 TABLE 20

	Situation as at 31/12/2020	Registrations	De-registrations	Situation as at 31/12/2021
Entities				
Venture capital funds	235	47	6	276
SME venture capital funds	13	0	0	13
European venture capital funds (EuVECA)	31	13	0	44
European social entrepreneurship funds (EUSEF)	4	2	0	6
Venture capital companies	184	54	7	231
SME venture capital companies	18	5	3	20
Total venture capital firms	**485**	**121**	**16**	**590**
Closed-ended collective investment funds	33	12	2	43
Closed-ended collective investment companies	28	10	0	38
Total closed-ended collective investment entities	**61**	**22**	**2**	**81**
Management companies of closed-ended collective investment entities	**119**	**7**	**4**	**122**

Source: CNMV.

The data corresponding to 2021, provided by the Spanish Association of Capital, Growth and Investment (ASCRI), reflect an increase 20% in investment volumes compared to 2020, to €7.49 billion, in 841 transactions. This increase was due, to a large extent, to the recovery of large transactions (for over €100 million), with 10 investments accounting for more than half of the total investment volume. In terms of the development of the project, the venture capital segment (seed and start-up phases) was, as in previous years, the most active in terms transaction numbers. In 2021 this segment surpassed all its previous records, with a total of 691 transactions in which €1.94 billion were invested. Of this figure, more than €1.5 million were invested by international vehicles.

Crowdfunding platforms

In 2021, the number of registered crowdfunding platforms continued to decline, following several years of intense activity after the publication of Law 5/2015.[53] Thus, only one new platform was registered in the year (two in 2020) and there was one de-registration, so that the number of crowdfunding platforms registered with the CNMV remained at 27, the same figure as one year earlier. Of these, nine were for securities vehicles, eight were loans and ten were mixed.

It is also worth noting the entry into force of Regulation (EU) 2020/1503 of the European Parliament and of the Council, of 7 October 2020, on European crowdfunding service providers, on 10 November 2021.[54] The Regulation establishes standard requirements for the provision of crowdfunding services in the European Union, which obliges crowdfunding platforms authorised in Spain to adapt to comply with the requirements imposed by the Regulation. There is a transitional period in place that ends on 10 November 2022.

Number of registered crowdfunding platforms

TABLE 21

Platform type	Securities	Loans	Mixed	Total
2015	1	0	0	**1**
2016	4	8	0	**12**
2017	3	1	4	**8**
2018	3	1	1	**5**
2019	2	0	2	**4**
2020	0	1	1	**2**
2021	0	0	1	**1**
Cumulative total[1]	**9**	**8**	**10**	**27**

Source: CNMV.

1 The sum of the different years does not coincide with the cumulative total due to the de-registrations: two in 2019, three in 2020 and one in 2021.

53 Many of the applications made in 2015 and 2016 related to platforms that were already operating as such and which, as a consequence of the new regulation, had to adapt to the legislative requirements in order to be able to continue their business.

54 CNMV – Crowdfunding services.

II Reports and analysis

Margin calls, liquidity pressures and anti-procyclicality measures under EMIR: ESRB recommendations and on-going reforms

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1 Introduction

The outbreak of the SARS-CoV-2 coronavirus in 2020 led to sharp price drops and increased volatility in the financial markets. Most of these effects were felt between February and April due to the uncertainty caused by the rapid spread of the infection and the lethal nature of the virus, in addition to the start of lockdown measures and their impact on the economy and on society at large.

The movements observed in the financial markets triggered large-scale adjustments in the collateral required to maintain open positions in central counterparties (CCPs) or in bilateral agreements on transactions in derivatives instruments.

The reforms carried out after the 2008 crisis to improve the risk management frameworks of financial institutions and CCPs have played a key role in ensuring that the recent crisis has not given rise to exposures and uncertainties that could be of particular concern in terms of counterparty risk. The clearing of transactions through CCPs and the creation of a system of margin calls in bilateral agreements have had clear benefits for financial stability and default risk management in high volatility scenarios.

However, the increase in margin calls linked to growing fluctuations in prices could have caused procyclical effects and liquidity constraints for market participants. This would be compounded by the potential restrictions on the type of collateral required, preferably in the form of cash or highly liquid assets, which would entail the sale of other assets, either to cover the requirements or to restore liquidity after meeting the margin call, which could contribute to the downward spiral of prices.

In these circumstances, the regulatory and supervisory authorities expressed their concern and indicated an interest in analysing all these effects on the stability of the financial system and the liquidity and solvency of market participants.

The European Systemic Risk Board (ESRB) prepared a document with a series of recommendations on liquidity risks that could arise from margins calls in the markets during times of stress. These recommendations were published on 20 July 2020 in the *Official Journal of the European Union.*[1]

In 2021, the CNMV included a review of the extent of compliance with these recommendations in its supervisory work, both for the CCP BME Clearing and the entities

1 *Recommendation of the European Systemic Risk Board of 25 May 2020 on liquidity risks arising from margin calls* (ESRB/2020/6) (2020/C 238/01).

subject to the EMIR Regulation,[2] in regard to their activities as clearing members and financial counterparties of OTC derivatives.

In parallel to these events, a review was carried out (and is still ongoing) of one of the articles in the EMIR technical standards that specifically relates to the application of anti-procyclicality measures in the calculation of margins. The objective of this review is to include in EMIR some of the guidelines that the European Securities and Markets Authority (ESMA) had published in 2018[3] on the application of measures to reduce procyclicality in the margins of CCPs, guarantee a uniform and coherent application of the measures and incorporate nuances, clarifications or improvements in their implementation.

The Financial Stability Board (FSB), together with the Committee on Payments and Market Infrastructures (CPMI), the International Organization of Securities Commissions (IOSCO) and the Basel Committee on Banking Supervision (BCBS), set up a study group (Joint Steering Group on Margin, JSGM) to examine whether the margin calls were significant and involved sudden changes for a substantial group of market participants during the moments of greatest volatility in 2020. To do this, the JSGM prepared a survey[4] which the participants were asked to deliver in May 2021. The CNMV used the responses of some of the entities to complement its own analysis.

With all the information collected from the continuous supervision activities and through a series of additional requirements for this review, the CNMV was able to make an in-depth assessment of the extent of compliance with the different ESRB recommendations and, in the case of the CCP and given the relevance of the matter, with respect to the ESMA guidelines on the application of anti-procyclicality measures, and how they performed during the COVID-19 period. The analysis also considered the discussions held in international forums in which the CNMV took part during the year in relation to these issues, as well as the good industry practices.

From the study, it was concluded that all the entities analysed, including the CCP, fully comply with all the recommendations. In addition, when the results of the assessment on the extent of the compliance with its recommendations were announced, the ESRB gave a very positive assessment of the CNMV's supervisory activity, in relation to both the CCP (BME Clearing) and the clearing members and financial counterparties of bilateral agreements.

2 Regulation (EU) No. 648/2012, of the European Parliament and of the Council, of 4 July, on over-the-counter (OTC) derivatives, central counterparties and trade repositories.

3 *Guidelines on EMIR Anti-Procyclicality Margin Measures for Central Counterparties* (ESMA70-151-1293).

4 *Margin Survey: Intermediaries*. Available at: https://www.iosco.org/surveys/2021/jwgm-ws2/

2 Anti-procyclicality measures in EMIR

Regulation (EU) 648/2012 of the European Parliament and of the Council, of 4 July 2012, on over-the-counter (OTC) derivatives, central counterparties and trade repositories (EMIR) recognises that CCPs, competent authorities and ESMA must adopt measures to prevent the potential procyclical effects of risk management practices and margin calls.

Article 41 of EMIR and Article 28 of Commission Delegated Regulation (EU) 153/2013, of 19 December 2012, which supplement EMIR regarding the technical regulatory standards (RTS), propose that CCPs should apply three possible anti-procyclicality measures to help prevent these effects, at least one of which must be adopted:

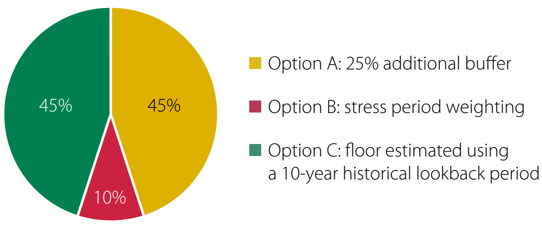
a) Applying a margin buffer at least equal to 25% of the calculated margins which is allowed to be temporarily exhausted in periods in which calculated margin requirements rise significantly.

b) Assigning at least 25% weight to stressed observations to establish margin parameters.

c) Ensuring that its margin requirements are not lower than those that would be calculated using volatility estimated over a 10-year historical lookback period.

In August 2015, ESMA published a report in which it reviewed the efficiency of the three proposed alternatives to limit procyclicality in the models.[5] The report also looked into the way in which entities had applied the different options. Figure 1 shows how the most popular options, in aggregate terms, were option A (25% buffer) and option C (volatility estimated over a 10-year historical lookback period). As discussed in some of the forums in which the CNMV took part, option B has not been very well received due to the ambiguity surrounding the application method, as the other two options are more direct and simpler.

Use of the three possible anti-procyclicality measures set out in Article 28 of the RTS FIGURE 1



Source: CNMV and *Review on the efficiency of margining requirements to limit procyclicality* (ESMA/ 2015/1252).

5 *Review on the efficiency of margining requirements to limit procyclicality* (ESMA/2015/1252).

The results of this review were used to build the guidelines on anti-procyclicality measures,[6] with the aim of establishing effective supervisory practices and guaranteeing a common, uniform and coherent application of the alternatives proposed in Article 28 of the RTS. In May 2018 ESMA published its final report on these guidelines, which would enter into force in December 2018. Details of these guidelines are presented below.

Anti-procyclicality measures in practice EXHIBIT 1

The criterion that is based on the application of a calibrated floor with a 10-year window (option C of Article 28 of the RTS) and the anti-procyclicality buffer criterion (option A) are the measures most used by CCPs due to their greater simplicity and clarity. In contrast, option B requires a method to be designed to select the corresponding stress period (which may be different for each instrument) and to apply the weighting.

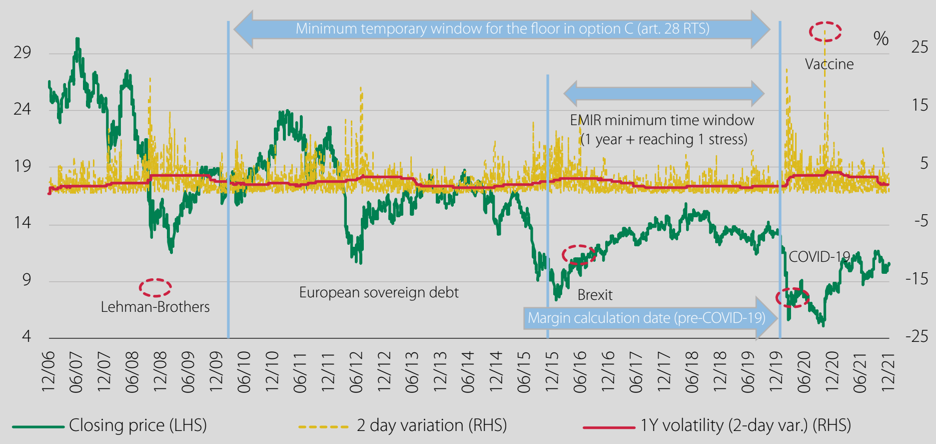
Based on the discussions held in the different international forums and as evidence itself demonstrates, the volatility floor estimated over a 10-year historical lookback period is not the most effective measure, especially due to the effect of the end of the 2008 crisis in terms of reducing collateral from 2019 onwards. In this case, the CCPs had to use their own criteria to manage this effect, and some chose to keep the 2008 crisis in the calculation period, and hence in the sample, while others automatically applied a moving window, taking into account the literal text of the article, thus excluding the crisis. The ongoing review of Article 28 has taken this into account and its wording has been changed to ensure that this option is implemented in a clearer, more flexible and more effective manner.

To provide a practical illustration of the different options for calculating the margin under EMIR, we provide an example based on the historical series of the share price of a Spanish company. The figure below shows the daily price performance from the end of 2006 to the end of 2021. The green line reflects the daily closing price, plotted on the left axis. The yellow dotted line reflects the two-day fluctuations, which is the settlement horizon normally used to estimate margins in OTC trades. The red line represents moving volatility (with a time horizon of two days) using a period of one year for the calculation (also on the right axis).

If we start from the point prior to the most volatile period in 2020, which corresponded to March and April, the 10-year window used for option C in the anti-procyclicality measures would begin in 2010, excluding, as we have already seen, the crisis of 2008.

6 *Guidelines on EMIR Anti-Procyclicality Margin Measures for Central Counterparties* (ESMA70-151-1293).

Time series for the calculation of the position margin (example) FIGURE E1.1



Source: CNMV.

EMIR requires CCPs to calculate positions using at least one year of historical data, or a window that is long enough to include a period of significant stress, ensuring that at least 99% of potential fluctuations are covered (99.5% for OTC instruments). The fact that at least 99% of the fluctuations have to be covered, implies that the 1% most extreme historical data will be outside the parameter that sets the margin. The most extreme events are not excluded in the framework of EMIR, they are introduced later through other CCP risk management tools.

In March 2020, the securities of the example above, like many others, underwent a fluctuation that was more than three times its expected volatility at one and two days. Given that the expected average fluctuation until that time, under EMIR calculation criteria, would have been considerably lower, this episode would correspond to one of the extreme events included in the 1% not covered by the margin. In this situation, the corresponding extraordinary margin call would be expected to cover the excess fluctuation and mitigate counterparty risk (forcing market participants to provide liquid funds immediately).

The following table illustrates a procedure to calculate the margin that would be required for a position in the security used in our example (as a percentage of the notional volume traded) just before March 2020, applying EMIR rules and the different the anti-procyclicality measures in place. For simplicity purposes, the calculation of the margin is based on the price fluctuation component, when in reality the margin is the sum of this and other components that represent additional risks, such as illiquidity and concentration. However, in this case and assuming a position in this security that is not abnormally large, the price fluctuation component is the main risk factor in the margin.

The first criterion that appears in Table E1.1 is referred to as the base margin and in this case, under EMIR rules, a series has been used that starts from the minimum period of one year and has been extended to cover a volatile and significant period in the market, in this case the Brexit referendum (June 2016). This would give an expected price fluctuation value of 6.59%. Once the base fluctuation has been calculated, the anti-procyclicality options are applied, from which the CCPs must choose at least one. The first option (A) would transform the base margin from 6.59% to 8.23%, increasing it by 25% (to simplify, it is assumed that the contract is not an option and therefore does not show a non-linear performance).

Criteria for calculating the margin parameter (example) TABLE E1.1

%	Margin parameter	Difference vs base margin
1) Base margin: minimum EMIR (1 year extended until the Brexit referendum)	6.59	
2) Anti-procyclicality measure A (25% buffer: minimum EMIR*1.25)	8.23	1.65
3) Anti-procyclicality measure B (period 2015-2016: 25%, base: 75%)	9.18	2.59
4) Anti-procyclicality measure C (10-year floor, Feb-2010 to Feb-2020)	8.91	2.33
5) Anti-procyclicality measure C (12-year floor: Feb-2008 to Feb-2020)	9.44	2.85

Source: CNMV.

To apply the second option (B), a method must be developed to objectively identify the relevant stress period. In this case, moving volatility parameters are calculated at different time horizons and using different windows, to identify the point in the historical series where there is a relative and significant increase in these indicators with respect to long-term volatility. In this case, it was the period between 2015 and 2016. As an alternative, the periods 2011-2012 or 2009-2009 could have been chosen, because the indicators also showed a significant increase in volatility in those years. A common practice is to add the worst observations from all these relevant stress periods, in such a way that the total observations represent 25% of the total historic series together with those used for the base margin. This criterion could be applied so that the period chosen is common to all securities (or by category) or an individual selection could be made by security, which complicates model maintenance. These are all reasons why CCPs normally prefer not to use this option.

In any case, simplifying for didactic reasons and applying the period 2015-2016 in our example, the margin component associated with the anti-procyclicality measure of option B would be calculated by applying a weighted average of 25% of the fluctuation parameter estimated for this data window plus 75% of the base fluctuation parameter. This would result in a margin fluctuation of 9.18%.

The third anti-procyclicality measure, option C, was calculated by estimating the expected fluctuation over a period of 10 years (at 99% and at two days). In this case, using the literal 10-year period, a figure of 8.91% would be obtained (criterion 4). If the 2008 crisis was anchored, thus stretching the window, the value obtained would be 9.44% (criterion 5).

The higher and more conservative the result, the lower the extraordinary margin needed to cover the fluctuation observed in March 2020 and the lower the potential liquidity constraint. In contrast, the more historical periods considered in the calculation, the more stable the margins tend to be (with fewer cyclical effects, both upwards and downwards). This range of options are available to CCPs to establish their position margins under the EMIR rules, with the flexibility to choose the quantitative methods with which they are calculated (parametric, simulation, filtered, exponentially weighted, hybrids, etc.).

Guideline 1. Regular assessment of procyclicality

The text of the first guideline establishes that competent authorities should ensure that any CCP supervised by them defines quantitative metrics to assess the margins in the context of margin procyclicality.

CCPs may define their own metrics and should holistically assess the long/short-term stability, also compared to the market volatility using indicators, and the conservativeness of margins. The ESMA guidelines establish that some metrics should be defined, such as the following:

- Short-term stability could be measured by metrics such as margin changes over a defined period or standard deviation of margins.

- Long-term stability could be monitored by a metric such as margin peak-to-trough ratio over a defined period, which in financial jargon is often also known as the "maximum drawdown", for which the peaks and troughs in a period must be recorded in the historical series and the fluctuation between them must be obtained: (trough – peak) / peak.

Competent authorities should ensure that any CCP supervised by them develops a policy for the review of its APC measures.

Guideline 2. Application of APC margin measures to all material risk factors

In the second guideline, ESMA indicates that the competent authorities should ensure that any CCP supervised by them ensures that the APC margin measures applied to at least all material risk factors, which could potentially lead to big-stepped changes in margins, and could include price shifts, foreign exchange shifts, implied volatility shifts, maturity spreads and portfolio margin offsets, as applicable.

Competent authorities should ensure that any CCP supervised by them that chooses to apply a margin buffer for non-linear products such as options, should apply a buffer at the risk factor level instead of directly scaling up the margins.

Guideline 3. Exhaustion of the margin buffer under Article 28.1(a) of the RTS

The third guideline states that competent authorities should ensure that any CCP supervised by them that chooses to apply a margin buffer at least equal to 25% of the calculated margin should develop and maintain documented policies and procedures setting out the circumstances under which the buffer could be temporarily exhausted.

Among other purposes, the anti-procyclicality measures are intended to provide buffers that will be consumed in times of market turmoil to mitigate demand for funds at times when there could be a greater risk that they may not be available. ESMA therefore requires a quantification of the extent to which buffers are consumed in periods of increased volatility and replenished in periods when volatility returns to stable levels, so that these decisions are not left to the discretion the CCPs.

Guideline 4. Margin floor under Article 28.1(c), of the RTS

According to the fourth guideline, competent authorities should ensure that any CCP supervised by them avoids using modelling procedures such as applying different weights to observations within the lookback period to reduce the effectiveness of using a 10-year historical lookback period for the computation of the margin floor when applying the APC margin measure in Article 28. 1(c) of the RTS. Competent authorities should ensure that any CCP supervised by them calculates the margin floor in a manner that continues to meet the requirements set out in EMIR and the RTS.

Guideline 5. Disclosure of margin parameters

In the fifth guideline, ESMA establishes that competent authorities are expected to ensure that any CCP supervised by them publicly discloses the models used in the calculation of margin requirements. The information disclosed should be sufficiently detailed to allow the replication of margin calculations and the anticipation of big-stepped margin revisions.

Review of Article 28 of the RTS on anti-procyclicality margin measures

Since the implementation of the guidelines in 2019, the market turmoil caused by COVID-19 has been a real test of the resilience of CCPs and the suitability of the regulatory and supervisory framework.

The performance of the CCP models and procedures was satisfactory during the crisis, despite the added difficulties of having to start operating in a remote working environment in a matter of days. It was not necessary to activate, at a global level or in Spain, any default procedures during the extreme market movements in March and April 2020, nor was it necessary to use waterfall resources.

However, the observed increase in margin requirements raised questions about whether some increases (beyond those linked to higher volumes and portfolio changes) could have acted procyclically, dissipating or even amplifying liquidity stress elsewhere in the financial system and whether it should therefore be mitigated using regulatory or supervisory measures.

While EMIR's anti-procyclicality margin measures helped mitigate procyclical margin increases, ESMA considered there was some room for improvement based on lessons learned from the market events driven by COVID-19.

Therefore, a review of the EMIR RTS on anti-procyclicality measures was undertaken in order to integrate the ESMA guidelines into the regulatory framework, include clarifications that ensure a harmonised and consistent application of these guidelines and to include improvements in the text having obtained consensus through consultations with the sector and the national authorities, which include the CNMV.

3 ESRB recommendations on liquidity risks arising from margin calls

On 20 July 2020 the ESRB recommendations on liquidity risks arising from margin calls were published in the *Official Journal of the European Union*. The objective of these recommendations was to encourage the competent authorities, through their supervisory activities, to ensure that CCPs, clearing members and financial institutions that act as counterparties in non-centrally cleared contracts have mechanisms in place to minimise liquidity constraints caused by margin adjustments.

This section presents the content of these recommendations, which are divided into four groups (A, B, C and D) and broken down into different sub-recommendations. Lastly, the CNMV's opinion on the extent of compliance by the different types of entities to which these recommendations are addressed.

Recommendation A

Group A recommendations govern the need for entities to have policies and procedures for margin calls that are designed in such a way that they do not produce procyclical effects that fuel liquidity constraints. The details of the sub-recommendations are as shown below.

– Recommendation A1. The ESRB recommends that competent authorities ensure that CCPs analyse the performance of their anti-procyclicality policies during periods of acute stress and report their findings to their competent authority.

– Recommendation A2(i). The ESRB recommends that, while respecting the priority of preserving the financial resilience of CCPs, the models to determine margin parameters and the valuation of collateral do not give rise to sudden or abrupt demand, and that:

  i) A granular scale and progressive approach are used for credit ratings when these are involved in eventual margin requirements.

  ii) Methods are applied that limit procyclical impacts, in particular in the event of downgrades of credit ratings.

– Recommendation A2(ii). The ESRB recommends that CCPs issue a report when they:

  i) Reduce the scope of eligible collateral.

  ii) Materially modify collateral haircuts.

  iii) Materially decrease concentration limits.

– Recommendation A3. The ESRB recommends that, to the extent permitted by law, the clearing members' relevant competent authorities engage with the clearing members within the context of ongoing supervision to ensure that the application by the clearing members of their risk-management procedures when providing clearing services to their clients does not result in sudden and significant changes in margin calls or collateral adjustments in situations of market stress or affect their resilience.

– Recommendation A4. The ESRB recommends that the competent authorities, also within the scope permitted by law, analyse the risk management mechanisms of financial and non-financial entities that operate with derivatives that are not cleared through a CCP, in order to assess whether they cause significant changes in margin requirements in situations related to credit rating downgrades. In this regard, it would be useful to encourage counterparties to use: i) a progressive and granular ratings-based sequence in their risk management practices based on credit ratings and ii) anti-procyclicality measures, especially when implementing downgrades of credit ratings.

The use of credit ratings in margin requirements EXHIBIT 2

The adjustment of margin requirements using methods based on changes in counterparties' credit ratings is relatively common in bilateral OTC derivatives contracts. A downgrade of the counterparty's credit rating would trigger an additional margin call to offset the added risk associated with a greater probability of default (or less solvency capacity). In some cases, a downgrade of the counterparty's credit rating could even allow the other party to terminate the transaction.

This mechanism can provide an increased sense of security, which would boost credit in buoyant markets. However, in times of recession or crisis, this type of change can impact the procyclicality of the financial system and exacerbate liquidity shocks, even generating a negative spiral that could further impair the solvency of the counterparties (this can give rise to a dangerous chain of events, going back to margin adjustments).

The downgrade of the US insurance company AIG in September 2008 and the events that followed serve as an example to illustrate the possible adverse effects of this type of adjustment. AIG sold protection against mortgage default through credit derivatives. In September 2008 AIG's rating was downgraded by at least two notches by the world's three leading ratings agencies. Until then, AIG's counterparties had saved on capital requirements due to AIG's high credit rating (AAA), while AIG had benefited from reduced margin requirements.

However, neither AIG nor its counterparties had considered the correlation between AIG's credit quality and the market value of its contracts in a seemingly unlikely global environment in which real estate was worth less than mortgages. Thus began the spiral of default, which AIG had to deal with, since it triggered the payment of the credit derivatives that it had on its balance sheet.

AIG's downgrade gave rise to substantial, sudden and simultaneous margin calls by its counterparties, leading to a significant liquidity shock at a time when AIG was also facing major disbursements relating to the market value of its contracts, coupled with additional pressure to obtain financing. The US government eventually nationalised the entity.

Recommendation B

The group B recommendations relate to the design of stress tests to assess liquidity risk. The category is broken down into the following sub-recommendations.

– Recommendation B1. The ESRB recommends that ESMA review the draft technical standards developed under Article 44(2) on liquidity risk affecting EMIR, to include provisions that require CCPs to include in their stress scenarios the default of any two entities that provide services to the CCP and whose default could materially affect the liquidity position of the CCP.

– Recommendation B2. While ESMA is finalising the technical specifications mentioned in the previous point, the ESRB recommends that the competent authorities examine the design and results of the control models for the potential liquidity needs of CCPs in order to ensure that they include the default of any two entities that provide services to the CCP and whose default could materially affect its liquidity position and identify procedures to remedy any liquidity shortfall deriving from these scenarios.

– Recommendation B3. The ESRB recommends that competent authorities seek to ensure that CCPs have designed remedial actions to address any difficulties caused by a shortfall in resources available to cover liquidity needs arising from the aforementioned default situations, and that they have access to alternative market sources.

– Recommendation B4. In addition, the ESRB recommends that ESMA and the local authorities work in a coordinated manner with CCPs to conduct the liquidity stress tests with default scenarios.

Recommendation C

The recommendations of group C are aimed at establishing specific collateral management mechanisms to prevent liquidity constraints for clearing members.

– Recommendation C1(i). The ESRB recommends that CCPs consider the following aspects in their margin call processes:

  i) That there is a clear separation between the margin covering potential exposures deriving from their positions and excess margins resulting from market variations during the day.

  ii) That any excess collateral corresponding to the members be transferred on the same day.

– Recommendation C1(ii). The ESRB also recommends that the use of the excess collateral deposited be prioritised over margin calls when additional margins are requested unless the members voluntarily wish to deposit the additional amount.

– Recommendation C1(iii). CCPs must ensure that the process for collecting of initial and variation margins does not result in excessive operational constraints for the clearing member which may pose additional liquidity risk.

- Recommendation C2. The ESRB recommends that competent authorities monitor, where permitted by law, the risk management practices applied by clearing members in relation to margin calls, to prevent, as far as possible, any type of liquidity constraints for their clients, including financial and non-financial entities. This can be assessed by ensuring that:

i) Clearing members take into account and prioritise the use of excess initial margin collateral over collecting additional collateral unless the client voluntarily posts the add-on margin.

ii) That clearing members ensure that the process for the collection of margins does not result in excessive operational or liquidity constraints for their clients.

Recommendation D

Lastly, recommendation D is addressed to the national competent authorities and highlights the importance of their contribution to and participation in international discussions, in order to jointly define ways to mitigate procyclical effects on margins in the context of CCP activities, bilateral derivatives agreements and securities lending activities.

3.1 Compliance by the CCP, clearing members and financial counterparties under EMIR

From the work carried out by the CNMV, it can be concluded that BME Clearing complies with the issues raised by the ESRB. Specifically, the CCP carries out an exhaustive control of its anti-procyclicality policies and applies granular scales when credit ratings are involved in margin adjustment models. The CCP also draws up liquidity stress scenarios on a daily basis using conservative criteria and assuming the default of all types of entities to which it is exposed in terms of liquidity risk. It also has a liquidity plan in place that envisages the actions to be carried out in the event of potential risks or imbalances. With regard to the recommendations for the management of excess margins and the establishment of operational mechanisms that limit liquidity constraints, the CNMV has also verified that the procedures followed by the CCP are satisfactory.

The entities analysed by the CNMV that act as clearing members can generally be said to comply with ESRB recommendations. The margin calls made by entities to their clients are usually daily exchanges – in some cases intraday exchanges – and they establish resources that allow clients to make the payments ensuring that counterparty risk is rigorously controlled. Entities have established a procedure for approving and monitoring the solvency and liquidity of their clients that enables them to manage scenarios in which they are unable to meet a margin call, also applying limits to their operations. Margins are deposited mostly as cash, so there is no large exposure to larger calls due to margin value adjustments.

From the standpoint of their activities as a financial counterparty, the entities analysed by the CNMV also generally comply with the recommendations addressed to them. In most cases, daily (not intraday) collateral exchanges are agreed, the credit ratings of the counterparties are used residually for some margin adjustment parameters and a progressive scale is applied, and the margins accepted are of high credit quality and market depth, where the regulatory valuation adjustments have been applied.[7]

When the results of the assessment on the extent of compliance with its recommendations were reported to the ESRB, the CNMV received a very positive assessment of its supervisory activity, in relation to both the CCP (BME Clearing) and the clearing members and financial counterparties of bilateral agreements.

3.2 CNMV participation in international forums

In 2021 the technical staff of the CNMV attended various international forums, at which they discussed issues related to the impact of margin requirements on liquidity risk management and the performance of anti-procyclicality measures.

ESMA's permanent committee that is responsible for drawing up the regulatory framework for CCPs (CCP Policy Committee) organised various remote meetings with national supervisors, including the CNMV, to discuss and complete the proposal to amend Article 28 of the EMIR RTS on anti-procyclicality measures. The draft of the new Article 28 has evolved in line with the discussions held in these meetings and is still open to change.

BCBS-CPMI-IOSCO also held a series of discussion workshops in which issues related to transparency in margin calculation practices, liquidity risk management by market participants and their ability to anticipate requirements, the response of margin models to stress scenarios and processes related to the adjustment of margins to the daily market value, among other topics, were discussed.

The CNMV actively participated in these discussions, complying with ESRB recommendation D, and the conclusions deriving from them have been considered in its supervisory analysis.

4 BCBS-CPMI-IOSCO study on collateral management practices

Given the situation observed in the markets during the COVID-19 period, the FSB together with the CPMI, IOSCO and the BCBS set up a study group (Joint Steering Group on Margin, JSGM) that would examine whether the margin calls were significant and sudden for at least a relevant set of market participants. To this end, they

7 Commission Delegated Regulation (EU) 2016/2251, of 4 October 2016, supplementing Regulation (EU) No. 648/2012 of the European Parliament and of the Council, on OTC derivatives, central counterparties and trade repositories, with regard to the risk mitigation techniques for OTC derivative contracts not cleared by a central counterparty.

drew up a survey[8] for financial intermediaries from which they would collect relevant information for the study.

The CNMV asked a sample of Spanish entities (selected for their transaction volumes) for details of their responses, which it assessed alongside additional information on their policies and procedures for margin exchanges.

In September 2021 the JSGM published its report, which included the following conclusions:

– As expected, the variation margins observed at the beginning of the financial crisis were significantly higher than those observed up until that time (there was an increase of 40% compared to February 2020). The vast majority of these additional margin calls were within the framework of CCP-cleared contracts, were due to market fluctuations and were called within the ordinary day-end closing circuit, although on the most volatile days of March 2020 there were numerous intraday calls.

– Margin calls associated with products not cleared by CCPs remained relatively constant due to the highly conservative and stable SIMM model of the International Swaps and Derivatives Association (ISDA),[9] which is generally used by entities in their bilateral transactions.

– Entities generally indicated that they did not see any need to change or update their counterparty risk and collateral management policies and procedures as a result of what happened in 2020.

– More than half of the entities participating in the study indicated that they did not experience significant increases in liquidity demand as a result of extraordinary margin calls, in contracts cleared and not cleared by CCPs, and sell offs had been generally avoided.

– In regard to the transparency of the models and their ability to anticipate margin requirements, the CCPs consider that they have sufficient tools to do this, which include functionalities that allow hypothetical scenarios to be calculated on members' open positions. However, clearing members and clients expressed a different view, suggesting that improvements should be made regarding transparency and tools that allow them to more easily understand and anticipate margin requirements.

In light of the results presented, the study group proposes the following steps:

– Increase the transparency of CCP models, especially regarding their response to extraordinary volatility.

8 *Margin Survey: Intermediaries*. Available at: https://www.iosco.org/surveys/2021/jwgm-ws2/

9 https://www.isda.org/category/margin/isda-simm/

- Improve the capabilities of market participants in relation to potential liquidity needs, with standard metrics and procedures.

- Identify possible improvements in reporting data to the authorities so that they can more accurately assess the capacity of market participants to address liquidity stress.

- Assess the response of CCP models (and also those of counterparties for products not cleared by CCPs) to stress environments and their implications for CCP resources and the financial system.

- Rationalise, simplify and streamline the variation margin payment processes, for products cleared and not cleared by CCPs, in high volatility scenarios, for which international proposals and approaches are required.

In relation to this last point, some approaches used by participants have been identified in the different discussion forums held. These include proposals such as:

- The acceptance of instruments other than cash to cover extraordinary variation margins at times of high volatility, since instruments other than cash are usually only accepted for position margins, and cash is usually accepted for variation margins.

- The establishment of standard hours (e.g. twice a day at the same time in addition to the close) for extraordinary intraday margin calls.

- The extension of notification periods when changes are applied to the accepted collateral or haircuts, or when there are additional requirements for credit rating downgrades, among others.

The debate is still ongoing on how to manage liquidity stress when there are extraordinary margin calls and in regard to EMIR, in terms of reducing these extraordinary margins calls to the greatest possible extent by improving the rules for the implementation and monitoring of the anti-procyclicality measures of margin models, a review that, while still underway, is already at a very advanced stage.

5 Conclusions

The reforms carried out in the financial sector after the 2008 crisis led to the multilateral clearing of transactions through CCPs and the drawing up of collateral agreements in non-cleared bilateral transactions. These regulatory reforms have improved the security of the financial system and helped prevent significant increases in uncovered exposures, which has reduced credit risk and contagion in the event of default.

A secondary effect of the increased use of collateral is that the systemic risk profile has been transformed, with counterparty risk decreasing and liquidity risk increasing, as clearing members need access to a greater number of liquid resources in a short period of time to meet the margins calls triggered by price movements.

This has made it even more necessary to have a robust framework in place in which margin calls were conservative, stable and anticipatory, even at times of high volatility. The EMIR regulatory framework addresses this matter through a set of technical standards and guidelines, subject to updates, as is the case with the anti-procyclicality measures for the margin models. However, the fact that the regulation must reflect contemporary circumstances and the emergence of new risks does not exempt financial institutions and CCPs from proactively making any adjustments that become necessary to their models, policies and procedures, within the framework regulation in which they operate. To date, entities supervised by the CNMV have acted in line with best practices and manage the flexible elements of the EMIR to apply, in some cases, criteria that are even more conservative or aligned with prevailing circumstances at any given time.

Lastly, there is no doubt that clearing members are also responsible for ensuring that they have a liquidity risk management framework in place that is suited to the potential exposures of their contracts, to ensure the availability of liquid resources that allow them to meet any extraordinary margin calls that may arise in moments of stress. Fortunately, for several years now international regulation has also been promoting the implementation of methodologies to correctly monitor liquidity risk in entities from the different parts of the sector (banking, insurance, collective investment institutions, etc.).

6 References

Regulation (EU) No. 648/2012 of the European Parliament and of the Council, of 4 July 2012, on over-the-counter (OTC) derivatives, central counterparties and trade repositories.

Commission Delegated Regulation (EU) 153/2013, of 19 December 2012, which supplements EMIR with regard to the technical regulatory standards.

Commission Delegated Regulation (EU) 2016/2251, of 4 October 2016, supplementing Regulation (EU) No. 648/2012 of the European Parliament and of the Council, on OTC derivatives, central counterparties and trade repositories, with regard to the risk mitigation techniques for OTC derivative contracts not cleared by a central counterparty.

Review on the efficiency of margining requirements to limit procyclicality (ESMA/2015/1252).

Guidelines on EMIR Anti-Procyclicality Margin Measures for Central Counterparties (ESMA70-151-1293).

Mitigating the procyclicality of margins and haircuts in derivatives markets and securities financing transactions (ESRB Expert Group on the Macroprudential Use of Margins and Haircuts, January 2020).

Recommendation of the European Systemic Risk Board ,of 25 May 2020, on liquidity risks arising from margin calls (ESRB/2020/6).

Liquidity risks arising from margin calls (ESRB, June 2020).

Review of margining practices (BCBS, CPMI-IOSCO, 30 September 2021).

Integration of climate risk monitoring into the CNMV's prudential, behavioural and macroprudential supervision process

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Acronyms used

AMCESFI	Macroprudential Authority Financial Stability Board
BCBS	Basel Committee on Banking Supervision
BIS	Bank for International Settlements
BMR	Benchmarks Regulation – Regulation (EU) 2016/1011 of the European Parliament and of the Council, of 8 June 2016, on indices used as benchmarks in financial instruments and financial contracts or to measure the performance of investment funds
CIS	Collective investment scheme
CCP	Central counterparty
CNMV	Comisión Nacional del Mercado de Valores (Spanish National Securities Market Commission)
CSRD	Corporate Sustainability Reporting Directive
EACH	European Association of CCP Clearing Houses
EBA	European Banking Authority
ECB	European Central Bank
EFAMA	European Fund and Asset Management Association
EIOPA	European Insurance and Occupational Pensions Authority
ESAP	European single access point
ESG	Environmental, social and governance
ESI	Investment firm
ESMA	European Securities and Markets Authority
ESRB	European Systemic Risk Board
EU	European Union
FSB	Financial Stability Board
GDP	Gross domestic product
GHG	Greenhouse gases
IFRS Foundation	Foundation for International Financial Reporting Standards
IOSCO	International Organization of Securities Commissions
IPCC	Intergovernmental Panel on Climate Change
NFRD	Non-financial Reporting Directive – Directive 2014/95/EU of the European Parliament and of the Council, of 22 October 2014, amending Directive 2013/34/EU as regards the disclosure of non-financial and diversity information by certain large undertakings and groups
NGFS	Network for the Greening of the Financial System
SDG	Sustainable Development Goals
SFDR	Sustainable Finance Disclosure Regulation – Regulation (EU) 2019/2088 of the European Parliament and of the Council, of 27 November 2019, on sustainability-related disclosures in the financial services sector
SME	Small- and medium-sized enterprise
SREP	Supervisory Review and Evaluation Process
TCFD	Working Group on Climate-Related Financial Disclosures

Integration of climate risk monitoring into the CNMV's prudential, behavioural and macroprudential supervision process

Once climate change becomes a defining issue for financial stability, it may already be too late.

Mark Carney

1 Introduction

Climate-related risks translate into economic and financial risks and so remain within the scope of the mandates of financial supervisors, who must ensure the soundness and proper and efficient functioning of the financial system. This is acknowledged by the Network for the Greening of the Financial System (NGFS) which was set up in 2017. One of its recommendations to ensure the orderly transition to a low-carbon economy urges supervisors to "integrate climate-related risks into financial stability monitoring and micro supervision".[1]

This recommendation has become a binding mandate for Spanish financial supervisors under Law 7/2021,[2] which, to ensure compliance with the climate goals set out in the Paris Agreement,[3] among other measures, requests the Bank of Spain, the CNMV and the General Directorate of Insurance and Pension Funds, coordinated by the macroprudential authority and within the framework of their respective powers, to assess the risk for the Spanish financial system posed by climate change and put forward measures to mitigate this risk.

This article describes the actions to monitor climate-related financial risks that correspond to the CNMV as supervisor of the securities markets. Section 2 analyses the role of the financial system and the capital markets in financing the transition to a sustainable economy and in managing the associated risks. Section 3 addresses the aspects of financial supervision that require adjustment to consider climate risks, based on existing research and literature and on the practices of authorities and leading organisations in the field. Lastly, in Section 4, we collect and synthesise our main conclusions.

1 This is the first recommendation addressed to central banks and financial supervisors by the NGFS to step up efforts to boost the role of the financial sector in achieving the objectives of the Paris Agreement. NGFS (2019).

2 Article 33 of Law 7/2021 of 20 May on climate change and energy transition.

3 The Paris Agreement is an international, legally binding treaty. It was implemented by 196 countries on 12 December 2015 and entered into force on 4 November 2016. Through this agreement, the Member States of the United Nations approved the 17 goals and 169 targets for sustainable development, committing to achieving by 2030, known as the SDGs of the 2030 Agenda. United Nations (2015).

2 Role of the capital markets in the transition to a sustainable economy and in climate-related risk management

Different climate studies show that to achieve zero net emissions of CO_2 by 2050 on a global scale – a necessary condition to limit global warming to 1.5° C compared with pre-industrial levels – all sectors of the economy will be required to undergo a far-reaching transition. If these changes occur in an orderly fashion, the scenarios suggest that there could be an increase in global GDP and lower unemployment compared with the previous trends. However, if the transition fails, which could lead to a temperature increase of over 3° C, global GDP in 2100 could fall by at least 13%, without even taking into account the potential consequences of severe weather events.[4]

This horizon explains why climate change has become one of the most prominent global concerns and why governments around the world have committed to firmly combating it in order to achieve a rapid and orderly transition to a decarbonised economy.

The Paris Agreement, which took onboard the scientific assessments carried out by the Intergovernmental Panel on Climate Change (IPCC),[5] was a milestone in this area, as it seeks a global response, in the context of sustainable development and efforts to eradicate poverty, to curb global warming and reduce greenhouse gas emissions from the countries that have signed the agreement in order to reach climate neutrality in 2050. At the same time, it seeks to encourage the financing of the investments needed to support these objectives.

Since 2015, work has been carried out to address these issues in different spheres by the G-20, the United Nations, the European Commission, central banks and supervisors, as well as the financial sector and other public and private institutions that have launched initiatives at global and European level to mobilise funding to achieve a transition to deal with climate change.[6]

The financial sector is thus called on to play a key role in the transition to a low-carbon economy, through a twofold perspective.

4 The NGFS has identified six scenarios to analyse the potential impact of climate risks for the economy and the financial system. These were published in July 2021 (NGFS (2021), along with an interactive website (NGFS Scenarios Portal) that provides access to all data and publications and offers interactive visualisations of the scenarios and the data that support them. It also offers a link to a climate impact explorer (Climate Analytics – Climate impact explorer) where users can download detailed physical risk data.

5 The Intergovernmental Panel on Climate Change (IPCC) is the body created by the United Nations to carry out scientific assessments of climate change, its implications and possible future risks, as well as to present adaptation and mitigation options.

6 The work of González (2021) provides details of the main, public and private, institutional initiatives underway related to sustainable finance. These different initiatives require coordinated action, undertaken by the FSB, which has published a roadmap that addresses four interrelated areas: company-level disclosures, data, vulnerability analysis, and regulatory and supervisory tools. FSB (2021).

- First, in its role as the necessary **financing channel** to make the large investments required to meet climate goals. Through its lending and investment policies, the financial sector plays a fundamental role in redirecting the flow of capital. Although banks can be decisive in the reallocation of funds necessary to achieve this goal, the stock markets are currently pioneers in the development of new products, with green bonds being the most widely used green financing instrument.

  The combination of fiscal, economic and financial policy instruments, as well as the growing awareness and preference of citizens and investors for products that are sensitive to sustainability factors, can build a system of incentives for the development and reorientation of a capital market that is aligned with these objectives.

- Second, due to the **financial risks** that climate change and the transition to a low-carbon economy imply, which affect the balance sheets of financial institutions and also have a systemic nature. The proper management of these risks by institutions, their inclusion in prudential and conduct regulation and supervision, and the necessary adjustments in macroprudential policy are key to promoting change and achieving an orderly transition.

However, this integration and the formulation of appropriate policies to mitigate these risks bring considerable challenges due to their characteristics (which make them different from traditional financial risks), and require reliable information and sufficiently granular data to be available, as well as proper diagnostics based on forward-looking measurement methodologies and effective policy instruments.[7]

7 The BCBS has made recommendations for areas that require further analysis to improve the measurement, monitoring and management of climate-related financial risks. These areas concern data gaps and risk classification, as well as methodologies to address uncertainties associated with the nature of climate change and the potentially longer time horizon for risks to manifest. BCBS (2021a) and BCBS (2021b).

Differentiating characteristics of climate risks TABLE 1

Far-reaching scope and scale of impact	➔	Climate change will affect all agents in the economy (households, companies, governments…), in all sectors and geographical areas. Risks are likely to be correlated, and potentially exacerbated by critical events, in a non-linear fashion. This means that they will be much larger and extensive, affecting multiple lines of business, sectors and geographical areas, so the total impact on entities and the financial system may be greater than for other types of risk. This makes them risks that are not easily diversifiable.
A long, undefined time horizon	➔	The time horizon over which these risks may crystallise is longer and less well known than the time horizons used in business planning and traditional risk assessment.
Predictable nature	➔	Although, given the time horizon and future path, the exact result is uncertain, there is a high degree of certainty that some combination of physical and transition risks will materialise in the future.
Irreversibility	➔	The impact of climate change is determined by the concentration of greenhouse gas emissions in the atmosphere and there is currently no approved technology to reverse the process. Above a certain threshold, scientists estimate that climate change will have irreversible consequences on our planet, although uncertainty remains about their severity and the time horizon.
Dependency on short-term actions	➔	The scale and nature of future shocks will be determined by actions taken today by governments, central banks and supervisors, financial market participants, investors, consumers, businesses and households.

Source: NGFS (2019).

Capital markets are key to meeting climate goals, as a substantial amount of investment and financing is required to comply with the 2050 carbon neutrality target. The European Commission estimates that the EU will need €480 billion in additional investment per year this decade to meet its 2030 emissions reduction target.[8] Capital markets are expected to act as catalysts to mobilise and allocate finance, thus complementing bank lending and public investment.

Sustainable debt markets in the euro area are developing rapidly and sustainable bond issuance in 2020 was more than three times larger than the amount of green loans.

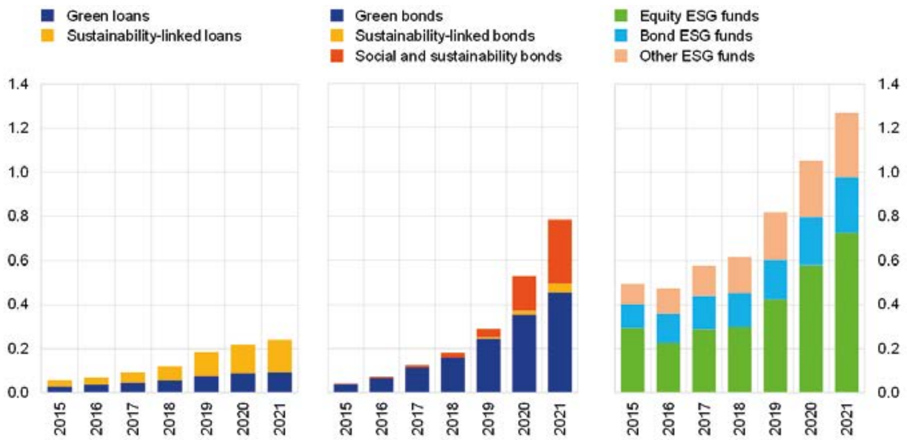
Sustainable financial instruments, such as green, sustainable and sustainability-linked bonds, still represent less than 10% of their respective markets in the euro area, but their volume has grown rapidly in the last six years. The European Commission's plan to issue up to €225 billion in green bonds between mid-2021 and 2026 as part of the NextGeneration EU recovery fund will further expand these markets.

The outstanding balance of green bonds issued by euro area residents has increased eightfold. The balance of catastrophe bonds has almost doubled. Since 2015 the assets under management in ESG funds have almost tripled. However, funds that have the objective of contributing to the fight against climate change or funds that effectively manage the risks associated with climate change account for a much smaller percentage.

8 European Commission Communication. European Commission (2021b)

Trend in volume of sustainable financial instruments in the euro area between December 2015 and June 2021 (in trillions of euros)

FIGURE 1



Source: Born et al. (2021).

Derivatives related to CO_2 emissions have grown more than seven times. As transition risks to the financial system increase with higher carbon prices, they must be actively managed. This is causing an increase in volumes in the emissions-related derivatives markets, mainly in relation to futures on emission rights that are used to hedge transition risk.

This rapid development of sustainable financing through capital markets can further help reduce transition risk by reinforcing market-based incentives. For example, sustainability-linked instruments such as transition bonds offer compensation to investors when the issuer fails to meet a pre-specified sustainability target (for example, a minimum reduction in CO_2 emissions).

Market hedging mechanisms such as derivatives can also help mitigate climate-related catastrophe risks, traditionally covered by insurance instruments. Although recent attempts to launch climate derivatives in Europe have received a lukewarm response from market participants, they could see be developed more widely in the future if insurance coverage were to become impracticable as natural disasters and their related losses increase.

A recent paper published in the ECB's macroprudential bulletin[9] notes that green capital markets are growing rapidly and appear to be more resilient and better integrated than traditional ones. However, without further efforts to improve the underlying structures and regulations of these capital markets, the risks of national fragmentation and greenwashing remain high and may inhibit the development of integrated and resilient green capital markets, the further growth of green finance and ultimately the transition to carbon neutrality.

Current regulatory efforts to improve the comparability and standardisation of sustainable financial products – such as the expansion of the taxonomy framework and

9 Born et al. (2021).

labels for financial instruments –, and to improve their verification and supervision and centralise access to sustainability-related information through a single EU platform will help mitigate some of these risks.[10]

3 Climate-related risks in financial supervision

Although the financial sector is one of the economic sectors that has the least direct impact on the environment due to its low GHG emissions, it has an indirect footprint since the bulk of its emissions are scope 3 emissions due to the wide range of sectors that participate in activities such as lending, investment, insurance underwriting and asset management. In this way, the financial sector is highly exposed to the risks arising from climate change as it provides funding to all sectors and numerous companies, both those that are exposed to extreme climate events and those that will be affected by the transition to a more sustainable economy.

These physical and transitional risks, and society's response to them, present opportunities for financial institutions and businesses, but they are also an emerging source of systemic risk and have the potential to destabilise the provision of financial services and the normal functioning of the financial markets, which could have knock-on effects for the real economy. Table 5 in Annex 1 lists the micro and macroeconomic transmission channels of climate risks and their translation into financial risks.

Up until now, climate risk monitoring by central banks and financial supervisors has had a prudential and financial stability focus. However, from the perspective of a supervisor who has to ensure investor protection and the correct and efficient functioning of the markets, proper transparency and correct price formation are particularly important, since if they do not exist this can lead investors to lose confidence in sustainable finance, capital allocation decisions that are contrary to their objectives and greenwashing, which could led to losses due to changes in asset prices as they become overvalued.

In a recent paper, ESMA outlines how environmental risks can affect the EU securities markets and their participants, and its approach to integrating them into its general risk assessment and monitoring framework as a new category that captures those that cause physical and transition risk, and the mitigating actions to address these risks. As part of this framework, ESMA identifies three core risks that affect compliance with its mandate:[11]

– Abrupt changes in market sentiment can lead to sell-offs, price swings, and volatility. Information on the potential exposure of financial institutions to climate risks and the policies in place to manage them can help mitigate the effects, as can clear plans to transition to more sustainable business models.

10 These measures are announced in the European Commission Communication. European Commission (2021b).

11 ESMA (2022a).

– Greenwashing practices, which, despite their complexity and lack of legal definition, can damage investor confidence.

– Extreme climate events, such as storms, floods or fires, can damage physical assets, cause price shocks and operational disruptions to critical market infrastructures such as trading platforms or central counterparties.

ESMA has started to publish in its report on trends, risks and vulnerabilities some new indicators that may be relevant for monitoring climate risk in the securities markets. These include trends in the number of companies that publish scope 1 emissions data, as it is understood that this contributes to reducing information asymmetries and the risk of changes in market sentiment for subjective reasons. It also publishes the trend in the number of climate-related disputes that affect financial entities, as an indicator of greater transition risk.[12]

This is familiar ground for the CNMV and it also incorporates, in compliance with its mandate, the monitoring of these risks as an integral part of its risk-oriented supervisory approach. The following sections analyse how this can be done. As an organisation, the CNMV also includes the integration of sustainability factors in the management of its activities.[13]

Delimitation of the CNMV mandate EXHIBIT 1

The CNMV is the body in charge of supervising and inspecting the Spanish securities markets and the activity of those who participate in them, with the aim of ensuring the transparency of the markets and the correct formation of prices, as well as the protection of investors.

The CNMV's work mainly focuses on companies that issue or offer securities for public placement, on secondary securities markets and companies that provide investment services and collective investment institutions.

For the latter, and for secondary securities markets infrastructures, the CNMV exercises **prudential supervision** that guarantees their solvency and the security of the transactions carried out. It also performs resolution functions on investment firms and CCPs to ensure the provision of critical functions in situations of non-viability without harming financial stability and without resorting to public funds.

It also **supervises the conduct** of the agents that participate in the markets. Conduct supervision has a triple focus:

– The protection of investors as consumers and users of investment products and services, guaranteeing that they have all the necessary information to be

12 See the statistical annex to this article. ESMA (2022b).

13 The CNMV's activity plans for 2021 and 2022 include the authority's commitment to sustainability both in the exercise of its powers and in the conduct of its activity. CNMV (2021a) and CNMV (2022).

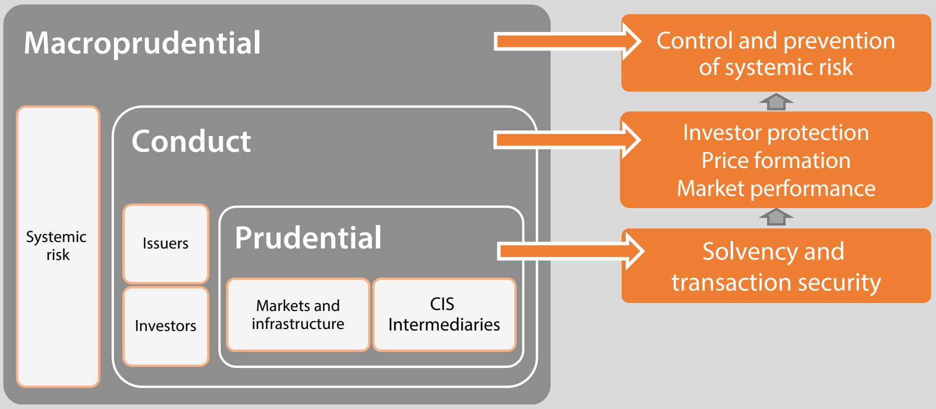
able to make their decisions in accordance with their risk profile and other relevant characteristics, and that the proper marketing practices are used.

– Ensure that the markets have sufficient, reliable and timely information to guarantee their efficient operation and the correct formation of prices, and that market abuse practices are avoided.

– Guarantee that entities that provide investment services carry out their business in a stable manner within the framework of the organisational, governance and control requirements that they are obliged to comply with.

Lastly, the CNMV plays a fundamental role in **financial stability monitoring** through the surveillance of the systemic risks that originate in and spread through the securities markets and the exercise of powers in matters of macroprudential policy that have been granted by the regulation.[1]

Competencies of the CNMV ILLUSTRATION E1.1



Source: CNMV.

1 Royal Decree-Law 22/2018, of 14 December, establishing macroprudential tools recognises the role of the CNMV in macroprudential policy and provides it with instruments and tools to mitigate systemic disturbances, under the coordination of AMCESFI, pursuant to Royal Decree 102/2019, of 1 March.

3.1 Prudential supervision

Prudential supervision seeks to safeguard the soundness of entities and the security and proper functioning of the markets. Although the CNMV carries out this activity in relation to collective investment institutions, investment firms (IFs) and market infrastructures, the integration of climate-related risk monitoring from a microprudential perspective uniquely affects investment firms, due to their intermediation function, and central counterparties (CCPs), as they centralise essential functions for the functioning of the markets.

3.1.1 Investment firms

The prudential regulation of financial institutions, IFs[14] and banks has recently been adapted to include ESG risks and their integration in their processes, strategies and disclosures, as well as in the review and evaluation carried out by the competent supervisory authorities (see Table 6 of Annex 2).

In compliance with the mandate of the regulation,[15] the EBA has developed uniform definitions of ESG risks and qualitative and quantitative criteria for assessing the impact of these risks on the financial soundness of entities in the short, medium and long term, identifying the indicators, metrics and evaluation methods that are necessary for the effective management of ESG risks, as well as any gaps and pending challenges.[16]

As a first approximation, the ESG risks to which IFs may be exposed can be described as shown in Table 2.

In general, IFs are not individually systemic and differ from credit institutions in that they do not hold large retail and corporate loan portfolios and do not accept deposits. Therefore, the ESG risks that IFs face are different from those that arise for credit institutions.

In the EBA's opinion, entities must incorporate ESG risks in their strategies and objectives and in their governance structures to manage them as drivers of financial risks in their risk appetite and their internal capital allocation process. This integration must be done taking into account the investment activities and the specific services they provide and in accordance with a principle of proportionality.

14 IFs currently have a new prudential regime, that is different from the regime applicable to credit institutions, and more adapted to their diversity and specific risk profiles, which are not always adequately captured by the banking prudential framework. The new prudential framework is set out in Directive (EU) 2019/2034 (IFD) and Regulation (EU) 2019/2033 (IFR).

15 Article 35 of the Investment Firms Directive (IFD) and Article 98 of the Capital Requirements Directive (CRDV) for credit institutions.

16 EBA (2021b).

ESG risks from IF activities

TABLE 2

Services and activities that may generate ESG risks	Manifestation of risks
IFs that operate on their own account, either on their own behalf or on behalf of their clients	• Market risk related to their balance sheet positions. • Net position risk. Financial assets subject to ESG risks may lose the transaction value recorded in the trading book. • Daily trading flows. Financial instruments affected by ESG risks may cause changes in the value of the total daily trading flow. • Concentration risk. Exposures to a single position or a group of connected counterparties may be more prone to ESG risk.
IFs that operate on their own account in commodity derivatives	• These types of investments (energy, agricultural products, etc.) can exacerbate the impact of ESG risks.
IFs that carry out portfolio management services	• In case of high concentration (geographical or in a specific sector), there would be a greater propensity to suffer impacts from ESG risks and the liquidity of these assets could suffer. • ESG risks would negatively affect the performance capacity of financial assets and their depreciation. Consequential loss of dissatisfied clients, reduction of assets under management, reduction of fees and other income, claims for damages if the IF has not correctly informed clients about the possible ESG risks affecting their portfolios in accordance with Article 6.1(b) of Regulation (EU) 2019/2088.
IFs that carry out portfolio management and investment advice services	• If clients request investment strategies that feature ESG factors or do not engage in harmful activities, IFs that cannot offer these strategies would be negatively affected (loss of clients, reduction in fees and other gains). • Failure to provide sustainable investment strategies may lead to reputational risk from investing in harmful activities.
IFs that provide brokerage services	• Financial instruments affected by ESG risks may generate volatility in the number and value of client orders processed daily, as a result of increased demand to open or close positions in these instruments, which could negatively affect the capital requirements of IFs.

Source: EBA (2021b).

In regard to the integration of ESG risks in the prudential supervision of IFs, it is necessary to improve the supervisory review and evaluation process (SREP) in a proportionate manner and adapted to their business model and risk profile. This requires the review and adaptation of the EBA guidelines on the SREP for IFs, since the current framework does not yet provide a proper understanding of the long-term impact of ESG risks.[17] The EBA proposes a gradual approach, beginning with the inclusion of environmental and climate factors and risks in supervision and in business and internal governance models, and continuing to deepen the process of identifying and evaluating social and governance factors.

In the future, the EBA could extend the assessment of ESG risks as part of capital and liquidity risks, together with the development of suitable methodologies. It

17 In November 2021, the EBA began the public consultation process on guidelines for the SREP for IFs in accordance with the IFD. This consultation document includes ESG risks in the key vulnerabilities of the business model and strategy of IFs and the impact on their long-term viability. These guidelines, once approved, would be applicable from January 2023. EBA (2021c).

should also be considered how to integrate climate risks in the resolution of financial institutions, to reach a common understanding at the international level.

3.1.2 Central counterparties

Financial markets base their operations on key infrastructures that, by centralising certain activities such as trading, payment, clearing, settlement and registration processes, enable participants to manage their risks more effectively and efficiently and, in some cases, reduce or eliminate them. These infrastructures concentrate risks and create interdependencies between themselves and the participating institutions, which means that they are subject to systemic risk, which if it were to materialise, could have significant adverse effects on the markets they serve and on the economy in general.[18]

Among these infrastructures, CCPs have become a critical centre of the financial system, making their resiliency and ability to manage risks critical to financial stability. For this reason, CCPs integrate climate-related financial risks both at the level of their own management and governance processes and in their micro and macroprudential supervision.

The strategic approach used by CCPs to address the management of climate change risks does not differ from the approach followed by supervisors and national and international organisations for the rest of the financial entities, and must, therefore, be considered in their strategies and objectives, governance structure, risk management and scenario analysis process, and in the transparency and disclosure of financial and non-financial information.

A key component of CCP risk management is stress testing, which is used to determine and assess the suitability of the level and type of financial resources held. As recognised in work published recently by EACH,[19] some CCPs already consider in risks with a more immediate effect in their stress tests, i.e. physical risks, particularly the entities that clear products that are directly affected by climate risk, such as energy products, agricultural products or certain CDSs, tend to apply stress scenarios caused by natural disasters.

Transition risks, which arise over a longer period than the short-term period considered for CCP stress tests, are generally captured through other types of analysis performed by CCPs, such as operational risk testing.

However, there is currently no specific guide or regulation for climate risk management for CCPs, deriving from the exposure of entities that act as clearing members,

18 The systemic importance of market infrastructures (payment systems, central securities depositories, securities settlement systems, central counterparties and trade repositories) justifies the existence of international standards for their organisation, resilience, risk management, supervision, recovery and resolution, which are essential to strengthen and preserve financial stability. See Key standards for sound financial systems of the FSB and the Principles for financial market infrastructures published by the BIS.

19 Recently, EACH published a document on climate risk management in CCPs in which it identifies the ways in which CCPs already take into account climate-related risks and discusses how a more comprehensive consideration of these risks can be addressed in the future. EACH (2021).

the CCPs themselves, the financial markets and the economy as a whole to factors caused by the climate or related to climate change. However, supervisors have started to work on and discuss the impact of these risks on the resilience of CCPs and their consideration in risk management.[20]

Although the impact of climate risks on resolution has not yet begun to be addressed, this topic should be considered at the international level. Like other global trends such as digital innovation, climate-related risk must be taken into account in the assessment of resolvability, in the definition of resolution scenarios and in the resolution planning of CCPs in order to ensure the continuity of critical functions and services in situations of non-viability and to have the necessary tools and resources to do so.

From a macroprudential standpoint, in the EU, both the EBA and EIOPA have already started working on including climate-related risks in the global stress tests carried out by the banking[21] and insurance sectors.[22] ESMA, which is responsible for assessing the resilience of CCPs to adverse market events and identifying potential risks to financial stability through stress testing, has included in its work plan for 2022[23] further work on the integration of climate-related risks in its stress testing scenarios and sensitivity analyses for these infrastructures. To do this, and acknowledging that "The assessment of climate risk within CCPs is still in its infancy at the level of individual CCPs, and to our knowledge, no cross-CCP climate stress test has been carried out to this date in any jurisdiction",[24] ESMA has proposed an approach that identifies four elements of climate risk that can negatively affect CCPs: physical risk, rapid transition risk, commercial risk and collateral replacement risk.

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20 In March 2022, the Fourth Annual Joint Conference of the Deutsche Bundesbank, the European Central Bank and the Federal Reserve Bank of Chicago on CCP Risk Management took place. This year, in addition to the impact of technological developments, the conference focused on the risks of climate change for CCPs.

21 Between 2020 and 2021, the EBA carried out an EU-wide pilot exercise on climate risk in order to map banks' exposure to climate risk and provide insight into the estimation efforts they have undertaken until now. This exercise, conducted in collaboration with the ESRB and the ECB, will serve as the basis for designing a climate risk stress test for the EU banking sector, as well as for developing methodologies and data requirements that are suitable for this purpose. EBA (2021a).

22 In the second discussion paper on the methodological principles of insurance stress testing, published by EIOPA in 2020, a specific section on the climate change stress testing framework is proposed. EIOPA (2020a). In December 2020, EIOPA published a sensitivity analysis of climate change-related transition risks in the investment portfolio of European insurers which will serve as the basis for EIOPA's future work on stress testing. EIOPA (2020b).

23 In its work programme for 2022, ESMA identifies in the section on *Risk Monitoring and Analysis* the objective of progressing in the integration of climate risks in stress tests. ESMA (2021b).

24 ESMA (2022c).

Climate risks for CCPs TABLE 3

Type of risk	Definition and transmission channel	Term considered
Physical risk	Effect of an extreme weather event on the operations of the CCP or of other entities to which it is exposed, combined with possible price movements in the markets affected by the event, both energy and raw materials and others that may also negatively affect the price of the shares of the affected companies.	Very short term
Rapid transition risk	Financial and reputational risks that could cause sudden and rapid changes in investor behaviour, increasing market volatility. These sudden spikes in market volatility, if combined with defaults by one or more clearing members, would affect the CCP.	Very short term
Business risk	If the clearing activity is linked to "brown" assets or activities and transactions decrease over time, with the CCP's revenue losses not being offset by new activities, this could have a negative impact on the CCP in the long term.	Long term
Collateral risk (second round effect)	If the CCP's margin policies are maintained (do not take into account environmental aspects) in the long term, a generalised and constant decrease in the value of a set of assets may occur, which will require the provision of additional collateral. This slower movement would create additional demand by CCP members for green assets at the expense of other brown assets.	Long term

Source: ESMA (2022c) and CNMV.

In a first phase of analysis, only simple materiality is considered, that is, the impact of climate risk on the CCP and climate trajectories as exogenous shocks, to evaluate the CCP's response to an adverse event instead of modelling the reasons that could lead to such circumstances materialising.

Through a public consultation in which evidence and opinion are requested from the sectors involved, ESMA aims to improve the identification and understanding of these risks, contribute to the awareness of market participants about the relevance of climate risks for CCPs and build a solid base with which to develop future climate-related stress tests for CCPs throughout the EU, based on scenario modelling and impact measurement adapted to the special characteristics of these infrastructures.

The incorporation of climate risk indicators in CCPs' organisation, business and risk control systems will contribute to a better understanding of the concentrations and exposures of the financial system to climate-related risk and will also help to improve the ability to price climate risk more accurately and ultimately encourage behaviour by market participants that is more aligned with climate objectives.

The harmonised development, use and dissemination of climate risk metrics across industries, products and services will improve the capture of and exposure to these risks at a more general level, as well as the comparability and consistency of the models' results.

3.2 Conduct monitoring

The EU has a regulatory framework on the transparency and disclosure of information related to sustainability adapted to the recommendations of the TCFD[25] and the IFRS Foundation, as well as a classification system for sustainable economic activities, the EU taxonomy.[26] These transparency requirements aim to improve the availability, consistency and quality of information that can be used by European financial institutions, investors and supervisors to assess climate-related risks. Table 6 of Annex 2 lists the main European standards that refer to disclosures on sustainability, including those related to the climate.

Compliance with disclosure and classification standards, and rules governing data quality and data sources are essential to ensure the objectives of investor protection, efficient market functioning and financial stability are met.

Therefore, the risk of greenwashing, in the context of the rapid development and fast growth of ESG investments, in which legislative are being prepared and implemented with a certain lag, has become, as recognised by ESMA in its work programme for 2022,[27] a significant supervisory risk for the competent securities markets authorities.

3.2.1 Asset management and investment services

In the asset management sector, the risk of greenwashing can arise from a lack of integration of sustainability risks in organisations, while at the same time entities may tend to claim that they invest in sustainable assets in a misleading, inaccurate or exaggerated manner.

For investment services, the ESG characteristics in the presentation of an investment product must also be consistent with the strategy that is actually implemented. The risk of misinformation and mis-selling can undermine investor confidence and result in capital allocation that is contrary to the objectives of sustainable finance.

Therefore, it is particularly important to pay attention to compliance with the transparency requirements of the Sustainability-Related Disclosures Regulation (SFDR) and to verify that entities comply with the sustainability commitments they take on.

In climate and sustainability benchmarks, the risk of greenwashing also relates to disclosures made by the index managers that may be inconsistent with the sustainability disclosure requirements contained in the Benchmarks Regulation (BMR).

25 TCFD (2017).

26 The taxonomy system provides investors and companies with definitions for the identification of economic activities that can be considered environmentally sustainable. It thus becomes the main instrument in the fight against greenwashing as it creates security for investors and protects against the risk relating to this activity. It also helps companies become more climate-friendly, mitigates market fragmentation and makes it easier to make investment decisions that are consistent with climate goals.

27 ESMA (2021b).

Progressing with the implementation of the taxonomy and harmonised disclosure standards and rigorous supervision of compliance with these will contribute to mitigating this risk. Similarly, promoting and facilitating the use of labels, such as those currently regulated for climate benchmarks and provided for in the European Commission's plans for investment funds or for green bonds, will improve confidence in investment products and services and help mitigate the risks of greenwashing.

3.2.2 Issuer transparency

In corporate disclosures, the risk of greenwashing stems from information that is incorrect or omitted from the statements of financial and non-financial information, or from a lack of transparency about the limitations of the methodologies and data used to prepare the disclosures.[28]

The risk of greenwashing is possibly one of the most significant risks in regard to the orderly functioning of the markets, since it can also lead to inefficiencies in the formation of prices and favour the overvaluation of assets that are considered to be "green".

The growing appetite for investment in ESG assets, such as bonds and shares of companies with ESG objectives, coupled with increased evidence of a green risk premium (known as the "greenium")[29] in the primary and secondary markets, entails lower financing costs for issuers, as investors seem willing to forego part of their return in exchange for holding green assets.

This process may encourage issuers to publish untrue ESG or climate goal disclosures that are not aligned with actual strategic goals, exacerbating the cycle of overweighting prices and underweighting the low quality of the data in investors decision-making processes.

The application of the proposed Corporate Sustainability Reporting Directive (CSRD) will help mitigate this risk by facilitating the standardisation and accessibility of information on sustainability and by requiring that a third party review the published information – a review that is already mandatory in Spain.

The competent supervisory authorities for matters of conduct and transparency must therefore incorporate into their work programmes the tools and methodology that are considered most effective to address the monitoring and evaluation of compliance with the rules on the disclosure of sustainability and data quality, and of the sustainability commitments undertaken by IFs, asset managers, credit institutions, collective investment schemes and issuers.

28 Section 3.3.2 of this article includes a description of the objectives, limitations and the reform project for the information that companies must disclose on sustainability and the associated risks.

29 Various studies confirm the existence of this premium. See the section on sustainable finance in the ESMA report (2022b).

3.3 Macroprudential supervision

A macroprudential perspective is needed to mitigate climate-related risks in the financial system. Given its systemic nature, macroprudential authorities should consider risks to the financial system as a whole and ensure cross-sector consistency.[30] Ultimately, macroprudential, prudential and behavioural supervisory approaches will need to be complementary and take into account the long-term horizon of climate-related risks and their complex interactions with the real economy and financial system.

As the watchdog for financial stability, taking into account the specific mandate conferred by Law 7/2021 and the information available, the CNMV will identify the vulnerabilities of the sectors and institutions that fall within the framework of its competences. This mapping is especially relevant for issuers, since it allows them to identify their level of exposure to physical risks and vulnerabilities at the individual and sector level according to their geographical location and to transition risks depending on their level of carbon emissions, and for the collective investment schemes sector, since the studies carried out to date show that the portfolios of these vehicles have the largest exposure in the financial system, at least to transition risks.

3.3.1 Collective investment schemes

In the category of collective investment schemes, investment funds are the most popular vehicle, with an asset management volume in Spain of more than €315 billion and almost 15 million investors at the end of the third quarter of 2021.

Although at the end of 2020, the assets of Spanish investment funds represented 2% of the total assets of European investment funds (behind the United Kingdom (27%), France (17%), Germany (15%), Switzerland (9%), the Netherlands (7%) and Italy (3%),[31] this volume of assets accounts for almost 30% of Spanish GDP. In addition, investment through collective investment schemes (both Spanish and foreign schemes marketed in Spain) represented 15.7% of the financial savings of Spanish families at the end of September 2021, according to Inverco.[32] Collective investment in Spain has always warranted close supervision by the CNMV due to its systemic importance.

At EU level, investment funds have the highest exposure to climate-sensitive economic sectors, even more than banks, insurance companies and pension funds. This is the conclusion of a recent study published by ESMA[33] and therefore it is necessary to analyse the vulnerability of these funds and the impact that the materialisation of climate risks could represent in terms of financial risks, both from an individual standpoint and at an aggregate level due to the impact on financial stability.

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30 This makes sense of the mandate conferred by Law 7/2021 on financial supervisors to assess the climate risk of the financial system under the coordination of the macroprudential authority.

31 According to data published by EFAMA (2021).

32 Inverco (2021).

33 ESMA (2021a).

With a universe of 23,352 funds[34] and assets of €8 billion,[35] this work presents a series of interesting conclusions to lay the foundations for the supervision and monitoring of the climate risks of investment funds:

– It is estimated that the exposure of investment funds to carbon-intensive sectors is higher than 55%, compared to 14% of the balance sheet of the euro area banking sector, and only 1% of this would be aligned with the EU taxonomy. Thus, they would be highly vulnerable to potential price shocks associated with climate change.

– The funds with the most polluting portfolios (brown funds), i.e. those with the highest concentration in high emission sectors,[36] are more diversified in terms of the number of companies they invest in than funds with cleaner portfolios (green funds).

– However, this diversification conceals concentration risk deriving from the greater connectivity of brown funds, as their portfolios are more similar than the portfolios of green funds.[37]

These findings suggest that it is likely that climate-related financial shocks will disproportionately impact brown funds, as the most polluting companies, while less vulnerable to liquidity risks, are more affected by climate-related financial risks and contribute more to systemic losses when these risks materialise.

This conclusion is confirmed through a climate risk simulation exercise that contemplates four prospective scenarios, over a five-year horizon,[38] of transition risks based on two drivers: the first, a political shock relating to delayed implementation and abrupt change with strict political measures to mitigate the adverse impact of

34 In this work, ESMA used detailed information on the portfolio of a universe of 23,352 funds at ISIN code level, provided by Morningstar. Information on CO_2 emission levels was provided by Refinitiv.

35 The total assets of EU investment funds are estimated at €15.7 trillion at the end of the first quarter of 2020, according to EFAMA.

36 In the ESMA study (2021a), companies were classified into four groups: companies whose emissions are below the bottom third (33rd percentile) of all companies in the data sample (i.e. green companies); companies whose emissions are greater than or equal to the top third (67th percentile) of all companies (i.e. brown companies); companies whose emissions fall between these groups (i.e. neutral companies), and companies for which there is no information on emissions.

37 Portfolio similarity is measured as the number of common investments between two investment funds, normalised by the total number of companies considered by any two funds. The funds are grouped into five groups based on the weighted average issuances of their portfolios: black (no issuance data available for any company in the fund's portfolio), dark green (the fund's portfolio is at the cleanest, i.e. in the 0-25% range in weighted average issuance terms), light green (portfolio is in the next cleanest tier, i.e. in the 25-50% range), yellow brown (portfolio is in the 50-75% range) and brown (portfolio is in the weighted average issuance range greater than 75%). Emissions are CO_2 and CO_2 equivalent emissions (scopes 1 and 2 included).

38 The scenarios used cover a five-year horizon that, although short from the perspective of long-term climate change risks, is considered to work well from the point of view of investment fund assets, which are relatively short-term, in contrast to the longer-term exposures of banks and insurance companies. The scenarios ignore secondary effects in terms of the interaction between the risks of the energy transition and climate change.

climate change,[39] the second driver is a technology shock, relating to technological advances that can reduce CO_2 emissions but, in doing so, lead to dramatic revaluations in all economic sectors (also involving defaults and write-offs of carbon-intensive assets).

From these two drivers, four scenarios are developed: the political shock, the technology shock, a combination of both and a shock scenario in which the absence of both shocks triggers a drop in consumer, business and investor confidence.

In an environment of losses for the investment funds as a whole of between €152 billion and €443 billion, depending on the scenario, the losses incurred by brown funds range between 9% and 18% of the value of the affected assets, in contrast with the losses of green funds, which are usually between 3% and 8%. In addition, brown funds have a greater systemic impact than green funds, in the sense that they contribute more to the total losses of the sector as a whole, due to their greater interconnection within the universe of funds.

From the standpoint of prudential and macroprudential supervision, the following conclusions can be drawn:

– Although no studies have yet been carried out on the exposure of investment funds to physical risks, which are concentrated at a regional level, the conclusions of this first exercise carried out by ESMA are a first step in advancing in the analysis and comparison of the funds from the perspective of climate risk, in terms of their contribution and vulnerability to said risk.

– It also substantiates the desirability of upgrading ESG ratings for investment funds and the need for greater fund transparency on exposure to climate-sensitive sectors (in the context of the SFDR).

– In order for these analyses to be carried out properly, it is essential that the issuers whose securities form part of the investment funds' portfolios disclose their corresponding reports. The review of the CSRD is therefore crucial step to establish these analyses, both at the individual level and from the macroprudential standpoint.

– From a macroprudential monitoring standpoint, it is also necessary to advance in perfecting the stress tests and in the analysis of the second-round effects derived from the portfolio adaptation mechanisms, sell-offs and the impact on investor preferences so that appropriate and effective mitigation measures can be identified.

3.3.2 Issuers

To make the action plan for sustainable finance work, it is essential to get companies to provide adequate and sufficient information about the sustainability risks to which they are exposed and about their own impact on people and the environment.

39 In this situation, the carbon price is assumed to increase globally by US$100 per tonne.

In the EU, the Non-Financial Information Disclosure Directive (NFRD)[40] introduced this obligation for large public interest entities with more than 500 employees – securities issuers, banks, insurance companies and other companies designated by the national authorities as public interest entities –, following the principle of dual materiality:[41] the impact of its operations on ESG aspects and impact of ESG factors on the company's operations.

According to impact analyses carried out by the European Commission,[42] only 20% of large companies currently apply the rules and only 30% request some type of disclosure verification. In order to gain efficiency and provide users of this information with access to a greater number of companies, there is an NFRD revision project under way through the CSRD project,[43] which will expand the scope of disclosures to all issuers of securities listed on regulated markets (except micro-enterprises), requiring a third-party review of the disclosures, which will have to be presented according to common standards and communicated digitally, making it easily accessible and usable through a single European access point.[44] Barring any delays, companies would apply the rules for the first time in 2024, for the fiscal year 2023.

With this review, all "large enterprises" under EC regulations[45] and most issuers of listed securities will be obliged to report information on their climate risks, which in the EU will increase from 11,600 to 49,000 companies, to cover approximately 75% of the turnover of all limited liability companies in the area. SMEs will be able to apply simplified reporting rules on a voluntary basis, allowing them to satisfy requests for information from large companies and banks.

These rules and requirements will go a long way towards closing climate-related data gaps in Europe. However, since this risk is essentially global, it is necessary to advance in the alignment of data standards at the international level, especially in climate taxonomies,[46] in order to facilitate the comparability of data across borders,

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40 Directive 2014/95/EU of the European Parliament and of the Council, of 22 October 2014, amending Directive 2013/34/EU as regards the disclosure of non-financial and diversity information by certain large undertakings and groups.

41 The dual materiality applicable to issuers of securities requires the reporting of "inside out" impacts as well as "outside in" impacts, both positive and negative, if relevant.

42 European Commission (2021a).

43 Proposal for a Directive of the European Parliament and of the Council amending Directive 2013/34/EU, Directive 2004/109/EC, Directive 2006/43/EC and Regulation (EU) No. 537/2014, as regards corporate sustainability reporting.

44 Currently, a proposal from the European Commission is being processed, which is part of a package of measures to reinforce its commitments on the Capital Markets Union, regarding a single European access point (European Single Access Point – ESAP). This project will make it possible to have on a single platform, in digital format, all the financial and non-financial information published by listed companies, large companies that provide information on sustainability (whether listed or not), banks, insurance companies, investment funds and other financial market entities.

45 Directive 2013/34 considers "large enterprises" to be those with more than 250 employees and that obtain income of more than €40 million or with assets of over €20 million.

46 Article 8 of the Taxonomy Regulation (Regulation (EU) 852/2020) and its delegated regulations detail the activities that are considered environmentally sustainable, the billing ratios, total fixed assets and operating expenses arising from or related to these activities and the information that must be disclosed by all entities that, in accordance with the NFRD, must publish a non-financial information statement.

reduce the burden on companies and enhance investors' understanding of the impact of these risks on their investment decisions. The EU is a pioneer in the regulation on sustainability and sustainability risk management,[47] so these standards may further encourage voluntary disclosures outside the Union and the necessary alignment process at global level.

This review will be a big step in the EU's commitment to sustainability. This is expected to positively influence European companies in their journey towards a sustainable economy, as it will increase their awareness and improve their management of sustainability-related risks. On the other hand, it poses some important challenges in the short term, such as the considerable increase in costs for entities,[48] which may have a negative impact on their international competitiveness. However, it is hoped that these disadvantages can be reversed in the long term if EU rules encourage harmonisation on a global scale.

At the national level, Law 7/2021 asks financial supervisors, under the coordination of AMCESFI, to monitor the alignment of the financial sector with the climate goals of the Paris Agreement and the EU, as well as an evaluation of the risk for the financial system, presenting a joint report every two years that will also include the proposals that, if applicable, they consider necessary to mitigate the risk.

At the same time, the law requires certain financial and non-financial entities (those that are obliged to prepare a non-financial information statement) to publish information on how they manage climate risks, in line with the recommendations of the TCFD, although this is not expected to be available before 2024, since the content of these reports must first be established through a royal decree to be approved within a period of two years from the publication of the law, among other reasons. These developments must be in accordance with the transposition of both the NFRD and the amendment to be approved by the CSRD.

There were 96 Spanish companies that were required to disclose information in accordance with the current Law 11/2018 (which transposes the NFRD and extends its scope) on a consolidated basis in 2020, which only covers 70% of the total number of issuers of securities in Spanish regulated markets.[49] This, together with the lack of harmonisation of the reported information, is a major constraint for carrying out the risk assessment requested under Law 7/2021. For this reason, and until the effective application of the CSRD, it is necessary to address the estimation of the exposures of Spanish companies to climate, physical and transition risks, and the analysis of scenarios to identify vulnerabilities, either by using external sources, such as agencies specialising in the collection, processing and provision of information on ESG risks, or by formulating a request for ad hoc information from entities that would allow an initial evaluation of these risks to be carried out. The CNMV has

47 One of the objectives of the action plan published by the European Commission in 2018 is precisely to incorporate sustainability into risk management together with the reorientation of capital flows towards a more sustainable economy and the promotion of transparency in the long term. European Commission (2018).

48 It is estimated that the implementation of the new CSRD requirements will entail an initial cost of €1.20 billion initially and €3.60 billion thereafter each year. European Commission (2021a).

49 According to data published by the CNMV (2021b).

been using the second option until Law 7/2021 enters into force. Thus, it has sent a voluntary questionnaire to the issuers that currently publish a non-financial information statement to carry out the risk analysis required under Law 7/2021.

As soon as complete, verified and digitally manageable information is available, it will be feasible to start up impact and stress analyses. In this regard, it should be noted that the ECB has been working in recent years on the development of stress testing methodologies aimed at capturing the impact of climate risks on the financial system and the economy in general.

Also, in collaboration with the ESRB, it has developed a joint project on climate risk monitoring with the aim of measuring the exposure of the European financial system and carrying out a long-term forward-looking assessment for banks, insurance companies and investment funds.

Exhibit 2 provides a summary of the objectives and findings of these projects.

ECB climate stress tests EXHIBIT 2

Climate stress tests for the economy as a whole

The ECB's economy-wide climate stress test aims to assess, through a "top-down" approach, the resilience to transition and physical risks of non-financial companies and banks in the area in different climate scenarios. The exercise has assessed the climate risk of four million companies around the world and 1,600 consolidated banking groups in the euro area, and is based on three main pillars:

– Specific climate scenarios identify future projections of climate and macroeconomic conditions for the next 30 years.

– A collection of climate data has been made to provide a complete set of backward- and forward-looking climate and financial information. Company data have been combined with granular banking exposures relating to loans and holdings of securities.

– The test looks at the interactions between transition and physical risk, covering both the direct and indirect impact (through macro scenarios) of the most severe and frequent natural disasters on businesses and banks. This allows the future costs and benefits of climate policy to be compared.

According to the report published by the ECB in September 2021, this stress test yields the following results:

– There are clear benefits to acting early. The short-term costs of the transition are much lower than the costs of unconstrained climate change in the medium and long term.

– If climate risk is not mitigated, its effects are concentrated in certain sectors (such as mining, electricity and gas) and in companies located in the geographical areas most exposed to physical risk, which would face a considerable decrease in their solvency as a consequence of more severe and frequent natural disasters.

– If policies for the transition to a greener economy are not introduced, physical risks will increase in a non-linear manner and, due to the irreversible nature of climate change, this increase will continue over time. Therefore, it is of the utmost importance to make an early and gradual transition to mitigate the costs of both the ecological transition and the future impact of natural disasters.

– For companies and banks most exposed to climate risks, the impact is potentially very significant, especially in the absence of additional mitigation policies. If climate risks are not reduced, the costs for companies arising from extreme weather events would increase substantially and would significantly and negatively affect their solvency.

– The impact on banks' expected losses is mostly due to physical risk and is potentially severe. The largest expected loan losses are suffered by banks located in countries with high exposure to physical risk. In the absence of climate policies, these banks' expected losses would continue to increase non-linearly over time, due to the irreversible nature of climate change.

– Therefore, climate change represents a major source of systemic risk, especially for banks with portfolios concentrated in certain economic sectors and in specific geographic areas.

Joint ECB/ESRB work to assess the impacts of climate change on financial stability

In order to measure the impacts of climate change on financial stability, the ECB and the ESRB have carried out a joint analysis based on the following components:

– Granular mapping of financial exposures to drivers of climate change, considering both physical and transition risks.

– Long-term scenario analysis for EU banks, insurers and investment funds suggesting credit or market risk losses from an insufficiently timely or effective climate transition. The climate scenarios are based on the proposals of the Network for the Greening the Financial System (NGFS): an orderly scenario of timely policy adjustment complemented by effective carbon dioxide removal technologies, a messy transition and a scenario loaded with physical risks in a "greenhouse world".

– The scenarios apply to 55 economic sectors and numerous regions and are run through stress tests for banks, insurers and investment funds.

The results of this assessment indicate that credit and market risk could accumulate from a failure to effectively counteract global warming. Further:

- Despite the uncertainties surrounding the methodologies that analyse these long-term horizons, the scenarios indicate that physical risk losses, particularly for high-emitting companies, would become dominant in about 15 years in the event of a climate transition that is insufficiently orderly, with drops of up to 20% in global GDP by the end of the century should mitigation prove insufficient or ineffective.

- The credit risk losses of the EU banking sector in adverse climate scenarios could amount to 1.60-1.75% of corporate risk-weighted assets over 30 years.

- Market risk losses in the insurance sector could be significant, up to 15%, on investments in climate-sensitive sectors (oil, gas and vehicles) in the next 15 years in a disorderly transition scenario.

- Market risk losses could also be relevant for EU investment funds. Adverse scenarios suggest an aggregate loss of value of 1.2% in equity and corporate bond investments over the next 15 years, which together make up more than 60% of around €8 billion in investment fund assets.

Despite the remarkable progress made in climate-related risk measurement and modelling, the joint report published in July 2021 acknowledges that much remains to be done in terms of adequate data and forward-looking physical risk metrics, incorporating second-round effects and potential non-linearities would further enrich the results.

Source: ECB (2021) and ECB/ESRB (2021).

4 Conclusions

Climate change and the transition to a low-carbon economy affect the financial system both because of its function of channelling the necessary financing to achieve the objectives of the Paris Agreement and because of the associated financial risks, which may be systemic in nature.

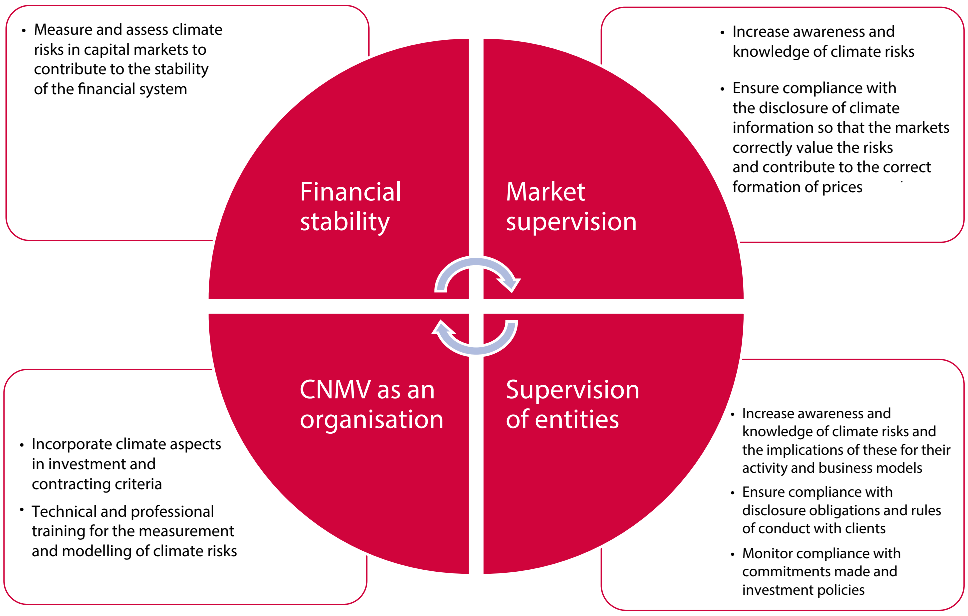
Both financial supervisors and market participants have to adapt and there is still a long way to go. Entities must integrate these risks into their organisation and risk management system and overcome pending challenges, such as having the broadest and most complete taxonomy possible of sustainable activities, the provision of sufficient information and appropriate measurement methodologies that contemplate the long and uncertain time horizon of these risks. This adaptation will require not only strategic decisions but also the development of new skills and knowledge.

Financial supervisors, as part of their mandates, must incorporate issues related to climate change in their supervisory and macroprudential practices, and in the management of their own activity as an organisation. As part of this responsibility, the authorities must also contribute to the identification of risk factors and their transmission channels, to the proper measurement of their economic and financial impact, and to the development of possible mitigation measures.[50]

The CNMV is also familiar with these issues and must integrate the monitoring of these risks into the performance of its functions. The CNMV's mandate includes investor protection, market transparency and its efficient operation, which requires a broader monitoring of environmental, social and governance risks and, in particular, of greenwashing practices that may undermine these goals.

As stated in this article, and summarised in Table 4, the CNMV can carry out the analysis, evaluation and monitoring of climate and environmental risks and, more generally, ESG risks, through the following approaches and work areas:

CNMV work areas related to climate-related risk monitoring TABLE 4



Source: CNMV.

– From a **macroprudential perspective**, as the watchdog for financial stability, taking into account the specific mandate conferred by Law 7/2021, under the coordination of AMCESFI, and the information available, a mapping of financial exposures to climate risks (physical and transition) will be carried out to identify vulnerabilities by sector and financial institution.

This mapping is especially relevant for issuers, since it allows them to identify their level of exposure and individual and sector-level vulnerabilities to

50 At the end of this article, the FSB published a report on possible approaches to supervision and regulation of climate-related risks with the aim of helping supervisors and regulators in their work to monitor, manage and mitigate these risks and to promote consistent approaches across sectors and jurisdictions. The report contains a series of recommendations – regarding the necessary climate data, the use of analytical and stress tools, and consideration of other possible macroprudential policies and tools – on which the sectors involved are requested to comment. FSB (2022).

physical risks according to their geographical location and to transition risks depending on their level of carbon emissions, and for the collective investment schemes sector, since the studies carried out to date show that the portfolios of these vehicles have the largest exposure in the financial system, at least to transition risks.

The CNMV will continue working to develop analysis tools, such as stress tests for investment funds and models that allow measures to be identified to mitigate the risks deriving from climate change.

– In the **prudential and conduct supervision of the markets**, the CNMV will contribute, within the scope of its powers, to increasing awareness and knowledge of climate risks in the markets and their participants, and will also ensure issuers comply with the disclosure requirements related to the climate and sustainability factors to help the markets correctly price climate-related financial risks.

It is also necessary to help increase awareness and knowledge of risks and promote their integration into the risk management environments and models of supervised entities and infrastructures.

From a behavioural standpoint, the risk of greenwashing is possibly one of the most serious, as it can damage investor confidence in sustainable finance and lead to a reallocation of capital away from sustainable development goals.

– Given the global dimension of these risks and the possible spillover effects that may arise from the interconnections between the real and financial sectors, it is crucial that efforts are coordinated, not only at the national level, but also at the global level. For this reason, the CNMV will continue to actively participate in the key **international and national forums** in this area to continue advancing and improving its knowledge, analysis and development of measures and methodologies and available information, as well as the integration of these risks into the supervision and resolution of entities and infrastructures.

It is therefore important to improve the cooperation between all relevant public authorities, at national, European and international level, to work towards a common approach that allows an orderly transition to be monitored and ensures that the perspective of dual materiality is integrated consistently throughout the EU financial system.

– The **CNMV, as an organisation**, is committed to achieving the Sustainable Development Goals and is working on the implementation of an environmental management policy that entails a reduction of its own carbon footprint.

In terms of capacities and availability of resources, the CNMV, like the other supervisors, faces the challenge of improving its technical and professional training, expanding its analysis and research possibilities for the measurement and modelling of climate and ESG risks.

Putting climate risks at the core of risk management and supervision will strengthen the resilience of the financial system. At the same time, sustainable finance based on sound risk management will help facilitate a smooth transition to a low-carbon economy. This creates a virtuous circle that benefits the economy and financial stability.

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Annex 1 Climate risk transmission channels and translation into financial risks

TABLE 5

Climate risks

Transition risks

These risks arise from efforts to move towards a low-carbon economy in response to climate change

- Changes in policies and regulations (CO_2 emission limits, carbon taxes)
- Technological development
- Consumer preferences

Physical risk. Caused by extreme weather events and changes in ecosystems.

- Acute: risks appear suddenly, linked to a specific event (torrential rain, hurricanes, floods, storms, tidal waves, droughts, etc.)
- Chronic: risks gradually manifest through long-term changes in weather patterns (sustained rise in temperatures that can cause sea levels to rise, chronic heat waves, desertification and the acidification of oceans)

Economic transmission channels

Micro
Impact on individual businesses and households

Companies

- Property damage and business stoppages due to severe weather
- Stranded assets and new capital expenditure due to the transition
- Changes in demand and costs
- Legal responsibility (due to a lack of mitigation or adaptation)

Households

- Loss of income (due to climate disturbances and health impacts, labour market friction, etc.)
- Property damage (from severe weather) or restrictions (due to low-carbon policies) drive up costs and affect valuations

Macro
Global macroeconomic impacts

- Capital depreciation and increased investment
- Price changes (due to structural changes, supply shocks)
- Changes in productivity (due to severe heat, shift of investment to mitigation and adaptation measures, greater risk aversion, etc.)
- Labour market friction (due to physical and transition risks)
- Socio-economic changes (changes in consumption patterns, migration, conflicts)
- Other impacts on international trade, government revenues, fiscal space, production, interest rates and exchange rates

Financial risks

Credit risk

- Business and household NPLs
- Depreciation of collateral

Market risk

- Change in the price of equities, raw materials, etc.
- Higher financial cost of debt and reduced access to markets

Liquidity risk

- Increased demand for liquidity
- Refinancing risk and limited access to funding sources

Operational risk

- Supply chain disruption
- Forced closure of facilities
- Increased operating costs

Legal risk

- Increase in litigation due to the consolidation of physical and transition risks

Reputational risk

- Investors' perception of non-alignment with climate objectives

Knock-on effect in the financial system

Climate and economic feedback effects

Economy and financial system feedback effects

Source: NGFS (2021) and CNMV.

Annex 2 European regulations on sustainability reporting

TABLE 6

Standard	Scope
Non-Financial Reporting Directive (NFRD)[51]	Rules on the disclosure of non-financial information, including ESG disclosures, for large public interest companies with more than 500 employees (listed companies, banks, insurance companies and other companies designated by national authorities as public interest entities). It follows the principle of dual materiality: impact of its operations on ESG aspects and ESG risks with an adverse impact on the company's operations.
Corporate Sustainability Reporting Directive (CSRD)[52]	NFRD review project being conducted through the Corporate Sustainability Reporting Directive (CSRD): this will expand the scope of ESG disclosures to all issuers of securities listed on regulated markets (except micro-enterprises) and require an independent review of the information. The text includes the development of common standards for the presentation of sustainability reports and stipulates that the information reported must be in digital format so that it is easily accessible through a single European access point. Barring any delays, companies would apply the rules for the first time in 2024, for the fiscal year 2023.
Sustainability-Related Disclosures Regulation in the Financial Services Sector (SFDR)	This Regulation establishes sustainability-related disclosure obligations for entities that offer financial products and for financial advisers. Financial market participants should integrate sustainability-related information into product design and disclose that information in pre-contractual documentation, periodic reports, and on their websites. In addition, they must disseminate information on the adverse impacts on sustainability at the level of the entity and financial products, that is, if they consider that there are negative externalities on ESG issues in investment decisions/advice and, if so, how they are reflected in the product. The Draft Technical Standards of the European Supervisory Authorities[53] published in February 2021 include 12 mandatory adverse climate indicators and other indicators related to the environment, including six for GHG emissions, which will be disclosed by financial market participants. The SFDR entered into force in March 2021, with the first major adverse impact disclosures beginning in 2023.
Taxonomy Regulation[54]	This Regulation establishes an EU-wide classification system that identifies a list of environmentally sustainable economic activities, according to six environmental objectives. For financial products that contribute to an environmental objective, under the SFDR, information must be disclosed about which environmental objectives they contribute to and how and to what extent they qualify as aligned with the taxonomy. For financial products that promote environmental characteristics, in addition to the above information, a statement regarding the financial products that do not meet the taxonomy criteria must be included.

51 Directive 2014/95/EU of the European Parliament and of the Council, of 22 October 2014, amending Directive 2013/34/EU as regards the disclosure of non-financial and diversity information by certain large undertakings and groups.

52 Proposal for a Directive of the European Parliament and of the Council amending Directive 2013/34/EU, Directive 2004/109/EC, Directive 2006/43/EC and Regulation (EU) No. 537/2014, as regards corporate sustainability reporting.

53 Joint Committee of the ESAs, Final report on draft Regulatory Technical Standards with regard to the content, methodologies and presentation of disclosures pursuant to Regulation (EU) 2019/2088.

54 Regulation (EU) 2020/852 of the European Parliament and of the Council, of 18 June 2020, on the establishment of a framework to facilitate sustainable investment, and amending Regulation (EU) 2019/2088.

Standard	Scope
	In addition, the Taxonomy Regulation requires any company subject to the NFRD to disclose how and to what extent its activities are associated with economic activities that qualify as environmentally sustainable. In February 2021, the ESAs published technical advice on the content and format of disclosures. The Taxonomy Regulation entered into force in July 2020 and the first delegated acts, related to the objectives of mitigation and adaptation to climate change, were adopted in April 2021. For these two goals, the first disclosures under the EU taxonomy are due in early 2022.
Capital Requirements Regulation (CRR)[55]	Amendments to the Capital Requirements Regulation (CRR) require large institutions that have issued securities admitted to trading on a regulated market in any Member State to disclose information on ESG risks, including physical and transition risks. The EBA is mandated to develop Implementing Technical Standards (ITS) for Pillar 3 disclosures. Starting in June 2022, the information must be disclosed annually for the first year and twice a year thereafter.
Regulation on Prudential Requirements of Investment Firms (IFR)[56]	Similarly, under the Investment Firms Prudential Requirements Regulation (IFR), investment firms above a certain size are required to disclose ESG risks, including physical and transition risks.
Benchmarks Regulation (BMR)[57]	The Benchmarks Regulation, amended in 2019 to incorporate specific reporting obligations on sustainability aspects for all benchmark indices and to regulate the new EU climate indices, establishes that all indices must report on how ESG factors are taken into account in their construction and on their alignment with the climate objectives of the Paris Agreement. In addition, indices labelled as climate indices must disclose their decarbonisation trajectory in terms of reducing GHG intensity by at least 7% per year on average.

55 Regulation (EU) 2019/876 of the European Parliament and of the Council of 20 May 2019 amending Regulation (EU) No. 575/2013 as regards the leverage ratio, the net stable funding ratio, requirements for own funds and eligible liabilities, counterparty credit risk, market risk, exposures to central counterparties, exposures to collective investment undertakings, large exposures, reporting and disclosure requirements, and Regulation (EU) No. 648/2012.

56 Regulation (EU) 2019/2033 of the European Parliament and of the Council of 27 November 2019 on the prudential requirements of investment firms and amending Regulations (EU) No. 1093/2010, (EU) No. 575/2013, (EU) No. 600/2014 and (EU) No. 806/2014.

57 Regulation (EU) 2016/1011 of the European Parliament and of the Council, of 8 June 2016, on indices used as benchmarks in financial instruments and financial contracts or to measure the performance of investment funds and amending Directives 2008/48/EC and 2014/17/EU and Regulation (EU) No. 596/2014. This Regulation was amended by Regulation (EU) 2019/2089 of the European Parliament and of the Council, of 27 November 2019, amending Regulation (EU) 2016/1011 as regards EU Climate Transition Benchmarks, EU Paris-aligned Benchmarks and sustainability-related disclosures for benchmarks.

III Legislative Annex

Since the publication of the *CNMV Bulletin* for the fourth quarter of 2021, the following legislative developments have taken place:

National regulations

- Royal Decree-Law 1/2022, of 18 January, amending Law 9/2012, of 14 November, on the restructuring and resolution of credit institutions, Law 11/2015, of 18 June, on the recovery and resolution of credit institutions and investment firms and Royal Decree 1559/2012, of 15 November, which establishes the legal framework for asset management companies, in relation to the legal framework for the Management Company for Assets Arising from Bank Restructuring (SAREB).

  The reclassification of SAREB in the national accounts as a unit of the public administrations sector, in line with the opinion issued by Eurostat, makes it urgent and necessary to implement several changes to its legal framework to enable this institution to adapt to the new situation.

  The constraints on the State's participation in SAREB's shareholder structure have been eliminated, which potentially allows it to increase its weight in the capital of this company. The Seventh Additional Provision of Law 9/2012, of 14 November, on the restructuring and resolution of credit institutions, is therefore amended. In addition, the procedure used by the Fund for Orderly Bank Restructuring (FROB) to acquire stakes in the capital of SAREB is regulated so that control can be taken of the company.

  The FROB is expected to be able to obtain a majority holding in SAREB without the latter acquiring the status of a state-owned mercantile company. SAREB is an asset management company and therefore a resolution instrument whose founding objective was to contribute to the proper development of credit institution restructuring and resolution processes. In addition, the company has a limited time horizon (2027), as reflected in the objective mentioned above and its singular economic nature. Therefore, to ensure that the potential taking of control by the FROB does not imply a change in its ability to act as a resolution instrument, the company will remain subject to the private legal system, with the specificities that this implies.

  A technical change has been implemented, which means that SAREB is not subject to Article 327 of the Spanish Corporate Enterprises Act and exempts the company from the mandatory capital reduction obligation in the event that, due to accounting losses, its equity is reduced to less than two thirds of its share capital and has not recovered within one financial year. This ensures full consistency with the change already implemented through Royal Decree-Law 6/2020, of 10 March, which exempted SAREB from applying Article 363.1(e), of the Spanish Corporate Enterprises Act, and guarantees legal certainty in regard to the company continuing its activities until the end of the established time horizon with no grounds for dissolution.

A specific amendment has also been made to the Fourth Additional Provision of Royal Decree-Law 32/2021, of 28 December, on urgent measures for labour reform, guaranteeing stability in employment and the transformation of the labour market, relating to the “Regime applicable to public sector employees”, in order to fine-tune its wording and, in particular, to add an express safeguard for the effective replacement rate set by the General Budgetary Law for each financial year.

– Law 4/2022, of 25 February, on the protection of consumers and users.

  The purpose of Law 4/2022, of 25 February, on the protection of consumers and users in situations of social and economic vulnerability, is to include for the first time in state regulations for the defence of consumers, a referral to “vulnerable consumers” who should be given special attention by both the public authorities and the business sector in consumer relations. The objective is to protect the legitimate interests of people who are in a situation of vulnerability in alignment with the mandate entrusted to the public authorities under Article 51.1 of the Spanish Constitution.

  Article 19 has been amended, sections 4 and 5 of which establish that the rules set out in this Law in regard to commercial practices and those that regulate commercial practices in matters which include: the remote marketing of financial services for consumers and users, e-commerce, collective investment in securities, rules of conduct in investment services, public offerings or admissions to trading of securities and insurance products, including mediation and any other sector rules that regulate specific aspects of the unfair commercial practices provided for in EU regulations, shall prevail in the event of discrepancies over the general legislation applicable to unfair commercial practices.

  For commercial practices relating to financial services, legal or regulatory standards may be drawn up that offer greater protection to the consumer or user.

  The Third Additional Provision establishes that the government will promote, in coordination with the Bank of Spain as supervisor and representative of the credit institution sector, a plan setting out measures to ensure the inclusion of the most vulnerable people, particularly older people.

– Royal Decree-Law 6/2022, of 29 March, implementing urgent measures as part of the national response plan to the economic and social consequences of the war in Ukraine.

  The government is rolling out a national plan that includes both regulatory and non-regulatory measures. The main objectives of the measures in the response plan are to lower energy prices for all citizens and businesses, support the most affected sectors and most vulnerable groups, and reinforce price stability. The aim is to limit the impact of the economic and social cost of geopolitical disturbance on gas prices, halt the inflationary process and help the economy adapt to this temporary situation, while at the same time shoring up the foundations for economic recovery and the creation of quality employment.

In the Twenty-first Final Provision, a section 5 is added to Article 32 of Law 39/2015, of 1 October, on the Common Administrative Procedure for Public Administrations, which contemplates the possibility of extending the deadlines for administrative procedures in the event of a "cyber incident". For the Public Administration service, this will provide additional support to extend deadlines that had already been set out in section 4, because the budget for this relates to mere technical incidents not serious cyber-attacks and because it refers to an extension of general deadlines for all procedures supported by the systems or services attacked and not an agreement to extend deadlines on a procedure-by-procedure basis.

The Twenty-second Final Provision adds a Thirtieth Additional Provision and Article 142 of Law 40/2015, of 1 October, on the Legal Regime of the Public Sector, referring to collaboration techniques, is amended to establish a secure model for the transparent management of information that provides free and agile access to public and private information, to develop digital services with high added value for the general public and thus promote and speed up the creation of accessible data repositories to help create value-added services based on data from public and, potentially, private sectors, by setting up a transversal shared data platform for companies and the Public Administration services, and Public Administrations.

Comisión Nacional del Mercado de Valores (CNMV)

– Circular 1/2022, of 10 January, of the CNMV (National Securities Market Commission) regarding the advertising of crypto-assets for investment purposes.

  The purpose of this Circular is to implement the rules, principles and criteria governing the advertising of crypto-assets.

  It defines the objective and subjective scope of application, specifying the advertising activity that must be subject to a prior communication regime and establishing the tools and procedures that will be used to effectively supervise the advertising of crypto-assets. The Circular does not contain any rules governing the products themselves, nor their suppliers or characteristics, but relates exclusively to the requirements that advertising aimed at offering these assets as a potential investment must adhere to. As for all forms of advertising, the products included in this circular must comply with the provisions of the General Advertising Act 34/1988, of 11 November, Law 3/1991, of 10 January, on unfair competition and other general regulations governing advertising.

  It entered into force one month after its publication in the Official State Gazette (*BOE*).

– Resolution of 12 January 2022, of the CNMV, publishing the Agreement with the EAE Madrid centre of higher education to offer external and extracurricular internships for students of official bachelor's and master's degrees.

- Resolution of 25 January 2022, of the CNMV, publishing the Agreement with the Bank of Spain and the Ministry of Economic Affairs and Digital Transformation for the promotion and development of the Financial Education Plan.

- Resolution of 25 January 2022, of the CNMV, publishing the Agreement with Rey Juan Carlos University to offer external curricular and extracurricular internships for students of official Bachelor's and Master's degrees.

- Resolution of 18 February 2022, of the CNMV, correcting the errors published in Circular 1/2022, of 10 January, regarding the advertising of crypto-assets for investment purposes.

- Resolution of 28 February 2022, of the Board of the CNMV amending the Commission's Internal Regulation.

  This reform of the CNMV's Internal Regulation aims to adjust the organisational structure of the Commission to its new functions in the field of sustainable finance and address the supervision of advertising of crypto-assets for investment purposes, following the approval of Circular 1/2022, of 10 January.

  The functions carried out by the General Directorate of Strategic Policy and International Affairs will include functions relating to the coordination of sustainable finance matters, and the name of the Department of Strategy and Innovation will be changed and it will be renamed the Department of Strategy, Innovation and Sustainable Finance, to give greater visibility to this function and to reflect the future importance of sustainable finance.

  Likewise, the General Directorate of Legal Services will be tasked with supervising compliance with the provisions of Circular 1/2022, with this supervisory activity being assigned to the Investors' Department.

Other

- Circular 1/2022, of 24 January, of the Bank of Spain, for financial credit institutions, on liquidity, prudential regulations and information obligations, amending Circular 1/2009, of 18 December, on credit institutions and other supervised entities, relating to information on the capital structure and non-voting units of credit institutions, and their branches, as well as the senior managers of the supervised entities, and Circular 3/2019, of 22 October, implementing Regulation (EU) 575/2013 to define the significance threshold of past due credit obligations.

  In execution of the specific authorisations included in Royal Decree 309/2020, of 11 February, on the legal regime of financial credit establishments, and amending the Regulations of the Mercantile Registry, approved by Royal Decree 1784/1996, of 19 July, and Royal Decree 84/2015, of 13 February, implementing Law 10/2014, of 26 June, on the organisation, supervision and solvency of credit institutions, the Bank of Spain had implemented this circular with the purpose of supplementing the solvency regulations of financial credit institutions and adapting their reporting obligations to their type of activity, business model, size and relative importance.

The Circular will enter into force three months after its publication.

– Resolution of 23 February 2022, of the General Secretariat of Digital Administration, establishing the conditions of use for non-cryptographic electronic signatures linked to "AutenticA", in dealings with the General State Administration and related or dependent public bodies and public law firms.

– Circular 2/2022, of 15 March, of the Bank of Spain, on the rules for sending payment statistics to the Bank of Spain by payment service providers and payment system operators.

  This Circular establishes rules on: i) the procedure for submitting statistical information to the Bank of Spain by reporting agents, ii) the periodicity of the statistical information to be submitted to the Bank of Spain and iii) the power of the Bank of Spain to exempt certain reporting agents from complying with the obligations to submit statistical information.

  The new rules introduced by Regulation (EU) 1409/2013 of the European Central Bank, of 28 November 2013, on payment statistics, justifies the implementation of a new circular to replace Circular 2/2015, of 22 May, of the Bank of Spain, on rules for sending the payments statistics and payment systems included in Regulation (EU) 1409/2013 of the European Central Bank, of 28 November 2013, to this body.

– Resolution of 17 March 2022, of the sub secretariat publishing the agreement between the National Police and the CNMV for the prosecution of financial fraud by unauthorised persons or entities.

  The purpose of this agreement is to set the framework for collaboration between the Economic and Fiscal Crime Unit (UDEF) of the National Police and the CNMV in matters of prosecution of financial fraud and of persons operating outside the legal channels provided for in the securities market regulations (unauthorised persons or entities).

European Securities and Markets Authority (ESMA)

– Guidelines on the assessment of the suitability of members of the management body and key function holders (2 July 2021). European Securities Market Authority (ESMA) and European Banking Authority (EBA).

– Guidelines on settlement fails reporting under Article 7 of CSDR (8 December 2021). European Securities and Markets Authority (ESMA).

– Guidelines on methodology oversight function and record keeping under the Benchmarks Regulation (7 December 2021) European Securities and Markets Authority (ESMA).

EU legislation (in order of publication in the *OJEU*)

– Commission Delegated Regulation (EU) 2022/25, of 22 September 2021, supplementing Regulation (EU) 2019/2033 of the European Parliament and of the Council specifying the methods for measuring the K-factors referred to in Article 15 of that Regulation.

  Published in the *OJEU* (L) No. 6, of 11 January 2022, pp. 1-6.

– Commission Delegated Regulation (EU) 2022/26, of 24 September 2021, supplementing Regulation (EU) 2019/2033 of the European Parliament and of the Council with regard to regulatory technical standards specifying the notion of segregated accounts to ensure client money's protection in the event of an investment firm's failure.

  Published in the *OJEU* (L) No. 6, of 11 January 2022, pp. 7-8.

– Commission Delegated Regulation (EU) 2022/27, of 27 September 2021, amending Regulation (EU) No. 236/2012 of the European Parliament and of the Council as regards the adjustment of the relevant threshold for the notification of significant net short positions in shares.

  Published in the *OJEU* (L) No. 6, of 11 January 2022, pp. 9-10.

– Commission Delegated Regulation (EU) 2022/76, of 22 September 2021 supplementing Regulation (EU) 2019/2033 of the European Parliament and of the Council with regard to regulatory technical standards specifying adjustments to the K-factor 'daily trading flow' (K-DTF) coefficients.

  Published in the *OJEU* (L) No. 13, of 20 January 2022, pp. 1-3.

– Commission Implementing Decision (EU) 2022/174, of 8 February 2022, determining, for a limited period of time, that the regulatory framework applicable to central counterparties in the United Kingdom of Great Britain and Northern Ireland is equivalent, in accordance with Regulation (EU) No. 648/2012 of the European Parliament and of the Council. (Applicable from 1 July 2022. Expires on 30 June 2025).

  Published in the *OJEU* (L) No. 40, of 9 February 2022, pp. 40-44.

– Commission Delegated Regulation (EU) 2022/192, of 20 October 2021, amending the regulatory technical standards laid down in Commission Delegated Regulation (EU) No. 1151/2014 as regards the information to be notified when exercising the right of establishment and the freedom to provide services.

  Published in the *OJEU* (L) No. 31, of 14 February 2022, pp. 1-3.

– Commission Implementing Regulation (EU) 2022/193, of 17 November 2021, amending the implementing technical standards laid down in Implementing Regulation (EU) No. 926/2014 laying down standard forms, templates and procedures as regards the information to be notified when exercising the right of establishment and the freedom to provide services.

Published in the *OJEU* (L) No. 31, of 14 February 2022, pp. 4-20.

– Council Regulation (EU) 2022/345, of 1 March 2022, amending Regulation (EU) No. 833/2014 concerning restrictive measures in view of Russia's actions destabilising the situation in Ukraine.

  Published in the *OJEU* (L) No. 63, of 2 March 2022, p. 1.

– Council Decision (CFSP) 2022/346, of 1 March 2022, amending Decision 2014/512/CFSP concerning restrictive measures in view of Russia's actions destabilising the situation in Ukraine.

  Published in the *OJEU* (L) No. 63, of 2 March 2022, p. 5.

– Commission Regulation (EU) 2022/357, of 2 March 2022, amending Regulation (EC) No. 1126/2008 adopting certain international accounting standards in accordance with Regulation (EC) No. 1606/2002 of the European Parliament and of the Council as regards International Accounting Standards 1 and 8.

  Published in the *OJEU* (L) No. 68, of 3 March 2022, pp. 1-8.

– Commission Implementation Regulation (EU) 2022/365, of 3 March 2022, amending Implementing Regulation (EU) 2018/1624 laying down implementing technical standards with regard to procedures and standard forms and templates for the provision of information for the purposes of resolution plans for credit institutions and investment firms pursuant to Directive 2014/59/EU of the European Parliament and of the Council.

  Published in the *OJEU* (L) No. 69, of 4 March 2022, pp. 60-104.

– Commission Delegated Regulation (EU) 2022/439, of 20 October 2021, supplementing Regulation (EU) No. 575/2013 of the European Parliament and of the Council with regard to regulatory technical standards for the specification of the assessment methodology competent authorities are to follow when assessing the compliance of credit institutions and investment firms with the requirements to use the Internal Ratings Based Approach.

  Published in the *OJEU* (L) No. 90, of 18 March 2022, pp. 1-66.

IV Statistics Annex

1 Markets

1.1 Equity

Share issues and public offerings[1]

TABLE 1.1

				2021				2022
	2019	2020	2021	I	II	III	IV	I
NO. OF ISSUERS								
Total	33	28	34	10	10	16	8	9
Capital increases	33	28	33	10	10	15	8	9
Primary offerings	1	1	1	0	1	0	0	0
Bonus issues	10	12	14	6	3	6	5	4
Of which, scrip dividend	9	12	13	6	3	6	4	4
Capital increases by conversion	3	2	4	0	1	3	0	0
For non-monetary consideration	2	1	4	1	1	2	0	1
With pre-emptive subscription rights	8	5	4	0	2	1	1	0
Without trading warrants	13	9	12	3	4	5	2	5
Secondary offerings	0	0	1	0	0	1	0	0
NO. OF ISSUES								
Total	52	40	52	10	14	19	9	10
Capital increases	52	40	51	10	14	18	9	10
Primary offering	1	1	1	0	1	0	0	0
Bonus issues	15	17	20	6	3	6	5	4
Of which, scrip dividend	14	17	19	6	3	6	4	4
Capital increases by conversion	4	2	4	0	1	3	0	0
For non-monetary consideration	2	2	5	1	1	3	0	1
With pre-emptive subscription rights	9	5	4	0	2	1	1	0
Without trading warrants	21	13	17	3	6	5	3	5
Secondary offerings	0	0	1	0	0	1	0	0
CASH VALUE (millions of euros)								
Total	9,806.0	10,852.1	17,138.3	2,969.2	8,948.7	4,898.8	321.7	1,368.9
Capital increases	9,806.0	10,852.1	14,938.1	2,969.2	8,948.7	2,698.6	321.7	1,368.9
Primary offerings	10.0	150.1	100.0	0.0	100.0	0.0	0.0	0.0
Bonus issues	1,565.4	1,949.0	1,264.9	772.5	195.8	131.1	165.5	422.8
Of which, scrip dividend	1,564.1	1,949.0	1,243.6	772.5	195.8	131.1	144.2	422.8
Capital increases by conversion	354.9	162.4	109.5	0.0	68.0	41.4	0.0	0.0
For non-monetary consideration[2]	2,034.2	233.0	3,525.3	2,079.2	56.0	1,390.1	0.0	17.4
With pre-emptive subscription rights	4,729.8	6,837.2	7,060.4	0.0	7,032.8	6.3	21.2	0.0
Without trading warrants	1,111.8	1,520.3	2,878.1	117.5	1,496.0	1,129.6	135.0	928.7
Secondary offerings	0.0	0.0	2,200.2	0.0	0.0	2,200.2	0.0	0.0
NOMINAL VALUE (millions of euros)								
Total	1,336.9	1,282.0	5,021.7	2,396.6	445.0	1,991.7	188.5	131.9
Capital increases	1,336.9	1,282.0	4,939.4	2,396.6	445.0	1,909.4	188.5	131.9
Primary offerings	0.5	7.8	5.4	0.0	5.4	0.0	0.0	0.0
Bonus issues	307.6	799.6	796.2	303.9	195.8	131.1	165.3	68.3
Of which, scrip dividend	306.3	799.6	774.9	303.9	195.8	131.1	144.0	68.3
Capital increases by conversion	16.6	1.7	46.3	0.0	23.0	23.3	0.0	0.0
For non-monetary consideration	401.0	68.0	3,289.0	2,079.2	56.0	1,153.8	0.0	8.7
With pre-emptive subscription rights	372.1	370.9	98.8	0.0	72.5	5.1	21.2	0.0
Without trading warrants	239.1	34.1	703.7	13.4	92.3	596.1	1.9	54.9
Secondary offerings	0.0	0.0	82.3	0.0	0.0	82.3	0.0	0.0
***Pro memoria*: transactions BME Growth[3]**								
No. of issuers	12	9	44	9	11	26	14	11
No. of issues	17	14	77	11	15	32	19	14
Cash value (millions of euros)	298.3	238.5	2,440.8	83.2	692.3	1,230.6	434.7	347.0
Capital increases	298.3	238.5	2,440.8	83.2	692.3	1,230.6	434.7	347.0
Of which, primary offerings	229.4	173.5	1,654.2	0.0	405.5	869.6	379.1	216.5
Secondary offerings	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

1 Registered transactions at the CNMV. Does not include data from BME Growth, ETF or Latibex.
2 Capital increases for non-monetary consideration are valued at market prices.
3 Unregistered transactions at the CNMV. Source: BME and CNMV.

Companies listed[1]

TABLE 1.2

				2021				2022
	2019	2020	2021	I	II	III	IV	I
Total electronic market[2]	129	126	123	127	129	126	123	123
Of which, foreign companies	7	7	6	7	7	7	6	6
Second market	3	0	0	0	0	0	0	0
Madrid	1	0	0	0	0	0	0	0
Barcelona	2	0	0	0	0	0	0	0
Bilbao	0	0	0	0	0	0	0	0
Valencia	0	0	0	0	0	0	0	0
Open outcry	9	11	10	10	10	10	10	9
Madrid	3	3	3	3	3	3	3	3
Barcelona	5	6	6	6	6	6	6	6
Bilbao	2	2	2	2	2	2	2	2
Valencia	2	2	1	1	1	1	1	0
BME MTF Equity[3]	2,709	2,580	2,432	2,530	2,484	2,458	2,432	2,402
Latibex	19	19	19	19	19	18	19	18

1 Data at the end of period.
2 Without ETFs (Exchange Traded Funds).
3 Alternative Stock Market.

Capitalisation[1]

TABLE 1.3

Millions of euros

				2021				2022
	2019	2020	2021	I	II	III	IV	I
Total electronic market[2]	806,064.3	690,101.6	781,805.4	740,998.9	775,240.5	784,104.0	781,805.4	749,196.8
Of which, foreign companies[3]	141,671.0	113,478.9	147,214.3	127,137.4	140,652.7	146,598.2	147,214.3	143,841.7
Ibex 35	494,789.4	424,167.3	475,870.0	424,167.3	484,076.2	482,298.0	475,870.0	460,787.9
Second market	31.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Madrid	1.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Barcelona	29.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Bilbao	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Valencia	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Open outcry	1,154.2	1,053.6	1,319.3	1,072.1	1,283.7	1,299.5	1,319.3	1,222.1
Madrid	69.8	30.9	23.1	27.1	27.1	23.1	23.1	24.2
Barcelona	1,036.5	956.0	1,258.7	1,009.5	1,221.1	1,239.4	1,258.7	1,202.9
Bilbao	32.9	20.6	19.2	21.2	21.2	19.7	19.2	16.2
Valencia	80.4	76.0	45.3	45.3	45.3	45.3	45.3	0.0
BME MTF Equity[4, 5]	44,706.4	43,595.5	48,656.9	44,706.5	46,128.3	47,484.6	48,656.9	47,115.3
Latibex	199,022.2	177,210.3	196,093.9	184,754.0	229,997.7	184,664.1	196,093.9	281,928.2

1 Data at the end of period.
2 Without ETFs (Exchange Traded Funds).
3 Capitalisation of foreign companies includes their entire shares, whether they are deposited in Spain or not.
4 Calculated only with outstanding shares, not including treasury shares, because capital stock is not reported until the end of the year.
5 Alternative Stock Market.

Trading

TABLE 1.4

Millions of euros

	2019	2020	2021	2021 I	II	III	IV	2022 I
Total electronic market[1]	462,378.8	422,786.4	372,972.8	92,325.6	94,803.4	78,833.1	107,010.8	108,728.0
Of which, foreign companies	3,477.8	4,273.8	4,343.6	1,056.9	1,061.9	1,106.5	1,118.3	2,167.5
Second market	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Madrid	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Barcelona	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Bilbao	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Valencia	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Open outcry	6.2	2.5	7.4	2.8	2.6	0.4	1.6	2.3
Madrid	0.8	0.1	0.1	0.0	0.0	0.0	0.0	0.2
Barcelona	3.2	2.4	7.4	2.7	2.6	0.4	1.6	2.1
Bilbao	2.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Valencia	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
BME MTF Equity[2]	4,014.4	3,929.0	3,559.2	971.2	837.8	639.8	1,110.4	933.0
Latibex	136.4	79.5	48.9	11.2	8.2	7.9	21.7	29.4

1 Without ETFs (Exchange Traded Funds).
2 Alternative Stock Market.

Trading on the electronic market by type of transaction[1]

TABLE 1.5

Millions of euros

	2019	2020	2021	2021 I	II	III	IV	2022 I
Regular trading	450,575.7	405,120.5	355,841.2	89,838.4	90,427.5	75,244.2	100,331.1	106,941.7
Orders	258,242.2	278,516.1	237,430.5	65,154.6	57,158.8	54,975.2	60,141.9	77,695.7
Put-throughs	38,888.0	42,666.5	40,006.0	10,629.0	10,135.9	8,809.5	10,431.7	10,938.1
Block trades	153,445.5	83,938.0	78,404.7	14,054.8	23,132.8	11,459.5	29,757.6	18,308.0
Off-hours	3,098.1	4,174.3	4,890.0	970.0	1,721.1	435.6	1,763.2	964.2
Authorised trades	1,706.3	2,001.4	1,213.3	261.8	379.5	200.9	371.1	80.3
Art. 36.1 SMA trades	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tender offers	2,509.5	5,250.9	5,306.1	0.0	0.0	2,092.0	3,214.0	0.0
Public offerings for sale	634.4	967.8	1,723.2	105.0	1,618.2	0.0	0.0	75.0
Declared trades	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Options	3,422.0	3,369.1	2,787.7	747.8	400.5	633.9	1,005.6	327.2
Hedge transactions	1,799.4	1,902.4	1,211.5	402.7	256.6	226.5	325.7	339.5

1 Without ETFs (Exchange Traded Funds).

1.2 Fixed income

Gross issues registered at the CNMV

TABLE 1.6

	2019	2020	2021	2021 I	II	III	IV	2022 I
NO. OF ISSUERS								
Total	39	47	34	11	14	13	13	13
Mortgage-covered bonds	12	14	7	3	3	3	2	6
Territorial-covered bonds	2	3	3	0	2	0	1	3
Non-convertible bonds and debentures	13	11	11	3	3	5	8	3
Convertible bonds and debentures	0	0	0	0	0	0	0	1
Backed securities	13	15	12	3	4	4	1	4
Commercial paper	11	11	7	1	5	0	1	0
Of which, asset-backed	0	0	0	0	0	0	0	0
Of which, non-asset-backed	11	11	7	1	5	0	1	0
Other fixed-income issues	1	2	1	1	0	0	0	0
Preference shares	1	2	4	1	0	1	1	0
NO. OF ISSUES								
Total	298	244	156	46	49	43	18	27
Mortgage-covered bonds	29	26	16	3	4	7	2	8
Territorial-covered bonds	3	6	3	0	2	0	1	3
Non-convertible bonds and debentures	205	143	82	30	24	21	10	4
Convertible bonds and debentures	0	0	0	0	0	0	0	1
Backed securities	48	52	41	10	14	14	3	11
Commercial paper[1]	11	11	7	1	5	0	1	0
Of which, asset-backed	0	0	0	0	0	0	0	0
Of which, non-asset-backed	11	11	7	1	5	0	1	0
Other fixed-income issues	1	4	1	1	0	0	0	0
Preference shares	1	2	6	1	0	1	1	0
NOMINAL AMOUNT (millions of euros)								
Total	90,164.5	132,111.3	101,170.7	23,638.4	24,728.1	25,484.7	27,319.5	42,857.7
Mortgage-covered bonds	22,933.0	22,960.0	28,700.0	3,500.0	9,000.0	9,450.0	6,750.0	14,300.0
Territorial-covered bonds	1,300.0	9,150.0	5,500.0	0.0	3,500.0	0.0	2,000.0	3,040.0
Non-convertible bonds and debentures	29,605.6	33,412.5	25,256.7	9,669.3	1,505.7	807.4	13,984.4	4,371.8
Convertible bonds and debentures	0.0	0.0	0.0	0.0	0.0	0.0	0.0	300.0
Backed securities	18,740.9	36,281.0	18,375.7	5,030.0	5,673.5	7,184.2	488.0	14,021.8
Commercial paper[2]	15,085.0	22,291.6	20,180.0	4,240.8	5,048.9	7,293.2	3,597.1	6,824.1
Of which, asset-backed	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Of which, non-asset-backed	15,085.0	22,291.6	20,180.0	4,240.8	5,048.9	7,293.2	3,597.1	6,824.1
Other fixed-income issues	1,500.0	6,266.2	823.3	823.3	0.0	0.0	0.0	0.0
Preference shares	1,000.0	1,750.0	2,335.0	375.0	0.0	750.0	500.0	0.0
***Pro memoria*:**								
Subordinated issues	3,213.5	14,312.1	4,599.5	1,022.2	1,208.0	1,805.9	563.4	951.3
Underwritten issues	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

1 Shelf registrations.
2 The figures for commercial paper refer to the amount placed.

Issues admitted to trading on AIAF[1]

TABLE 1.7

Nominal amount in millions of euros

	2019	2020	2021	2021 I	II	III	IV	2022 I
Total	114,034.0	119,230.2	113,205.9	45,044.1	21,415.6	26,630.3	20,115.9	40,160.8
Commercial paper	15,036.1	22,293.8	20,190.1	2,902.1	6,335.2	4,763.2	6,189.7	5,272.3
Bonds and debentures	45,082.0	20,407.1	37,664.0	33,306.0	906.9	1,316.1	2,135.0	15,926.6
Mortgage-covered bonds	29,375.0	23,058.3	29,020.0	3,600.0	5,000.0	12,670.0	7,750.0	14,300.0
Territorial-covered bonds	3,300.0	9,150.0	5,500.0	0.0	3,500.0	0.0	2,000.0	3,040.0
Backed securities	18,740.9	36,281.0	18,375.7	4,030.0	5,673.5	7,131.0	1,541.2	1,621.8
Preference shares	1,000.0	1,750.0	1,625.0	375.0	0.0	750.0	500.0	0.0
Matador bonds	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other fixed-income issues	1,500.0	6,290.1	831.0	831.0	0.0	0.0	0.0	0.0

1 Only corporate bonds are included.

AIAF. Issuers, issues and outstanding balance

TABLE 1.8

	2019	2020	2021	2021 I	II	III	IV	2022 I
NO. OF ISSUERS								
Total	331	321	292	316	310	301	292	284
Corporate bonds	299	289	257	282	276	266	257	249
Pagarés	9	8	40	7	8	7	40	40
Commercial paper	40	41	39	41	39	40	39	39
Bonds and debentures	35	29	27	29	29	29	27	27
Mortgage-covered bonds	7	8	6	8	7	7	6	6
Territorial-covered bonds	227	222	198	216	212	202	198	198
Backed securities	6	5	5	4	4	4	5	5
Preference shares	5	5	3	5	5	4	3	3
Government bonds	32	32	35	34	34	35	35	35
Letras del Tesoro	1	1	1	1	1	1	1	1
Long government bonds	1	1	1	1	1	1	1	1
Regional government debt	13	13	13	13	13	13	13	13
Foreign public debt	10	10	13	12	12	13	13	13
Other public debt	8	8	8	8	8	8	8	8
NO. OF ISSUES								
Total	2,775	2,610	2,451	2,574	2,560	2,492	2,451	2,415
Corporate bonds	1,834	1,655	1,465	1,600	1,579	1,508	1,465	1,407
Commercial paper	84	53	54	26	52	36	54	54
Bonds and debentures	718	589	481	573	547	519	481	481
Mortgage-covered bonds	209	200	183	200	191	195	183	183
Territorial-covered bonds	23	22	18	22	21	21	18	18
Backed securities	787	777	715	765	754	723	715	715
Preference shares	8	9	11	9	9	10	11	11
Matador bonds	5	5	3	5	5	4	3	3
Government bonds	941	955	986	974	981	984	986	1,008
Letras del Tesoro	12	12	12	12	12	12	12	12
Long government bonds	236	231	233	232	230	227	233	236
Regional government debt	173	167	171	164	166	170	171	170
Foreign public debt	508	533	558	554	562	564	558	572
Other public debt	12	12	12	12	11	11	12	18
OUTSTANDING BALANCE[1] (millions of euros)								
Total	6,421,003.0	6,297,532.5	6,261,335.6	6,439,031.5	6,429,153.0	6,358,591.6	6,261,335.6	6,311,600.3
Corporate bonds	463,816.1	464,170.7	456,613.9	479,648.0	470,461.5	472,718.8	456,613.9	452,925.0
Commercial paper	6,423.1	4,812.4	5,688.6	3,245.0	4,441.2	3,915.7	5,688.6	5,092.2
Bonds and debentures	62,477.8	53,696.1	68,584.8	78,185.6	78,173.8	78,850.0	68,584.8	73,017.1
Mortgage-covered bonds	195,719.1	199,054.1	199,681.7	197,648.2	190,799.1	201,689.8	199,681.7	206,148.4
Territorial-covered bonds	20,762.3	18,262.3	17,544.0	18,262.3	19,144.0	19,144.0	17,544.0	19,694.0
Backed securities	172,878.9	181,341.0	156,695.2	175,017.1	170,613.5	161,139.6	156,695.2	140,553.8
Preference shares	5,240.0	6,690.0	8,225.0	6,975.0	6,975.0	7,725.0	8,225.0	8,225.0
Matador bonds	314.8	314.8	194.6	314.8	314.8	254.7	194.6	194.6
Government bonds	5,957,186.8	5,833,361.8	5,804,721.7	5,959,383.5	5,958,691.5	5,885,872.8	5,804,721.7	5,858,675.3
Letras del Tesoro	68,335.5	79,765.7	79,409.6	82,265.0	77,822.1	76,253.7	79,409.6	79,174.4
Long government bonds	937,290.9	1,026,625.5	1,094,574.1	1,059,837.2	1,085,130.1	1,096,361.5	1,094,574.1	1,156,820.9
Regional government debt	35,247.6	32,775.5	36,131.2	33,894.9	34,155.4	35,127.5	36,131.2	36,099.7
Foreign public debt	4,914,792.7	4,692,674.9	4,592,786.5	4,781,866.2	4,760,263.7	4,676,809.9	4,592,786.5	4,579,819.9
Other public debt	1,520.2	1,520.2	1,820.2	1,520.2	1,320.2	1,320.2	1,820.2	6,760.4

1 Nominal amount.

AIAF. Trading

TABLE 1.9

Nominal amount in millions of euros

				2021				2022
	2019	2020	2021	I	II	III	IV	I
BY TYPE OF ASSET								
Total	158,807.2	140,509.4	47,659.3	21,502.7	17,534.7	5,855.1	2,766.8	5,178.6
Corporate bonds	275.2	170.2	174.3	38.9	49.1	35.5	50.7	32.1
Commercial paper	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Bonds and debentures	260.0	169.4	174.3	38.9	49.1	35.5	50.7	32.1
Mortgage-covered bonds	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Territorial-covered bonds	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Backed securities	13.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Preference shares	1.4	0.8	0.0	0.0	0.0	0.0	0.0	0.0
Matador bonds	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Government bonds	158,532.0	140,339.2	47,485.0	21,463.8	17,485.6	5,819.6	2,716.1	5,146.5
Letras del Tesoro	25,858.4	27,975.5	5,186.3	2,076.0	1,755.0	1,305.0	50.3	50.0
Long government bonds	92,592.8	83,478.8	21,997.4	11,484.2	7,996.0	1,491.1	1,026.1	1,996.3
Regional government debt	35.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Foreign public debt	40,027.8	28,884.9	20,301.3	7,903.5	7,734.6	3,023.5	1,639.7	3,100.2
Other public debt	18.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
BY TYPE OF TRANSACTION								
Total	158,807.2	140,509.4	47,659.3	21,502.7	17,534.7	5,855.1	2,766.8	5,178.6
Outright	158,807.2	140,509.4	47,659.3	21,502.7	17,534.7	5,855.1	2,766.8	5,178.6
Repos	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sell-buybacks/Buy-sellbacks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

AIAF. Third-party trading. By purchaser sector

TABLE 1.10

Nominal amount in millions of euros

				2021				2022
	2019	2020	2021	I	II	III	IV	I
Total	158,792.5	140,495.9	47,564.1	21,492.7	17,484.3	5,829.9	2,757.2	5,175.5
Non-financial companies	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Financial institutions	158,792.5	140,495.9	47,564.1	21,492.7	17,484.3	5,829.9	2,757.2	5,175.5
Credit institutions	385.5	176.6	278.3	34.7	43.3	162.8	37.5	23.0
CIS, insurance and pension funds	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other financial institutions	158,407.0	140,319.3	47,285.8	21,458.0	17,441.1	5,667.0	2,719.7	5,152.5
General government	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Households and NPISHs[1]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest of the world	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

1 Non-profit institutions serving households.

Equity markets. Issuers, issues and outstanding balances

TABLE 1.11

				2021				2022
	2019	2020	2021	I	II	III	IV	I
NO. OF ISSUERS								
Total	13	11	10	11	10	10	10	10
Private issuers	5	4	4	4	4	4	4	4
Non-financial companies	0	0	0	0	0	0	0	0
Financial institutions	5	4	4	4	4	4	4	4
General government[1]	8	7	6	7	6	6	6	6
Regional governments	2	2	2	2	2	2	2	2
NO. OF ISSUES								
Total	54	44	49	53	49	48	49	48
Private issuers	16	11	11	11	11	11	11	11
Non-financial companies	0	0	0	0	0	0	0	0
Financial institutions	16	11	11	11	11	11	11	11
General government[1]	38	33	38	42	38	37	38	37
Regional governments	20	18	26	27	26	26	26	26
OUTSTANDING BALANCES[2] (millions of euros)								
Total	7,340.4	6,158.4	8,399.3	8,830.8	8,412.5	8,413.9	8,399.3	8,397.0
Private issuers	481.1	366.3	319.4	353.6	341.7	330.5	319.4	307.9
Non-financial companies	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Financial institutions	481.1	366.3	319.4	353.6	341.7	330.5	319.4	307.9
General government[1]	6,859.2	5,792.2	8,079.9	8,477.2	8,070.7	8,083.4	8,079.9	8,089.1
Regional governments	6,260.7	5,179.3	7,549.3	7,862.8	7,549.3	7,549.3	7,549.3	7,549.3

1 Without public book-entry debt.
2 Nominal amount.

SENAF. Public debt trading by type

TABLE 1.12

Nominal amounts in millions of euros

				2021				2022
	2019	2020	2021	I	II	III	IV	I
Total	150,634.0	120,706.0	174,959.0	45,061.0	44,715.0	48,400.0	36,783.0	28,045.0
Outright	150,634.0	120,706.0	174,959.0	45,061.0	44,715.0	48,400.0	36,783.0	28,045.0
Sell-buybacks/Buy-sellbacks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Others	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

1.3 Derivatives and other products

1.3.1 Financial derivative markets: MEFF

Trading on MEFF TABLE 1.13

Number of contracts

				2021				2022
	2019	2020	2021	I	II	III	IV	I
Debt products	0	0	0	0	0	0	0	0
Debt futures[1]	0	0	0	0	0	0	0	0
Ibex 35 products[2, 3]	6,625,993	6,395,357	5,547,599	1,364,908	1,329,170	1,430,095	1,423,426	1,664,446
Ibex 35 plus futures	5,965,905	5,905,782	5,260,568	1,274,216	1,264,040	1,377,802	1,344,510	1,587,224
Ibex 35 mini futures	145,489	154,351	92,657	26,918	21,783	21,059	22,896	33,042
Ibex 35 micro futures	0	0	0	0	0	0	0	0
Ibex 35 dividend impact futures	144,831	91,571	45,450	15,289	11,150	3,793	15,218	4,320
Ibex 35 sector futures	6	0	0	0	0	0	0	0
Call mini options	177,369	104,132	69,667	29,481	17,834	12,332	10,020	11,728
Put mini options	192,393	139,521	79,257	19,003	14,364	15,109	30,781	28,131
Stock products[4]	32,841,027	30,313,892	25,434,719	7,155,442	6,423,846	6,083,100	5,772,331	6,925,765
Futures	15,298,027	10,968,411	11,346,047	3,153,650	3,318,301	3,410,227	1,463,869	3,919,655
Stock dividend futures	758,700	130,055	2,100	0	0	400	1,700	25
Stock plus dividend futures	0	7,752	20,800	3,956	3,956	8,729	4,159	9,040
Call options	7,405,619	8,564,019	6,131,488	1,989,957	1,444,525	1,066,620	1,630,386	1,499,642
Put options	9,378,681	10,643,655	7,934,284	2,007,879	1,657,064	1,597,124	2,672,217	1,497,403

1 Contract size: €100,000.
2 The number of Ibex 35 mini futures (multiples of €1) and micro futures (multiples of €0.1) was standardised to the size of the Ibex 35 plus futures (multiples of €10).
3 Contract size: Ibex 35, €10.
4 Contract size: 100 stocks.

1.3.2 Warrants, option buying and selling contracts, and ETF (Exchange-Traded Funds)

Issues registered at the CNMV TABLE 1.14

				2021				2022
	2019	2020	2021	I	II	III	IV	I
WARRANTS								
Premium amount (millions of euros)	1,837.7	1,167.7	2,142.7	585.3	550.2	496.7	510.4	1,236.0
On stocks	901.4	445.7	792.8	200.3	220.4	169.3	202.7	289.7
On indexes	809.3	674.0	1,258.6	343.7	309.6	315.8	289.5	868.8
Other underlyings[1]	127.1	48.1	91.3	41.3	20.2	11.6	18.2	77.4
Number of issues	5,496	3,081	4,581	1,264	1,301	1,006	1,010	2,299
Number of issuers	6	5	4	3	2	2	2	2
OPTION BUYING AND SELLING CONTRACTS								
Nominal amounts (millions of euros)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On stocks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On indexes	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other underlyings[1]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Number of issues	0	0	0	0	0	0	0	0
Number of issuers	0	0	0	0	0	0	0	0

1 It includes the following underlying: baskets of stocks, exchange rates, interest rates and commodities.

Equity markets. Warrants and ETF trading

TABLE 1.15

	2019	2020	2021	2021				2022
				I	II	III	IV	I
WARRANTS								
Trading (millions of euros)	291.6	319.7	289.2	74.9	71.4	66.5	76.3	106.0
On Spanish stocks	81.1	121.1	123.3	43.9	36.2	20.4	22.7	23.0
On foreign stocks	19.7	26.0	18.2	4.9	4.0	3.8	5.6	6.0
On indexes	186.6	161.7	143.4	24.2	30.5	41.4	47.3	73.6
Other underlyings[1]	3.7	10.9	4.3	1.9	0.7	0.9	0.8	3.4
Number of issues[2]	3,605.0	3,785.0	3,249.0	878	811	781	779	1,126
Number of issuers[2]	8	7	4	4	4	4	4	2
CERTIFICATES								
Trading (millions of euros)	0.3	0.2	0.0	0.0	0.0	0.0	0.0	0.0
Number of issues[2]	2	1	1	1	0	0	0	0
Number of issuers[2]	1	1	1	1	0	0	0	0
ETFs								
Trading (millions of euros)	1,718.8	2,548.1	1,549.0	400.5	345.3	404.5	398.7	556.9
Number of funds	6	5	5	5	5	5	5	5
Assets[3] (millions of euros)	229.2	241.5	259.8	259.4	270.8	267.1	274.1	257.8

1 It includes the following underlying: baskets of stocks, exchange rates, interest rates and commodities.
2 Issues or issuers which were traded in each period.
3 Only assets from national collective investment schemes are included because assets from foreign schemes are not available.

2 Investment services

Investment services. Spanish firms, branches and agents

TABLE 2.1

				2021				2022
	2019	2020	2021	I	II	III	IV	I
BROKER-DEALERS								
Spanish firms	39	38	33	36	34	33	33	33
Branches in Spain	19	14	13	14	13	13	13	14
Agents operating in Spain	1,944	1,407	1,359	1,367	1,344	1,336	1,359	1,149
Branches in EEA[1]	9	8	4	8	7	4	4	4
Firms providing services in EEA[1]	25	25	20	23	21	20	20	21
Passports to operate in EEA[1, 2]	205	205	161	175	170	153	161	173
BROKERS								
Spanish firms	56	57	58	60	58	59	58	60
Branches in Spain	23	24	21	24	22	22	21	22
Agents operating in Spain	361	353	729	331	339	375	729	887
Branches in EEA[1]	1	0	4	0	0	4	4	6
Firms providing services in EEA[1]	24	30	30	32	29	30	30	32
Passports to operate in EEA[1, 2]	144	205	200	213	196	198	200	200
PORTFOLIO MANAGEMENT COMPANIES								
Spanish firms	1	1	0	1	1	1	0	0
FINANCIAL ADVISORY FIRMS								
Spanish firms	140	140	140	139	142	141	140	140
Branches in Spain	22	23	21	21	21	21	21	21
Branches in EEA[1]	2	2	1	1	1	1	1	1
Firms providing services in EEA[1]	29	27	26	27	28	27	26	26
Passports to operate in EEA[1, 2]	51	47	49	49	55	54	49	48
CREDIT INSTITUTIONS[3]								
Spanish firms	112	110	108	110	110	110	108	108

1 EEA: European Economic Area.
2 Number of passports to provide services in the EEA. The same entity may provide investment services in one or more Member States.
3 Source: Banco de España [Bank of Spain] and CNMV.

Investment services. Foreign firms

TABLE 2.2

				2021				2022
	2019	2020	2021	I	II	III	IV	I
Total	3,567	3,617	1,369	1,333	1,345	1,364	1,369	1,413
Investment services firms	3,088	3,131	952	927	937	951	952	963
From EU Member states	3,085	3,128	947	922	932	946	947	958
Branches	65	66	41	41	41	42	41	42
Free provision of services	3,020	3,062	906	881	891	904	906	916
From non-EU States	3	3	5	5	5	5	5	5
Branches	0	0	2	2	2	2	2	2
Free provision of services	3	3	3	3	3	3	3	3
Credit institutions[1]	479	486	417	406	408	413	417	450
From EU Member states	473	480	412	401	403	408	412	445
Branches	54	50	52	51	50	52	52	52
Free provision of services	419	430	360	350	353	356	360	393
Subsidiaries of free provision of services institutions	0	0	0	0	0	0	0	0
From non-EU States	6	6	5	5	5	5	5	5
Branches	3	4	3	3	3	3	3	3
Free provision of services	3	2	2	2	2	2	2	2

1 Source: Banco de España [Bank of Spain] and CNMV.

Intermediation of spot transactions[1]

TABLE 2.3

Millions of euros

				2020	2021			
	2019	2020	2021	IV	I	II	III	IV
FIXED INCOME								
Total	3,222,363.2	3,782,640.8	2,878,970.7	744,236.9	883,875.4	757,396.9	472,152.2	765,546.2
Broker-dealers	2,263,416.4	3,345,439.9	2,865,236.9	741,972.5	880,812.8	755,486.3	470,699.2	758,238.6
Spanish organised markets	909,992.9	1,261,885.8	1,199,193.3	414,745.3	415,199.3	338,861.7	250,039.0	195,093.3
Other Spanish markets	1,012,359.1	1,721,922.5	1,006,802.5	246,211.8	309,058.9	280,240.9	134,635.1	282,867.6
Foreign markets	341,064.4	361,631.6	659,241.1	81,015.4	156,554.6	136,383.7	86,025.1	280,277.7
Brokers	958,946.8	437,200.9	13,733.8	2,264.4	3,062.6	1,910.6	1,453.0	7,307.6
Spanish organised markets	17,314.9	1,229.4	1,307.0	157.1	313.0	217.0	160.0	617.0
Other Spanish markets	803,742.9	405,199.7	80.2	16.6	17.5	19.5	10.4	32.8
Foreign markets	137,889.0	30,771.8	12,346.6	2,090.7	2,732.1	1,674.1	1,282.6	6,657.8
EQUITY								
Total	1,213,388.9	1,816,691.4	1,220,967.9	423,633.8	587,035.0	438,252.0	135,727.2	59,953.7
Broker-dealers	1,194,473.3	1,793,180.4	1,195,799.7	417,973.8	581,477.9	432,767.3	131,370.6	50,183.9
Spanish organised markets	329,666.8	261,188.7	86,911.0	38,336.4	35,850.3	22,207.0	6,346.7	22,507.0
Other Spanish markets	1,771.0	5,938.7	8,150.6	1,791.1	3,232.7	1,774.8	1,055.1	2,088.0
Foreign markets	863,035.5	1,526,053.0	1,100,738.1	377,846.3	542,394.9	408,785.5	123,968.8	25,588.9
Brokers	18,915.6	23,511.0	25,168.2	5,660.0	5,557.1	5,484.7	4,356.6	9,769.8
Spanish organised markets	7,712.5	7,137.8	10,221.7	1,843.1	1,752.1	1,734.4	1,155.7	5,579.5
Other Spanish markets	1,006.8	1,094.9	1,501.6	261.6	298.9	498.5	404.4	299.8
Foreign markets	10,196.3	15,278.3	13,444.9	3,555.3	3,506.1	3,251.8	2,796.5	3,890.5

1 Period accumulated data. Quarterly.

Intermediation of derivative transactions[1, 2]

TABLE 2.4

Millions of euros

				2020	2021			
	2019	2020	2021	IV	I	II	III	IV
Total	10,807,586.8	11,557,923.7	9,509,509.7	3,798,892.3	2,662,237.6	2,441,759.7	2,182,511.2	2,223,001.2
Broker-dealers	10,523,995.1	11,261,186.5	9,372,575.4	3,710,600.1	2,578,484.5	2,410,453.9	2,173,689.4	2,209,947.6
Spanish organised markets	5,058,147.9	3,839,450.0	4,280,290.6	1,028,274.7	1,008,973.3	1,147,718.4	1,081,941.0	1,041,657.9
Foreign organised markets	4,160,941.8	5,884,599.5	4,135,376.7	2,074,662.4	1,153,439.5	997,145.4	917,068.7	1,067,723.1
Non-organised markets	1,304,905.4	1,537,137.0	956,908.1	607,663.0	416,071.7	265,590.1	174,679.7	100,566.6
Brokers	283,591.7	296,737.2	136,934.3	88,292.2	83,753.1	31,305.8	8,821.8	13,053.6
Spanish organised markets	29,601.4	12,975.9	6,858.9	3,903.5	3,781.9	2,340.5	672.8	63.7
Foreign organised markets	116,038.0	195,686.4	126,635.7	81,723.0	79,914.9	27,800.9	7,987.5	10,932.4
Non-organised markets	137,952.3	88,074.9	3,439.7	2,665.7	56.3	1,164.4	161.5	2,057.5

1 The amount of the buy and sell transactions of financial assets, financial futures on values and interest rates, and other transactions on interest rates will be the securities nominal or notional value or the principal to which the contract applies. The amount of the transactions on options will be the strike price of the underlying asset multiplied by the number of instruments committed.
2 Period accumulated data. Quarterly.

Portfolio management. Number of portfolios and assets under management[1]

TABLE 2.5

	2019	2020	2021	2020 IV	2021 I	II	III	IV
NUMBER OF PORTFOLIOS								
Total[2]	25,388	44,982	89,646	44,982	53,783	65,053	75,875	89,646
Broker-dealers. Total	3,219	3,585	19,317	3,585	4,265	8,968	13,246	19,317
CIS[3]	40	42	38	42	40	40	38	38
Other[4]	3,179	3,543	19,279	3,543	4,225	8,928	13,208	19,279
Brokers. Total	22,169	41,397	70,329	41,397	49,518	56,085	62,629	70,329
CIS[3]	79	82	64	82	69	66	65	64
Other[4]	22,090	41,315	70,265	41,315	49,449	56,019	62,564	70,265
ASSETS UNDER MANAGEMENT (thousands of euros)								
Total[2]	4,925,671	6,098,558	8,088,415	6,098,558	6,132,979	6,776,795	7,230,753	8,088,415
Broker-dealers. Total	2,266,997	2,687,786	2,907,767	2,687,786	2,146,038	2,393,001	2,551,997	2,907,767
CIS[3]	1,059,718	1,280,966	592,849	1,280,966	590,333	586,695	598,536	592,849
Other[4]	1,207,279	1,406,820	2,314,918	1,406,820	1,555,705	1,806,306	1,953,461	2,314,918
Brokers. Total	2,658,674	3,410,772	5,180,648	3,410,772	3,986,941	4,383,794	4,678,756	5,180,648
CIS[3]	1,346,615	1,256,276	1,125,208	1,256,276	1,063,010	1,081,072	1,096,336	1,125,208
Other[4]	1,312,059	2,154,496	4,055,440	2,154,496	2,923,931	3,302,722	3,582,420	4,055,440

1 Data at the end of period. Quarterly.
2 Only data on broker-dealers and brokers are shown.
3 It includes both resident and non-resident CIS management.
4 It includes the rest of clients, both covered and not covered by the Investment Guarantee Fund – an investor compensation scheme regulated by Royal Decree 948/2001.

Financial advice. Number of contracts[1, 2]

TABLE 2.6

	2019	2020	2021	2020 IV	2021 I	II	III	IV
NUMBER OF CONTRACTS								
Total[3]	26,561	31,169	34,006	31,169	30,765	31,626	32,296	34,006
Broker-dealers. Total	6,163	8,721	9,727	8,721	9,126	9,349	9,537	9,727
Retail clients	6,115	8,670	9,674	8,670	9,074	9,297	9,481	9,674
Professional clients	31	45	48	45	46	46	50	48
Eligible counterparties	17	6	5	6	6	6	6	5
Brokers. Total	20,398	22,448	24,279	22,448	21,639	22,277	22,759	24,279
Retail clients	20,125	22,128	24,007	22,128	21,390	22,034	22,515	24,007
Professional clients	229	282	235	282	207	201	203	235
Eligible counterparties	44	38	37	38	42	42	41	37
***Pro memoria*: commission received for financial advice[4]** (thousands of euros)								
Total[3]	37,583	39,803	48,086	39,803	7,270	12,672	19,595	48,086
Broker-dealers	23,400	5,813	7,944	5,813	1,267	2,764	4,315	7,944
Brokers	14,183	33,990	40,142	33,990	6,003	9,908	15,280	40,142

1 Data at the end of period. Quarterly.
2 Quarterly data on assets advised are not available since the entry into force of CNMV Circular 3/2014, of 22 October.
3 Only data on broker-dealers and brokers are shown.
4 Accumulated data from the beginning of the year to the last day of every quarter. It includes companies removed during the year.

Aggregated income statement. Broker-dealers

TABLE 2.7

Thousands of euros[1]

				2021				2022
	2019	2020	2021	I	II	III	IV	I[2]
I. Interest income	38,125	35,957	41,565	-856	9,586	23,451	41,565	1,426
II. Net commission	279,650	310,868	265,790	97,775	177,191	218,104	265,790	24,647
Commission revenues	427,813	525,812	481,945	158,537	320,279	406,485	481,945	41,133
Brokering	164,606	254,307	164,293	67,188	124,513	145,125	164,293	13,546
Placement and underwriting	8,849	5,279	86,324	26,843	70,129	83,778	86,324	180
Securities deposit and recording	42,643	39,260	36,880	9,107	18,384	27,534	36,880	5,183
Portfolio management	15,102	13,128	15,860	3,281	6,577	10,248	15,860	2,242
Design and advice	34,751	16,282	20,316	3,503	8,257	13,238	20,316	2,419
Stock search and placement	1,302	1,960	5,306	572	1,497	3,090	5,306	286
Market credit transactions	0	0	0	0	0	0	0	0
CIS marketing	53,506	50,985	64,608	14,902	30,969	46,730	64,608	10,573
Other	107,055	144,611	88,356	33,140	59,954	76,741	88,356	6,705
Commission expenses	148,163	214,944	216,155	60,762	143,088	188,381	216,155	16,486
III. Financial investment income	29,452	97,113	32,733	7,818	23,639	25,906	32,733	7,627
IV. Net exchange differences and other operating products and expenses	29,066	91,278	35,370	13,273	30,168	33,957	35,370	282
V. Gross income	376,293	535,216	375,458	118,010	240,585	301,418	375,458	33,982
VI. Operating income	55,978	124,993	88,966	28,472	67,511	65,910	88,966	2,237
VII. Earnings from continuous activities	54,528	102,928	93,481	35,277	67,780	69,599	93,481	3,359
VIII. Net earnings from the period	54,528	102,928	90,708	35,277	67,780	69,599	90,708	3,359

1 Accumulated data from the beginning of the year to the last day of every quarter. It includes companies removed during the year.
2 Available data: February 2022.

Results of proprietary trading. Broker-dealers

TABLE 2.8

Thousands of euros[1]

				2020	2021			
	2019	2020	2021	IV	I	II	III	IV
TOTAL								
Total	101,039	221,894	108,249	221,894	20,128	61,827	81,777	108,249
Money market assets and public debt	2,625	23,229	3,039	23,229	72	3,870	3,271	3,039
Other fixed-income securities	27,811	18,457	19,224	18,457	6,338	11,010	14,438	19,224
Domestic portfolio	13,186	11,796	4,920	11,796	1,835	2,101	3,354	4,920
Foreign portfolio	14,625	6,661	14,304	6,661	4,503	8,909	11,084	14,304
Equities	8,009	21,860	6,845	21,860	1,458	5,920	5,097	6,845
Domestic portfolio	7,006	22,859	5,281	22,859	767	3,847	4,359	5,281
Foreign portfolio	1,003	-999	1,564	-999	691	2,073	738	1,564
Derivatives	-3,873	28,367	-21,138	28,367	3,713	-18,759	-20,864	-21,138
Repurchase agreements	-3,492	-6,851	-6,446	-6,851	-2,234	-4,281	-6,470	-6,446
Market credit transactions	0	0	0	0	0	0	0	0
Deposits and other transactions with financial intermediaries	1,084	-6,207	3,177	-6,207	606	202	2,139	3,177
Net exchange differences	118	-981	971	-981	284	281	585	971
Other operating products and expenses	28,949	92,259	34,398	92,259	12,990	29,888	33,372	34,398
Other transactions	39,808	51,761	68,179	51,761	-3,099	33,696	50,209	68,179
INTEREST INCOME								
Total	38,127	35,957	41,564	35,957	-854	9,585	23,449	41,564
Money market assets and public debt	1,027	922	804	922	173	469	643	804
Other fixed-income securities	3,319	1,347	732	1,347	417	633	749	732
Domestic portfolio	734	556	81	556	70	152	179	81
Foreign portfolio	2,585	791	651	791	347	481	570	651
Equities	2,767	962	973	962	194	513	798	973
Domestic portfolio	2,456	766	539	766	121	263	470	539
Foreign portfolio	311	196	434	196	73	250	328	434
Repurchase agreements	-3,492	-6,851	-6,446	-6,851	-2,234	-4,281	-6,470	-6,446
Market credit transactions	0	0	0	0	0	0	0	0
Deposits and other transactions with financial intermediaries	1,084	-6,207	3,177	-6,207	606	202	2,139	3,177
Other transactions	33,422	45,784	42,324	45,784	-10	12,049	25,590	42,324
FINANCIAL INVESTMENT INCOME								
Total	29,451	97,113	32,734	97,113	7,820	23,638	25,905	32,734
Money market assets and public debt	1,598	22,307	2,235	22,307	-101	3,401	2,628	2,235
Other fixed-income securities	24,492	17,110	18,492	17,110	5,921	10,377	13,689	18,492
Domestic portfolio	12,452	11,240	4,839	11,240	1,765	1,949	3,175	4,839
Foreign portfolio	12,040	5,870	13,653	5,870	4,156	8,428	10,514	13,653
Equities	5,242	20,898	5,872	20,898	1,264	5,407	4,299	5,872
Domestic portfolio	4,550	22,093	4,742	22,093	646	3,584	3,889	4,742
Foreign portfolio	692	-1,195	1,130	-1,195	618	1,823	410	1,130
Derivatives	-3,873	28,367	-21,138	28,367	3,713	-18,759	-20,864	-21,138
Other transactions	1,992	8,431	27,273	8,431	-2,977	23,212	26,153	27,273
EXCHANGE DIFFERENCES AND OTHER ITEMS								
Total	33,461	88,824	33,951	88,824	13,162	28,604	32,423	33,951
Net exchange differences	118	-981	971	-981	284	281	585	971
Other operating products and expenses	28,949	92,259	34,398	92,259	12,990	29,888	33,372	34,398
Other transactions	4,394	-2,454	-1,418	-2,454	-112	-1,565	-1,534	-1,418

1 Accumulated data from the beginning of the year to the last day of every quarter. It includes companies removed during the year.

Aggregated income statement. Brokers

TABLE 2.9

Thousands of euros[1]

				2021				2022
	2019	2020	2021	I	II	III	IV	I[2]
I. Interest income	1,252	932	454	111	75	216	454	68
II. Net commission	130,293	143,162	173,785	40,147	76,041	114,528	173,785	23,157
Commission revenues	150,842	165,094	202,333	45,864	87,169	131,945	202,333	27,805
Brokering	23,194	22,035	14,140	4,708	8,087	10,824	14,140	3,223
Placement and underwriting	580	2,157	1,481	137	601	1,584	1,481	17
Securities deposit and recording	879	754	425	150	286	361	425	56
Portfolio management	14,890	14,554	22,874	4,572	9,371	14,648	22,874	3,933
Design and advice	14,426	34,128	40,421	6,072	10,079	15,480	40,421	3,046
Stock search and placement	0	0	0	0	0	0	0	0
Market credit transactions	0	0	0	0	0	0	0	0
CIS marketing	62,866	62,134	91,375	20,157	42,532	63,776	91,375	14,965
Other	34,008	29,331	31,617	10,067	16,216	25,273	31,617	2,566
Commission expenses	20,549	21,932	28,548	5,717	11,128	17,417	28,548	4,648
III. Financial investment income	910	-5,562	666	130	464	478	666	-612
IV. Net exchange differences and other operating products and expenses	1,194	-968	-776	-1,180	-1,872	-2,809	-776	216
V. Gross income	133,648	137,564	174,129	39,208	74,708	112,414	174,129	22,829
VI. Operating income	9,284	3,339	26,155	10,132	15,169	21,604	26,155	315
VII. Earnings from continuous activities	6,163	2,836	22,802	9,663	13,675	19,338	22,802	429
VIII. Net earnings of the period	6,163	2,836	22,802	9,663	13,675	19,338	22,802	429

1 Accumulated data from the beginning of the year to the last day of every quarter. It includes companies removed during the year.
2 Available data: February 2022.

Capital adequacy. Broker-dealers and brokers[1, 2]

TABLE 2.10

	2018	2019	2020	2021
TOTAL[3]				
Own fund surplus (thousands of euros)	915,187	1,165,522	1,026,770	612,842
Surplus (%)[4]	429.56	486.61	277.64	541.03
Number of companies according to surplus percentage				
≤ 100%	20	23	26	25
> 100-≤ 300%	28	30	29	35
> 300-≤ 500%	10	10	12	12
> 500%	15	13	10	19
BROKER-DEALERS				
Own fund surplus (thousands of euros)	874,235	1,118,273	960,720	506,721
Surplus (%)[4]	464.51	520.42	285.14	654.90
Number of companies according to surplus percentage				
≤ 100%	7	7	9	4
> 100-≤ 300%	10	14	11	12
> 300-≤ 500%	7	4	8	5
> 500%	14	11	8	12
BROKERS				
Own fund surplus (thousands of euros)	40,952	47,249	66,051	106,121
Surplus (%)[4]	164.84	191.77	200.79	295.60
Number of companies according to surplus percentage				
≤ 100%	13	16	17	21
> 100-≤ 300%	18	16	18	23
> 300-≤ 500%	3	6	4	7
> 500%	1	2	2	7

1 From 2014 to 2020 this table only includes the entities subject to reporting requirements according to 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.

2 From II-2021 onwards there are no quarterly data available, due to regulatory changes made by Regulation (EU) 2019/2033 of the European Parliament and of the Council, of 27 November 2019, on the prudential requirements of investment firms; and Directive (EU) 2019/2034 of the European Parliament and of the Council, of 27 November 2019, on the prudential supervision of investment firms.

3 Only data on broker-dealers and brokers are shown.

4 Average surplus percentage is weighted by the required equity of each company. It is an indicator of the number of times, in percentage terms, that the surplus contains the required equity in an average company.

Return on equity (ROE) before taxes[1]

TABLE 2.11

	2019	2020	2021	2020 IV	2021 I	II	III	IV
TOTAL[2]								
Average (%)[3]	9.22	18.71	13.68	18.71	13.09	20.95	11.79	13.68
Number of companies according to annualised return								
Losses	32	32	30	32	31	30	33	30
0-≤ 15%	22	15	20	15	18	19	16	20
> 15-≤ 45%	18	20	14	20	12	13	15	14
> 45-≤ 75%	7	9	9	9	13	12	7	9
> 75%	12	15	17	15	17	17	20	17
BROKER-DEALERS								
Average (%)[3]	8.87	19.72	11.48	19.72	9.44	19.74	9.18	11.48
Number of companies according to annualised return								
Losses	13	12	13	12	15	10	14	13
0-≤ 15%	13	6	8	6	8	10	8	8
> 15-≤ 45%	7	9	6	9	6	8	7	6
> 45-≤ 75%	1	6	4	6	3	4	2	4
> 75%	2	2	1	2	2	1	1	1
BROKERS								
Average (%)[3]	12.05	12.48	23.97	12.48	35.76	28.08	23.92	23.97
Number of companies according to annualised return								
Losses	19	20	17	20	16	20	19	17
0-≤ 15%	9	9	12	9	10	9	8	12
> 15-≤ 45%	11	11	8	11	6	5	8	8
> 45-≤ 75%	6	3	5	3	10	8	5	5
> 75%	10	13	16	13	15	16	19	16

1 ROE has been calculated as:

$$ROE = \frac{\textit{Bº antes de impuestos (anualizado)}}{\textit{Fondos propios}}$$

Own funds= Share capital + Paid-in surplus + Reserves – Own shares + Prior year profits and retained earnings – Interim dividend.

2 Only data on broker-dealers and brokers are shown.

3 Average weighted by equity, %.

Financial advisory firms. Main figures[1]

TABLE 2.12

Thousands of euros

	2017	2018	2019	2020	2021
ASSETS UNDER ADVICE[2]					
Total	30,790,535	31,658,460	21,627,677	17,423,050	19,263,515
Retail clients	9,096,071	10,281,573	8,313,608	6,907,284	8,858,793
Rest of clients and entities	21,694,464	21,376,887	13,314,069	10,515,766	10,404,722
Professional	6,482,283	7,052,031	–	–	–
Other	15,212,181	14,324,856	–	–	–
COMMISSION INCOME[3]					
Total	65,802	62,168	56,963	45,782	56,190
Commission revenues	65,191	61,079	56,029	45,153	55,657
Other income	611	1,088	934	629	532
EQUITY					
Total	32,803	33,572	32,089	30,177	34,140
Share capital	8,039	6,894	5,770	5,454	6,125
Reserves and retained earnings	13,317	15,386	17,260	18,979	21,245
Income for the year[3]	11,361	10,626	8,172	4,837	7,456
Other own funds	86	666	888	907	-686

1 Annual frequency since 2015 (CNMV Circular 3/2014, of 22 October).

2 Data at the end of each period. Since 2019, due to the entry into force of CNMV Circular 4/2018, there is no disaggregated information of non-retail clients.

3 Accumulated data from the beginning of the year.

3 Collective investment schemes (CIS)[a]

Number, management companies and depositories of CIS registered at the CNMV

TABLE 3.1

				2021				2022
	2019	2020	2021	I	II	III	IV	I[1]
Total financial CIS	4,233	4,018	3,815	3,970	3,901	3,859	3,815	3,797
Mutual funds	1,595	1,515	1,452	1,506	1,487	1,469	1,452	1,452
Investment companies	2,569	2,427	2,280	2,383	2,334	2,307	2,280	2,262
Funds of hedge funds	7	7	10	8	9	10	10	10
Hedge funds	62	69	73	73	71	73	73	73
Total real estate CIS	5	5	4	4	4	4	4	4
Real estate mutual funds	2	2	2	2	2	2	2	2
Real estate investment companies	3	3	2	2	2	2	2	2
Total foreign CIS marketed in Spain	1,033	1,048	1,074	1,046	1,058	1,068	1,074	1,069
Foreign funds marketed in Spain	399	407	416	421	423	424	416	411
Foreign companies marketed in Spain	634	641	658	625	635	644	658	658
Management companies	123	123	123	122	125	124	123	123
CIS depositories	36	35	33	35	34	33	33	33

1 Available data: February 2022.

Number of CIS investors and shareholders

TABLE 3.2

				2021				2022
	2019	2020	2021	I	II	III	IV	I[1]
Total financial CIS	12,132,581	13,015,104	16,160,034	13,932,921	14,666,536	15,121,845	16,160,034	16,747,566
Mutual funds	11,734,029	12,654,439	15,810,134	13,581,009	14,319,397	14,777,155	15,810,134	16,403,206
Investment companies	398,552	360,665	349,900	351,912	347,139	344,690	349,900	344,360
Total real estate CIS[2]	799	798	691	690	688	690	691	691
Real estate mutual funds	483	483	482	483	483	482	482	482
Real estate investment companies	316	315	209	207	205	208	209	209
Total foreign CIS marketed in Spain[3]	3,361,901	4,312,340	6,073,537	4,865,192	5,231,449	5,609,293	6,073,537	–
Foreign funds marketed in Spain	521,648	592,053	776,206	635,555	697,470	723,358	776,206	–
Foreign companies marketed in Spain	2,840,253	3,720,287	5,297,331	4,229,637	4,533,979	4,885,935	5,297,331	–

1 Available data: January 2022.
2 Investors and shareholders who invest in many sub-funds from the same CIS have been taken into account once. For this reason, investors and shareholders may be different from those in Tables 3.6 and 3.7.
3 Only data on UCITS are included. From I-2018 onwards, data are estimated.

a Information about mutual funds and Investment companies contained in this section does not include hedge funds or funds of hedge funds. The information about hedge funds and funds of hedge funds is included in Table 3.12.

CIS total net assets

TABLE 3.3

Millions of euros

				2021				2022
	2019	2020	2021	I	II	III	IV	I[1]
Total financial CIS	308,170.1	306,654.5	353,203.3	320,524.3	337,338.4	343,722.2	353,203.3	345,498.9
Mutual funds[2]	279,377.4	279,694.5	324,701.0	292,865.2	309,047.2	315,632.6	324,701.0	317,695.5
Investment companies	28,792.7	26,960.0	28,502.3	27,659.1	28,291.2	28,089.6	28,502.3	27,803.4
Total real estate CIS	1,072.9	1,218.0	1,224.3	1,201.0	1,201.3	1,221.5	1,224.3	1,227.3
Real estate mutual funds	309.4	310.8	311.0	311.0	311.1	311	311	311.2
Real estate investment companies	763.5	907.1	913.2	890.0	890.2	910.5	913.2	916.1
Total foreign CIS marketed in Spain[3]	178,841.5	199,419.3	276,231.9	219,851.3	249,927.6	261,733.8	276,231.9	–
Foreign funds marketed in Spain	30,843.4	27,355.5	36,662.6	27,861.7	32,797.0	34,459.8	36,662.6	–
Foreign companies marketed in Spain	147,998.1	172,063.8	239,569.4	191,989.7	217,130.6	227,274.0	239,569.4	–

1 Available data: January 2022.
2 Mutual funds investment in financial mutual funds of the same management company reached €10,552.7 million in December 2021.
3 Only data on UCITS are included. From I-2018 onwards, data are estimated.

Asset allocation of mutual funds

TABLE 3.4

Millions of euros

				2020	2021			
	2019	2020	2021	IV	I	II	III	IV
Asset	279,377.4	279,694.5	324,701.0	279,694.5	292,865.2	309,047.2	315,632.6	324,701.0
Portfolio investment	256,750.7	256,257.2	299,434.9	256,257.2	268,778.4	282,168.2	288,531.1	299,434.9
Domestic securities	66,520.4	54,587.8	54,715.8	54,587.8	54,198.1	55,270.4	56,360.1	54,715.8
Debt securities	44,637.7	38,394.5	35,648.2	38,394.5	37,044.9	34,519.9	34,914.9	35,648.2
Shares	9,047.9	6,185.3	6,828.5	6,185.3	6,584.2	6,863.3	6,833.9	6,828.5
Collective investment schemes	8,581.9	8,511.0	11,396.5	8,511.0	8,994.8	12,322.3	13,050.0	11,396.5
Deposits in credit institutions	4,004.8	1,341.5	627.2	1,341.5	1,370.0	1,364.6	1,349.0	627.2
Derivatives	243.2	140.9	168.3	140.9	190.3	177.1	174.8	168.3
Other	4.9	14.6	47.1	14.6	13.9	23.3	37.5	47.1
Foreign securities	190,224.5	201,664.8	244,715.5	201,664.8	214,574.7	226,894.2	232,167.3	244,715.5
Debt securities	83,817.5	86,151.5	95,131.8	86,151.5	89,938.7	92,596.8	92,917.5	95,131.8
Shares	33,115.9	33,886.1	46,254.3	33,886.1	36,866.7	41,191.2	42,944.2	46,254.3
Collective investment schemes	73,054.4	81,358.2	103,089.9	81,358.2	87,482.1	92,971.0	96,006.2	103,089.9
Deposits in credit institutions	4.5	0.1	0.0	0.1	0.0	0.0	0.0	0.0
Derivatives	231.3	268.0	238.6	268.0	286.4	121.4	282.9	238.6
Other	0.9	0.8	1.0	0.8	0.8	13.9	16.5	1.0
Doubtful assets and matured investments	5.8	4.6	3.5	4.6	5.6	3.6	3.8	3.5
Intangible assets	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Net fixed assets	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cash	21,735.1	22,203.0	23,950.8	22,203.0	22,725.1	25,490.7	25,805.1	23,950.8
Net balance (Debtors - Creditors)	891.6	1,234.3	1,315.3	1,234.3	1,361.6	1,388.3	1,296.4	1,315.3

Asset allocation of investment companies

TABLE 3.5

Millions of euros

				2020	2021			
	2019	2020	2021	IV	I	II	III	IV
Asset	28,792.7	26,960.0	28,502.3	26,960.0	27,659.1	28,291.2	28,089.6	28,502.3
Portfolio investment	25,940.3	24,548.9	25,729.9	24,548.9	25,088.5	25,598.8	25,317.6	25,729.9
Domestic securities	4,588.3	3,419.9	3,525.2	3,419.9	3,490.9	3,517.6	3,460.0	3,525.2
Debt securities	1,217.1	734.3	734.3	734.3	655.2	619.3	630.9	734.3
Shares	1,982.8	1,601.2	1,633.7	1,601.2	1,690.4	1,714.8	1,636.2	1,633.7
Collective investment schemes	1,232.2	967.7	1,067.4	967.7	1,039.0	1,089.2	1,092.5	1,067.4
Deposits in credit institutions	98.6	47.7	19.1	47.7	35.3	27.8	30.6	19.1
Derivatives	0.8	3.2	-0.4	3.2	4.7	-0.6	1.4	-0.4
Other	56.8	65.9	71.1	65.9	66.2	67.1	68.4	71.1
Foreign securities	21,348.2	21,125.7	22,202.8	21,125.7	21,594.6	22,078.8	21,855.4	22,202.8
Debt securities	4,617.7	3,243.8	2,683.8	3,243.8	2,909.1	2,852.4	2,822.6	2,683.8
Shares	6,133.8	6,548.1	7,157.9	6,548.1	6,940.2	7,150.3	6,943.3	7,157.9
Collective investment schemes	10,549.0	11,297.4	12,335.3	11,297.4	11,718.5	12,049.4	12,050.8	12,335.3
Deposits in credit institutions	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Derivatives	34.1	23.8	8.3	23.8	13.3	12.4	23.5	8.3
Other	12.5	12.6	17.5	12.6	13.5	14.4	15.2	17.5
Doubtful assets and matured investments	3.8	3.2	1.8	3.2	3.0	2.4	2.2	1.8
Intangible assets	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Net fixed assets	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Cash	2,659.8	2,219.3	2,476.4	2,219.3	2,387.9	2,541.8	2,517.3	2,476.4
Net balance (Debtors - Creditors)	192.1	191.4	295.5	191.4	182.1	150.0	254.2	295.5

Financial mutual funds: number, investors and total net assets by category[1, 2]

TABLE 3.6

	2019	2020	2021	2021 I	II	III	IV	2022 I[3]
NO. OF FUNDS								
Total financial mutual funds	1,710	1,644	1,611	1,642	1,629	1,604	1,611	1,623
Fixed income[4]	281	276	266	279	272	265	266	267
Mixed fixed income[5]	173	174	181	181	182	183	181	183
Mixed equity[6]	185	186	192	188	186	187	192	192
Euro equity	113	104	94	100	98	96	94	92
Foreign equity	263	276	307	278	285	295	307	315
Guaranteed fixed income	66	55	43	53	51	50	43	43
Guaranteed equity[7]	155	133	114	130	125	117	114	112
Global funds	255	248	263	252	253	252	263	267
Passive management[8]	133	118	88	114	110	93	88	89
Absolute return	84	72	61	65	65	64	61	61
INVESTORS								
Total financial mutual funds	11,739,183	12,660,100	15,816,557	13,586,390	14,325,481	14,783,710	15,816,557	16,412,954
Fixed income[4]	3,668,324	4,135,294	5,476,096	4,435,899	4,621,057	4,766,153	5,476,096	5,523,487
Mixed fixed income[5]	1,087,881	1,203,280	1,459,004	1,364,227	1,406,147	1,411,225	1,459,004	1,508,751
Mixed equity[6]	707,159	745,112	721,346	806,042	648,612	681,278	721,346	733,235
Euro equity	598,901	530,107	778,138	705,654	737,047	774,026	778,138	888,621
Foreign equity	2,655,123	3,043,542	3,882,184	3,298,703	3,545,847	3,671,230	3,882,184	4,360,391
Guaranteed fixed income	154,980	135,320	77,430	127,437	115,807	109,449	77,430	76,949
Guaranteed equity[7]	428,470	356,439	265,043	348,061	308,880	273,878	265,043	256,806
Global funds	1,359,915	1,409,759	1,989,428	1,506,594	1,920,588	2,046,838	1,989,428	1,888,431
Passive management[8]	429,428	511,251	505,514	513,333	530,215	522,529	505,514	507,222
Absolute return	646,042	587,040	659,411	477,482	488,319	524,138	659,411	666,097
TOTAL NET ASSETS (millions of euros)								
Total financial mutual funds	279,377.4	279,694.5	324,701.0	292,865.2	309,047.2	315,632.6	324,701.0	317,695.5
Fixed income[4]	78,583.2	81,015.9	88,422.8	82,209.7	83,503.3	86,173.0	88,422.8	87,043.7
Mixed fixed income[5]	40,819.9	43,200.4	50,869.7	48,373.9	48,143.1	48,904.9	50,869.7	50,600.3
Mixed equity[6]	28,775.8	30,432.7	28,141.1	32,601.3	24,893.5	25,970.6	28,141.1	27,765.8
Euro equity	10,145.1	7,091.1	8,279.6	7,771.9	8,232.2	8,180.2	8,279.6	7,803.1
Foreign equity	34,078.9	37,722.5	51,222.2	42,746.1	46,464.6	47,217.0	51,222.2	50,954.5
Guaranteed fixed income	4,809.3	4,177.0	2,346.7	3,929.5	3,585.6	3,356.7	2,346.7	2,312.6
Guaranteed equity[7]	13,229.1	11,037.1	8,094.9	10,745.2	9,339.3	8,394.1	8,094.9	7,787.8
Global funds	43,041.9	40,944.5	67,591.0	43,120.7	62,913.0	67,783.8	67,591.0	63,902.1
Passive management[8]	14,073.8	14,014.3	12,500.4	13,571.5	13,587.1	13,137.3	12,500.4	12,326.1
Absolute return	11,818.3	10,057.4	7,231.2	7,793.7	8,383.9	6,513.4	7,231.2	7,198.0

1 Sub-funds which have sent reports to the CNMV excluding those in process of dissolution or liquidation.
2 Data on side-pocket sub-funds are only included in aggregate figures, and not in each individual category.
3 Available data: January 2022.
4 It includes: public debt constant net asset value short-term money market funds (MMFs), low volatility net asset value short-term MMFs, variable net asset value short-term MMFs, variable net asset value standard MMFs, euro fixed income and short-term euro fixed income.
5 It includes: mixed euro fixed income and foreign mixed fixed income.
6 It includes: mixed euro equity and foreign mixed equity.
7 It includes: guaranteed equity and partial guarantee.
8 It includes: passive management CIS, index-tracking CIS and non-guaranteed specific return target CIS.

Financial mutual funds: detail of investors and total net assets by type of investors

TABLE 3.7

	2019	2020	2021	2021 I	II	III	IV	2022 I[1]
INVESTORS								
Total financial mutual funds	11,739,183	12,660,100	15,816,557	13,586,390	14,325,481	14,783,710	15,816,557	16,412,954
Natural persons	11,534,957	12,437,954	15,541,300	13,346,642	14,068,930	14,518,217	15,541,300	16,135,879
Residents	11,440,086	12,339,829	15,427,337	13,245,856	13,964,805	14,408,799	15,427,337	16,020,376
Non-residents	94,871	98,125	113,963	100,786	104,125	109,418	113,963	115,503
Legal persons	204,226	222,146	275,257	239,748	256,551	265,493	275,257	277,075
Credit institutions	1,928	1,403	746	1,479	1,465	1,483	746	764.00
Other resident institutions	201,408	219,849	273,421	237,336	254,112	262,995	273,421	275,211
Non-resident institutions	890	894	1,090	933	974	1,015	1,090	1,100.00
TOTAL NET ASSETS (millions of euros)								
Total financial mutual funds	279,377.4	279,694.5	324,701.0	292,865.2	309,047.2	315,632.6	324,701.0	317,695.5
Natural persons	231,434.8	230,573.8	264,075.7	240,434.7	250,264.3	255,030.4	264,075.7	259,691.9
Residents	228,214.4	227,444.5	260,321.1	237,165.7	246,838.9	251,485.0	260,321.1	255,990.1
Non-residents	3,220.4	3,129.3	3,754.6	3,269.0	3,425.4	3,545.4	3,754.6	3,701.7
Legal persons	47,942.6	49,120.7	60,625.3	52,430.5	58,782.9	60,602.2	60,625.3	58,003.7
Credit institutions	523.7	480.0	472.5	531.3	513.2	482.8	472.5	469.7
Other resident institutions	46,628.9	47,995.2	59,288.6	51,233.9	57,559.6	59,358.6	59,288.6	56,677.8
Non-resident institutions	790.0	645.4	864.2	665.4	710.1	760.8	864.2	856.2

1 Available data: January 2022.

Subscriptions and redemptions of financial mutual funds by category[1, 2]

TABLE 3.8

Millions of euros

	2019	2020	2021	2020 IV	2021 I	II	III	IV
SUBSCRIPTIONS								
Total financial mutual funds	156,702.7	113,265.7	149,415.0	27,903.2	35,042.4	51,735.6	27,554.9	35,082.0
Fixed income	91,050.8	51,487.7	58,255.2	12,703.3	13,896.5	16,922.1	11,740.5	15,696.3
Mixed fixed income	14,154.1	15,496.2	21,134.0	3,179.3	6,104.1	6,481.4	3,653.1	4,895.4
Mixed equity	11,156.0	8,861.2	11,113.2	2,077.5	2,962.5	3,042.2	2,078.5	3,029.9
Euro equity	2,998.4	2,232.1	3,005.8	600.2	1,008.8	976.7	467.4	553.0
Foreign equity	16,864.0	15,974.8	19,019.8	3,982.7	5,194.4	5,883.0	3,526.1	4,416.3
Guaranteed fixed income	854.1	424.7	9.0	1.4	2.2	4.7	0.7	1.3
Guaranteed equity	898.2	74.2	86.8	25.2	33.1	30.5	11.7	11.6
Global funds	12,713.7	11,391.1	30,193.0	3,371.2	3,655.2	16,386.3	5,197.2	4,954.4
Passive management	2,261.9	4,944.6	2,827.9	1,460.4	1,062.9	936.6	374.8	453.5
Absolute return	3,751.5	2,379.0	3,770.3	501.9	1,122.6	1,072.2	505.1	1,070.4
REDEMPTIONS								
Total financial mutual funds	154,273.0	112,634.4	121,839.9	25,979.4	28,035.7	41,143.4	21,214.5	31,446.3
Fixed income	80,046.4	47,611.0	49,850.1	11,016.6	12,562.8	14,936.3	9,133.2	13,217.9
Mixed fixed income	16,004.2	14,974.6	13,671.0	3,051.5	4,025.5	3,710.1	2,972.4	2,962.9
Mixed equity	7,943.7	7,667.5	14,639.8	1,996.7	1,794.9	10,262.5	979.2	1,603.1
Euro equity	6,540.2	4,205.3	2,979.1	919.3	925.8	838.3	546.2	668.8
Foreign equity	12,963.1	13,449.4	13,586.3	2,906.0	3,120.1	4,393.9	2,974.9	3,097.5
Guaranteed fixed income	1,136.7	1,030.6	1,720.9	247.4	153.7	340.1	229.5	997.6
Guaranteed equity	2,739.2	2,245.2	2,914.0	370.0	332.7	1,437.3	832.6	311.5
Global funds	15,133.7	12,743.7	15,234.6	3,487.6	2,750.3	3,400.7	2,404.0	6,679.7
Passive management	5,272.0	4,985.6	4,372.9	1,210.0	776.1	1,231.4	869.4	1,496.1
Absolute return	6,493.7	3,721.4	2,871.1	774.2	1,594.0	592.8	273.1	411.2

1 Estimated data.
2 Data on side-pocket sub-funds are only included in aggregate figures, and not in each individual category.

Change in assets in financial mutual funds by category: net subscriptions/redemptions and return on assets[1, 2]

TABLE 3.9

Millions of euros

				2020	2021			
	2019	2020	2021	IV	I	II	III	IV
NET SUBSCRIPTIONS/REDEMPTIONS								
Total financial mutual funds	2,467.5	660.3	27,620.3	1,938.1	7,009.8	10,633.7	6,337.3	3,639.6
Fixed income	10,732.6	2,062.6	7,674.2	1,714.0	1,324.9	1,237.0	2,632.1	2,480.2
Mixed fixed income	-1,506.1	2,619.5	6,574.7	219.6	4,789.7	-705.8	761.9	1,728.9
Mixed equity	3,288.8	1,601.4	-4,179.3	147.0	1,375.3	-8,279.2	1,091.9	1,632.7
Euro equity	-3,588.2	-2,007.7	13.8	-319.2	82.3	135.8	-88.8	-115.3
Foreign equity	4,113.8	2,633.1	5,260.9	1,078.9	2,082.0	1,257.6	600.9	1,320.5
Guaranteed fixed income	-282.6	-707.4	-1,787.1	-245.4	-226.2	-335.5	-228.7	-996.8
Guaranteed equity	-1,857.0	-2,254.2	-2,949.3	-380.2	-299.6	-1,406.6	-943.3	-299.9
Global funds	-2,553.9	-1,501.2	22,755.0	-92.7	1,075.3	18,527.0	4,878.0	-1,725.3
Passive management	-3,026.8	-23.8	-2,700.6	179.9	-862.2	-294.8	-500.6	-1,043.0
Absolute return	-2,852.9	-1,761.9	-3,041.9	-363.5	-2,331.7	498.4	-1,866.2	657.6
RETURN ON ASSETS								
Total financial mutual funds	18,002.8	-310.6	17,471.5	10,679.0	6,169.7	5,558.4	260.2	5,483.3
Fixed income	961.9	371.5	-265.8	525.9	-130.6	56.8	38.4	-230.3
Mixed fixed income	1,866.9	-220.0	1,160.1	1,029.4	389.1	481.2	5.4	284.3
Mixed equity	2,231.0	55.5	1,890.4	1,266.6	793.7	572.3	-14.1	538.5
Euro equity	1,556.4	-1,044.9	1,176.4	1,011.8	598.9	325.1	37.3	215.1
Foreign equity	5,561.1	1,012.7	8,242.5	3,881.1	2,941.7	2,462.1	151.6	2,687.0
Guaranteed fixed income	204.4	75.2	-43.3	24.8	-21.4	-8.5	-0.1	-13.3
Guaranteed equity	530.0	62.2	7.2	89.3	7.8	0.6	-1.9	0.7
Global funds	3,460.8	-595.3	3,894.8	1,980.3	1,101.2	1,265.6	-7.1	1,535.1
Passive management	1,133.2	-28.7	1,192.9	610.6	421.4	310.4	55.0	406.1
Absolute return	498.7	1.7	216.5	259.3	68.0	92.6	-4.3	60.2

1 Data on side-pocket sub-funds are only included in aggregate figures, and not in each individual category.
2 A change of category is treated as a redemption in the original category and a subscription in the final one. For this reason, and the adjustments due to de-registrations in the quarter, the net subscription/refund data may be different from those in Table 3.8.

Return on assets in financial mutual funds. Breakdown by category[1]

TABLE 3.10

% of daily average total net assets

				2020	2021			
	2019	2020	2021	IV	I	II	III	IV
MANAGEMENT YIELDS								
Total financial mutual funds	7.67	0.85	6.81	4.18	2.41	2.14	0.36	1.97
Fixed income	1.83	0.99	0.15	0.79	-0.04	0.19	0.16	-0.15
Mixed fixed income	5.75	0.50	3.37	2.70	1.06	1.31	0.23	0.80
Mixed equity	9.79	1.60	8.43	4.64	2.89	2.79	0.26	2.35
Euro equity	16.01	-12.72	16.30	15.60	8.62	4.46	0.81	2.99
Foreign equity	21.00	4.76	19.98	11.53	7.73	5.97	0.85	5.85
Guaranteed fixed income	4.52	2.18	-0.85	0.70	-0.43	-0.12	0.10	-0.43
Guaranteed equity	4.20	1.00	0.59	0.90	0.19	0.09	0.11	0.20
Global funds	9.24	-0.30	8.04	5.29	2.93	2.58	0.40	2.56
Passive management	7.88	0.29	9.61	4.61	3.31	2.43	0.53	3.38
Absolute return	4.93	0.87	3.78	2.81	1.14	1.38	0.08	1.04
EXPENSES. MANAGEMENT FEE								
Total financial mutual funds	0.85	0.83	0.86	0.22	0.21	0.22	0.21	0.22
Fixed income	0.44	0.42	0.40	0.11	0.10	0.10	0.10	0.10
Mixed fixed income	0.92	0.88	0.88	0.23	0.22	0.22	0.21	0.22
Mixed equity	1.29	1.28	1.28	0.34	0.34	0.32	0.29	0.33
Euro equity	1.49	1.45	1.30	0.37	0.33	0.33	0.32	0.32
Foreign equity	1.41	1.31	1.31	0.36	0.34	0.33	0.30	0.34
Guaranteed fixed income	0.36	0.36	0.36	0.09	0.09	0.09	0.09	0.09
Guaranteed equity	0.47	0.44	0.44	0.11	0.11	0.11	0.11	0.11
Global funds	1.03	1.07	1.15	0.27	0.28	0.30	0.28	0.29
Passive management	0.42	0.41	0.37	0.09	0.10	0.09	0.09	0.09
Absolute return	0.81	0.78	0.68	0.20	0.20	0.19	0.14	0.15
EXPENSES. DEPOSITORY FEE								
Total financial mutual funds	0.07	0.08	0.07	0.02	0.02	0.02	0.02	0.02
Fixed income	0.06	0.06	0.06	0.02	0.02	0.02	0.01	0.01
Mixed fixed income	0.08	0.08	0.08	0.02	0.02	0.02	0.02	0.02
Mixed equity	0.10	0.10	0.09	0.02	0.02	0.02	0.02	0.02
Euro equity	0.10	0.10	0.09	0.02	0.02	0.02	0.02	0.02
Foreign equity	0.09	0.09	0.08	0.02	0.02	0.02	0.02	0.02
Guaranteed fixed income	0.05	0.05	0.05	0.01	0.01	0.01	0.01	0.01
Guaranteed equity	0.05	0.05	0.05	0.01	0.01	0.01	0.01	0.01
Global funds	0.08	0.08	0.09	0.02	0.02	0.02	0.02	0.02
Passive management	0.05	0.05	0.04	0.01	0.01	0.01	0.01	0.01
Absolute return	0.06	0.07	0.06	0.02	0.02	0.02	0.01	0.01

1 Data on side-pocket sub-funds are only included in aggregate figures, and not in each individual category.

Mutual funds, quarterly returns. Breakdown by category[1]

TABLE 3.11

%

				2021				2022
	2019	2020	2021	I	II	III	IV	I[2]
Total financial mutual funds	7.12	0.78	6.31	2.34	1.93	0.10	1.81	-1.95
Fixed income	1.38	0.62	-0.31	-0.16	0.07	0.05	-0.28	-0.42
Mixed fixed income	4.75	-0.03	2.49	0.85	1.04	0.02	0.56	-1.43
Mixed equity	9.25	0.59	7.18	2.56	2.42	-0.03	2.05	-2.62
Euro equity	14.27	-8.75	16.72	8.58	4.28	0.42	2.66	-2.77
Foreign equity	22.18	2.83	21.14	7.87	5.74	0.42	5.77	-4.05
Guaranteed fixed income	3.98	1.68	-1.29	-0.52	-0.22	-0.02	-0.54	-0.60
Guaranteed equity	3.62	0.70	0.06	0.08	0.00	-0.03	0.01	-0.44
Global funds	8.45	-0.31	7.90	3.10	2.28	0.01	2.32	-2.71
Passive management	7.45	0.44	9.82	3.28	2.36	0.40	3.48	-1.81
Absolute return	3.94	0.94	3.02	0.97	1.15	-0.07	0.95	-1.16

1 Data on side-pocket sub-funds are only included in aggregate figures, and not in each individual category.
2 Available data: January 2022.

Hedge funds and funds of hedge funds

TABLE 3.12

				2020	2021			
	2019	2020	2021	IV	I	II	III	IV
HEDGE FUNDS								
Investors/shareholders[1]	7,548	7,961	8,786	7,961	8,067	8,299	8,450	8,786
Total net assets (millions of euros)	2,832.40	2,912.60	3,543.40	2,912.60	3,085.30	3,273.00	3,352.50	3,543.40
Subscriptions (millions of euros)	1,290.00	454.5	845	125.6	134.4	245.6	157.5	307.6
Redemptions (millions of euros)	937	407.2	409.2	120.5	62.5	157.1	62.8	126.8
Net subscriptions/redemptions (millions of euros)	353	47.3	435.8	5.1	71.9	88.5	94.6	180.8
Return on assets (millions of euros)	217.2	27.7	193.1	212.3	100.8	98.9	-16.4	9.7
Returns (%)	10.35	1.77	5.9	7.66	3.22	3.36	-1	0.27
Management yields (%)[2]	9.94	2.35	7.39	7.93	3.77	3.76	-0.41	0.57
Management fees (%)[2]	1.19	1.43	1.47	0.53	0.29	0.58	0.26	0.34
Financial expenses (%)[2]	0.00	0.02	0.14	0.02	0.04	0.03	0.03	0.05
FUNDS OF HEDGE FUNDS								
Investors/shareholders[1]	2,859	2,858	5,385	2,858	3,020	3,848	4,457	5,385
Total net assets (millions of euros)	566.7	652.8	831	652.8	666	727.3	676.1	831
Subscriptions (millions of euros)	72.3	32.4	237.8	18.1	4.6	45.9	26.8	160.5
Redemptions (millions of euros)	0.3	3.1	121.8	2.6	11.7	0.2	91.4	18.5
Net subscriptions/redemptions (millions of euros)	71.4	29.3	116	15.5	-7.1	45.7	-64.6	142
Return on assets (millions of euros)	26.5	56.8	62.2	15.3	20.3	15.6	13.4	12.9
Returns (%)	5.23	3.71	9.35	2.44	3.14	2.18	1.78	1.94
Management yields (%)[3]	6.32	4.24	10.68	2.55	3.49	2.72	2.53	2.26
Management fees (%)[3]	1.63	1.39	1.37	0.34	0.33	0.34	0.38	0.37
Depository fees (%)[3]	0.06	0.06	0.06	0.02	0.01	0.01	0.02	0.02

1 Data on sub-funds.
2 % of monthly average total net assets.
3 % of daily average total net assets.

Management companies. Number of portfolios and assets under management

TABLE 3.13

				2020				2022
	2019	2020	2021	I	II	III	IV	I[1]
NUMBER OF PORTFOLIOS[2]								
Mutual funds	1,595	1,515	1,452	1,506	1,487	1,469	1,452	1,456
Investment companies	2,560	2,421	2,275	2,377	2,328	2,301	2,275	2,268
Funds of hedge funds	7	7	10	8	9	10	10	10
Hedge funds	62	69	72	73	71	72	72	72
Real estate mutual funds	2	2	2	2	2	2	2	2
Real estate investment companies	3	3	2	2	2	2	2	2
ASSETS UNDER MANAGEMENT (millions of euros)								
Mutual funds	279,377.4	279,694.5	324,701.0	292,865.2	309,047.2	315,632.6	324,701.0	317,695.5
Investment companies	28,385.5	26,564.8	28,049.3	27,245.8	27,827.0	27,625.4	28,049.3	27,337.0
Funds of hedge funds	566.7	652.8	831.0	666.0	727.3	725.2	831.0	–
Hedge funds	2,832.4	2,912.6	3,543.4	3,085.3	3,273.0	3,267.4	3,543.4	–
Real estate mutual funds	309.4	310.8	311.0	311.0	311.1	311.0	311.0	311.2
Real estate investment companies	763.5	907.1	913.2	890.0	890.2	910.5	913.2	916.1

1 Available data: January 2022.
2 Data source: registers of Collective Investment Schemes.

Foreign Collective Investment Schemes marketed in Spain[1]

TABLE 3.14

	2019	2020	2021	2020 IV	2021 I	II	III	IV
INVESTMENT VOLUME[2] (millions of euros)								
Total	178,841.5	199,419.3	276,231.9	199,419.3	219,851.3	249,927.6	261,733.8	276,231.9
Mutual funds	30,843.4	27,355.5	36,662.6	27,355.5	27,861.7	32,797.0	34,459.8	36,662.6
Investment companies	147,998.1	172,063.8	239,569.4	172,063.8	191,989.7	217,130.6	227,274.0	239,569.4
INVESTORS/SHAREHOLDERS[2]								
Total	3,361,901	4,312,340	6,073,537	4,312,340	4,865,192	5,231,449	5,609,293	6,073,537
Mutual funds	521,648	592,053	776,206	592,053	635,555	697,470	723,358	776,206
Investment companies	2,840,253	3,720,287	5,297,331	3,720,287	4,229,637	4,533,979	4,885,935	5,297,331
NUMBER OF SCHEMES[3]								
Total	1,033	1,048	1,074	1,048	1,046	1,058	1,068	1,074
Mutual funds	399	407	416	407	421	423	424	416
Investment companies	634	641	658	641	625	635	644	658
COUNTRY[3]								
Luxembourg	462	472	501	472	480	486	493	501
France	222	225	222	225	228	229	228	222
Ireland	220	222	231	222	221	224	225	231
Germany	48	45	50	45	48	50	50	50
United Kingdom	23	23	0	23	0	0	0	0
The Netherlands	4	3	3	3	3	3	3	3
Austria	30	32	33	32	34	34	33	33
Belgium	5	5	5	5	5	5	5	5
Denmark	1	1	1	1	1	1	1	1
Finland	11	13	14	13	14	14	14	14
Liechtenstein	4	4	5	4	4	4	4	5
Portugal	3	3	0	3	3	3	3	0
Sweden	0	0	9	0	5	5	9	9

1 Only data on UCITS are included.
2 Investment volume: participations or shares owned by the investors/shareholders at the end of the period valued at that time.
3 UCITS (funds and societies) registered at the CNMV.

Real estate investment schemes[1]

TABLE 3.15

	2019	2020	2021	2021 I	II	III	IV	2022 I[2]
REAL ESTATE MUTUAL FUNDS								
Number	2	2	2	2	2	2	2	2
Investors	483	483	482	483	483	482	482	482
Assets (millions of euros)	309.4	310.8	311.0	311.0	311.1	311.0	311.0	311.2
Return on assets (%)	-0.02	0.47	0.07	0.06	0.01	-0.01	0.01	0.05
REAL ESTATE INVESTMENT COMPANIES								
Number	3	3	2	2	2	2	2	2
Shareholders	316	315	209	207	205	208	209	209
Assets (millions of euros)	763.5	907.1	913.2	890.0	890.2	910.5	913.2	916.1

1 Real estate investment schemes which have sent reports to the CNMV, excluding those in process of dissolution or liquidation.
2 Available data: January 2022.