



CNMV BULLETIN
Quarter III
2022



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ISSN (digital edition): 1988-2025

Layout: Cálamo y Cran

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Initials and acronyms

AA. PP.	Public administration service
ABS	Asset-Backed Security
AIAF	Spanish Market in Fixed-income Securities
AIF	Alternative Investment Fund
ANCV	Spanish National Securities 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
CIS	Collective Investment Company/Collective Investment Scheme
CISMC	CIS Management Company
CNMV	(Spanish) National Securities Market Commission
CP	Crowdfunding Platforms
CS	Customer Service
CSD	Central Securities Depository
CSRD	Central Securities Depositories Regulation
CTP	Consolidated Tape Provider
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
ESEF	European Single Electronic Format
ESFS	European System of Financial Supervision
ESG	Environment, Social and Governance
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
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
RFR	Risk Free Rate
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
SGEGR	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 (SIBE)
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
SOC	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 Fund
XBRL	Extensible Business Reporting Language

I Market survey (*)

(*) This report has been prepared by the Department of Research and Statistics of the Directorate General for Strategic Policy and International Affairs of the CNMV.

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1 Overview

The international and national macroeconomic and financial environment continues to be very complex as a result of the strong growth in inflation and the abrupt shift in monetary policy. The rise in inflation, initially considered temporary, has consolidated its growth rates at levels close to 10% in many economies, levels not seen for 40 years. The need to avoid second-round effects and to anchor inflation expectations has led central banks to make a rapid and abrupt shift in monetary policy, the consequences of which are still uncertain, especially for the evolution of economic activity.

This change of tone in monetary policy, which has led to significant increases in official interest rates (300 basis points [bp] in the United States, to the range of 3-3.25%; 125 bp in the euro area, to 1.25% and 215 bp in the United Kingdom, to 2.25%) has not yet come to an end. The increase in interest rates, which are now at levels similar to those in 2008,¹ marks the end of a cycle of several years of extremely low interest rates and the beginning of a new stage of a certain normalisation of financing conditions. A normalisation that, because of the short time in which it has taken place, implies sharply higher financing costs for agents and negatively affects the development of economic activity. Forecasts of major organisations and institutions indicate that the deterioration in activity will be temporary and concentrated in the fourth quarter of this year and the first quarter of next one. However, there is a very high degree of uncertainty surrounding these forecasts, particularly in Europe, where the scenario is further complicated by the possibility of interruptions in energy supply during the winter months. In fact, the possibility of a brief recession in some economies in 2023, such as Germany and Italy, is not ruled out.²

1 In the case of the United States and the United Kingdom. In the case of the euro area, rates are similar to those in 2011, although, given that additional increases are expected in the coming months, this reference could vary.

2 According to the International Monetary Fund (IMF) World Economic Outlook, published on 11 October 2022.

Summary of financial indicators

TABLE 1

	Dec-21	Mar-22	Jun-22	Sep-22
Short-term interest rates¹ (%)				
Benchmark interest rate	0.00	0.00	0.00	1.25
Euribor 3 months	-0.58	-0.50	-0.24	1.01
Euribor 12 months	-0.50	-0.24	0.85	2.23
Exchange rates²				
Dollar/euro	1.13	1.11	1.04	0.97
Yen/euro	130.4	135.2	141.5	141.0
Yield on medium and long-term government bonds³				
Germany				
3 year	-0.72	-0.24	0.98	1.48
5 year	-0.56	0.05	1.27	1.70
10 year	-0.31	0.33	1.50	1.83
United States				
3 year	0.95	2.09	3.16	3.86
5 year	1.23	2.11	3.20	3.68
10 year	1.46	2.13	3.15	3.50
Private debt risk premiums: spread over 10-year public debt³ (bp)				
Euro area				
High yield	428	543	587	654
BBB	121	173	227	251
AAA	66	86	97	110
United States				
High yield	350	406	501	532
BBB	119	177	191	212
AAA	39	71	75	81
Equity markets				
Return of main international stock indices⁴ (%)				
Eurostoxx 50	6.2	-9.2	-11.5	-4.0
Dow Jones	7.4	-4.6	-11.3	-6.7
Nikkei	-2.2	-3.4	-5.1	-1.7
Return of other indices (%)				
Merval (Argentina)	7.9	8.9	-2.8	57.3
Bovespa (Brazil)	-5.5	14.5	-17.9	11.7
Shanghai Comp. (China)	2.0	-10.6	4.5	-11.0
BSE (India)	-1.4	0.6	-9.6	9.7
Spanish stock market				
Return of the Ibex 35 (%)	-0.9	-3.1	-4.1	-9.0
PER of the Ibex 35 ⁵	12.9	11.3	11.9	10.5
Volatility of the Ibex 35 ⁶ (%)	18.0	23.4	21.8	21.0
SIBE trading volumes ⁷	1,672	1,703	1,597	1,038

Source: CNMV, Refinitiv Datastream and Madrid Stock Exchange.

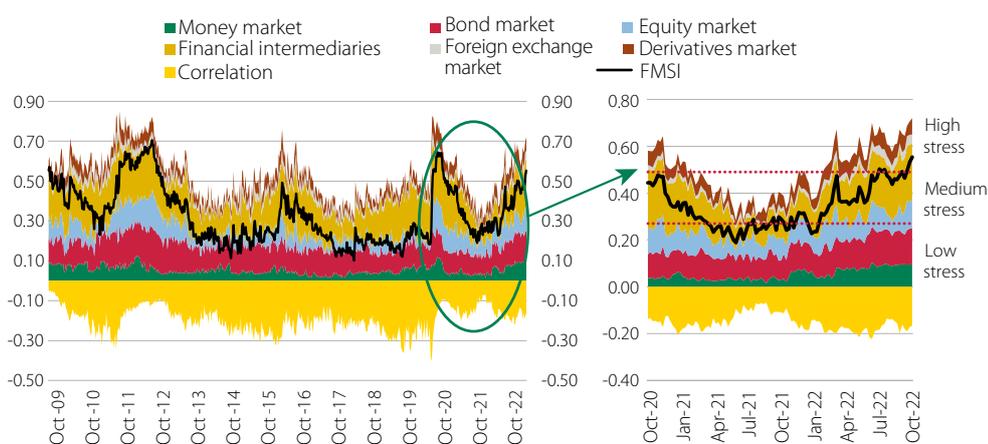
- 1 Monthly average of daily data. The benchmark interest rate corresponds to the marginal rate of the weekly auction at the close of the period.
- 2 Data at the close of the period.
- 3 Monthly average of daily data. In the euro area, the spread is calculated relative to the German government bond.
- 4 Cumulative quarterly yields in each period.
- 5 Price-earnings ratio (PER).
- 6 Implied volatility. Arithmetic mean of the quarter.
- 7 Daily average, in millions of euros.

Financial markets have incorporated this scenario of high inflation, shift in monetary policy, erosion of economic growth and prolongation of the war in Ukraine, with declines in share prices and significant increases in interest rates and risk premiums of instruments with the worst credit quality. Between January and September³ stock markets posted falls of between 20.9% and 32.4% in the United States, between 6.6% and 24.5% in Europe, and between 7.8% and 9.9% in Japan. Performances of emerging economies' stock markets are more uneven, with advances in those favoured by higher commodity prices and falls in others that are more exposed to war or domestic political uncertainties. In Spain, the Ibex 35 posted a loss of 15.5% for the period, somewhat less than other EU benchmark indices.

In the debt markets there have been significant increases in the yield on assets over the course of the year, a trend that was interrupted only in June and July. At the end of September, the interest rate on the 10-year sovereign debt bond stood at 3.8% in the United States (1.5% at the beginning of the year), and in the euro area it ranged between 2.1% for the German bond and 4.8% for that of Greece (between -0.2% and 1.3% in January). In Spain, this yield stood at 3.3%, compared to 0.6% at the beginning of the year, with values in positive territory in all sections of the debt curve. In Italy it increased to 4.5%, while the risk premium increased to 240 bp as a result of the country's political situation.

Spanish financial markets stress indicator

FIGURE 1



Source: CNMV.

In this context, the stress indicator of the Spanish financial markets⁴ has experienced a gradual increase since mid-September to stand at 0.55 in the first days of

3 The closing date for this report is 30 September, except for certain specific information.

4 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. For further details on recent movements in this indicator and its components, see the publication Financial Stability Note, and the CNMV's statistical series (market stress indicators), available at <http://www.cnmv.es/portal/menu/Publicaciones-Estadisticas-Investigacion.aspx?lang=en>. 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).

October (high risk level).⁵ After several months hovering at the threshold between medium and high risk (0.49), the indicator is now at the highest level seen since the pandemic (see Figure 1). The falls in the prices and the spikes in the volatility of most financial assets, as well as the rising trend in risk premiums, have led to a general increase in the six segments that make up the indicator. Those with the greatest contribution to the overall increase are financial intermediaries and the bond market, which closed the first week of October at 0.80 and 0.77 respectively. Other segments with a lower weighting, such as the foreign exchange segment, also posted significant highs (0.88). The system's correlation remains at a medium-high level.

2 Fixed income markets

2.1 Interest rates

In the third quarter, short-term interest rates in the main advanced economies continued the upward trend they have maintained since the beginning of the year, in line with the rate hikes made by central banks in response to high inflation. Since this increase in rates has been more intense in the United States, the spread between 3-month interest rates in the United States and in the euro area has also widened over the course of 2022, especially in the third quarter of the year. During 2021 it was an average of 71 bp, in March of this year it was 182 bp and in September it stood at 244 bp (see Figure 2).

At its September meeting, the European Central Bank (ECB) raised its key interest rate by 75 bp, the largest increase in its history. The key interest rates now stand at 1.25% for the main refinancing operations, 1.5% for the marginal lending facility and 0.75% for the deposit facility. The ECB had carried out its first rate hike, of 50 bp, in July.⁶ Furthermore, the Governing Council expects to continue with these increases in the next meetings with the goal of moderating demand and containing euro area inflation,⁷ which continues to rise, among other reasons due to the sharp rise in energy and food prices, as well as the existence of some bottlenecks. In this context, three-month interest rates in the euro area increased by 137 bp in the third quarter to stand at 1.17% at the end of September. With regard to the ECB's purchase programmes, the principal of the securities acquired under the APP will continue to be fully reinvested. As for the PEPP, it is also intended to reinvest the principal of the acquired securities that mature, at least until the end of 2024.

5 This indicator has a weekly frequency. The figure presented in this report corresponds to 7 October.

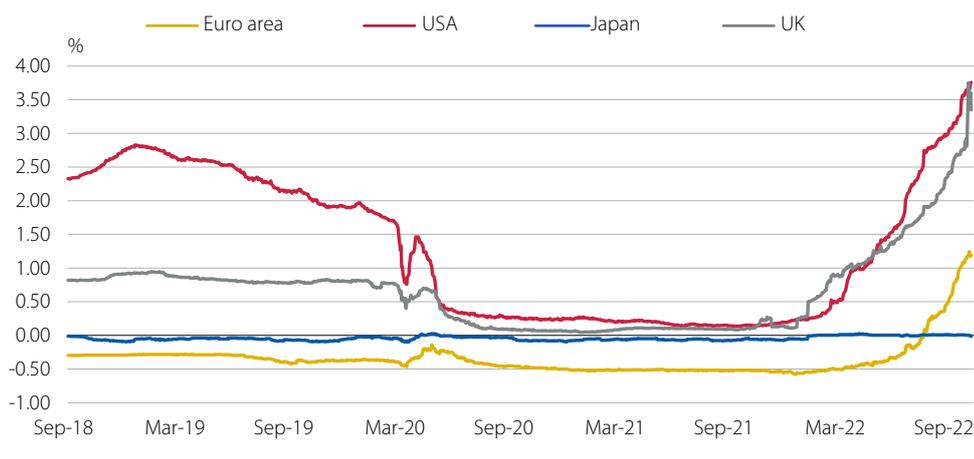
6 This rate hike was the first in 11 years in the euro area (since April 2011). The official interest rate in the euro area had been at 0% since March 2016 and below 0.5% since 2013.

7 Inflation in the euro area in September was 10%, above the rate for August (9.1%). In Spain, on the other hand, data from the National Institute of Statistics (INE) place inflation in September at 9.0%, which represents a decrease compared to August (10.6%)

Three-month interest rates in the United States increased by 147 bp in the third quarter of the year to 3.75%, driven by the two rate hikes carried out by the Federal Reserve (FED) since the end of June. Official interest rates were in the range of 3-3.25% in September, after two consecutive increases of 75 bp in the July and September meetings due to fears of rising inflation.^{8, 9} In addition, the FED began to reduce its balance sheet in June, in accordance with the plans published in May for this purpose.¹⁰

Three-month interest rates

FIGURE 2



Source: Refinitiv Datastream.

The Bank of England, which began the process of increases in December 2021, has increased the official rate to 2.25%, its highest level since December 2008. During the third quarter, the central bank raised rates by 50 bp on 2 occasions,¹¹ since, despite estimating a 0.1% contraction in GDP this quarter, its priority is to combat the rise in inflation (9.9% in August). In addition, although at its last meeting in September the Bank of England announced the details of its debt sale strategy to reduce its balance sheet,¹² just a few days later it was forced to temporarily suspend this order and decided to urgently buy debt (£65 billion) to alleviate market turbulence and preserve financial stability as a result of the market's reaction to the fiscal plans of the new British government. The most intense increases in short-term interest rates of the main advanced economies were observed in this economy throughout the third quarter of the year. The three-month benchmark increased by 168 bp relative to June, to 3.34% in September (see Figure 2).

8 Since January, the FED has raised its official interest rates five times: by 25 bp in March; 50 bp in May, and 75 bp in June, July and September (3 pp in the year). Furthermore, in its last meeting in September it indicated that new increases would be appropriate in order to meet the objectives of maximum employment and holding inflation at 2% in the long term.

9 Inflation stood at 8.2% in August, the second month of decline (9% in June and 8.5% in July).

10 In May the FED published its plans to reduce its balance sheet: <https://www.federalreserve.gov/newsevents/pressreleases/monetary20220504b.htm>

11 Before these two rate hikes, the Bank of England had already made five (of 25 bp each) since December 2021, so these new rate increases represent an acceleration in the tightening of its monetary policy in order to contain inflation.

12 By reducing its stock of government bonds by £80 billion (to £758 billion) in the next 12 months.

In contrast, in Japan official interest rates remain negative and unchanged since February 2016. In fact, the monetary authority indicated that it would not change its policy of ultra-low rates in the near future, to support the recovery of the economy after the pandemic.¹³ In this way, the three-month interest rate remained relatively stable in the third quarter of the year, falling by just 1 bp.

Short-term interest rates¹

TABLE 2

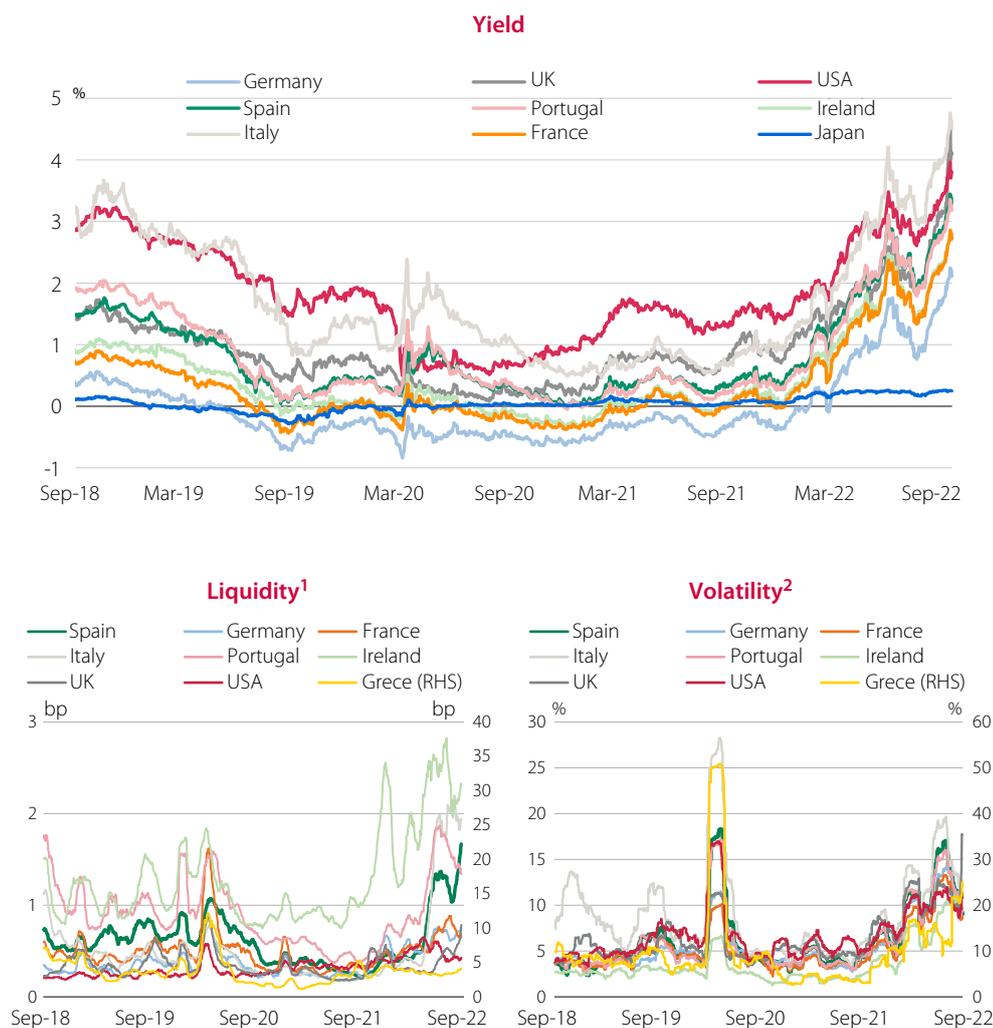
%								
	Dec-18	Dec-19	Dec-20	Dec-21	Dec-21	Mar-22	Jun-22	Sep-22
Euro area								
Official ²	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.25
3-month	-0.31	-0.40	-0.54	-0.58	-0.58	-0.50	-0.24	1.01
6-month	-0.24	-0.34	-0.52	-0.54	-0.54	-0.42	0.16	1.60
12-month	-0.13	-0.26	-0.50	-0.50	-0.50	-0.24	0.85	2.23
United States								
Official ³	2.50	1.75	0.25	0.25	0.25	0.50	1.75	3.25
3-month	2.79	1.91	0.23	0.21	0.21	0.84	1.97	3.45
6-month	2.89	1.90	0.26	0.31	0.31	1.21	2.59	4.00
12-month	3.08	1.97	0.34	0.52	0.52	1.73	3.32	4.52
United Kingdom								
Official	0.75	0.75	0.10	0.25	0.25	0.75	1.25	2.25
3-month	0.90	0.79	0.03	0.16	0.16	0.99	1.57	2.91
6-month	1.03	0.87	0.04	0.36	0.36	1.45	2.13	3.73
12-month	1.16	0.97	0.10	0.72	0.72	0.81	0.81	0.81
Japan								
Official ⁴	-0.10	-0.10	-0.10	-0.10	-0.10	-0.10	-0.10	-0.10
3-month	-0.10	-0.06	-0.10	-0.08	-0.08	-0.01	-0.03	-0.02
6-month	0.00	0.01	-0.06	-0.05	-0.05	0.04	0.03	0.05
12-month	0.11	0.11	0.05	0.05	0.05	0.05	0.05	0.05

Source: Refinitiv Datastream.

- 1 Monthly average of daily data, except official rates, corresponding to the close of the period. Data to 30 September.
- 2 Minimum bid rate at weekly auctions.
- 3 Federal funds rate.
- 4 Monetary policy rate.

In this context of abrupt change of course in monetary policy, yields on 10-year sovereign bonds show significant increases in the main advanced economies, especially in Italy and the United Kingdom. The upward trend in interest rates on long-term debt has been relatively uniform during the year in these economies, being reversed temporarily only between June and mid-August (see Figure 3).

¹³ The disparity between Japanese monetary policies and those of other central banks have led to a depreciation of the yen (especially against the dollar). For this reason, at the end of September, the Government of Japan intervened in the currency market by buying yen to prevent its collapse.



Source: Bloomberg, Refinitiv Datastream and own calculations. Data to 30 September.

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 the euro area, the increase in yields on 10-year sovereign bonds was intense in the third quarter, ranging between 69 bp (Ireland and the Netherlands) and 12 bp (Greece). The yield on the German 10-year sovereign bond¹⁴ turned positive in January 2022 and stood at 2.1% at the end of September (74 bp more than at the end of June). In France, Portugal and Spain the advances were similar (77 bp, 73 bp and 83 bp respectively). Thus, at the end of the third quarter, these yields stood at 2.7% in France, 3.2% in Portugal and 3.3% in Spain. It is worth highlighting the increase in interest rates of the 10-year bond in Italy (112 bp, to 4.5% at the end of September), caused in part by the political instability in the country, which gave rise to new elections at the end of September. The same goes for the sharp rise in interest rates on 10-year public debt in the United Kingdom, where they increased by 185 bp during the quarter, to 4.1%. The additional increase compared with other

14 It had been in negative territory since May 2019.

European references was also related to the uncertainty generated by the political decisions referred to earlier.¹⁵

The increase in the yield on the US sovereign bond was 83 bp relative to June (231 bp cumulative YTD), reaching 3.80%. This increase is explained by the multiple rate hikes already referred to, in a context of high inflation. Of particular note in the US economy is the inversion of the yield curve beyond the 12-month term, a phenomenon associated with increased probability of recession.

Medium- and long-term government bond yields¹

TABLE 3

%

	Dec-18	Dec-19	Dec-20	Dec-21	Dec-21	Mar-22	Jun-22	Sep-22
Germany								
3 year	-0.53	-0.62	-0.78	-0.72	-0.72	-0.24	0.98	1.48
5 year	-0.27	-0.54	-0.75	-0.56	-0.56	0.05	1.27	1.70
10 year	0.25	-0.27	-0.57	-0.31	-0.31	0.33	1.50	1.83
United States								
3 year	2.68	1.64	0.19	0.95	0.95	2.09	3.16	3.86
5 year	2.68	1.68	0.38	1.23	1.23	2.11	3.20	3.68
10 year	2.83	1.86	0.93	1.46	1.46	2.13	3.15	3.50
United Kingdom								
3 year	0.74	0.53	-0.07	0.61	0.61	1.26	1.98	3.41
5 year	0.90	0.58	-0.04	0.67	0.67	1.28	2.03	3.44
10 year	1.27	0.78	0.26	0.83	0.83	1.52	2.38	3.40
Japan								
3 year	-0.14	-0.14	-0.14	-0.11	-0.11	-0.01	-0.04	-0.06
5 year	-0.13	-0.11	-0.11	-0.09	-0.09	0.03	0.03	0.05
10 year	0.04	-0.02	0.02	0.05	0.05	0.20	0.24	0.25

Source: Refinitiv Datastream.

1 Monthly average of daily data. Data to 30 September.

In Spain, short-term yields on both public and private debt were broadly similar, with private debt showing slightly sharper increases. Short-term public debt rates stood were in positive territory throughout the short section of the curve, reflecting the change in tone of the ECB's monetary policy and the prospect of its tightening being extended. These increases took short-term public debt rates to their highest level since 2012 and brought an end to a period of negative values that had lasted seven years. Thus, the average yield in the secondary market¹⁶ on 3, 6 and 12-month Treasury bills stood at 0.49%, 0.96% and 1.60% respectively in September, which is

15 In September UK Prime Minister Liz Truss announced a programme of tax cuts to support the country's growth, to be financed by borrowing. This announcement raised doubts about the sustainability of the country's public finances, which led to an increase in the yield on public debt and a sharp depreciation of sterling (it fell by almost 5% during the 26 September session to record intraday lows of around US\$1.03).

16 In the primary market, the rates of the last auctions of 3, 6, 9 and 12-month bills held during September stood at 0.71%, 0.87%, 1.31% and 1.41% respectively.

between 90 bp and 104 bp more than the June values and between 127 bp and 220 bp more than those of January (see Table 4).

Short-term interest rates¹

TABLE 4

%	Dec-18	Dec-19	Dec-20	Dec-21	Dec-21	Mar-22	Jun-22	Sep-22
Treasury bills								
3-month	-0.50	-0.58	-0.70	-0.78	-0.78	-0.66	-0.41	0.49
6-month	-0.41	-0.47	-0.59	-0.63	-0.63	-0.58	-0.02	0.96
12-month	-0.33	-0.48	-0.63	-0.60	-0.60	-0.48	0.56	1.60
Corporate commercial paper²								
3-month	0.24	0.20	0.49	0.38	0.38	0.21	0.32	0.71
6-month	0.19	0.52	0.55	0.50	0.50	0.45	0.65	1.71
12-month	0.07	0.71	1.44	0.81	0.81	0.68	0.83	2.83

Source: Refinitiv Datastream and CNMV.

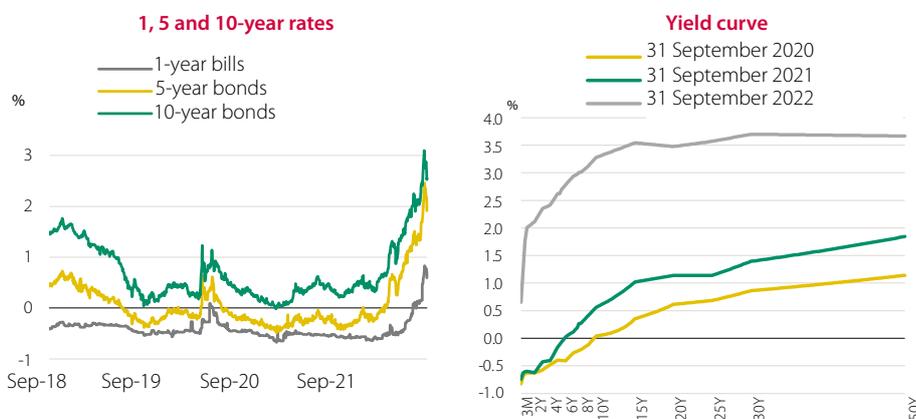
1 Monthly average of daily data.

2 Issue interest rate.

The return on short-term private sector fixed-income assets showed similar behaviour, with somewhat more intense rises in the one-year term. Private debt rates have been pushed up by the withdrawal of the ECB's corporate debt purchase programme. Although not all corporate issuers benefited directly from this programme in previous months, they did benefit indirectly from investors' search for yield. Also, while volumes of commercial paper issued on the Alternative Fixed Income Market (MARF) have fallen, their weight in the sample is still significant. Issue costs on the MARF are relatively high, which raises the average rates of the sample. Thus Spanish market data show that in September the average yield on commercial paper in the primary market ranged from 0.71% at 3 months to 2.83% for 12-month paper, substantially higher than those at the end of June 2022 (see Table 4), implying a risk premium relative to public debt at the same terms of between 21 and 77 bp. The biggest increase in spreads in the quarter was concentrated in the longer maturities.

Yields on Spanish public debt

FIGURE 4



Source: Refinitiv Datastream and Bloomberg. Data to 30 September.

Medium- and long-term private fixed income yields¹

TABLE 5

	Dec-18	Dec-19	Dec-20	Dec-21	Dec-21	Mar-22	Jun-22	Sep-22
Public sector fixed income								
3 year	-0.04	-0.29	-0.53	-0.48	-0.48	0.20	1.58	2.05
5 year	0.44	-0.06	-0.42	-0.20	-0.02	0.56	1.99	2.35
10 year	1.43	0.45	0.05	0.39	0.39	1.27	2.65	3.00
Private fixed income								
3 year	0.67	0.20	-0.20	0.12	0.12	0.49	1.26	2.15
5 year	0.55	0.23	-0.13	0.13	0.13	0.78	1.50	1.94
10 year	1.52	0.79	0.41	0.56	0.56	1.46	2.35	3.73

Source: Refinitiv Datastream, Refinitiv Eikon and CNMV.

¹ Monthly average of daily data.

Medium- and long-term public debt rates rose in the third quarter, but less sharply than in the two previous quarters. This was due to their already having largely factored in expectations of tightening monetary policy in the previous quarter, and also to the favourable effects of the ECB's July announcement of its TPI (Transmission Protection Instrument) debt purchasing instrument to combat financial fragmentation. Even so, they stood at their highest level since 2014. The increases were somewhat more notable in the shortest section of the curve, reflecting to a greater extent the expectations of tightening monetary policy, while they were more moderate in the medium and long sections, in which ECB debt purchases were larger. As shown in Table 10, in September the yield on 3, 5 and 10-year Spanish government debt reached 2.05%, 2.35% and 3%¹⁷ (monthly average) respectively, between 35 and 47 bp more than in June.

The behaviour of private fixed income was similar, although the increases were more intense and concentrated to a greater extent in the longer maturities. Contrary to public debt, which continued to benefit from ECB purchases through its TPI tool, the disappearance of corporate debt purchases pushed up its rates, especially on the longer maturities. At the end of September, returns on private debt assets at 3, 5 and 10 years reached 2.15%, 1.94% and 3.73% respectively, between 44 and 138 bp higher than in June and representing a premium of between 10 and 73 bp over public debt assets at similar terms.¹⁸

¹⁷ Ten-year rates ended September at 3.3%, although during the month they had at times exceeded 3.4%, their highest level since 2014.

¹⁸ At the five-year term there is a negative premium of 41 bp in favour of private debt assets, which is attributable to the scarcity of 5-year private debt benchmarks available for yield calculation.

The Resolution of 12 April 2021 of the Secretariat of State for Finance created the Committee of Experts (hereinafter the Committee) for the preparation of the White Paper on tax reform, in order to lay the foundations for a structural medium- and long-term tax reform to modernise the tax system and make it more efficient.

On 3 March 2022 the Committee presented its report, which analyses the economic efficiency and interpersonal, territorial and gender equitability of the tax system and proposes the possible reforms to be undertaken, with special attention to environmental, corporate and wealth taxation, the tax treatment of the digital economy and emerging activities, and international trends.

The Government had planned to evaluate the measures proposed by the White Paper in 2022 with a view to carrying out the tax reform in 2023. However, according to the latest information, the Government has decided to postpone this tax reform in view of recent geopolitical and economic events. This tax reform forms part of the commitments made vis-à-vis the European Union.

One of the CNMV's objectives for 2022 is to analyse the proposals in this White Paper that affect the securities markets with a view to making a technical contribution to the tax debate. The most relevant issues for the CNMV are detailed below. The CNMV's main conclusions are:

- In line with the White Paper Committee's position, the CNMV shares the objective of **correcting the debt bias induced by the tax-deductibility of financial expenses** as against the non-deductibility of the opportunity cost of own capital. To mitigate the distorting effects of this tax-induced bias, various different initiatives could be proposed.

In this regard, the European Commission's (EC's) proposal for a Directive establishing rules for reducing the debt bias and limiting the tax-deductibility of corporate interest (debt-equity bias reduction allowance, or DEBRA) introduces a tax allowance¹ on equity increases, putting them on a comparable footing with debt, which will make financing more accessible, in particular for start-ups and SMEs. This harmonised solution will stimulate the single capital market and the green and digital transition. In order to ensure that the common framework is also sustainable in the short term for the budgets of the Member States, a limitation² of the tax deductibility of debt costs is also introduced.

- As regards the **VAT exemption applicable to financial services**, given the cost of collection cost and the possible negative effects on the economy deriving from breaks in the VAT chain, the EC is considering two possible alternatives: full taxation of financial and insurance services, or taxation of fee-based services only. The White Paper also supports the revision of this exemption. In view of the importance of this matter, the CNMV will

follow the evolution of these proposals and, if there are public consultation processes, will contribute to the debate directly and in coordination with the Ministry of Economy and Digital Transformation.

- Concerning the **special regimes of certain financial entities** for corporation tax, particularly SICAVs and SOCIMIs (Spanish “REITs”), it is considered essential to highlight the **importance of the competitive international tax environment** to prevent the disappearance or hardening of these regimes. As the White Paper indicates, this type of investment vehicle exists in neighbouring countries with a design similar to that of Spain and even with less burdensome corporate taxation, which could displace current investments by both residents and non-residents to other markets and lead to shortfalls relative to expected revenues. The Committee also points out the difficulty of measuring these effects.
- The Committee also considers that there is an **urgent need for a regulatory framework on crypto-assets** and related activities and transactions to define and govern their legal and tax status. In particular, it addresses the two main problems that arise from the tax perspective: the **lack of transparency** of these transactions and of the persons and entities involved in them, and the **uncertainty about the classification and quantification for tax purposes** of the related rights, operations and transactions. In this regard, it calls in essence for the Ministry of Finance to actively support the initiatives of the OECD and the European Union to strengthen administrative cooperation and the automatic exchange of information in this area, for the tax treatment of crypto-assets to be clarified in state tax regulations and for systematic interpretation to be provided by means of interpretive or explanatory resolutions.
- The White Paper also points out Spain has **no specific tax framework for crowdfunding in its various forms**, the General Directorate of Taxes having taken responsibility for clarifying its tax treatment in the Spanish system through its answers to tax queries. The Committee supports the **introduction of tax incentives for micro-financing** of SME start-ups, in line with the experience of other neighbouring countries.

Other White Paper proposals with an impact on the securities markets are those relating to:

- The current dual model of taxation of income from capital and from employment in personal income tax and the progressive nature of the tax.
- Levelling taxation of the digital economy and emerging activities.
- Measures to reduce complexity and uncertainty, such as exporting the sandbox model to the field of taxation and considering the incorporation of the tax perspective into existing regulatory sandboxes

- Measures to promote entrepreneurship and innovation, such as deductions for investment in start-ups, improvements in investment incentives (in the case of carried interest) and the tax treatment of remuneration (stock options).

The CNMV will follow the evolution of the White Paper initiatives that affect the securities markets and will play an active role in the event that they give rise to specific regulatory proposals.

- 1 The allowance is calculated by multiplying the allowance base by a notional interest rate, the allowance base being the difference between the amount of equity at the end of the tax year and at the end of the previous tax year. The notional interest rate consists of a 10-year risk-free interest rate plus a risk premium. This risk premium will be 1% in general and 1.5% for SMEs.
- 2 Interest deductibility is limited to 85% of excess borrowing costs, defined as the amount by which a taxpayer's deductible borrowing costs exceed its taxable income from interest and other economically equivalent taxable income obtained by the taxpayer in accordance with the national legal system.

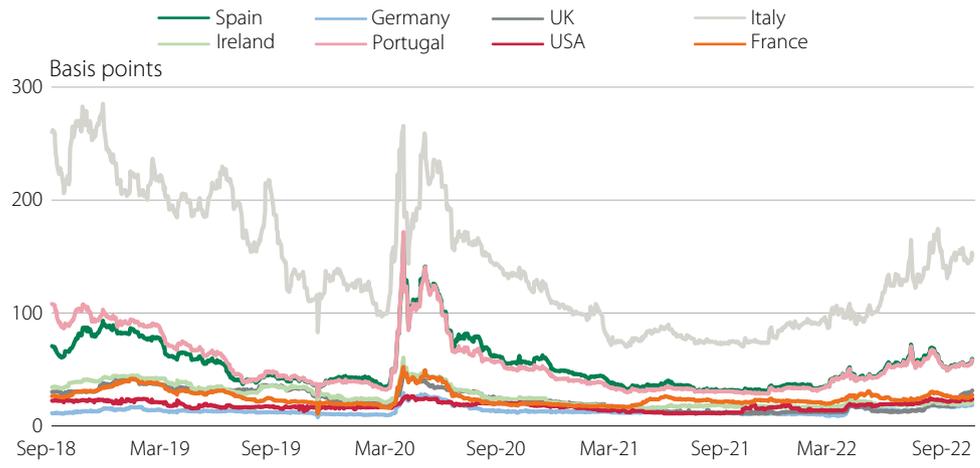
2.2 Risk premiums

The sovereign credit risk premiums of advanced economies, evaluated on the basis of five-year CDS (credit default swap) contracts, showed increases during the quarter, especially in Italy and the United Kingdom. This upward trend has been observed since the beginning of the year in the main economies due to the heightened uncertainty and increased risks entailed by the current economic and political environment. In some cases, the rise is also related to domestic political uncertainties. It is worth noting the increase in the UK risk premium this quarter (35 bp), especially in September, when it doubled, to end the quarter at 48 bp due to doubts about the sustainability of the country's debt. In the euro area, the most significant rise in risk premium was that of Italy: by 44 bp, to 175 bp at the end of September. This increase, which began in the second quarter, is explained by the political crisis referred to above.¹⁹ In Spain, the increase was 9 bp, to 66 bp, and in France and Portugal it was 8 bp and 11 bp, to 32 bp and 65 bp respectively. In Germany, the increase in the risk premium was similar, 11 bp, taking it to 24 bp, approaching the maximum level reached in the COVID-19 crisis (28 bp). Meanwhile, in the United States, the quarterly rise was 8 bp, to 28 bp, a higher level than any of those recorded during the pandemic.

¹⁹ The risk premium is at its highest levels since June 2020.

Sovereign debt credit risk premiums (5-year CDS)

FIGURE 5



Source: Refinitiv Datastream. Data to 30 September.

For its part, the risk premium for the banking sector (see Figure 6) in both the euro area and the United States maintained a downward path during the third quarter, slightly steeper in the case of the euro area. Thus, this indicator increased from June to September by 19 bp in the euro area (to 153 bp) and by 6 bp in the United States (to 107 bp).

Banking sector credit risk premiums (5-year CDS)

FIGURE 6



Source: Refinitiv Datastream, indices prepared by CMA. Data to 30 September.

Credit risk premiums in the private fixed income markets of advanced economies also registered increases in all debt tranches. These increases were more significant in the euro area than in the United States, especially in assets with poorer credit quality. Thus, in the United States, the risk premium on high-yield debt increased by 31 bp in the third quarter, to 532 bp (September average); that of BBB debt increased by 21 bp to 223 bp, and that of AAA debt increased by 6 bp to 81 bp. In the euro area, the increase in corporate debt credit risk premiums was 67 bp in the high yield segment, to 654 bp; 24 bp in the BBB segment, to 251 bp, and less pronounced in the AAA tranche, 13 bp, to 110 bp at the end of September 2022. In general, a rising trend is seen throughout the year, with an accentuation in the second half of September (see Table 6). Even so, the peaks in high yield segment

risk premiums in September, 718 bp in the euro area and 611 bp in the United States, remain below the highs recorded during the COVID-19 crisis (970 and 1,064 bp respectively).

Private debt risk premiums¹

TABLE 6

Spread vs. 10-year government debt, basis points

	Dec-18	Dec-19	Dec-20	Dec-21	Dec-21	Mar-22	Jun-22	Sep-22
Euro area²								
High yield	605	489	443	428	428	5.43	5.87	6.54
BBB	199	137	124	121	121	1.73	2.27	2.51
AAA	86	66	53	66	66	0.86	0.97	1.10
United States								
High yield	485	430	418	350	350	4.06	5.01	5.32
BBB	192	141	126	119	119	1.77	1.91	2.12
AAA	72	46	47	39	39	0.71	0.75	0.81

Source: Refinitiv Datastream.

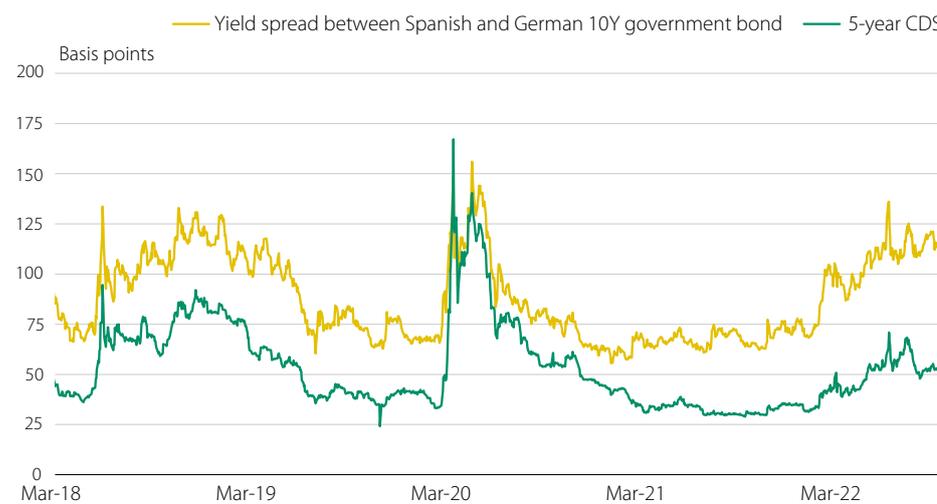
1 Monthly average of daily data. Data to 30 September.

2 Spread vs. the German bond.

In Spain, the sovereign risk premium, measured as the spread between the yield on 10-year public debt and that on German sovereign debt at the same term, closed the quarter at 118 bp, 9 bp more than in the previous quarter and in the area of annual maximums. In the third quarter this indicator reached its highest value since the first half of 2020, well above the 77 bp at which it started the year began (see Figure 7). Similar increases in risk premiums were also observed in other euro area countries (with the exception of Greece and Italy, where they were more intense). The evolution of the risk premium of the various economies is conditioned in general terms by that of their activity, their fiscal policy, in some instances by the maintenance of high levels of indebtedness and in the particular case of the euro area by the ECB's intervention through its purchases of public debt in the secondary markets through its TPI tool.

Risk premium of Spanish issuers: public sector

FIGURE 7



Source: Refinitiv Datastream and CNMV. Data to 30 September.

The risk premiums of the private sub-sectors of the economy also showed increases, which were slightly higher than those of the sovereign bond. The risk premiums of both companies and financial institutions reflect the ending of the ECB's debt purchase programmes (PEPP and APP), which included specific programmes for the purchase of commercial paper and corporate bonds, as well as bank debt (mortgage bonds and securitisations), in addition to rounds of financing on excellent specific terms for financial entities. The rise in interest rates also entails a significant increase in financial expenses of non-financial companies, in a context of economic slowdown and lower revenue growth. In the case of financial entities, this has a positive effect on their interest margins but also tends to lead to an increase in non-performing loans. As Figure 8 shows, the average CDS of financial institutions stood at 135 bp at the end of September, 13 bp more than at the end of June, and that of non-financial companies reached 97 bp, 10 bp more. In both cases it was more than twice the figure for the beginning of the year.

Risk premium of Spanish issuers: private sector¹

FIGURE 8



Source: Refinitiv Datastream and own calculations. Data to 30 September.

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

2.3 Debt issues and trading

Gross long-term debt issues in international markets in the third quarter of the year (half-yearly data) decreased by 30.3% year-on-year to just under US\$5 trillion.²⁰ All sectors posted falls (as in previous months), the most significant being that of the non-financial sector (39.4%). These declines are explained in part by the sharp tightening of financing conditions brought about by the shift in monetary policy, as well as by fears of recession, which are leading companies to defer their investment plans. By region, decreases were observed in the main economies, the most notable being that of the European Union (41.2%, to US\$775 billion), followed by the United States (33.8%, to US\$2.6 trillion) and Japan (28.3%, to US\$575 billion).

Gross sovereign debt issues fell by 28.5% compared with the second half of 2021, to US\$3.4 trillion. The lower financing needs of public administrations following the increase in spending as a result of the pandemic led to falls in all regions, the most intense in Europe, where they decreased by 53.3%, to US\$336 billion. In the United States and Japan the declines were less pronounced, although both economies recorded declines of close to 30% (to US\$2 trillion and US\$752 billion respectively).

Gross debt issues by private sectors decreased sharply relative to the second half of 2021, especially in the non-financial sector. The decrease in the latter was 39.4%, to US\$570 billion, the fall in issues in Europe (57.9%, to US\$93 billion) being particularly noticeable. The United States and Japan also posted declines compared with the same period in 2021, although to a lesser extent (31.4%, to US\$296 billion and 37.9%, to US\$47 billion respectively). There was also a decline in gross issues in the financial area (30.5%, to US\$1 trillion). Although all regions saw declines in long-term issues of this sector, those in the United States stood out (down by 50.1%, to US\$314 billion) as did those in Japan (down by 21.5% to US\$53 billion). In Europe, the decline in gross fixed-income issues by the financial sector was less intense (8.1% to \$345 million).

20 The decline in net long-term debt issues was much more pronounced, 109%, resulting in negative net issues of US\$230 billion. This was due both to the fall in gross issues and to the increase in maturities as a whole.



Source: Dealogic. Half-yearly data to 30 September.

In the case of private fixed income issues carried out by Spanish issuers, it should be noted that the amount of those registered in Spain in the third quarter (CNMV and MAREF) exceeded €27.65 billion, while that of those made abroad (July and August) was close to €16 billion. Within the issues made in Spain, close to 90% were registered with the CNMV and the rest were admitted to the MAREF. Of particular note in this quarter were the issues of commercial paper, which were more than double those of the same quarter of the previous year, with other asset classes showing decreases of varying intensity.

So far this year, fixed income issues registered in Spain stand at €80.52 billion, 9% more than 2021. The growth in issues of mortgage covered bonds and corporate commercial paper stands out, (€27.3 billion and €29.86 billion respectively), representing growth of 24% and 80% respectively compared with the same period of 2021. In contrast, bond issues barely reached €1.23 billion, half the 2021 amount.²¹ The issue of securitisation bonds and territorial bonds remained at levels similar to those of 2021, although in the case of the former, issues were concentrated in the first quarter of the year. The use of securitisation was largely due to its use as collateral to obtain financing in the ECB's extraordinary liquidity auctions, which have ended.

²¹ The bulk of the issues of this type of asset is carried out by the SAREB, which is considered a public administration.

The information gathered in the year suggests 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 of less than one year, and others adopted by the CNMV to simplify and streamline the issuing process, seem to have had a positive impact on the volume of commercial paper issues registered with the CNMV. The total amount of these issues increased by more than 50% in year-on-year terms, as several Spanish issuers have relocated to Spain the issues of this type that they made abroad, the amount of which has fallen significantly this year.

Issues made on the MARF totalled €2.95 billion in the third quarter, 35% less than in the same quarter of 2021. However, for the year to date they amount to €10.1 billion, a figure similar to that of 2021 (€10.2 billion). The relative importance of commercial paper increased from 74% in 2021 to 95% in 2022, reflecting the success of this market as a working capital financing mechanism for a significant number of companies, including large companies such as El Corte Inglés and MásMóvil but also listed companies such as Sacyr, Técnicas Reunidas and Vidrala, as well as a growing number of SMEs.

Gross private fixed income issues registered in Spain

TABLE 7

Nominal amounts in millions of euros

CNMV	2018	2019	2020	2021	2022			
					March	June	Sep	Jan-Sep
Long term¹	53,774	52,305	80,753	59,914	31,798.0	10,461.0	8,406.0	50,665.0
Non-convertible bonds ²	6,085	9,101	5,545	4,180	136.0	550.0	547.0	1,233.0
Convertible bonds	0	0	0	0	300.0	1,000.0	0.0	1,300.0
Covered bonds	26,575	22,933	22,960	28,700	14,300.0	7,000.0	6,000.0	27,300.0
Territorial bonds	2,800	1,300	9,150	5,500	3,040.0	0.0	500.0	3,540.0
Securitisation bonds	15,464	16,471	35,081	18,376	14,022.0	1,911.0	1,359.0	17,292.0
Preferred shares	2,850	1,000	1,750	2,335	0.0	0.0	0.0	0.0
Other issues	0	1,500	6,266	823	0.0	0.0	0.0	0.0
Short term¹	15,089	15,085	22,301	20,180	6,824.0	6,743.0	16,288.0	29,855.0
Commercial paper	15,089	15,085	22,301	20,180	6,824.0	6,743.0	16,288.0	29,855.0
Asset securitisation	240	0	0	0	0.0	0.0	0.0	0.0
Total	68,863	67,390	103,054	80,094	38,622.0	17,204.0	24,694.0	80,520.0
Pro memoria:								
Subordinated issues:	4,923	3,214	14,312	4,600	951.0	745.0	258.0	1,954.0
Admitted to the MARF	6,358.7	10,347.6	9,584.0	13,964.5	3,107.3	4,040.2	2,952.5	10,100.0
Total	75,221.7	77,737.6	112,638.0	94,058.5	41,729.3	21,244.2	27,646.5	90,620.0

Source: CNMV.

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

2 The CNMV registry also incorporates the issues of the SAREB (Sociedad de Gestión de Activos procedentes de la Reestructuración Bancaria), which, as it belongs to the public sector, are not included in this table. The amount of issues of this company in 2022 is €4.24 billion, made entirely in the first quarter.

Debt issues by Spanish issuers abroad during July and August were close to €16 billion. For the year to date as a whole, these issues amounted to €68.86 billion, 9.7% less than in 2021. The decrease originated both from short-term debt assets (-6.5%) and, to a greater extent, from long-term ones (-13.1%). The data suggest that large issuers, especially large non-financial corporations, brought their issues forward to 2021 and the first part of 2022 and covered their financing needs in view of the prospects for the ECB's monetary policy shift. Only in the second quarter of this year was somewhat more vigorous issuing activity seen, at a time when a more abrupt process of rate hikes started to be factored in. Likewise, it seems that in the case of short-term issues there has been a certain transfer of issuing activity from abroad to Spain as a result of the regulatory changes referred to above.

Gross private fixed income issues of Spanish issuers abroad

TABLE 8

Nominal amounts in millions of euros

	2018	2019	2020	2021	2022			
					March	June	Sep	Jan-Sep
Long-term	36,913	53,234	46,122	60,644	11,657	14,740	5,701	32,098
Preferred shares	2,000	3,070	1,850	3,820	0	0	0	0
Subordinated bonds	2,250	1,755	0	1,350	0	0	0	0
Bonds	32,663	48,409	44,272	55,474	11,657	14,740	5,701	32,098
Securitisation bonds	0	0	0	0	0	0	0	0
Short term	50,933	47,087	44,078	62,606	10,319	16,181	10,258	36,758
Commercial paper	50,933	47,087	44,078	62,606	10,319	16,181	10,258	36,758
Asset securitisation	0	0	0	0	0	0	0	0
Total	87,846	100,321	90,201	123,250	21,976	30,921	15,959	68,856
Pro memoria: Gross issues of subsidiaries of Spanish companies in rest of the world								
Financial institutions	43,549	57,449	42,063	40,439	15,062	15,395	10,207	40,664
Non-financial companies	49,051	34,893	28,678	28,986	7,403	5,527	2,773	15,703
Total	92,600	92,342	70,741	69,426	22,465	20,921	12,980	56,366

Source: Bank of Spain. Third quarter data to August.

The amount of debt issues with environmental, social and governance (ESG) criteria by Spanish issuers reached €2.5 billion in the third quarter (€4.04 billion in the same period of the previous year), with a decrease in numbers of both issuers and issues (two green and two social). So far this year, issues of this type have amounted to €8.53 billion, 29% less than in the same period of 2021.²²

Finally, regarding the activity registered in the Spanish trading venues, downturns continue to be observed in trading in the Electronic Debt Trading System (SEND), with further advances in the organised trading facilities (OTFs). Cumulative trading on the SEND in the first three quarters of the year was below €15 billion, 67% less than in 2021. In the case of OTFs, trading stood at €982.91 billion YTD, more than double the previous year, thanks to the strong growth in activity at Tradition España OTF,²³ which largely offset the fall in activity of the other two OTFs (CAPI, with -10.3%, and CIMD, with -12.3%). The new OTF accounts for two thirds of all trading. Of the total amount of debt traded on the OTFs, 70% corresponded to fixed-income assets issued abroad and the rest to fixed-income assets issued in Spain.

Conclusions of the review of the obligation to report transactions suspected of involving market abuse in 2021

EXHIBIT 2

Reports of transactions and orders that might involve market abuse are one of the fundamental tools for market supervisors to be able to investigate and, where appropriate, sanction this type of conduct. They provide additional information to that held by supervisors, mainly with regard to the profile and actions of the suspected party.

The regime that obliges investment firms (IFs) and trading venues to report suspicious behaviour is established by the European Union in a Regulation. Specifically, the obligation to notify is imposed by Article 16 of Regulation (EU) 596/2014 of the European Parliament and of the Council, of 16 April 2014, on market abuse (the MAR), which is supplemented by Commission Delegated Regulation (EU) 2016/957. The EU authorities share these communications with the authority that they determine is competent to investigate and sanction the alleged market abuse concerned.

The CNMV carries out an annual assessment of the communications received and provides information to the sector, with a view to possible improvement in their quality and to encourage the detection and notification of these behaviours as soon as there is a suspicion. The number of suspicious transaction reports sent to the CNMV stood at 290 in 2021, 3.6% more than in 2020. The range of financial instruments to which the information may refer is wide, although, in practice, the communications mostly refer to shares. Thus, 86% of the total communications received in 2021 referred to equity instruments, the same proportion as in 2020 (see

22 ESG issues by public administrations amounted to €4.36 billion, practically half the corresponding amount for 2021.

23 Tradition España OTF was the latest OTF to be authorised, at the end of September 2021. Its trading is computed in net terms, without proprietary trading.

Table E.2.1). These were followed by communications referring to transactions with derivatives (7.2%) and fixed income (6.2%).

In terms of the type of conduct, communications about the use or attempted use of privileged information accounted for almost 73% of the total, a higher percentage than in previous years. These were followed by reports of attempts at market manipulation (25%) and other behaviours (2%). As for the types of entity that make the communications, investment firms are in the lead (67% of the total in 2021, 65% in 2020), followed by other NCAs (25% in 2021, 31% in 2020). Markets accounted for 2% and other types of entities for 6%.

Communications by type of instrument and type of infringement

TABLE E.2.1

	IFs		Markets		Other NCAs ¹		Others		Total	
	2020	2021	2020	2021	2020	2021	2020	2021	2020	2021
Type of instrument										
Equity	174	186	4	6	60	50	1	6	239	248
Derivatives	6	4	1	0	13	14	1	3	21	21
Fixed income	1	1	0	0	14	9	4	8	19	18
Combination	0	2	0	0	1	1	0	0	1	3
Total	181	193	5	6	88	74	6	17	280	290
Type of infringement										
Attempted or actual insider dealing	120	143	3	4	66	61	2	3	191	211
Attempted or actual market manipulation	61	50	2	2	22	13	4	8	89	73
Other	0	0	0	0	0	0	0	6	0	6
Total	181	193	5	6	88	74	6	17	280	290

Source: CNMV.

1 NCAs: National Competent Authorities

The CNMV carries out an analysis of the quality of the information sent by the entities that takes account of whether the information is complete, the description of the transaction precise and the indications sufficient, reasonable and plausible in terms of the possible conduct contrary to market regulations. This analysis, in which we classify the quality of the information received into three levels (medium/low, medium and medium/high), concluded that 62% of the communications received in 2021 had a medium/high quality, a percentage that exceeds the 57% of the previous year.

Among the main aspects for improvement in the quality of the notifications are the identification of the logic and coherence of the behaviour communicated in order to consider the existence of possible indications of market abuse, as well deeper analysis of the suspect client's investor profile and its relation to the financial instrument in question.

The MAR not only imposes the obligation to notify, but also requires entities to establish mechanisms, procedures and systems precisely to be able to detect and analyse which behaviours must be reported to the competent authority. The aforementioned delegated regulation develops the characteristics that these mechanisms, procedures and systems must have, and also requires that they be evaluated annually by the entity. The objective of the annual evaluation is to detect possible weaknesses or needs for adaptation or modification.

In addition to having appropriate procedures and technological means, entities must dedicate specialised personnel to the task of detecting, analysing and reporting suspicious transactions.

Finally, regarding the deadline for reporting suspicious transactions, they must be sent to the competent authority without delay. In this regard, the EU authorities have agreed within the framework of ESMA an indicative period of 60 calendar days, which is considered reasonable. The number of communications received from financial entities with a certain delay in 2021 stood at 27, sent by 7 entities. This number, which represents 14% of all communications sent, decreased by 40% compared to the 2020 figure.

3 Equity markets

3.1 Prices and yields

The main international equity indices experienced falls again in the third quarter of the year, although they were more moderate than in previous quarters, as the prospects of interest rate rises by central banks materialised.²⁴ For most of the indices the falls exceeded the gains accumulated during 2021 and placed them at their lowest level since the first half of 2020, after the outbreak of the pandemic. The scenario in the financial markets is likely to remain uncertain and volatile in the coming months in view of the prospect of new additional rises in interest rates and the possible scenario of recession in some economies, in a context of prolongation of the war in Ukraine and the energy crisis. All the major indices posted falls in the quarter, somewhat more pronounced for the US indices (between 4.1% for the Nasdaq and 6.7% for the Dow Jones) and less so for Asian ones (except for those related to the Chinese economy). Losses on the European indices were between 2.7% for the Cac 40 and 9% for the Ibex 35.

24 See the heading "Interest rates".

Performance of the main stock market indices¹

TABLE 9

	2021				2022			
	2018	2019	2020	2021	March	June	Sep	Jan-Sep
%								
World								
MSCI World	-10.4	25.2	14.1	20.1	-5.5	-16.6	-6.6	-26.4
Euro area								
Eurostoxx 50	-14.3	24.8	-5.1	21.0	-9.2	-11.5	-4.0	-22.8
Euronext 100	-11.2	24.9	-3.6	23.4	-6.7	-9.8	-2.8	-18.2
Dax 30	-18.3	25.5	3.5	15.8	-9.3	-11.3	-5.2	-23.7
Cac 40	-11.0	26.4	-7.1	28.9	-6.9	-11.1	-2.7	-19.4
Mib 30	-16.1	28.3	-5.4	23.0	-8.5	-14.9	-3.0	-24.5
Ibex 35	-15.0	11.8	-15.5	7.9	-3.1	-4.1	-9.0	-15.5
United Kingdom								
FTSE 100	-12.5	12.1	-14.3	14.3	1.8	-4.6	-3.8	-6.6
United States								
Dow Jones	-5.6	22.3	7.2	18.7	-4.6	-11.3	-6.7	-20.9
S&P 500	-6.2	28.9	16.3	26.9	-4.9	-16.4	-5.3	-24.8
Nasdaq-Cpte	-3.9	35.2	43.6	21.4	-9.1	-22.4	-4.1	-32.4
Japan								
Nikkei 225	-12.1	18.2	16.0	4.9	-3.4	-5.1	-1.7	-9.9
Topix	-17.8	15.2	4.8	10.4	-2.3	-3.9	-1.9	-7.8

Source: Refinitiv Datastream.

¹ In local currency. Data to 30 September.

The evolution of the main stock market indices (see Table 9) in the year shows notable decreases in all regions, except in the case of the United Kingdom and Japan, where the falls are more moderate. In Europe, with the exception of the United Kingdom, where the FTSE 100 fell by only 6.6%, the declines ranged between 15.5% for the Spanish Ibex 35 and 24.5% for the Italian Mib 30, following three consecutive quarters of losses on all the major indices. The US indices have fallen rather more, YTD, by 20.9% for the generalist Dow Jones index and 32.4% for the more tech-heavy Nasdaq, while in Japan losses have been more moderate: 9.9% for the Nikkei 225 and 7.8% for the Topix.

In Spain, the Ibex 35 ended the third quarter with a fall of 9%, the biggest quarterly fall among the major continental European indices, despite which it presented the best performance of all of them for the year to date, falling by 15.5%, more than 7 pp less than the Eurostoxx 50. The Ibex 35 has now had five consecutive quarters of falls, which places its value (7,367 points) at the lowest level since the second half of 2020 and at values similar to those it presented in 2012, after the financial crisis.

The behaviour of the Ibex 35 in the quarter was slightly worse than that of mid-cap companies (-8.3%), but notably better than that of small-cap companies (-15.3%), which felt the tightening of financing costs and the prospects of economic deterioration more keenly (see Table 10). Small-caps posted a decrease of 17.9% YTD, although in the first part of the year they had actually performed

positively. Likewise, the Latin American indices listed in euros, FTSE Latibex All-Share and FTSE Latibex Top, managed to end the quarter on a positive note (with slight revaluations of 1.4% and 0.5%, respectively) thanks to the good performance of some of the main Latin American stock markets,²⁵ but above all their currencies,²⁶ which continue to be favoured by high commodity prices.

Performance of Spanish stock market indices and sectors

TABLE 10

Indices	2019	2020	2021	2022			
				March ¹	June ¹	Sep ¹	Jan-Sep
Ibex 35	11.8	-15.5	7.9	-3.1	-4.1	-9.0	-15.5
Madrid	10.2	-15.4	7.1	-2.3	-4.0	-9.3	-15.0
Ibex Medium Cap	8.4	-9.7	8.6	-5.9	-1.5	-8.3	-15.1
Ibex Small Cap	11.9	18.9	1.8	3.1	-6.1	-15.3	-17.9
FTSE Latibex All-Share	16.3	-22.0	5.8	32.7	-16.3	1.4	12.6
FTSE Latibex Top	15.3	-19.1	13.5	26.2	-14.5	0.5	8.4
Sectors²							
Financial services	-2.6	-26.4	20.3	6.3	-10.0	-4.0	-8.0
Banking	-3.4	-27.5	20.7	6.8	-10.2	-3.4	-7.4
Insurance	-0.5	-23.6	7.3	-2.7	-5.8	-11.6	-19.0
Real estate services	15.7	-32.1	13.0	5.6	-14.5	-15.5	-23.8
Oil and energy	14.4	5.0	-1.6	-1.1	2.3	-8.5	-7.3
Oil	-1.1	-40.8	26.5	14.3	17.8	-16.0	13.1
Electricity and gas	18.4	14.2	-4.2	-4.1	-0.9	-6.8	-11.4
Basic mats., industry and construction	24.9	-2.5	9.3	-10.2	-3.0	-4.7	-17.0
Construction	29.1	-16.3	15.2	-5.8	-1.7	-1.8	-9.0
Manufacture and assembly of capital goods	21.1	50.7	-20.4	-19.4	6.2	-4.3	-18.0
Minerals, metals and metal products processing	4.4	-0.1	28.7	-10.6	-6.2	-10.1	-24.5
Engineering and others	19.1	-6.1	29.2	-19.2	-21.8	-17.4	-47.8
Technology and telecommunications	4.5	-21.9	9.0	-0.5	-4.1	-19.4	-23.1
Telecommunications and others	-4.5	-25.8	15.7	-0.8	-0.7	-23.8	-24.9
Electronics and software	19.8	-18.8	1.2	-0.1	-10.3	-10.3	-19.5
Consumer goods	34.8	-15.3	0.9	-21.3	6.3	-10.3	-25.0
Textile, clothing and footwear	40.6	-17.3	9.5	-30.6	9.1	-1.4	-25.4
Food and drink	1.8	10.6	-1.6	-5.4	-0.2	-0.7	-6.3
Pharmaceutical products and biotechnology	38.0	-18.3	-17.9	1.1	2.4	-33.6	-31.3
Consumer services	8.6	-36.7	-1.9	3.3	-19.0	-13.0	-27.3
Leisure, tourism and hospitality	6.9	-27.8	27.5	-3.6	-18.3	-19.3	-36.4
Transportation and distribution	12.5	-38.8	-2.6	4.2	-19.9	-11.7	-26.3

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 sub-sectors is displayed within each sector.

25 The main Brazilian stock market index, Bovespa, gained 11.7% in the first quarter of the year, while that of the Mexican market fell by 6.1%.

26 In the third quarter of the year, the Brazilian real appreciated by 6.8% against the euro, while the Mexican peso gained 3.9%.

All sectors ended the quarter with losses which, with the exception of the oil, renewable energy and paper sectors, led almost all of them to show a negative performance so far this year. Even so, the intensity of the losses was very uneven among the different companies and sectors depending on how much they were affected by the increase in the cost of debt and inflation, as well as the prospects for the economic evolution of each one of them.

The largest declines corresponded to companies in the telecommunications and real estate sectors, as well as those in the services and consumer goods sectors, in addition to oil companies. In the case of the telecommunications sector, the fall of Telefónica stood out, affected by the increase in the financial costs of the sector in an environment of intense competition and reduced economic dynamism. For its part, the real estate sector suffered from the prospect of a deterioration in activity as a result of the increase in the cost of financing and the increase in the yield of other alternative assets such as fixed income. In the consumer goods and services sectors, the falls in the prices of pharmaceutical companies, those of the tourism sector and the media stand out. Pharmaceutical companies are affected by the high indebtedness of some of them (Grifols); the tourism sector is affected by the end of the tourist season, rising costs and fears of recession, while media companies fear falling advertising revenue. In addition, the downturns of the oil companies (Repsol) due to the drop in oil prices and the fear of the impact of the future tax on extraordinary profits of oil companies proposed by the EC were also notable.

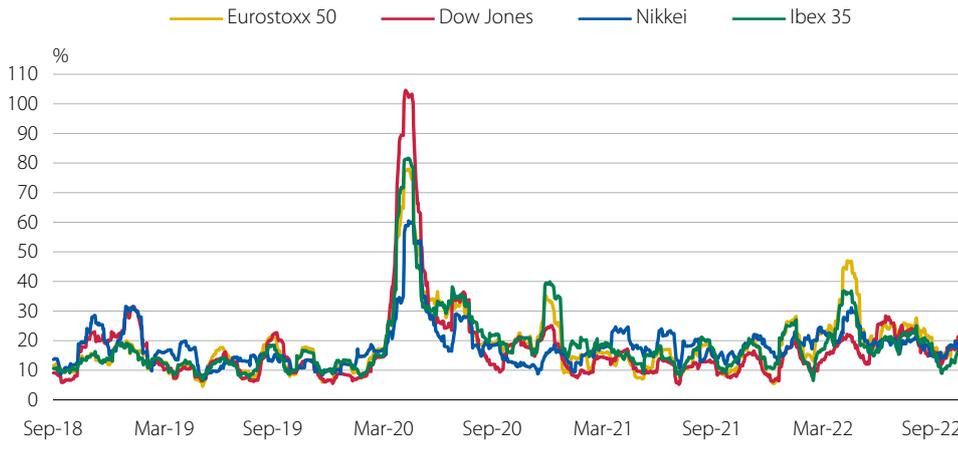
The smallest losses were seen in the financial sector and in the industry and construction sectors, as well as in companies in the food, textile and renewable energy sectors. The financial sector is favoured by the increase in its intermediation margins as a result of the rate hike, although it is suffering from the effect that the new tax that the Government is preparing will have on its profits. The industrial and construction sectors are favoured by the maintenance of activity levels; the textile sector benefits from the good evolution of its main company (Inditex); the food sector from its countercyclical nature, and that of renewable energies, from its growth prospects.

3.2 Volatility

The historical volatility measures of the most relevant stock market indices continued to moderate in the third quarter, reaching their lowest level since the end of 2021 (see Figure 10). The Eurostoxx 50 and the Ibex 35 reached their highest levels of volatility in the first quarter (around 27% and 22% on average in the quarter, respectively) coinciding with the Russian invasion of Ukraine and its foreseeable effects on the economy, a situation that was delayed in the case of the volatility of the Dow Jones until the second quarter when it reached 21%, coinciding with the prospects of rate hikes by the Federal Reserve. Volatility reaches average values for the third quarter close to 20% in the main indices, in line with the historical average observed in the year, except for the Eurostoxx, whose volatility is below this average.

Historical volatility of main stock indices

FIGURE 10

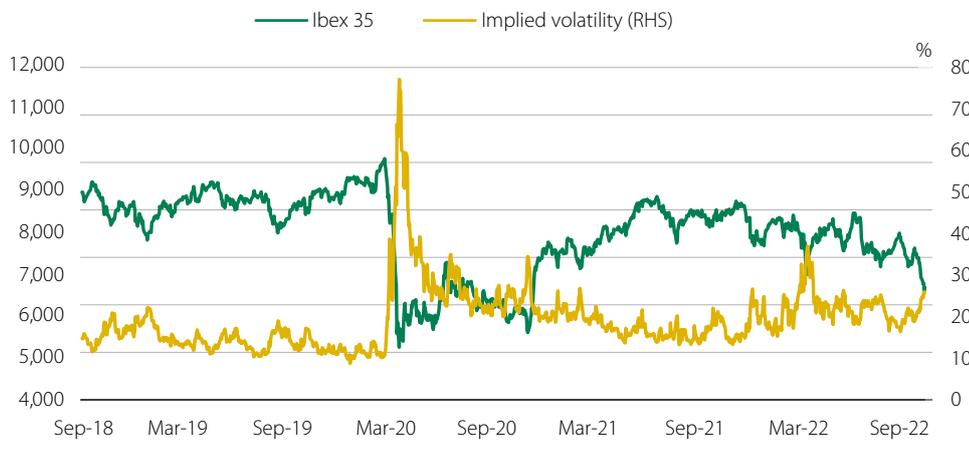


Source: Refinitiv Datastream. Data to 30 September.

In the case of the Ibex 35, the historical volatility value fell again in the third quarter (16.3%) for the second consecutive quarter, registering its lowest value in the past year. The level of this indicator is below its annual average of 19.3% and its behaviour, contrary to what is usual, has been less volatile than that of the Eurostoxx 50 itself or that of other European markets that have suffered more from the outbreak of war. Other volatility measures, such as implied volatility, show a similar pattern (see Figure 11).

Performance of the Ibex 35 and implied volatility¹

FIGURE 11



Source: Refinitiv Datastream and MEFF. Data to 30 September.

¹ At-the-money (ATM) implied volatility of the first maturity.

For the fifth consecutive year, with the information provided in the annual corporate governance reports (IAGC), the CNMV has analysed the participation of women on the Boards of Directors and in senior management of listed companies.

Recommendation 15 of the Code of Good Governance for Listed Companies advise that female directors should represent at least 40% of Board members by the end of 2022 and not be less than 30% prior to that date.

At the end of 2021, in 53.8% of companies the presence of female directors was equal to or greater than the recommended 30%, so there were still 46.2% of listed companies (55 companies, 8 of them in the Ibex 35) that had not reached the objective by that date.

A total of 25 companies (9 of them in the Ibex 35) had already reached the increased target of 40% of female directors. For the Ibex 35 companies to meet that figure, they would have to appoint 24 female directors, which represents barely 5.7% of its total members. In the case of the rest of the listed companies, they would manage to reach that 40% with the appointment of 107 women on their Boards, out of a total of 799 directors at the closing date of the data.

As an aspect to improve, there are still seven companies in which the presence of women on their Board of Directors is zero, and 27 companies (3 of them in the Ibex 35) in which there are no female senior executives.

Analysing the data according to the market capitalisation of the companies, it is observed that, as a whole, the greater the capitalisation, the greater the number of women on their Boards. Thus, in Ibex 35 companies, women represent, on average, 34.20% of the members of their Boards, compared to 28.17% for companies with a capitalisation of more than €500 million and 25.19% for the rest.

By categories of directors, the presence of women in the group of independent directors continued to increase (43.68% in 2021 compared to 39% in 2020), followed by proprietary directors (23.56%). Conversely, the low number of female executive directors stands out: 6.42%.

As for senior management (positions that report directly to the Board or the CEO of the company and, in any case, the internal auditor), in all the listed companies analysed, women held 19.66% of the total senior management positions, more than 2 pp more than in the previous year. By market capitalisation, in the members of the Ibex 35, this percentage increased by almost 5 pp in a single year, since at the end of 2021 it amounted to 22% (17.1% in 2020). In companies with more than €500 million capitalisation, the figure was 18.96%, and 16.59% in those with less than €500 million.

This evolution is considered positive, but it should also be noted that listed companies must accelerate the incorporation of women in their positions of greatest

responsibility, especially in senior management and as executive directors, as has happened in the rest of the categories. In addition to favouring the necessary gender diversity, this incorporation would allow maximising the talent available to the issuing companies.

The CNMV makes this information available to the public,¹ broken down by company, based on data published by listed companies in their annual Board remuneration reports. The published data, which are also presented grouped into three categories of companies: i) Ibex 35, ii) non-Ibex 35 and capitalisation of more than €500 million and iii) others, show that there is still great disparity among companies.

Presence of women on Boards of Directors

TABLE E.3.1

	Total women				Ibex 35			
	2020		2021		2020		2021	
	Number	% of total	Number	% of total	Number	% of total	Number	% of total
Total women Board members	331	26.10	357	29.26	136	31.26	144	34.20
Proprietary	87	21.02	90	23.56	23	23.47	21	23.33
Executive	11	5.50	12	6.42	4	6.06	3	4.92
Independent	219	39.00	242	43.68	105	43.93	116	48.95
Other external	14	15.40	13	14.61	4	12.50	4	12.12
Women in senior management¹	179	17.53	197	19.66	73	17.10	90	22.00

Source: CNMV, based on reports published by the companies.

1 Excluding senior executive directors.

1 CNMV – Presence of women on Boards of Directors and in senior management of listed companies.

3.3 Dividend yield and PER

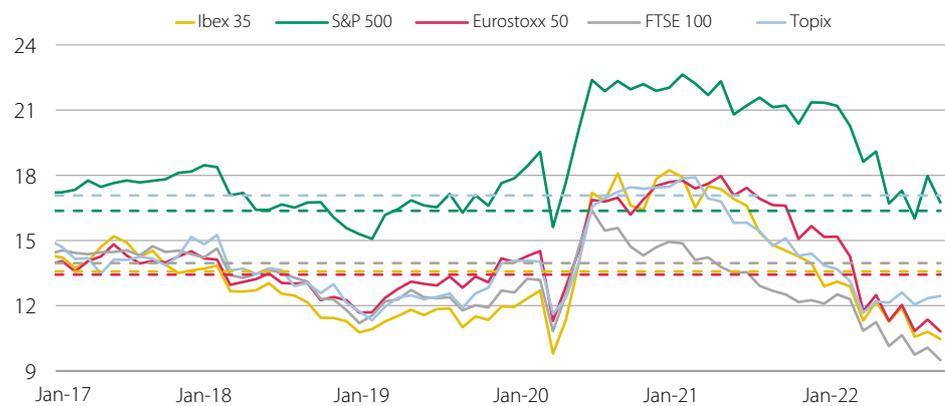
Dividend yields increased for all the major indices as a result of the significant falls in share prices in a context in which shareholder remuneration was maintained and, in some cases, even increased. Throughout the year this indicator has been increasing for all the indices as their falls have been consolidated.

The dividend yields of the European indices remain higher than those of the US and Japanese indices; indeed the differential has even increased. Thus, at the end of September the dividend yield of the S&P 500 stood at 2.2% (compared to 1.7% at the end of 2021), while that of the Eurostoxx 50 stood at 3.7% (2.4% at the end of 2021). All the European indices increased their dividend yield in the year, with the most notable rises being observed in the German Dax 30 (1.7 pp, to 3.9%) and the Eurostoxx 50 itself (1.4 pp, to 3.7%). The highest dividend yield corresponds to the Italian Mib 30 (4.6%), followed by the UK FTSE 100 (4.2%) and the Spanish Ibex 35 (4%), which has seen its dividend yield improve by 1 pp over the course of the year.

The price-earnings ratios (PER) of the main equity indices fell again in the third quarter, maintaining the trend observed throughout the year, reaching their lowest levels since the first half of 2020 (see Figure 12). The drop in these ratios is explained by the sharp decline in prices, more than the deterioration in corporate profits expected for the coming months. In September, the value of this ratio was notably lower for the European indices than for the US ones, with values of 10.8 and 9.5 times for the Eurostoxx 50 and the UK FTSE 100, compared to 16.7 times for the S&P 500. For its part, the Japanese Topix 500 stood at an intermediate point with a PER of 12.4 times and a decrease of barely 1.4 times. Likewise, as can be seen in Figure 12, with the exception of the S&P 500, all the PER ratios are below the average values reached in the last decade.

PERs¹ of the main stock market indices

FIGURE 12



Source: Refinitiv Datastream. Data for the last session of each month. Data to 30 September.

¹ Earnings per share in the denominator of this ratio are based on 12-month forecasts. The dotted lines represent historical averages for each index since 2000.

In Spain, the Ibex 35 PER has been progressively decreasing for most of the year, as had already happened in the previous year, from 13.1 in January to 10.4 in September – its lowest value since March 2020. The PER of the Spanish index is still below that of the Eurostoxx 50 (10.8 times), but it has reduced its differential with respect to it since the beginning of the year due to the smaller decrease in share prices on the Spanish market (see Figure 12).

3.4 Trading, issues and liquidity

Until September, trading volumes of major exchanges²⁷ showed an upward trend in most regions, although on the European platforms trading data were more uneven (see Table 11). In the United States, the increase in total trading was almost 26%,²⁸ and the biggest advances were those registered in the NYSE and Nasdaq OMX (32.4% and 21.6% respectively, since in Cboe Global Markets it was less intense (14.6%). The increase in trading in Japan until the third quarter of the year was 5.9%. In Europe, trading was down at several venues, most notably the London Stock Exchange, where it fell by 10.3% to September. Deutsche Börse also saw slight declines in trading (2.6%), while Cboe Equities Europe and Euronext saw strong increases in volumes (58.3% and 24.9% respectively), and trading at Bolsas y Mercados Españoles (BME) was up by 4.5%.

Trading volumes on the main international stock exchanges

TABLE 11

Billions of euros

	2018	2019	2020	2021	2022			
					March	June	Sep ¹	Jan-Sep ¹ (%)
Market operator								
United States ²	44,222	36,874	61,492	65,954	21,758	19,075	3,617	25.5
Nasdaq OMX	14,250	14,210	21,840	23,553	7,840	6,826	3,617	21.6
NYSE ³	16,397	10,918	22,991	24,637	8,319	7,491	-	32.4
Cboe Global Markets	13,575	11,747	16,661	17,764	5,599	4,758	-	14.6
Japan Exchange Group	5,327	4,542	5,399	5,555	1,514	1,366	855	5.9
London Stock Exchange Group	2,143	1,784	1,837	1,320	370	300	162	-10.3
Euronext ³	1,865	1,713	2,193	2,493	884	660	370	24.9
Deutsche Börse	1,538	1,344	1,812	1,686	543	385	168	-2.6
BME ⁴	591	469	429	378	110	102	70	4.5
Cboe Equities Europe ⁵	2,377	1,667	1,462	1,568	663	546	326	58.3

Source: World Federation of Stock Exchanges, European Federation of Stock Exchanges and CNMV.

- 1 Data to 30 September for BME, and to 31 August for the other market operators except those of the NYSE and Cboe Global Markets, which are shown until June 2022. The year-on-year changes shown in this column cover the cumulative periods up to the last month mentioned in each case.
- 2 Since 2009, the sum of the Nasdaq OMX, the New York Stock Exchange (NYSE) and Cboe Global Markets (formerly BATS) has been used.
- 3 Includes Belgium, the Netherlands, France, Portugal, Ireland and, from May 2021, Borsa Italiana.
- 4 BME Bolsas y Mercados Españoles does not include Latibex.
- 5 BATS Europe until February 2017, the date on which it was acquired by the Cboe Global Markets group.

27 According to data published by the World Federation of Exchanges (WFE) and the Federation of European Stock Exchanges (FESE).

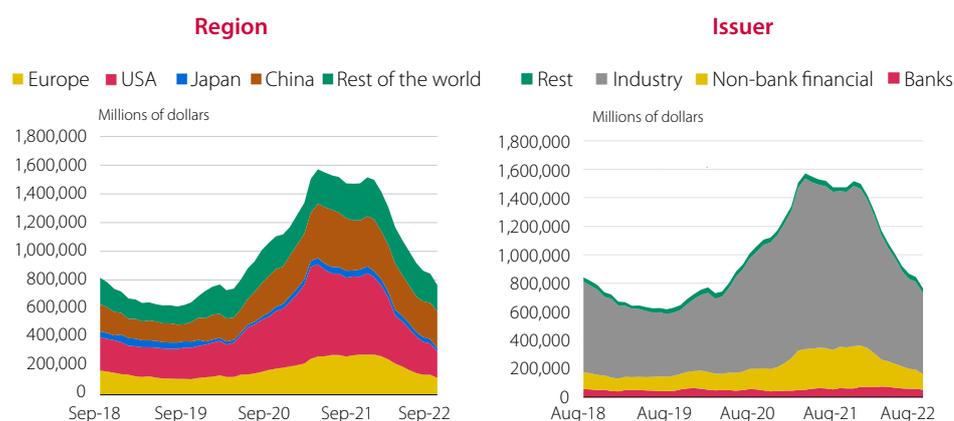
28 Comparative data for trading in the United States January-June 2021 and January-June 2022, except Nasdaq OMX, for which data go through to August. In the rest of the stock markets, the data is up to August, except for the BME data, which covers up to September 2022.

Equity issues in international financial markets continued to fall significantly during the third quarter of the year (in year-on-year terms). The volume of issues was close to US\$136 billion in the quarter, approximately half the volume registered one year ago (US\$288 billion), which means that cumulative issues of equities in the first nine months of the year total US\$401.35 billion, 65% less than in the same period of 2021. Substantial declines have been seen in all regions so far this year, most notably in the United States, with a decline of 82.9%, to US\$73.5 billion. In Japan and Europe there were also sharp falls: 77.9% and 74.6% (to US\$6 billion and US\$55 billion respectively in the first nine months of the year). In China, the downturns were significant, although somewhat less pronounced (US\$156 billion in 2022 compared to US\$258 billion in 2021).

By sectors, most have shown declines so far this year, except for utilities, whose equity issues were 3.3% higher than in the same period of last year, at US\$24.1 billion. In relative terms, issues of companies in the non-bank financial sector experienced the largest decline, amounting to less than a quarter of the amount for the first 9 months of 2021 (from US\$235 billion to US\$51.1 billion). There were also sharp decreases in issues of the industrial sector (64.3%) and banking (38.7%). The industrial sector, in fact, presents the greatest drop in issues in absolute value (US\$531 billion less this year).

International equity issues

FIGURE 13



Source: Dealogic. Accumulated data for 12 months up to 30 September.

Trading in Spanish equities amounted to around €149 billion in the third quarter of the year, 1.5% less than in the same quarter of 2021. This slight decrease is explained by the decline in trading on BME (-12.7%), which completely offset the increase in volumes recorded on the various competing trading venues (10.5%).

So far this year, the volume of Spanish securities traded exceeds €579,000, 15.5% more than in the same period of 2021. This increase represents a change in trend with respect to the pattern observed in recent years and which took the 2021 trading figures to their lowest level since 2014. Of the total amount, €273.73 billion corresponded to the Spanish regulated market (4.2% more) and €305.4 billion were traded in competing trading venues (27.9% more). In previous years it has been observed that, at times of greater market volatility, as is the case here, securities

trading tends to increase more intensely in competing venues, where specific trading modalities such as high frequency are more common. As can be seen in Table 12, the aggregate amount of trading in these venues was higher than the amount registered in BME in all quarters of 2022, which reduced the share²⁹ of the latter to 48%³⁰ annual average (53% in 2021 and 54% in 2020).

Trading in Spanish equities admitted to Spanish stock exchanges¹

TABLE 12

Amounts in millions of euros

	2018	2019	2020	2021	2022			
					March	June	Sep	Jan-Sep
Total	930,616.1	805,833.0	780,343.5	693,644.2	222,262.9	208,231.6	148,635.0	579,129.5
Admitted to SIBE electronic platform	930,607.1	805,826.6	780,341.0	693,636.7	222,260.7	208,228.6	148,634.3	579,123.6
BME	579,810.4	460,267.4	418,512.6	368,608.5	106,560.5	99,333.5	67,831.3	273,725.3
Cboe Equities ²	278,361.0	256,772.5	275,682.4	238,466.3	90,240.6	84,225.9	58,949.3	233,415.8
Turquoise	42,883.4	30,550.6	23,242.2	23,101.3	5,685.3	5,053.6	4,446.6	15,185.5
Other	29,552.2	58,236.1	62,903.8	63,460.6	19,774.3	19,615.8	17,407.0	56,797.0
Open outcry	8.2	6.2	2.5	7.5	2.3	2.9	0.7	5.9
Pro memoria								
Foreign equities traded through BME	3,517.1	3,480.5	4,273.8	4,343.6	2,167.5	1,268.4	660.4	4,096.3
BME MTF Equity ³	4,216.3	4,007.7	3,929.0	3,559.2	933.0	983.2	759.0	2,675.2
Latibex	151.6	136.6	79.5	48.9	29.4	15.3	21.5	66.1
ETF	3,027.6	1,718.0	2,551.1	1,556.0	556.9	428.5	328.5	1,313.9
Total trading through BME	590,732.0	469,616.6	429,348.5	378,144.4	110,249.5	102,031.8	69,601.4	281,882.7
% Spanish equities traded through BME/ total Spanish equities	62.6	57.4	53.9	53.5	48.3	48.1	46.0	47.6
Systematic internalisers⁴	143,956.9	141,308.3	144,694.4	48,469.9	10,912.6	11,124.1	9,187.6	31,224.3

Source: Bloomberg and CNMV.

- 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). 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 moved to Amsterdam in January 2021 as a result 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 transaction reporting.

29 Calculated as percentages of total trading subject to non-discretionary market rules.

30 Other alternative sources of information, in particular that provided by BME based on Liquidmetrix data, point to BME's having a higher market share in securities trading in September, 61.4% (66.6% in June). The difference is explained by the trading volume in foreign centres, which is considerably lower in the information provided by Liquidmetrix.

Regarding the composition of trading in Spanish equities carried out in competing markets and venues, Cboe Global Markets (Cboe) continues to stand out. This market, which operates from Amsterdam, maintains its leadership position, trading nearly €59 billion in the quarter, which represents nearly 73% of trading carried out abroad and 87% of trading carried out through BME in the period. For the year as a whole, trading at Cboe accounted for 76% of all competing venues, Turquoise for 5% and the other venues for the remaining 21% (see Table 12).

Trading carried out by systematic internalisers amounted to around €9.2 billion in the third quarter and €31.2 billion YTD. These figures, which represent year-on-year falls of close to 15% in both cases, gave rise to a slight loss in the importance of this type of trading in total trading³¹ of Spanish securities, taking it to 5% (6.5% in 2021 as a whole and 13-15% in the 2018-2020 period).

Equity issues made in Spanish markets stood at €1.01 billion in the third quarter, barely a fifth of the corresponding 2021 amount. Of this amount, 70% corresponded to scrip dividends, used as a way of remunerating shareholders. The use of this format, which limits the outflow of cash from the company and helps to strengthen the balance sheet, has increased significantly compared with the same period in 2021. In the year to date, equity issues are slightly above €3.08 billion, well below the €16.82 issued in the same period of 2021. The only IPO took place at the end of July and corresponded to the renewable energy company Opdenenergy through a public subscription offer (OPS) valued at €200 million. The environment of volatility and high uncertainty has delayed the processes of new flotations both nationally and internationally. It is worth mentioning, however, a greater degree of dynamism in the BME Growth alternative market, which 11 new companies have joined so far this year.

31 Total trading being defined as the sum of trading subject to non-discretionary market rules and that carried out through systematic internalisers.

Capital increases and public offers for sale

TABLE 13

	2019	2020	2021	2022			
				March	June	Sep	Jan-Sep
NUMBER OF ISSUERS¹							
Total	33	28	34	9	10	9	28
Capital increases	33	28	33	9	10	9	28
Public offers for subscription of securities	1	1	1	0	0	1	1
Initial public offering (IPO)	0	0	1	0	0	0	0
NUMBER OF ISSUANCES¹							
Total	52	40	52	10	12	9	31
Capital increases	52	40	51	10	12	9	31
Public offers for subscription of securities	1	1	1	0	0	1	1
Initial public offerings ² (IPO)	0	0	1	0	0	0	0
CASH AMOUNT¹ (millions of euros)							
Capital increases with fund-raising	8,240.6	8,903.1	13,673.0	946.1	354.1	312.3	1,612.5
With pre-emptive right	4,729.8	6,837.2	7,060.4	0.0	254.2	0.0	254.2
No pre-emptive right	10.0	150.1	100.0	0.0	0.0	200.0	200.0
Accelerated book builds	500.0	750.0	0.0	741.1	82.5	90.0	913.5
Capital increases with non-monetary consideration ³	2,034.2	233.0	3,525.3	17.4	0.0	0.0	17.4
Capital increases via conversion	354.9	162.4	109.5	0.0	3.1	2.0	5.1
Other	611.8	770.3	2,878.1	187.7	14.3	30.3	222.3
Bonus issues	1,565.4	1,949.0	1,264.9	422.8	347.8	694.6	1,465.1
Of which, scrip dividends ⁴	1,564.1	1,949.0	1,243.6	422.8	347.8	694.6	1,465.1
Total capital increases	9,806.0	10,852.1	14,938.1	1,368.9	701.9	1,006.8	3,077.7
Public offers for sale	0.0	0.0	2,200.2	0.0	0.0	0.0	0.0
Pro memoria: transactions on BME Growth⁵							
Number of issuers	12	13	60	13	13	19	35
Number of issues	17	14	77	14	26	30	70
Cash amount (millions of euros)	298.3	238.0	2,441.0	347.0	615.2	643.0	1,605.0
Capital increases	298.3	238.0	2,441.0	347.0	615.2	643.0	1,605.0
Of which, public offers for sale	229.4	173.0	1,654.0	216.5	190.7	399.3	806.0
Public offer for the sale of shares	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Source: BME and CNMV.

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.

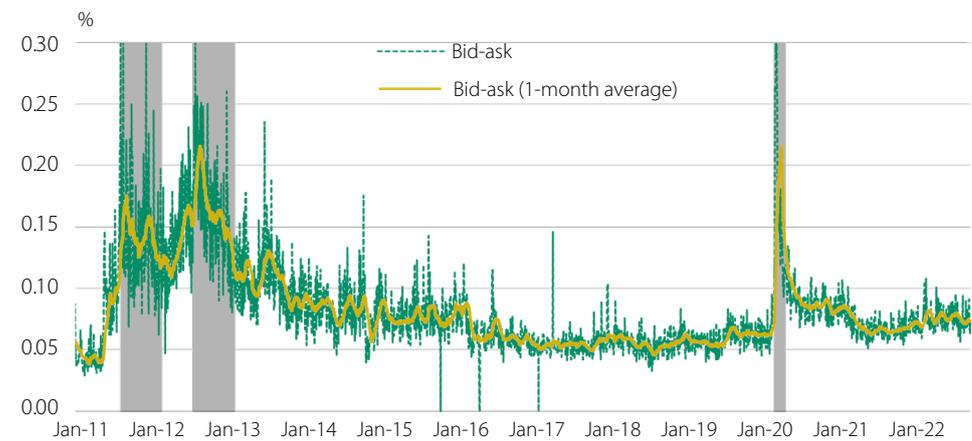
4 In scrip dividends, the issuer gives existing shareholders the option of receiving their dividend in cash or converting it into shares in a bonus issue.

5 Trades not registered with the CNMV. Source: BME and CNMV.

The liquidity conditions of the Ibx 35, measured through the bid-ask spread (bid-ask spread), remained at levels similar to those of the second quarter. The slight decrease in trading and volatility in the third quarter allowed the bid-ask spread to stand at an average of 0.076%, in line with the values of the previous quarter and the average for the year as a whole (0.075%). As can be seen in Figure 14, the Ibx liquidity indicator, which deteriorated very slightly in March with the start of the war, has stabilised at values slightly higher than those observed in the years immediately prior to the pandemic. Despite this, the liquidity conditions of the index are satisfactory.

Liquidity indicator (bid-ask spread) of the Ibx 35

FIGURE 14



Source: Refinitiv Datastream and own calculations. Information is presented on the Ibx 35 bid-ask spread and last month's average. The vertical lines of the figure refer to the introduction of the precautionary prohibition on short-selling dated 11 August 2011, its subsequent lifting on 16 February 2012, the new prohibition of 23 July 2012 and its lifting on 1 February 2013 and the most recent prohibition which extended from 16 March to 18 May 2020. The last two prohibitions affect all entities.

Consideration of customer sustainability preferences

EXHIBIT 4

Tuesday 2 August 2022 marked the start of application of Commission Delegated Regulation (EU) 2021/1253, of 21 April 2021, amending Delegated Regulation (EU) 2017/565 as regards the integration of sustainability factors, risks and preferences into certain organisational requirements and operating conditions for investment firms.

According to this Regulation, investment firms must integrate clients' sustainability preferences into the suitability assessment process when providing investment advice or discretionary portfolio management. The purpose of the suitability assessment is for companies to be able to recommend or integrate financial instruments that are suitable for them into their client portfolios, that is, that are in line with their investment objectives, financial situation, knowledge and experience. The integration of sustainability preferences means that entities will take these customer preferences into account as an additional element. Thus, entities must first assess clients' other investment

objectives, time horizon and individual circumstances, and then ask them about their sustainability preferences.

For these purposes, the Regulation includes a detailed definition of what it considers clients' sustainability preferences on which firms must collect information:

“[...] a client's or potential client's choice as to whether and, if so, to what extent, one or more of the following financial instruments shall be integrated into his or her investment:

- a) a financial instrument for which the client or potential client determines that a minimum proportion shall be invested in environmentally sustainable investments as defined in Article 2, point (1), of Regulation (EU) 2020/852 of the European Parliament and of the Council (the Taxonomy Regulation);
- b) a financial instrument for which the client or potential client determines that a minimum proportion shall be invested in sustainable investments as defined in Article 2, point (17), of Regulation (EU) 2019/2088 of the European Parliament and of the Council (the Disclosure Regulation);
- c) a financial instrument that considers principal adverse impacts on sustainability factors where qualitative or quantitative elements demonstrating that consideration are determined by the client or potential client”.

Firms may not recommend to clients or include in their managed portfolios financial instruments that are not suitable and, therefore, do not meet their sustainability preferences. Where no financial instrument meets the client's sustainability preferences, the client will be able to adapt his or her sustainability preferences and the investment firm will keep a record of the client's decision, including the reasons for such decision.

Likewise, when the advisory service is provided, the entities must include in the suitability report, in which it is explained how the recommendation made is suitable for the client, how the recommendations are also adjusted to the client's sustainability preferences.

In order to develop the implementation of these changes as regards suitability, the European Securities and Markets Authority (ESMA) reviewed the Guidelines on certain aspects of the MiFID II suitability requirements and published its Final Report on the guidelines on 23 September 2022, although it will not enter into force until six months after its publication in all EU official languages. The CNMV intends to incorporate the guidelines into its supervisory procedures.

As established by Regulation (EU) 2021/1253, the new obligations are applicable from 2 August 2022. Therefore, institutions should have updated the questionnaires to assess the suitability of a new client or an existing client who decides, on his or her own initiative, to update his or her profile from that date. For existing clients, the entity may decide to collect the information on the client's

sustainability preferences at the next regular periodic review of the client profile, although ESMA expects entities to proactively invite their clients (who have not already done so) to update their profiles in relation to sustainability preferences within 12 months of the entry into force of the new obligations. In addition, ESMA clarifies that, as long as the customer's information on their sustainability preferences is not updated, the customer will be considered neutral with respect to sustainability and, therefore, products with or without characteristics related to sustainability may be recommended.

As stated in the guidelines, entities should ask for all the aspects mentioned in the definition of sustainability preferences, in a sufficiently granular way to allow the adjustment of said preferences with the characteristics of the product in relation to sustainability.

If there are no products that meet the preferences of the client, he or she will be able to adapt them. Once the client has decided to proceed with the adaptation, and only then, the entity can provide the client with information about its offer of sustainable products.

In the event that services are provided on a portfolio basis, the guidelines cover the possibility that, in order to assess the suitability of the product to the client's sustainability preferences, a portfolio approach could be used, that is, the degree of sustainability of the portfolio as a whole.

It should also be noted that, given the novelty of the matter, it is essential that the personnel of the entities that gather the preferences of the clients have sufficient knowledge to be able to explain in simple language and in an understandable manner the different aspects on which preferences are sought and recorded.

In this regard, and to make it easier for non-professional investors and the general public to make informed decisions, the CNMV has prepared a series of training resources that, in different formats (guide, infographic, online course), explain how to acquire a sustainable financial product, how to assess sustainability preferences and how a financial institution should act to adjust the advisory or portfolio management service to the client's sustainability preferences.

Additionally, given that the regulations related to sustainability, in general, and to sustainability preferences, in particular, incorporate new concepts, it has been decided to publish a Glossary of sustainable finance terms.

II Reports and analysis

Comparative analysis of performance and costs between spanish CISs and foreign CISs marketed in Spain

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Summary

- In recent years, Spanish investors have increasingly channelled their savings into collective investment vehicles, both Spanish and foreign, which had accumulated volumes of €353.20 billion and €294.10 billion respectively at the end of 2021. At the same date, the numbers of investors in Spanish and foreign collective investment schemes (CISs) reported¹ to the CNMV were 16.2 million and 6.1 million respectively.
- The rate of growth of foreign CISs has been much higher than that of Spanish CISs (investment funds [IFs] and variable capital investment companies [SICAVs]), as a result of which their weight, which was low at the end of 2008 (8.2%), has come to account for almost half of the total investment in CISs (45.4%) at the end of 2021. In this period, the assets of foreign CISs have multiplied by 16, going from €18 billion at the end of 2008 to €294.10 billion at the end of 2021.
- In light of this phenomenon, the CNMV, in its Plan of Activities for the year 2022, proposed to carry out an “Analysis of the most significant particularities and magnitudes of foreign CISs marketed in Spain in the period 2018-2021”. This project, which has different angles, begins with the comparative analysis, presented here, of the performance obtained and the expenses borne by the investors in foreign CISs with respect to the performance and expenses of Spanish CISs. This is the first analysis of this type carried out by the CNMV. The period of analysis covered the last four financial years closed (2018, 2019, 2020 and 2021).
- The information received by the CNMV on foreign CISs marketed in Spain is sparser than that on Spanish CISs, and for this reason it has been necessary to obtain information from an international data provider specialising in CISs in order to carry out the analysis. The comparison has been made between equivalent investment categories. For this, the 20 existing investment categories in the Spanish CISs have been grouped into the five categories into which the foreign CISs are classified (fixed income, equities, mixed, alternative and money market).
- The analysis of performance, calculated in annual terms based on year-end net asset values, reveals that the performance on foreign CISs has been higher than on Spanish CISs (on average in the period) in all categories of investment. The average annual difference ranges between 0.2 percentage points (pp) in mixed funds and 7.1 pp in equity funds. In the rest of the categories,

¹ A participant can be computed more than once if he or she has positions in different CISs or, in the case of foreign CISs, if he or she has subscribed to the same CIS through different marketing entities.

the differences are 0.3 pp in money market, 1.2 pp in fixed income and 1.9 pp in alternatives.

- It has been observed that the higher performance obtained by foreign CISs are associated with higher levels of dispersion of performance in all categories of CISs.
- The analysis of expenses has been carried out on the ongoing charges figure (OCF), calculated from a methodology harmonised at EU level. In the case of Spanish CISs, this ratio is included annually in the key investor information document, while in foreign CISs, it has been taken from the data provider Refinitiv Lipper.
- Unlike the performance comparison, the results obtained in relation to expenses are mixed. Thus, foreign CISs present a lower expense ratio than Spanish CISs in the money market and equities categories (with differences of 0.06 pp and 0.24 pp in annual averages, respectively), while in the fixed-income, mixed and alternative categories they bear higher expenses than the Spanish ones (0.18 pp, 0.29 pp and 0.06 pp more, respectively).
- The results of this study cannot necessarily be extrapolated to longer periods than those considered in it, nor do they claim to explain the expansion of investment in foreign CISs in recent years based on the elements considered here. These elements are just some of the several that will be considered in the near future to draw a description as complete as possible of the phenomenon of collective investment in Spain and, in particular, of the participation of foreign CISs in it.

1 Rationale

The volume of assets of foreign CISs marketed in Spain has increased exponentially in recent years, multiplying by more than 16 since 2008. Thus from 31 December 2008 when this volume amounted to €18 billion it climbed to €294.10 billion at the end of 2021. The rate of increase in foreign CIS assets marketed has accelerated in this past year, with an increase of 50% in 2021.

In parallel, Spanish investors have also increased their investment in Spanish CISs in recent years, although at a less intense rate, going from €200.52 billion in 2008 to €353.20 billion at the end of 2021. The smaller increase in the assets of Spanish CISs in this period (76.1% compared to 1,534% for foreign CISs) has caused the weight of foreign CISs in the total volume of CISs (foreign plus Spanish) to increase from 8.2% at the end of 2008 to 45.4% at the end of 2021. The assets of foreign CISs represented 83.3% of the assets of Spanish CISs (IFs and SICAVs) at the end of 2021.

Regarding the place of origin, 78.6% of the volume marketed in 2021 corresponded to CISs domiciled in Luxembourg and 14.6% to those domiciled in Ireland, followed by France, with 5.4% of the total volume. The remaining EU jurisdictions have a very residual weight.

The above figures, in themselves, support the relevance of carrying out a comparative analysis of the performance obtained and the expenses borne by foreign CISs with respect to the performance and expenses of Spanish CISs. This is the first analysis of this type carried out by the CNMV.

2 Performance and expenses of foreign CISs

2.1 Description of the sample

CNMV Circular 2/2017 establishes the obligation for each designated marketing entity of foreign CISs in Spain to submit a quarterly statement to the CNMV with statistical information referring to each of the classes of shares or units of foreign CISs marketed in Spain. This statement includes: identification of the class by its ISIN code, total volume marketed in Spain and net asset value at the beginning and end of each quarter, as well as the fees paid for management, custody, subscription and redemption. Likewise, the investment strategy followed is identified, distinguishing among the following seven categories: money market, fixed income, equities, mixed, hedge funds, real estate and others.

Circular 2/2017 entered into force in the first quarter of 2018, so this analysis covers the four years from 2018 to the end of 2021.

The sample analysed in each year is made up of all classes of shares or units of foreign CISs that, as indicated in the statistical information statement submitted to the CNMV, were marketed in Spain at the end of each of the four years. The CIS sample is not the same in all four years, since share classes are withdrawn and registered in each year.

The volume of assets of foreign CISs marketed in Spain considered in this analysis has been taken from the statement by the marketing entities at the end of each year in the statistical information statements. The data used have been obtained from the statistical information submitted to the CNMV and from Lipper, in order to achieve the maximum possible coverage of foreign CISs marketed in Spain.

The following table shows the total number and volume of foreign CISs marketed each year in Spain, classified into the seven categories used by Lipper (money market, bond, mixed, equities, alternatives, real estate and commodities). They are the same categories as those defined in Circular 2/2017, with the addition of the commodities category. It can be seen that between 2018 and 2021 the number of CIS classes has increased from 12,253 to 15,748 and that their assets have increased from €162.61 billion to €294.10 billion. The most significant categories in terms of assets are equities and bonds, with €125.62 billion and €88.89 billion respectively at the end of 2021. Their joint weight exceeds 70% of the total (see Figure 1). They are followed by the mixed category, with €32.14 billion in 2021, 10.9% of the total. At the opposite extreme is the commodities category, with very residual assets marketed (0.32% of the total). Real estate investment funds, also with a residual weight during the first three years analysed, have experienced significant progress in 2021,

climbing from €228 million in 2019 to €13.74 billion at the end of 2021. For their part, the alternative and money market categories have a moderate weight in the total, with 4.8% and 5.7% respectively in 2021. Lastly, there are classes of CISs for which it has not been possible to obtain information on their investment categories either in Lipper or in the information received by the CNMV, for which the investment category has been classified as “Not available”. The assets of these CISs have been decreasing over the years (0.7% of assets in 2021), while the CISs that could be classified have increased.

Number and assets of foreign CISs marketed in Spain

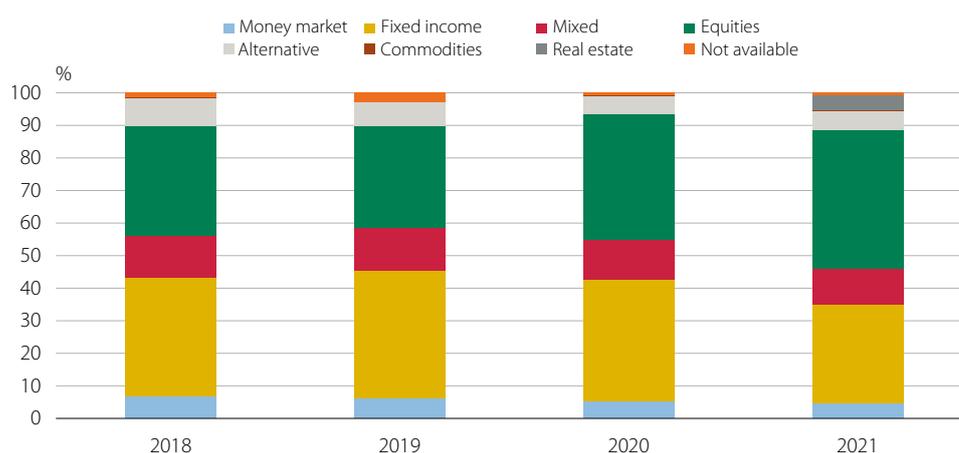
TABLE 1

Investment category	2018		2019		2020		2021	
	No. of ISIN codes	Assets						
Money market	254	11,250	260	11,236	262	10,262	275	14,028
Bond	3,650	59,226	4,074	71,555	4,410	73,691	4,772	88,894
Mixed	1,106	20,633	1,246	23,531	1,311	23,937	1,478	32,141
Equity	6,470	54,890	6,604	57,243	7,041	75,406	8,257	125,624
Alternative	400	14,118	507	13,185	577	11,042	730	16,776
Commodities	37	206	39	124	44	228	67	930
Real estate	6	59	9	61	8	63	16	13,738
Not available	330	2,224	398	5,020	291	1,450	153	1,965
Total	12,253	162,606	13,137	181,956	13,944	196,080	15,748	294,095

Source: CNMV and Refinitiv Lipper. Assets (millions of euros) The number of ISIN codes corresponds to the number of CIS classes. Data on assets calculated from the information received by the CNMV on the marketing of foreign CISs (UCITS and AIFs).

Distribution of the assets of foreign CISs marketed in Spain

FIGURE 1



Source: CNMV.

- The category identified by Lipper as Alternative includes funds that follow different alternative management strategies, although most of them establish an absolute return objective with a limit in terms of risk or volatility. It is considered comparable to the Spanish absolute return category, which brings together funds that follow this type of strategy.

The number of investors in Spain in foreign CISs has increased in parallel with the increase in assets marketed. The following table shows the evolution of the number of investors in the period analysed, broken down by investment categories. In the three-year period from the end of 2018 to the end of 2021, the number of investors almost doubled, from 3.1 million at the end of 2018 to 6 million at the end of 2021. By investment categories, once again equities have seen the greatest increase in the number of investors, an increase that has accelerated during the last year of the analysis: from 2 million in 2020 to 3.2 million investors at the end of 2021.

Number of investors in foreign CISs marketed in Spain

TABLE 2

Investment category	2018	2019	2020	2021
Money market	33,450	53,948	54,785	76,954
Fixed income	1,038,890	1,209,976	1,411,839	1,793,465
Mixed	440,233	465,351	501,822	599,637
Equities	1,393,982	1,394,976	2,087,442	3,244,241
Alternative	212,320	193,582	187,882	276,628
Commodities	1,813	1,161	6,696	25,266
Real estate	38	47	51	179
Not declared	8,292	10,575	12,695	16,505
Total	3,129,018	3,329,616	4,263,212	6,032,875

Source: CNMV and Refinitiv Lipper. Number of investors that have been reported by marketing entities in Spain.

Regarding the place of origin of the CISs, 78.6% of the volume marketed in 2021 corresponded to CISs domiciled in Luxembourg and 14.6% to those domiciled in Ireland, followed by France, with 5.4% of the total volume. The remaining EU jurisdictions have a very residual weight.

2.2 Performance of foreign CISs

The performance has been calculated, for each class of shares marketed in Spain, based on the net asset value at the end of the year compared to the closing value of the previous year. The performance obtained via distribution of results has not been taken into account.

The net asset values used to calculate performance are those corresponding to 31 December of all years, from 2017 to 2021. They have been obtained from the statistical information statements of the CNMV and Refinitiv Lipper. As can be seen in Table 3, the general coverage of the sample studied is very high in the four years analysed, ranging between 91.9% and 97.6% of total assets marketed (95% on average in the period). Information coverage is high in all CIS categories (except real estate in the first three years, when its weight was residual), with money market coverage standing out (100% in 2021 and 99.6% on average) and those of equities and fixed income, with coverage of 98.0% and 98.6% respectively in 2021.

**Percentage of assets analysed in terms of performance
by category of foreign CIS**

TABLE 3

Investment category	2018	2019	2020	2021	Average 2018-2021
Money market	99.1	99.6	99.4	100.0	99.6
Fixed income	95.3	91.0	94.2	98.6	94.8
Mixed	92.7	97.8	97.7	95.6	96.0
Equities	95.1	94.5	97.8	98.0	96.3
Alternative	94.3	97.3	98.1	95.9	96.4
Commodities	100.0	99.9	100.0	65.6	91.4
Real estate	2.3	0.2	0.6	99.2	25.6
% of total	94.6	91.9	95.9	97.6	95.0
Assets analysed	153,900	167,235	188,007	286,993	

Source: Refinitiv Lipper and CNMV. Assets (millions of euros)

Figure 2 shows the average annual performance calculated for each investment category during the period analysed. The average performance by investment category has been calculated on a weighted basis, the individual performance on each class of shares being assigned a weight equal to the proportion represented by the volume of that class marketed in Spain relative to the total volume of the investment category to which it belongs.

It can be seen in the different panels that the narrowest performance were in money market funds (between -2.2% and 0.7%) and fixed income funds (between -2.6% and 5.3%). In contrast, equity funds show a wider range of performance, from -8.6% to 27.6%. It is worth noting that, over the past three years, performance on this category have consistently been around or above 20%. These high performance have no doubt attracted investment to this category of funds and might well explain the substantial increase in their assets (67% in 2021). In an intermediate situation are mixed and alternative funds, which on average show performance of between 2.6% and 2.9%, with much less pronounced extremes.

Performance on foreign CISs marketed in Spain

FIGURE 2



Source: Refinitiv Lipper and CNMV.

2.3 Expense ratio of foreign CISs

To analyse the expenses incurred, we used the TER (Total Expense Ratio) data published by Refinitiv Lipper. This term can refer to the expense ratio calculated according to different methodologies: Expense Ratio (ER), Fund Expense Ratio (FER), Management Expense Ratio (MER), Ongoing Charges Figure (OCF) or Total Expense Ratio (TER). In the Spanish CISs, the data taken for the analysis have been calculated systematically using the EU harmonised OCF methodology, which includes all fees and other current management expenses borne by the CISs in one year with respect to their average assets in that year and thus provides greater homogeneity than in the case of foreign CISs.

We should also point out that the data on foreign CISs used in this analysis, unlike those of Spanish CISs, have not been verified by the CNMV. As noted above, we have taken the data published by Refinitiv Lipper, an information provider that disseminates the data provided by managers, but accept no responsibility for their veracity and give no assurance as to the consistency of the calculation methodology.

The following table shows, in a similar way to that described for the performance, the percentage of assets of foreign CISs for which it has been possible to obtain the expense ratio. This percentage of coverage of the analysis of expenses relative to total assets of the sample is also very high, 98% on average for the period, and above 97% in each of the four years.³ By categories of CISs, the highest coverage ratios are in money market, alternative and equity CISs, where they are close to 100%, followed by fixed-income CISs (98%).

Percentage of assets analysed in terms of expenses by category of foreign CISs

TABLE 4

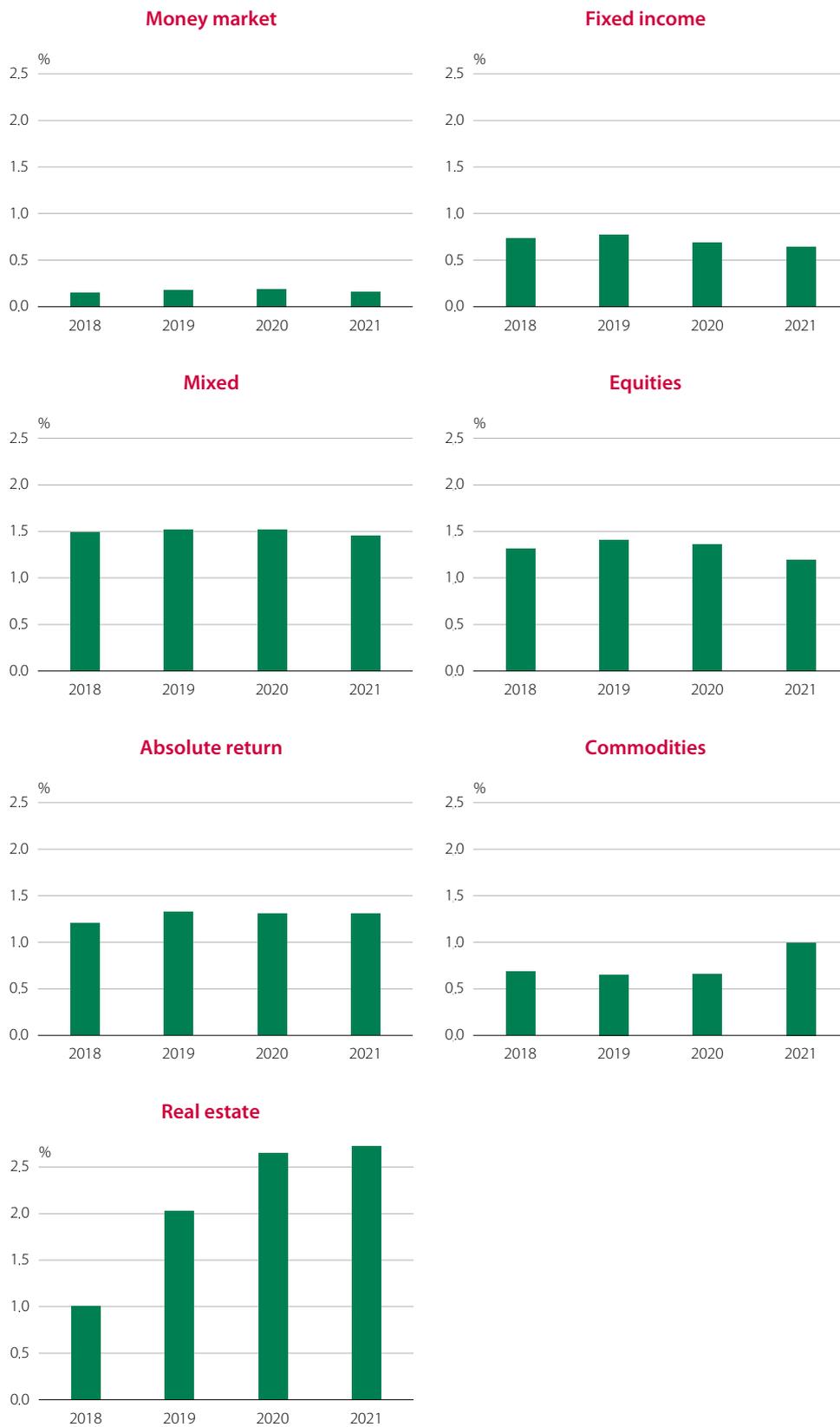
Investment category	2018	2019	2020	2021	Average 2018-2021
Money market	100.0	99.8	99.9	100.0	99.9
Fixed income	99.6	99.5	96.4	96.6	98.0
Mixed	99.1	99.0	98.8	98.4	98.8
Equities	99.3	99.6	99.8	99.3	99.5
Alternative	100.0	99.7	99.3	99.3	99.6
Commodities	100.0	100.0	100.0	60.0	90.0
Real estate	2.3	0.2	0.6	99.2	25.6
% of total	99.0	97.3	97.7	97.7	97.9
Assets analysed	161,034	176,986	191,586	273,700	

Source: Refinitiv Lipper and CNMV. Assets (millions of euros)

³ A small number of classes have not communicated to Refinitiv Lipper the expense ratio corresponding to any of the years analysed. In these cases, the expense ratio figure for the closest available year has been taken.

Annual total expense ratio (TER) of foreign CISs marketed in Spain

FIGURE 3



Source: Refinitiv Lipper and CNMV.

Once again in the same way as for performance, the asset-weighted average expense ratio has been calculated for each investment category. The results are shown in the panels of Figure 3. The first thing that strikes one when looking at the panels is the relative stability of the expense ratio by category over the period analysed, with very low variability from one year to the next. Money market and fixed income funds have the lowest ratios, as is usual in this type of category, with an annual average of 0.17% and 0.7% respectively in the last four years. The highest ratio is in the mixed category, with an average of 1.5%, higher than that of equity CISs (1.3%), which is unusual.

Indeed, there has been a decrease in the expense ratio of the equity category in recent years (from 1.36% in 2020 to 1.19% in 2021). However, in this respect we should point out that the expense ratio, according to the EU definition of the OCF, excludes performance-related fees, and equity funds, as well as alternative and absolute performance funds, tend to opt to a greater extent either for management fee schemes based on performance rather than net asset value, or for mixed schemes using both net asset value and performance, which would not be captured in the expense ratios analysed.

3 Comparative analysis between Spanish CISs and foreign CISs

At the end of 2021, assets of Spanish CISs (IFs and SICAVs) amounted to €353.20 billion, in excess of the €294.10 billion of foreign CISs marketed in Spain. It must be borne in mind that Spanish CISs invest a significant part of their assets in foreign CISs. At 31 December 2021 these investments amounted to €115.43 billion, about one third of their total assets. Of this amount, €74.85 billion corresponded to foreign CISs marketed in Spain, the object of this analysis.⁴ Thus part of Spanish investors' holdings in foreign CISs is indirect, through Spanish CISs.

The comparison of both the performance and the expense ratios of Spanish CISs with those of foreign CISs marketed in Spain requires both to first be grouped in the same investment categories. Spanish CISs identify their investment category in their prospectuses, based on the criteria established in CNMV Circular 1/2009, of 4 February, on categories of collective investment schemes, as amended by Circulars 3/2011 and 2/2019.⁵ This Circular establishes 20 possible investment categories for Spanish CISs, whereas only seven categories are identified by Refinitiv Lipper.

Consequently, the 20 categories of Spanish CISs have been grouped into the five equivalent categories of foreign CISs (fixed income, equities, mixed, alternative

4 This volume corresponds to the assets in Spanish CISs' portfolios at December 2021 of foreign CISs whose ISIN codes coincide with those of foreign CISs forming the object of this analysis. However, it is possible for the managers of Spanish CISs to invest directly in these foreign CISs without having to go through a marketing entity in Spain. In this case, the volume would not be included in the marketing entities' reporting to the CNMV in the statistical information statement.

5 In this latest update, the passive management CIS category has been split into two: CISs with a specific non-guaranteed return objective and CISs that replicate an index.

and money market). The category of real estate CISs has been left out of the analysis, since real estate funds are not the subject of this analysis (and in any case their weight is residual in CISs as a whole, both Spanish and foreign), and the commodities category, which does not exist in Spain, has also been omitted.

Spanish CISs included in the analysis encompass IFs and non-real estate SICAVs, leaving out hedge funds and funds of hedge funds. The correspondence between categories has been carried out in the following way:

Correspondence between categories

TABLE 4

MONEY MARKET	SHORT-TERM MONEY MARKET WITH VARIABLE NET ASSET VALUE
	SHORT-TERM MONEY MARKET PUBLIC DEBT WITH CONSTANT NET ASSET VALUE
	SHORT-TERM MONEY MARKET WITH LOW-VOLATILITY NET ASSET VALUE
	STANDARD MONEY MARKET WITH VARIABLE NET ASSET VALUE
FIXED INCOME	EURO FIXED INCOME
	SHORT-TERM EURO FIXED INCOME
	INTERNATIONAL FIXED INCOME
MIXED	EURO MIXED FIXED INCOME
	INTERNATIONAL MIXED FIXED INCOME
	EURO MIXED EQUITY
	INTERNATIONAL MIXED EQUITY
	PASSIVELY MANAGED CISs
	GUARANTEED, VARIABLE PERFORMANCE
	GUARANTEED, FIXED PERFORMANCE
	PARTLY GUARANTEED
	CISs WITH A SPECIFIC NON-GUARANTEED TARGET PERFORMANCE
GLOBAL	
EQUITIES	EURO EQUITIES
	INTERNATIONAL EQUITIES
	CISs THAT REPLICATE AN INDEX
ALTERNATIVE	ABSOLUTE PERFORMANCE

Source: CNMV.

The information referring to the investment categories of Spanish CISs is extracted from the prospectuses, and has been previously verified by the CNMV, which also carries out periodic checks on compliance with the category declared in the prospectus. However, this same verification is not carried out on the information of the foreign CISs communicated in the statistical information statements, since foreign CISs are not under the supervision of the CNMV, but of the competent authority of the jurisdiction in which they are domiciled.

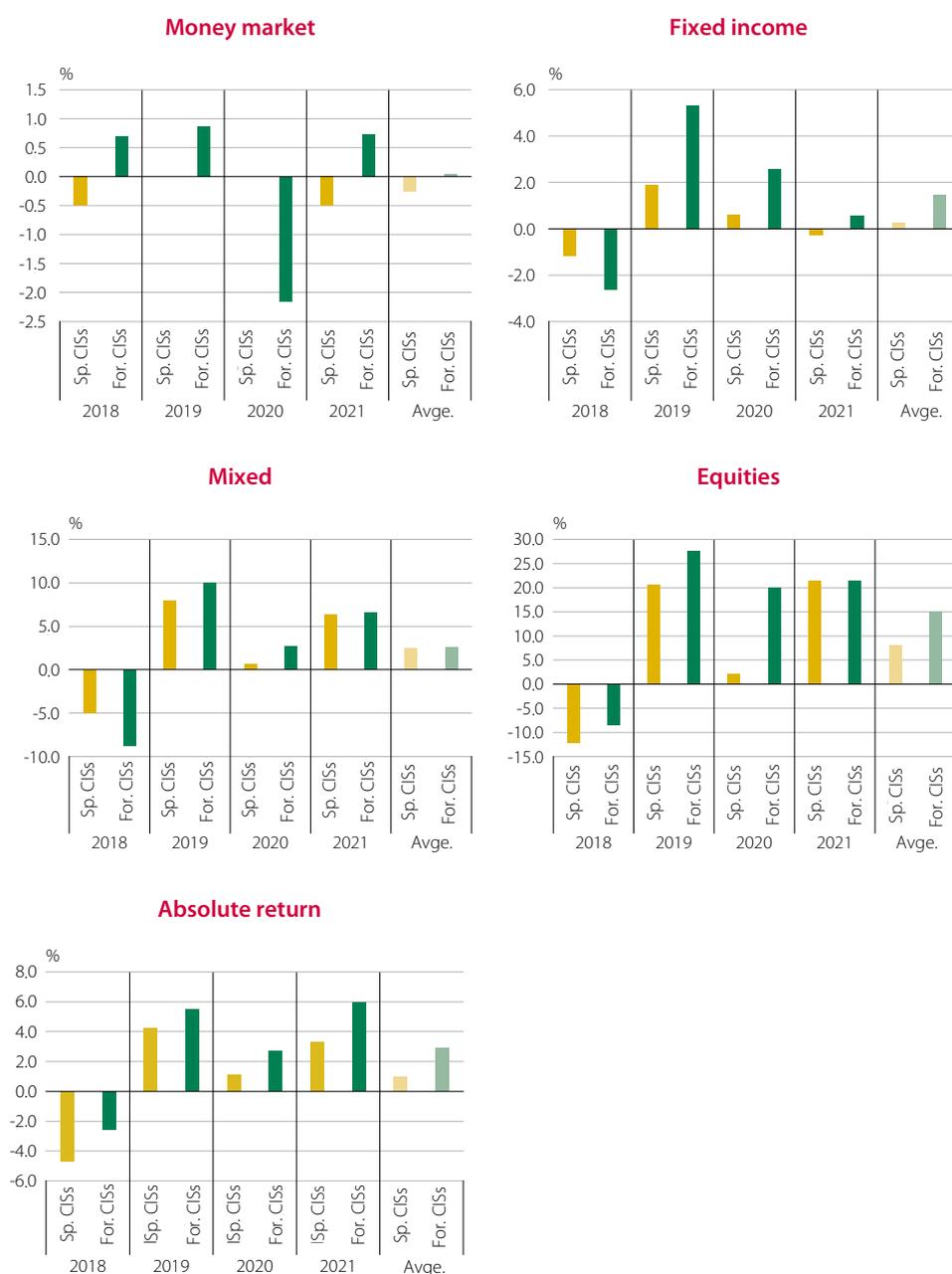
3.1 Comparison of performance

The following panels show the comparison of the weighted average performance by category between Spanish and foreign CISs. The performance of the Spanish CISs that are reflected in the panels have been obtained in a similar way to that of the foreign CISs, based on the closing net asset values of each financial year. The figure shows that the average performance of foreign CISs are higher than those of Spanish CISs in all investment categories and in most of the years analysed, with few exceptions.

The smallest difference is found in the mixed category CISs, where on average Spanish CISs obtained a performance just 0.2 pp lower than foreign ones. The biggest difference is in equity CISs, with Spanish CISs showing a performance 7.1 pp lower (on average) than that of foreign CISs. The difference is much smaller in other categories: 0.3 pp in money market, 1.2 pp in fixed income and 1.9 pp in absolute performance (average of the four periods). The years and categories in which Spanish CISs' performance were higher were the fixed-income and mixed categories in 2018 and the money market category in 2020. In all cases, these are negative performance, so rather than "higher" performance Spanish CISs actually posted less negative performance than foreign CISs.

Comparison of performance between Spanish and foreign CIS

FIGURE 4



Source: Refinitiv Lipper and CNMV.

As indicated above, the difference in performance between Spanish and foreign CISs is notable in the equity category (7.1 pp annual average), with a particularly notable disparity in 2020 when foreign CISs posted average performance of 20%, while for Spanish CISs the figure was 2.2%. A possible explanation for these differences could lie in Spanish CISs' greater weighting of Spanish and other European stock markets which, in general, underperformed those of other geographical areas in the years analysed⁶ (see Table 5). In 2020, the Ibex 35 and the Eurostoxx 50 registered negative performance, of -15.5% and -5.1% respectively, while revaluations were observed in other international markets outside the euro area, especially in the US. (16.3% on the S&P 500 and 43.6% on the Nasdaq). In 2021, a year in which Spanish and other EU markets performed better, Spanish and foreign CISs obtained very similar performance: 21.51% and 21.43% respectively.

Performance of the main stock market indices

TABLE 5

	2018	2019	2020	2021
MSCI World	-10.4	25.2	14.1	20.1
Eurostoxx 50	-14.3	24.8	-5.1	21.0
Euronext 100	-11.2	24.9	-3.6	23.4
Ibex 35	-15.0	11.8	-15.5	7.9
FTSE 100	-12.5	12.1	-14.3	14.3
S&P 500	-6.2	28.9	16.3	26.9
Nasdaq-Cpte	-3.9	35.2	43.6	21.4
Nikkei 225	-12.1	18.2	16.0	4.9

Source: Refinitiv Datastream.

One is struck by the high performance obtained by foreign fixed income CISs in 2019 and 2020 (5.3% and 2.6%) in an environment of very low interest rates. Again, a possible explanation would be foreign CISs' greater weighting of markets with higher interest rates than those of the European Union and/or of higher-risk assets in terms of duration or credit quality.

The analysis of average performance has been completed with a study of the dispersion of the performance of the individual CISs included in each category. To do this, several dispersion metrics have been calculated: on the one hand, the weighted standard deviation of performance relative to the mean, and on the other, the levels of performance associated with different percentiles.

The standard deviation is a measure of the average distance of the individual performance of each CIS from the mean performance of its category. The following table shows that the deviation of the performance of foreign CISs is systematically higher, in all years and investment categories,⁷ than that of Spanish CISs. The difference (average) between the standard deviations of the performance of foreign and Spanish CISs is greatest in the equity CISs (5.5 pp), followed by fixed income CISs (2.7 pp).

⁶ In future works, the hypotheses alluded to in relation to the investment pattern of foreign and Spanish CISs will be contrasted.

⁷ With the sole exception of the mixed category in 2019, which shows a slightly higher deviation in the Spanish CISs.

Weighted standard deviation of performance

TABLE 6

Investment category	2018		2019		2020		Avge. diff. (p.p.)
	Sp. CISs	For. CISs	Sp. CISs	For. CISs	Sp. CISs	For. CISs	
	Money market	0.2	2.7	0.3	2.1	0.1	
Fixed income	1.3	4.9	2.2	4.0	1.6	4.1	2.7
Mixed	3.5	9.0	6.1	5.7	4.9	5.7	2.0
Equities	5.6	7.8	7.6	8.5	11.8	24.5	5.5
Alternative	2.4	3.3	4.1	7.8	3.5	5.1	2.6

Source: CNMV and Refinitiv Lipper.

Foreign fixed income funds are those in which the dispersion most exceeds that of Spanish CISs, in relative terms, the standard deviation of the performance of these funds being more than double that of Spanish CISs on average. The highest standard deviation figures are to be found in the foreign equities category, with a maximum of 24.5% in 2020, compared to 11.8% in the case of Spanish CISs. 2020 is also the year in which the performance of foreign equity CISs most exceed those of Spanish schemes. Thus, foreign CISs obtained an average performance of 20% with an average standard deviation of 24.5%, while Spanish CISs obtained an average performance of 2.2% with an average standard deviation of 11.8%. Finally, it should be noted that the number of Spanish money market CISs is very small, so their dispersion measure may not be very representative (in 2021 there were only nine classes of units with this category, belonging to just two CISs, while the number of classes of foreign CISs was 9,433).

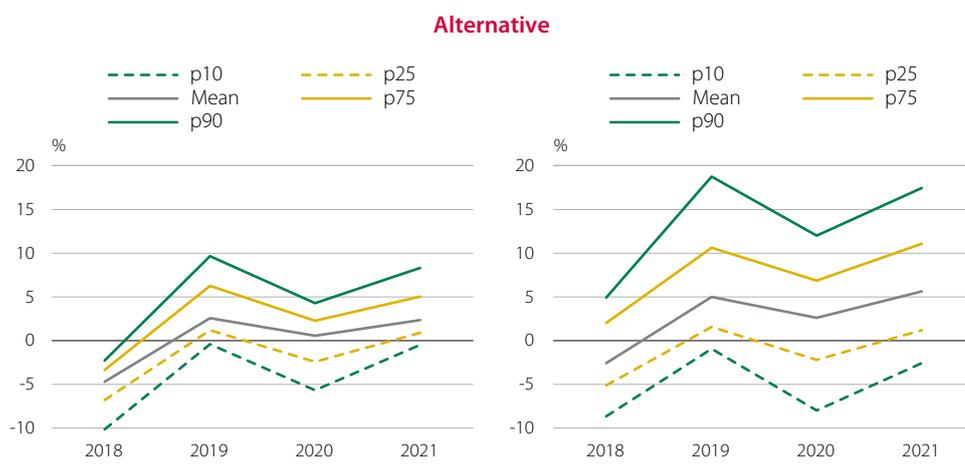
The analysis of the percentiles complements that of the standard deviation. Figure 5 shows, by investment categories (the money market category has been excluded due to the small size of the Spanish sample), a comparison of five percentiles (p10, p25, p50, p75 and p90) of the distribution of the performance of Spanish CISs compared with foreign ones. Once all the individual performance have been ranked in ascending order, the 10th percentile reflects the level of performance of that CIS that leaves the 10% of the CISs with lower performance to the left. In the same way, the 90th percentile leaves the 90% of CISs with lower performance to the left (in other words, only 10% of the funds would show a higher performance than the CIS located in the 90th percentile).

In line with what was observed in the analysis of the standard deviation, the difference between the performance of the CISs located in the most extreme percentiles (10-90) and also in the most intermediate percentiles (25-75) points to a greater dispersion in foreign CISs. The distance between both pairs of percentiles (10-90 and 25-75) is greater in all categories and in general in foreign CISs. This gap is highest in the equity and fixed income categories.

Comparison of the dispersion of performance

FIGURE 5





Source: Refinitiv Lipper and CNMV.

Since the net asset value, on the basis of which the performance has been calculated, is obtained from the valuation of the CIS's assets once fees and expenses have been deducted, the performance analysed is net of expenses, so lower levels of expenses would imply higher performance. However, as can be seen under the following heading, the expense ratio of foreign fixed income CISs is higher than that of Spanish CISs, so this variable would not help explain the greater performance of foreign CISs.

3.2 Comparison of expenses

For Spanish CISs, the periodic reports addressed to unitholders must include historical information on the ratio of current expenses supported in each of the last five years, calculated in accordance with the methodology recommended in the guidelines of the Committee of European Securities Regulators (CESR).⁸ The ratio of current expenses for the year is included in the report for the second half-year, which in turn is transferred to the key information document (KID) for the investor in the annual update of said document, which is produced in the first 35 business days of the following financial year.

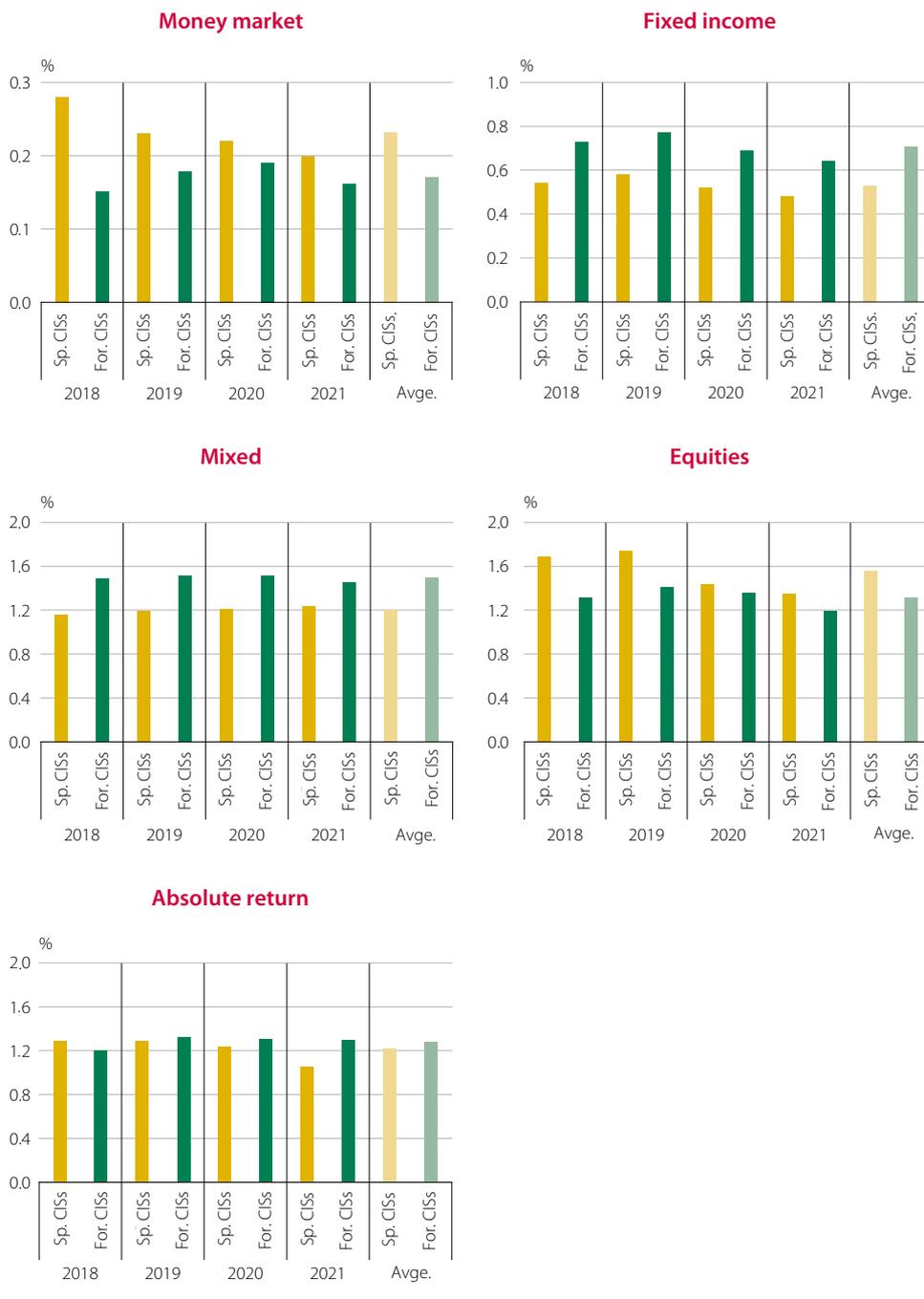
The current expense ratio must be calculated as the sum of management and custodial fees and all other current management expenses borne by the CIS, including an estimate of the indirect expenses borne as a result of investment in other CISs, when these represent more than 10% of the assets of the investing CIS. The expense ratio does not include performance-related fees or transaction costs assumed by funds in the purchase and sale of securities.

⁸ The CESR guidelines on the ratio of current expenses or OCF (CESR/10-674) began to be applied in 2011. In previous years, a total expense ratio (TER) was also calculated using a slightly different methodology. The fundamental difference is that the TER included performance-related fees and financing expenses, which the OCF does not. However, it did not include indirect expenses as a result of investment in other CISs in the calculation, which the OCF does. In the case of foreign CISs, the methodology followed is not specified.

The CNMV periodically checks the correct calculation of the expense ratio in Spanish CISs based on the information available in their income statements. However, as mentioned above, in the case of foreign CISs this contrast is not made, and it is also possible that the expense ratio taken from Refinitiv Lipper is not in all cases consistent with the calculation methodology harmonised at EU level.

Comparison of the expense ratio between Spanish and foreign CISs

FIGURE 6



Source: Refinitiv Lipper and CNMV.

The panels of Figure 6 show the ratio of current expenses by investment category of Spanish and foreign CISs for the years 2018, 2019, 2020 and 2021, as well as its average. In contrast with the performance comparison, the foreign CISs do not perform better, in general terms, than the Spanish CISs in terms of expenses incurred. Some investment categories support lower expenses, while others are more expensive than their Spanish equivalents. Thus, foreign CISs present a lower expense ratio than Spanish CISs in the categories of money market funds and equities (0.06 pp and 0.24 pp below the annual average, respectively). On the other hand, in the categories of fixed income, mixed and absolute performance, foreign CISs bear higher expenses than Spanish ones (0.18 pp, 0.29 pp and 0.06 pp, respectively, on average). The Spanish CISs of these last three categories concentrated 80% of the total assets in 2021, so in aggregate terms and weighted by category, Spanish CISs would show a lower aggregate expense ratio than that of foreign CISs.

4 Conclusions

This is the first comparative analysis of Spanish CISs and foreign CISs marketed in Spain, carried out in the 2018-2021 period, focused on the performance offered and expenses incurred by them. However, it is necessary to carry out the analysis in greater depth, considering other important aspects, including questions relating to the size and degree of concentration of the entities such as the presence of specialisation or variety of offering.

For example foreign CISs have obtained higher performance than Spanish CISs in all investment categories in the last four years, the difference of more than 7 pp annual average in the equities category being particularly notable. This difference might be partly explained by Spanish CISs' greater propensity for Spanish and other EU equity assets, which have underperformed equities in other geographical areas in recent years. This hypothesis will be tested in future works that involve a more detailed analysis of CISs' portfolios.

We note also that the higher average performance obtained by foreign CISs are accompanied by a greater dispersion of performance in all categories. Both the standard deviation and the difference between the most extreme percentiles are higher in foreign CISs than in Spanish CISs, especially in the equity and fixed income categories.

Regarding expenses incurred, the results are less conclusive: Spanish CISs bear higher expenses in the money market and equities categories, and lower expenses in the fixed income, mixed and absolute performance categories. In any case, the difference in expenses in these last-named does not help them to be more competitive in terms of performance, as indicated above. Again, choices of different types of fixed income assets, either in markets where interest rate levels are higher than those in the European Union, or with higher risk levels, could be behind these results.

This analysis has some limitations that respond both to the time period of the study (limited to four years) and its specificity (almost half of the sample was affected by the pandemic) as well as issues relating to the quality and comparability of the foreign CISs' data. Therefore, its findings should not be extrapolated to longer periods, more detailed study being required, for example, and as already mentioned, of fund portfolios. Other factors that may help explain the strong growth in investment volumes in foreign CISs in the most recent period should also be analysed. A growth that has contributed to the progressive increase in their weight in total collective investment, which at the end of 2021 represented 45% of the total and 83% of the volume of Spanish CISs (IFs and SICAVs).

Alternative markets for growth companies and the Spanish case, BME Growth

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1 Introduction to alternative markets

Many of the major listed companies such as Inditex, Telefónica, IBM or Citibank are listed on the world's main stock markets. However, there are many smaller companies which also need financing and resources, but which due to their size are unable to access the major stock markets.

European economies, and particularly Spain's, are generally characterised as economies in which small and medium-sized businesses make up the most important base of the business fabric. In the European Union more than 99.5% of companies are SMEs,¹ employing around 66% of the labour force and generating almost 57% of GDP.² For Spain, these figures are even more striking, nearly 99.9% of Spanish businesses being SMEs, which produce more than 62% of GDP and employ more than six of every ten workers.³

The small size of SMEs makes it difficult for these companies to access financing, which is basically bank financing⁴ and not in the form of capital, a circumstance that worsened from 2008 with the outbreak of the financial crisis. For this reason, in order for these companies to be able to access investors and obtain long-term financing for their projects, many markets geared to this type of company have emerged internationally in recent years. These markets are specifically designed for this type of company, as they have both processes and lower costs adapted to their specific characteristics, in a more flexible regulatory environment.

The first market of its kind in Europe⁵ was created in the United Kingdom in 1995, when the London Stock Exchange established the Alternative Investment Market (AIM). Subsequently, Euronext launched Alternext in 2005 and Bolsas y Mercados Españoles created its own alternative market in 2008, the Mercado Alternativo Bursátil (MAB), which has now been renamed BME Growth. In a more recent second stage, many European markets⁶ have created similar alternative markets for

1 According to the definition of SME contained in Annex I of Commission Regulation (EU) No. 651/2014, of 17 June 2014, SMEs are enterprises that employ fewer than 250 persons and whose turnover does not exceed €50 million and/or whose balance sheet total does not exceed €43 million. They are subdivided into medium-sized (fewer than 250 employees and not more than €50 million turnover and/or €43 million balance sheet total), small (fewer than 50 employees and not more than €10 million turnover and/or balance sheet total) and micro (fewer than 10 employees and not more than €2 million turnover and/or balance sheet total).

2 Source: Eurostat.

3 Source: Ministry of Industry, Commerce and Tourism, DIRCE 2021

4 Usually the financing they obtain is for limited amounts in the short and medium term and involves the provision of guarantees.

5 Previously there had been in some European stock markets the so-called second markets, geared to SMEs as a specific segment within the traditional stock exchanges (such as the Segundo Mercado of the Madrid Stock Exchange, the Second Marché of the Paris Stock Exchange, the Geregelter Markt of Deutsche Börse and the Mercato Ristretto of the Italian Stock Exchange), but their success was limited due to excessively rigid regulation and high costs that did not take into account the particular characteristics of this type of company. Likewise, some stock markets created new markets specifically for technology companies, such as the French Nouveau Marché, the German Neuer Markt, the Italian Numtel and Spain's Nuevo Mercado.

6 The first alternative market for fixed income in Europe, called Nordic ABM, was created in 2005 by the Oslo Stock Exchange.

fixed income, such as the Spanish MARF, or specific segments for debt trading within their alternative markets.

This paper describes and analyses the characteristics of alternative markets for growth companies, as well as their expansion in Europe, with special emphasis on the Spanish BME Growth market, with the aim of better understanding its operation, its evolution and the characteristics of companies currently listed on it. With this objective, we start from the description of these markets and their characteristics, giving details of the evolution of the Spanish market since its creation as the MAB in 2008. Next, the characteristics of companies currently listed on this market are analysed in detail to discover their idiosyncrasies and, finally, some conclusions are drawn and some prospects offered for the evolution of the market in the coming years.

2 Main characteristics of alternative markets

The main attraction of alternative markets is that they allow small companies to access the securities markets so that they can benefit from their particular advantages, such as the greater ease of accessing financing and greater liquidity, as well as gaining visibility. This easier access to financing can allow companies to develop their projects, gain size and even compete internationally. This is especially relevant for smaller companies, which find it difficult to access traditional financial markets and which in this way can access institutional investors, who have a closer understanding of the needs and challenges faced by SMEs and entrepreneurs. In addition, most alternative markets are open to companies from all economic sectors and origins.

Experience has shown that it is more practical for small, innovative, high-growth companies to raise resources in the form of equity rather than as debt, since they prefer to devote their resources to prioritising their growth without having to service debt. In this type of market, this is feasible, since there is a group of investors who are aware of this problem and are willing to take risks and sacrifice short-term returns in exchange for obtaining significantly higher returns in the longer term.

Alternative markets have much more flexible regulation than traditional ones, as well as lower costs and simpler processes. In addition, they allow companies to access the trading systems operated by the markets, which provides them with greater liquidity and transparency compared with the alternative of not listing. To this end they normally use specific trading models and information communication systems that take account of the singularities of this type of company. In addition, in order to guarantee their integrity, these markets are supervised by the market regulatory authorities of the countries in which they operate.⁷ Most of them have the legal form of multilateral trading facilities (MTFs) and they usually form part of the regulated market operators.

⁷ In this regard, it should be noted that the regulatory authorities have supervisory and sanctioning powers.

They also allow greater access to liquidity, both for the current shareholders of many companies, who can more easily gauge the value of their assets, and for new shareholders, since the fact that the companies are listed on a market makes it possible to easily turn the investment into cash. Contrary to what happens with investment in small unlisted companies or start-ups, the existence of a secondary market allows the investment to be liquidated without incurring the high search costs that would be involved in selling a stake⁸ in a company that is not listed on any organised market, and also makes it possible to expand the company's shareholder base, which helps to increase sources of financing.

Apart from this, companies also enhance their visibility, which reinforces their prestige and brand image, elements that in turn can promote access to financing and, therefore, the growth of the company.

Finally, in the case of those companies whose growth has allowed them to reach an adequate size, there is the possibility that they can make the leap to listing on traditional stock markets and access a greater number of potential investors. However, due to the nature of the companies traded on them, these markets are associated with relatively high levels of risk and therefore of volatility.

Through MiFID II, the European Union has launched a set of initiatives to promote the development of these markets in Europe, so that SMEs have incentives to use them. These initiatives are focused on reducing administrative costs to enable companies to raise capital, while at the same time preserving market integrity and investor protection (see Exhibit 1).

8 These search costs are especially high for minority holdings in the capital of a company.

MiFID II included this new category of markets, which was developed within the framework of the Capital Markets Union (CMU) initiative, with the aim of facilitating the financing of smaller companies through their presence in the financial markets to promote their growth. With this objective, the regulation required for this type of company is simplified, while the standards of quality and transparency are made uniform among EU markets.

MiFID II introduced the SME Growth Market, with differences in the structure of the market, as well as in the regulations applicable to listing on the market, the trading of securities and the dissemination of information. For a market to be recognised as an SME Growth Market, at least 50% of the companies traded on it must have a capitalisation of less than €200 million.

The main changes introduced by this regulation were the following:

- i) Possibility of registering the EU Growth Prospectus with the CNMV to request the initial listing of securities on a regulated market in cases where there is a public offer of securities that implies the obligation to publish a prospectus in accordance with the Prospectus Regulation. In cases where there is no such obligation, it will still be possible to submit an “informative document of incorporation to the market” (DIM), to the model of which some changes have been made based on the EU Growth Prospectus, most notably the creation of a specific section for including indicators of financial and operating results.
- ii) European integration: the SME Growth Market puts the various European markets for SMEs on an equal footing, facilitating transparent, uniform access criteria for national and international companies and investors.
- iii) Reduced requirements for storing information: privileged information of companies listed on the market may be included on the website of the trading venue without the need to also include it on the website of the issuer itself.
- iv) Exemption from the obligation to maintain and update the list of insiders: elimination of the obligation for companies to prepare a list of insiders, providing issuers take measures to ensure that any person with access to privileged information is aware of the penalties deriving from trading on it and are able to provide a list of insiders if requested by the competent authority.

2.1 Advantages and disadvantages of listing on a market

Although some of the advantages for companies of being listed on markets have previously been mentioned, notably the greater ease of raising resources, this section presents a detailed list of possible advantages, as well as some of its drawbacks. Among the advantages, which are numerous, the following stand out:

- i) It facilitates the expansion of the company by giving it greater prestige and visibility, which can generate positive effects both from the point of view of customers and suppliers.
- ii) It facilitates both organic and inorganic growth through corporate transactions, in addition to favouring their international expansion.
- iii) It provides a market valuation of the company. The existence of an objective estimate of the value of the company facilitates its participation in corporate transactions.
- iv) Increased transparency and communication thanks to scrutiny by markets and investors, which usually translates into higher long-term growth rates for the company.
- v) It favours the professionalism of management and the incorporation of human capital into the company.
- vi) It allows current shareholders to turn their investment into cash by selling their securities on the market or through a public offer for sale.
- vii) It facilitates access to a broad base of institutional investors.
- viii) It facilitates the increase in the shareholder base of companies, while allowing investors greater investment possibilities by incorporating new assets and sectors.
- ix) Some markets and regions have tax advantages⁹ specific to companies entering these markets.

On the other hand, it also involves some drawbacks in the form of administrative costs and some risks. The most salient risks are the following:

- i) Although they facilitate liquidity for investors, in many cases secondary markets are narrow due to the small size of the listed companies, which limits liquidity and puts off many investors compared with regulated markets.¹⁰

9 Some countries such as the United Kingdom and France have tax incentives to encourage investment in this type of company and, therefore, favour their financing. In Spain, only the autonomous regions of Madrid, Galicia and Aragón have established any tax incentive for investors resident in their territories.

10 Mainly institutional investors such as investment or pension funds whose regulations limit their investments to large securities or those with a high degree of liquidity.

- ii) Despite the relatively relaxed regulations on companies listed on alternative markets, there are still administrative obligations that entail direct and indirect costs, as well as compliance with specific regulations for listed companies.
- iii) Possibility of being the subject of a takeover bid and losing control of the company.
- iv) Tendency for management to be conditioned by the behaviour of the share price, which is determined not only by the evolution of the company itself (specific risk), but also by the market as a whole (systemic risk).
- v) The supervision and control of these markets may be less rigorous than that of traditional markets, as they are partially decentralised and attributed to different bodies.¹¹
- vi) Non-existent or very little monitoring and coverage by market analysts.

2.2 Alternative markets in Europe

In the international sphere there are numerous markets of this type, among which the large markets of the United States and Canada stand out in particular,¹² as well as a growing number of such markets in Southeast Asia. Similarly, in Europe, most markets have created a specific segment for SMEs, and the European Union itself, in the framework of the CMU initiative, has created a specific category for these markets, the SME Growth Market, as has already been mentioned, with the aim of promoting the financing of smaller companies through their presence in the financial markets, as well as standardising the quality and transparency standards of this type of market. In addition to the Spanish BME Growth market, which will be discussed in the following sections, the most significant markets of this type in Europe are:

Alternative Investment Market (AIM)

Belonging to the London Stock Exchange, it was created in 1995 with ten companies with capitalisation of around £82 million. Since then, it has made it possible for almost 4,000 companies to raise resources for more than £130 billion, of which around 60% has corresponded to issues on the secondary market. It currently has 831 companies with an aggregate capitalisation of £103 billion.¹³

11 In the case of BME Growth, the market, its members and participating entities are subject to the supervisory and sanctioning powers of the CNMV, but the market's governing entity is responsible for effectively observing the Market Regulations and other applicable regulations, especially regarding the rules on market abuse by issuers, members, registered advisers and other participants. In addition, registered advisers must ensure that issuers correctly comply, both formally and substantively, with their reporting obligations to the governing entity and to investors.

12 The most representative are the US Nasdaq and the Canadian TSX Venture Exchange.

13 It represented around 4.5% of UK GDP in 2021 and 3.8% of the capitalisation of the London Stock Exchange.

It has three representative market indices: the FTSE AIM UK 50 Index, the FTSE AIM 100 Index and the FTSE AIM All-Shares, which bring together companies from more than 90 countries and 40 different sectors, this being a market with a significant international focus and broad sector diversification.

Euronext Growth and Euronext Access

This market was created in 2005 as a Euronext Paris trading platform for the listing of SMEs, called Alternext. It currently has two MTFs for SMEs: Euronext Growth and Euronext Access. Euronext Growth operates in the markets of Paris, Brussels, Dublin, Lisbon and Oslo¹⁴ and focuses on SMEs seeking to attract resources to finance their growth; while Euronext Access¹⁵ operates in Paris, Brussels and Lisbon and is designed specifically for start-ups and SMEs looking to join the market to finance their growth and benefit from the other advantages of listing but do not meet the requirements¹⁶ to access Euronext Growth.

At the end of 2021, a total of 390 companies were listed on the Euronext Growth market (of which 45 were foreign), while 195 (58 foreign) were listed on the Euronext Access market, with market capitalisations of €43.85 billion and €8.81 billion¹⁷ respectively.

Deutsche Börse, Scale

Created in 2017 as a platform for trading SME shares and bonds with the aim of replacing the old Entry Standard segment of the Frankfurt Stock Exchange intended for this purpose. It has been an SME Growth Market since the end of 2019 and currently has 50 listed companies from different sectors, whose capitalisation is around €8 billion. In the period from January to August 2022, total trading was close to €1.2 billion.

Borsa Italiana (Euronext Growth Milan)

This market has its origin in the AIM Italia Market, now integrated into Euronext and named since the end of October 2021 Euronext Growth Milan. At the end of July 2022, it had 181 listed companies, of which a third belong to the technology sector, and reached a market capitalisation of around €10.5 billion. In the period from January to July 2022, trading exceeded €2.2 billion.

14 Euronext Growth Oslo is not registered as an SME Growth Market.

15 Within this segment there is a specific compartment called Euronext Access+ aimed at start-ups and fast-growing SMEs.

16 The requirements to access this segment are very lax. It is not regulated by MiFID II and its liquidity is lower.

17 They represent less than 1.2% of GDP and 0.8% of the capitalisation of all stock exchanges in all countries whose stock markets are managed by Euronext.

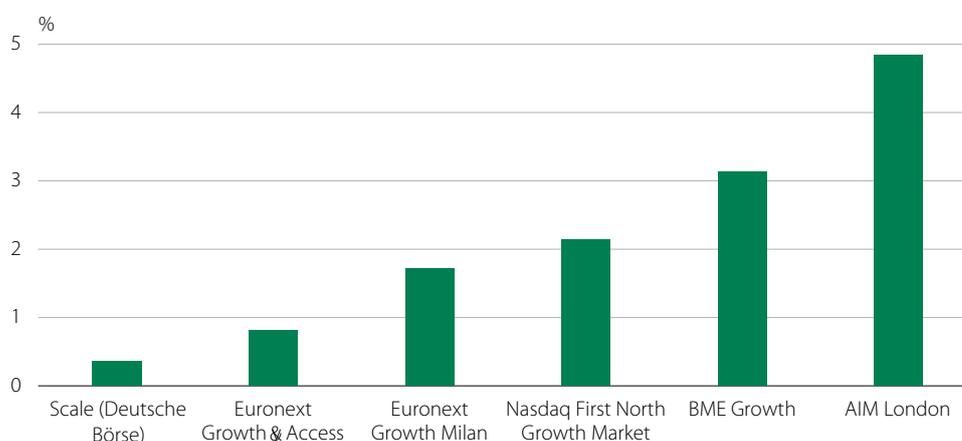
Nasdaq First North Growth Market

This market began operating in 2006 and currently operates in Sweden, Finland, Denmark and Iceland. It has a total of 568 listed companies with a combined market capitalisation of more than €47 billion. Of these companies, 79 belong to the segment called First North Premier,¹⁸ designed to prepare companies for a main market listing.

The following markets are also recognised as EU SME Growth Markets: the Swedish Spotlight Stock Market, which has almost 170 listed companies, the Nordic Growth Market,¹⁹ also Swedish, which has 18 listed companies, Poland's NewConnect, with 380 companies, the Progress Market²⁰ of the Zagreb Stock Exchange, which has three companies and the BaSE Market of the Bulgarian Stock Exchange, which has 168 companies.

Capitalisation of companies in alternative markets as percentage of capitalisation of regulated markets

FIGURE 1



Source: Compiled by the author based on data provided by the stock exchanges.

18 This segment has more demanding accounting and reporting requirements than the standards imposed by the market.

19 Owned by the Stuttgart Stock Exchange.

20 The Progress Market operates under the format of a multilateral trading system in Croatia and Slovenia under a cooperation agreement between the Zagreb and Ljubljana stock exchanges, although it is administered by the Zagreb stock exchange.

3 The Spanish case: from the Alternative Stock Market (MAB) to BME Growth

BME Growth is Bolsas y Mercados Españoles' (BME's) market for small-cap companies (SMEs). It is designed to be a platform allowing SMEs to access the capital markets to promote their growth and even, if they reach a significant size, seek listing on the traditional stock exchanges.

BME Growth has its origin in the Alternative Stock Market (MAB), which was created in March 2008.²¹ It currently has 132 registered companies²² with a combined market capitalisation of close to €20 billion.²³ The market is intended for companies from any sector, although currently a large part of the listed companies correspond to the technology, health, biotechnology, telecommunications, engineering and renewable energy sectors. Also, since the end of 2013²⁴ it has had a specific segment for publicly traded real estate investment companies (SOCIMIs).²⁵ Currently all the listed companies are Spanish, except for one, domiciled in Bulgaria, but the market is open to any company regardless of its origin.

The market's regulation,²⁶ structure and costs are adapted to the size of SMEs, notably including the requirement for a registered adviser to help the company with the pre- and post-listing process (see Exhibit 2).

In its legal form the market is part of BME MTF Equity²⁷ as a segment for growth companies, and is supervised by the CNMV.

21 The MAB began its operations in July 2009.

22 The first companies registered in this market in 2009 were Zinkia Entertainment and Imaginarium.

23 Data at the end of August 2022.

24 The first two companies incorporated in this segment were Entrecampos Cuatro and Promorent.

25 SOCIMIs are the Spanish version of real estate investment trusts (REITs) existing in other countries. They are regulated by Law 11/2009, of 26 October, as amended by Law 16/2012, of 27 December, regulating listed real estate investment companies (known as the SOCIMI Law) and they are characterised by having a tax regime that exempts them from paying corporate tax (the shareholders pay tax on distributed dividends) and by having a 95% discount on property transfer tax and documented legal acts. In return, they are required to distribute as dividends at least 80% of the profits obtained from rental income and 50% of those generated from the sale of assets, as well as 100% of the profits from their participation in other SOCIMIs. Their activities focus on the promotion, refurbishment and transaction of leased real estate, holdings in other SOCIMIs and the performance of ancillary real estate activities. They must have a minimum capital of €5 million, whether in monetary or non-monetary contribution, and be listed on a Spanish regulated market or MTF such as BME Growth or on that of any other EU or EEA Member State. This type of company allows investors to diversify their investment and access a real estate portfolio with greater ease and liquidity than in the case of direct investment in real estate assets.

26 Among other regulations, companies listed on BME Growth can choose to present their financial statements under IFRS or the General Accounting Plan (PGC) and Royal Decree 1159/2010.

27 Since the market is not considered an official regulated market, issuers do not have an obligation of transparency or of registering issue prospectuses (unless the securities are intended for the public), but are required to submit an "informative document of incorporation to the market" (DIM) instead.

3.1 Main characteristics of BME Growth

Since September 2020 this market has been considered as an SME Growth Market, after receiving recognition from the CNMV in accordance with the EU Regulation.²⁸

The BME Growth segment includes two broad categories of companies:

- **Growth companies:** made up of small-cap companies seeking to grow and expand.
- **SOCIMIs:** made up of listed real estate investment companies intended to own urban assets for lease or shares or holdings in the capital of other SOCIMIs or similar foreign entities.²⁹

In addition to the companies and investors present in this market, it has other participants that facilitate its operation and contribute to providing it with liquidity, notably including the registered advisers referred to above. These advisers assess the advisability of entering the market, while accompanying the process by advising companies on the fulfilment of their future obligations, as well as on the preparation of financial information and market reporting obligations.

Equally notable is the requirement for a liquidity provider, whose mission is to favour the liquidity of the transactions of the various securities traded on the market and to achieve sufficient trading frequency. The liquidity provider of a security undertakes to maintain bid and ask positions on it during the session for a minimum effective amount, which makes it easier for investors to have a certain counterparty with which to close operations. Companies listed on BME Growth must designate a liquidity provider who is in turn a member of the market and whose main purpose is to maintain bid and ask positions for an effective minimum amount throughout each session, although it will act independently of the company, which will not be able to give instructions on the transactions executed in the market.³⁰

Also, since mid-2017 this market has had two indices³¹ reflecting its performance: the Ibex Growth Market 15, which includes the 15 most liquid stocks in the BME Growth segment, and the Ibex Growth Market All Share,³² which is broader in nature.

28 The CNMV granted it this category after verifying compliance with all the relevant EU requirements as established in Article 33 of MiFID II.

29 Commonly referred to as REITs.

30 In the field of liquidity management, it is also worth mentioning the CNMV Circular amending the rules on liquidity contracts, limiting the liquidity provider's presence and manner of acting so as to avoid market abuse and adapting them MTFs such as BME Growth.

31 The indices for this market were launched by BME on 1 June 2017.

32 This index is made up of securities listed on the BME Growth market weighted by capitalisation, with the exception of companies whose corporate object is the holding of urban assets for lease or shares or other equity holdings in other SOCIMIs.

Companies wishing to be listed on BME Growth must have a registered adviser to help them in the preparation of the documentation and compliance with the requirements of this market, as well as in the preparation of understandable and appropriate information for investors.

The registered adviser,¹ a member of a group of specialised professionals under the format of legal persons registered in the register of registered advisers, is responsible for assessing the suitability of a company to enter the market and advising it on the fulfilment of the obligations that may be required, as well as in the preparation and presentation of the financial and business information required to participate in said market. These are thus advisers specialised in growing companies and they are answerable to the market for assisting and advising companies on fulfilling the obligations and responsibilities established by market regulations. For this purpose, the adviser must have proven, sufficient and appropriate experience in advising companies with regard to their actions in the securities markets.

The main functions of registered advisers are as follows:

- Assisting companies in complying with the incorporation requirements, mainly collaborating in the preparation of the Informative Document (DIM) for incorporation into BME Growth.
- Reviewing the information presented by the company at the time of its incorporation to the market and later helping it to comply with the recurring or specific reporting requirements of the market.
- Being available to the market to answer their questions about the issuer, activity, compliance, etc.

What information must be provided to the market?

- Periodic semi-annual and annual information:
 - i) Semi-annual information: it must contain a semi-annual financial report equivalent to interim statements of the company that must be, at least, subjected to a limited review by the auditor and contain a reference to the important events that occurred during the half-year. This information must be submitted within four months of the end of the first half of each financial year.
 - ii) Annual information: it must contain the annual accounts audited within four months of the accounts for the financial year being closed, as well as the corresponding Management Report.
- Privileged information and other relevant information in accordance with Article 228.2 of the Securities Market Law.

– Other information:

- i) Significant holdings.
- ii) Transactions carried out by administrators and directors.
- iii) Shareholder pacts.
- iv) Information on corporate transactions.
- v) Forecasts or estimates of the company's development.
- vi) In the case of public limited companies for investment in the real estate market (SOCIMIs), there is an obligation to publish an annual valuation² of the real estate assets.

Who can be registered advisers?

Companies must have a registered adviser at all times, who must necessarily be a legal entity and must meet the following requirements:³

- i) Accredited experience advising companies (at least in the last three years), particularly in relation to the securities market.
- ii) Resources: it must have qualified and experienced personnel in stock market financing (at least two responsible persons).
- iii) Independence and prevention of possible conflicts of interest.

1 Law 5/2015, of 27 April, on the Promotion of Business Financing created the "registered adviser", establishing that it must be appointed by the issuer and its mission is to ensure that the issuer complies correctly, both formally and substantively, with its reporting obligations to the governing body and to investors.

2 The appraisal of the assets must be in accordance with the ECO regulations or the RICS appraisal.

3 According to BME Circular 4/2020: "Registered Adviser in the BME Growth trading segment of BME MTF Equity".

3.2 Market structure

Although the securities traded on this market have liquidity providers that favour transactions and price formation, the specific characteristics of the small-size companies that it comprises determine the trading methods. There are two kinds of trading:

- **General trading (continuous market):** under the format of a continuous order-driven market, with an opening auction at the beginning of the session and a closing auction at the end of it. The Market Supervision Department will determine which securities must be traded under the general trading format based on their liquidity,³³ and trading will be in accordance with the general rules of the Stock Exchange Interconnection System.
- **Fixing:** the securities listed under this format are at auction for the entire session, with two periods for assigning the securities (opening and closing auctions).³⁴ This format is used for relatively illiquid securities, since it favours price formation and the reduction of volatility.

The information on this market is broadcast in real time on its screens, automatically reflecting the trading information.

Trading volume on BME Growth (2013-2021)

FIGURE 2



Source: CNMV. Annual data in millions of euros.

33 The decision about the type of trading (general or fixing) applied to each security will be taken every six months, except in the cases of new incorporations and cases in which market circumstances advise a revision.

34 The first (opening) auction takes place from the beginning of the session at 08:30 until 12:00, and the second (closing) auction runs from the end of the allocation of the first auction until 4:00 p.m.

Although trading in this market has quadrupled in recent years (see Figure 2), the truth is that for now the liquidity of many of the securities listed on the market is still low.^{35, 36} Thus, only 27 of the 52 growth companies are listed under the continuous market format, while the rest are subject to fixing, a circumstance that extends widely to the SOCIMI segment, in which only one company of the 80 admitted trades under the former format.

3.3 Joining BME Growth

The regulation applicable to BME Growth with regard to both its issuers and the manager of the infrastructure itself is much simpler than that of a regulated market. This fact explains much of the attractiveness of these alternative markets, as mentioned above. In this sense, it is worth highlighting some of the regimes that are not applied in these markets (and that differentiate them from regulated markets) such as, for example, the regulations on prospectuses, takeover bids³⁷ or transparency. To access the market, BME Growth issuers need an admission document, in accordance with the regulations of the market itself. In certain circumstances, they may need a CNMV prospectus, although they may benefit from a simplified prospectus for this type of issuer. In the case of other regulations, such as MiFID, specific provisions are established for MTFs. However, the Market Abuse Regulation applies to issuers on an MTF.

It is important to point out that the trading venue itself establishes particular obligations through its regulations. In this sense, BME Growth Circular 1/2020, partially amended by Circular 2/2022, includes the requirements, documentation and procedures applicable to the incorporation of companies into the market, which are based on different aspects:

- **Of a formal nature:**
 - i) Companies must be public limited companies and must have a capitalisation of less than €1 billion.³⁸
 - ii) Its share capital must be fully subscribed and paid up.
 - iii) The shares must be represented by book entries, without legal or statutory restrictions that prevent their trading and transferability.

35 Trading in this market barely reached 0.3% of the value of all equities traded on BME in 2021. Of the total traded in 2021, more than 85% corresponded to growth companies.

36 Market turnover in the growth companies segment, measured as the ratio of trading to capitalisation, was 0.19x in 2021 versus 1.1x on the regulated market.

37 Although the Royal Decree on takeover bids does not apply to them, in cases of exclusion an offer process is proposed.

38 In the case of the incorporation of shares issued by SOCIMIs, a capitalisation greater than €1 billion will be admitted provided that evidence is provided of meeting the requirements determining the applicability of the exemption according to Article 77.3 of the Consolidated text of the Securities Market Law and its implementing regulations.

- iv) The company must have begun to market products or services or have carried out relevant actions directly related to the marketing activity, and be obtaining significant income as a result of this prior to entering the market.
- v) In cases where the company whose shares are going to be listed on the market is less than two years old, the shareholders, directors and main managers may not sell shares or carry out transactions equivalent to the sale of shares within one year of the company's being admitted to the market.

– **Documentation:**

- i) The company must prepare an Information Document for Incorporation into the Market (DIM) or prepare a prospectus in accordance with the EU Growth Prospectus.
- ii) The company must carry out financial and legal due diligence.

– **Accounting standards:**

The audited financial information may be presented in accordance with the IFRS format or the national accounting standard if the listed company belongs to an EU Member State. In the event that the company does not belong to an EU Member State, the information must be presented in accordance with the IFRS or US GAAP formats.

– **Corporate governance:**

- i) Guarantee the transparency of the board of directors in the face of potential situations of conflict of interest, publishing said conflicts and actions if they exist.
- ii) The company must have an audit committee.

– **Specialists:**

The company must appoint a registered adviser and sign a liquidity contract with a financial entity that provides liquidity.

– **Free float:**

- i) The free float must be at least 25% of the company's capital or the sum of the total number of minority shareholders holding capital of €2 million.
- ii) Minority shareholders (< 5%) without links to the majority shareholders.
- iii) Significant holdings must be reported to the issuer when they exceed 5% of the share capital or fall below that percentage or multiples thereof, including new shareholders.

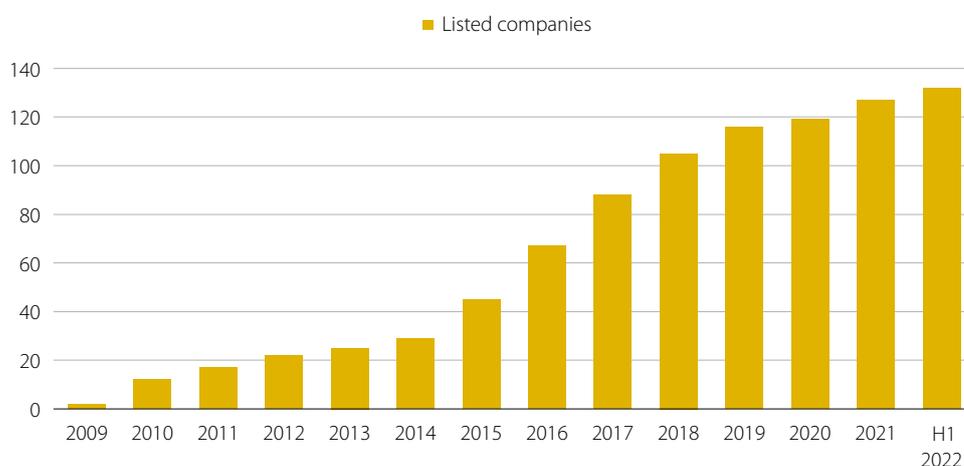
3.4 Evolution of BME Growth since the creation in 2008 of the Alternative Stock Market (MAB)

Since the creation in 2008 of the former Alternative Stock Market, more than 170 companies³⁹ from different sectors and activities have joined it. The market has gone through good times and bad. Thus, the MAB experienced a stage of notable expansion from its creation until 2015, when some of the listed companies managed to make the leap to the regulated market (this was the case of MásMóvil, Grenenergy Renovables, Artificial Intelligence Structures and Atrys Health). However, the difficulties⁴⁰ of some of the listed companies generated uncertainty among investors and caused ups and downs in the market that hampered its growth and consolidation process. In this context of some success stories, but also of negative experiences, the creation of a specific segment for SOCIMIs from the end of 2013 contributed to giving the market some stability in a scenario of growth in the real estate market and the operators of the sector (see Figure 3).

The transformation of MAB into BME Growth at the end of 2020, after receiving recognition as an SME Growth Market in accordance with the EU Regulation, gave renewed impetus to the market, which is experiencing a new period of expansion favoured by the recovery of investor confidence and interest in new companies and sectors, to which is added the need for companies, especially those in the most innovative and technological sectors, to have new sources of financing to help finance their growth plans.

Companies listed on BME Growth (2009-H1 2022)

FIGURE 3



Source: BME Annual data in number of companies.

39 From the launch of the MAB in 2009 until the first half of 2022, 74 growth companies and 98 REITs had joined this market.

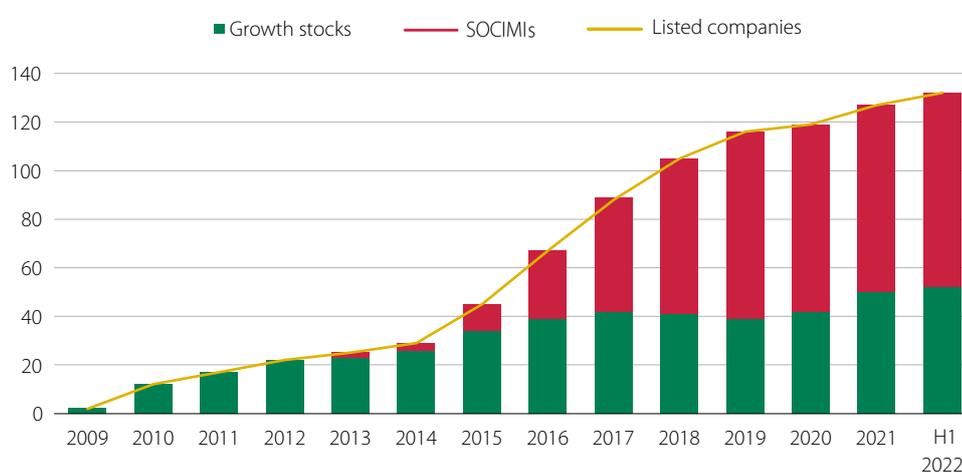
40 Such as the fraud at Gowex, the disappearance of Bodaclik and the difficulties of Zinkia, some of the most significant companies in the early years of the market.

3.4.1 Evolution of the number of new companies listed by type

As noted above, the market includes two broad categories of companies: growth companies and SOCIMIs. The former have been part of this market since its launch in 2009 and grew progressively until 2013 when the latter joined. From that moment on it has been the SOCIMIs that have led the growth of the market, under the tax advantages⁴¹ and because Law 16/2012 requires them to be listed on a Spanish or other EU regulated market or MTF in the two years following the approval of their status as SOCIMIs, so that in a few years the number of SOCIMIs listed exceeded that of growth companies. Subsequently, from 2015, as already indicated, the financial difficulties of some listed growth companies caused a decline in interest on the part of both investors and companies, so the REITs continued to lead the expansion. Thus, at the end of the last decade the number of SOCIMIs listed was practically double that of growth companies (see Figure 4).

Companies listed on BME Growth by type (2009-H1 2022)

FIGURE 4



Source: BME Annual data in number of companies.

In the most recent period, the introduction of regulatory improvements to favour market transparency, as well as the increasing presence of technology and renewable energy companies seeking financing to boost their growth, have once again aroused interest in this market on the part of both issuers and investors in search of investment opportunities in companies in growth sectors beyond the traditional ones, which are less represented on the major Spanish stock markets. On the other hand, despite the favourable trends in the real estate market, the number of new SOCIMIs entering the market has slowed, since most of the companies that could join it have already done so (see Figure 5).

41 Subject to a series of requirements, SOCIMIs benefit from a tax regime that exempts them from paying corporate tax, as well as giving them a 95% reduction on the tax on capital transfers and documented legal acts.

Companies admitted to BME Growth by type (2009-H1 2022)

FIGURE 5



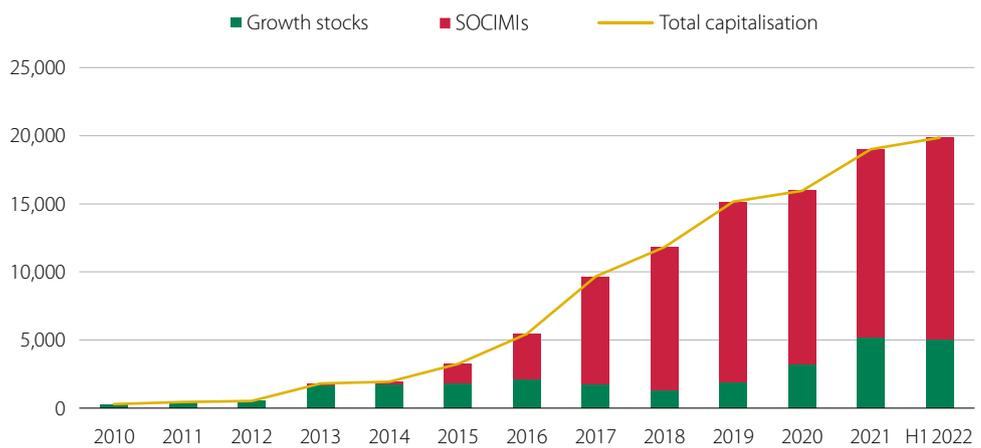
Source: BME Annual data on the number of companies.

3.4.2 Evolution of market capitalisation

Although the aggregate data on the market capitalisation of this market show continuous growth since its creation to around €20 billion (see Figure 6), if the companies are considered individually or by type of company, periods of growth and notable decline in the value of these companies are observed. In other words, the growth in capitalisation in aggregate terms has largely been a consequence, of the successive incorporation of new companies into the market, especially SOCIMIs from 2013 on, as well as the various capital increases carried out by companies. The revaluation of company prices has played a less significant role.

Capitalisation of BME Growth by type of company (2010-H1 2022)

FIGURE 6



Source: BME and CNMV. Annual data in millions of euros.

As can be seen in the figure above, the rapid growth in the number of SOCIMIs listed on this market has meant that in 2016 – just three years after they joined it – their market value already far exceeded that of growth companies. In the following years, the capitalisation of the latter fell back to barely 15% of the value of the

former. Only the progressive incorporation of new growth companies into the market from 2020 and the revaluation of their share prices, together with the slow-down in the admittance of new SOCIMIs, allowed this trend to be reversed and the weight of their capitalisation with respect to the total to reach around a quarter of the total market value, where it remains today.⁴²

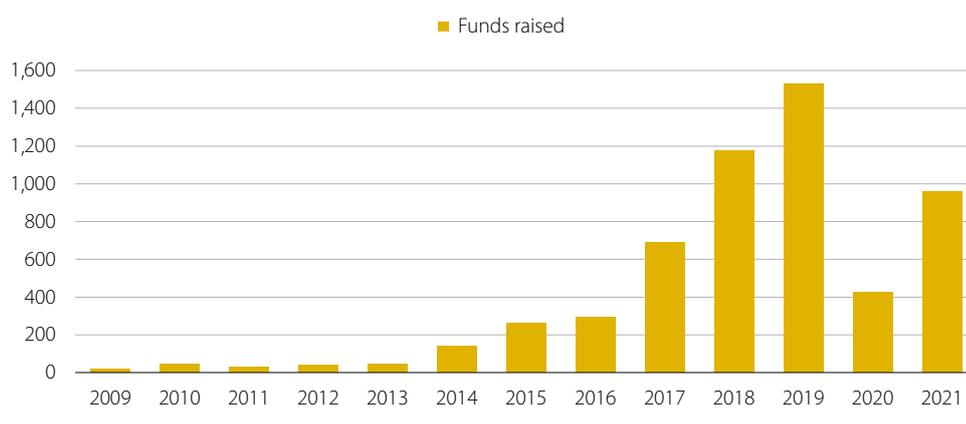
3.4.3 Capital resources raised

Companies have used this market on a recurring basis to raise capital, which since its launch has been valued at around €6 billion. The resources basically come from two sources: funds raised upon admission to the market through public offerings for sale (OPV) and funds raised later in successive capital increases. Public offerings for sale are usually under the format of a public subscription offer (OPS) or, at least, have a section of this type, in which the issuers offer new shares as a way of gaining entry to the stock exchange. Therefore, they imply a capital increase and a way of capturing new resources for the company. In the case of BME Growth, the subsequent capital increases are usually significant in number, although not so much with respect to the capital raised per transaction, since the companies use them on a recurring basis to finance their expansion.

The amount of resources raised grew progressively from when the market was created (see Figure 7), reaching its highest levels between 2017 and 2019, coinciding with the incorporation of a large number of REITs into the market, which attracted much of the financing. Subsequently, the pace at which resources are captured has moderated, and has been redistributed in a more balanced way between growth companies and SOCIMIs.

Funds raised on BME Growth (2009-2021)

FIGURE 7



Source: CNMV and BME. Annual data in millions of euros.

42 The capitalisation of the growth companies stood at around €5 billion at the end of August 2022, compared with almost €15 billion for the SOCIMIs.

3.4.4 Companies excluded from the market

Although a limited number of companies have successfully gained access to the regulated market from BME Growth as a reward for their growth,⁴³ a notable group of companies has had difficulties (problems with the audit, reformulation of accounts, insolvency proceedings, etc.), which has caused their suspension and exit from the market. Thus, most of the companies that have left the market in recent years (see Figure 8) have done so as a result of financial problems or insolvency proceedings, and only a small number have had their origin in corporate transactions or exclusion from entering the continuous market. These trends are similar to those observed in other alternative markets, such as those based in the United Kingdom or France.

Companies excluded from BME Growth (2014-H1 2022)

FIGURE 8



Source: CNMV and BME. Annual data in millions of euros.

Although the information available is limited, the results obtained by the academic literature seem to show that the long-term performance of companies that go public in this type of alternative markets is below that obtained by those that do so on the major markets (see, for example, Vismara, Paleari and Ritter, 2012). In addition, they point out that companies listed on alternative markets are more likely to end up being excluded from the market or be acquired by another company, although they point out that these markets have been successful in providing small companies with the opportunity to raise capital.

43 MásMóvil did so in 2017, after joining the MAB in 2012, as did Ibercom; Greenergy Renovables in 2019, after joining the market in 2015, and Atrys Health in 2022, after joining in 2016. Currently, the renewable energy company EidF is apparently preparing to progress to the continuous market, having exceeded €1 billion in capitalisation.

3.5 Performance and volatility of BME Growth

The determinants of the evolution of companies in both traditional and alternative markets are many and varied. There are similar conditioning factors such as those of a macroeconomic nature and, to a large extent, many of a microeconomic nature, but there is a third group of differential elements that have to do with the characteristics of the markets, basically with the requirements for admittance to listing, the trading model and the lower demands for dissemination of information.

This section describes the evolution of the return and volatility of the two representative performance indices of BME Growth, the Ibex Growth Market 15 and the Ibex Growth Market All Share,⁴⁴ from their launch in June 2017 to the present, establishing a comparison with the index of the main companies listed on the continuous market, the Ibex 35. This comparison does not allow long-term conclusions to be drawn regarding the evolution of companies in both markets because it is a short period of time, but it does provide some interesting evidence.

Table 1 presents the parameters of the evolution of the three indices in terms of return and volatility for the period between the second half of 2017 and the first half of 2022. The results show that the performance of the alternative markets has been higher in almost all the periods analysed⁴⁵ (see Figure 9), although there are differences between the index of the 15 most liquid securities and the broader one. The former shows greater volatility in its returns and greater long-term profitability, while the latter is more stable. Likewise, in terms of volatility, the Ibex Growth Market 15 index shows a relatively similar behaviour to that of the Ibex 35, while the Ibex Growth Market index⁴⁶ again shows a more stable behaviour and defensive character. The Spanish alternative market has a low correlation with the Ibex 35 index, as reflected by the betas of 0.31 and 0.43 of its two representative indices, which makes it an excellent asset to take into account for portfolio management due to its defensive nature, which facilitates diversification.

44 The first includes the 15 most liquid securities of BME Growth weighted by capitalisation, while the second, of a broader nature, is made up of all the securities listed in this segment, except for SOCIMIs.

45 Part of this excess return could be attributed to the lower shareholder remuneration of the companies that are part of BME Growth via dividend distribution, which would have to be compensated in the future through a greater revaluation of share prices. These companies often reinvest much of their profits instead of distributing them to their shareholders as dividends, allowing them to grow and create greater value in the future.

46 The volatility of the BME Growth indices could be biased downwards due to the reduced liquidity of the securities that form part of them, especially the Ibex Growth Market All Share, which includes the least liquid securities in this market.

Index behaviour parameters

TABLE 1

	Ibex 35	Ibex Growth Market All Share	Ibex Growth Market 15
Profitability H2 2017	-3.8	0.7	0.9
Volatility H2 2017	13.14	10.22	15.06
Profitability 2018	-15.0	-13.9	-16.8
Volatility 2018	12.94	13.87	18.28
Profitability 2019	11.8	37.7	65.4
Volatility 2019	12.51	11.66	16.74
Profitability 2020	-15.5	39.6	54.1
Volatility 2020	28.67	19.66	27.66
Profitability 2021	7.9	10.6	5.2
Volatility 2021	16.00	10.87	12.56
Profitability H1 2022	-7.1	-1.6	-4.1
Volatility H1 2022	21.15	13.95	18.76
Profitability H2 2017-H1 2022	-22.5	81.2	115.5
Volatility H2 2017-H1 2022	17.46	13.63	18.44
Beta of Ibex 35		0.31	0.43

Source: Bloomberg and CNMV. Performance and volatility data in percentage.

Evolution of the BME Growth and Ibex 35 indices (H2 2017-H1 2022)

FIGURE 9



Source: Bloomberg and CNMV.

4 Characteristics of companies listed on BME Growth

In order to better understand the particularities of the market and the profile of listed companies, this section presents the characteristics of the companies that were part of it at the end of August 2022. For this purpose, quantitative and qualitative information has been used on the 52 growth companies and 80 SOCIMIs listed on the market (see Annex I) available on the market's website and those of the companies themselves, as well as in the "DIM" information documents for joining the securities market and in the annual financial and audit reports of the different companies.

Given that the market includes two categories of companies – growth companies and SOCIMIs – with very different characteristics and particularities, its analysis will be carried out separately for each type of company, taking into account different specific variables of these: size, capitalisation, age, for how long they have been listed, time from creation to being listed on the market, sector of activity, international activity, registered office and trading format, as well as type of portfolio assets in the case of SOCIMIs.

4.1 Size

The analysis of the size of the company has been carried out taking into account two variables: the number of employees and their annual turnover, according to the definition of SME contained in Annex I of Commission Regulation (EU) No. 651/2014, of 17 June 2014, which in turn distinguishes between three company sizes:

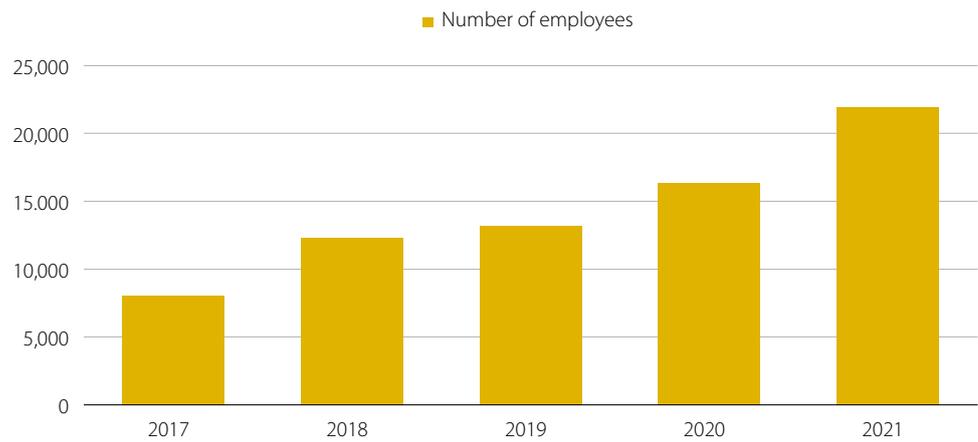
- i) Medium: fewer than 250 employees, annual turnover not exceeding €50 million and/or balance sheet total not exceeding €43 million.
- ii) Small: fewer than 50 employees, annual turnover and/or balance sheet total not exceeding €10 million.
- iii) Micro: fewer than 10 employees, annual turnover and/or balance sheet total not exceeding €2 million.

Growth companies

Considering the number of employees, the data shows that the aggregate number of direct employees of this type of company has grown steadily in recent years, both due to the incorporation of new companies to the market and due to the growth of the companies themselves. Thus, at the end of 2021 they reached almost 22,000 direct jobs, almost triple the number just four years earlier (see Figure 10). Table 2 and Figure 11 show the distribution of company size in individual terms, reflecting their specific characteristics.

Direct employment in BME Growth companies (2017-2021)

FIGURE 10



Source: BME Annual data in number of employees.

Classification of companies based on the number of employees

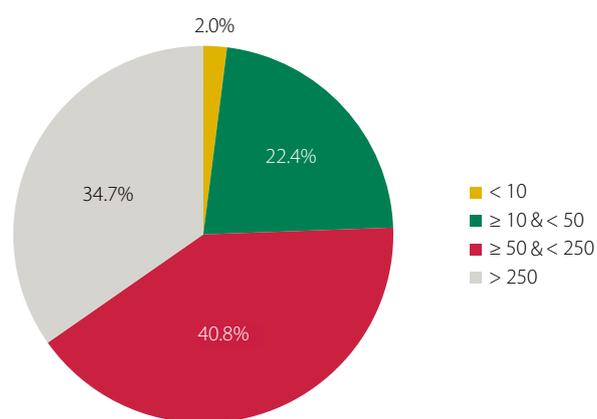
TABLE 2

Average No. of employees	No. of companies	Percentage
< 10	1	2.0
≥ 10 & < 50	11	22.4
≥ 50 & < 250	20	40.8
> 250	17	34.7
Total	49	100.0

Source: CNMV. Note: Data is not available for three companies. 2021 data.

Classification of BME Growth companies by number of employees

FIGURE 11



Source: CNMV. Note: Data is not available for three companies.

The results show that there are three well-defined groups of companies in the market. Just over a fifth of the companies listed (11) are small businesses,⁴⁷ more than 40% of companies (20) are medium-sized companies and almost 35% (17) would fall outside the definition established by EU regulations to be considered SMEs.

Considering their annual turnover, as shown in Table 3 and Figure 12, close to 30% of the companies (14) can be considered medium-sized and just over a third (18) would fall into the category of small, although 7 of the latter could be considered micro-enterprises as they do not reach a minimum annual turnover of €2 million. Likewise, 17 companies (34.7%) would again be above the definition established to be considered SMEs. On the other hand, in aggregate terms, their turnover has more than doubled in the last four years, to more than €3.6 billion (see Figure 13).

Classification of companies based on annual turnover

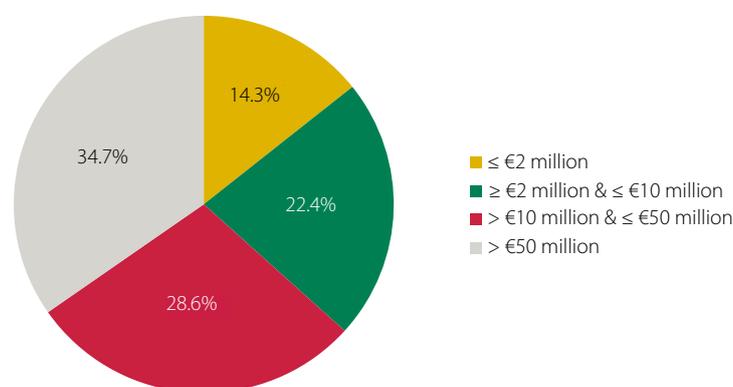
TABLE 3

Annual turnover (millions of euros)	No. of companies	Percentage
≤ €2 million	7	14.3
≥ €2 million & ≤ €10 million	11	22.4
> €10 million & ≤ €50 million	14	28.6
> €50 million	17	34.7
Total	49	100.0

Source: CNMV. Note: Data is not available for three companies. 2021 data.

Classification of BME Growth companies by annual turnover

FIGURE 12



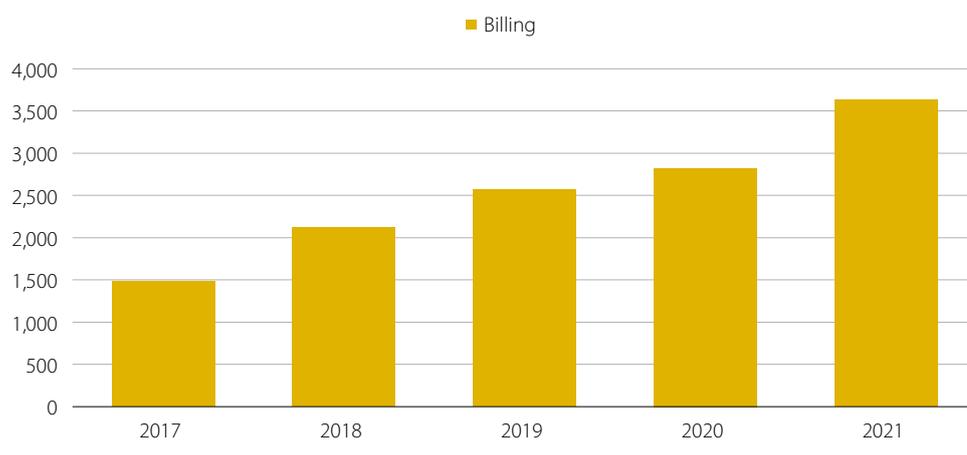
Source: CNMV. Note: Data is not available for three companies.

47 There is one company, Domo Activos, which would fall into the category of microenterprise as it has fewer than 10 employees, but its management is outsourced to a management company.

Therefore, based on the number of employees and turnover, it can be concluded that barely a third of the companies present in the market can be considered small and that the remaining two thirds are medium and large, which is reasonable since, despite the facilities of BME Growth for listing, a certain size and a significant level of professionalisation are necessary in companies to access the market satisfactorily.

Aggregate turnover in BME Growth (2017-2021)

FIGURE 13



Source: BME Annual data in millions of euros.

SOCIMIs

In the case of SOCIMIs, the data shows that the number of employees is not a relevant variable, because most of them have no employees⁴⁸ or they have a very small number as they have outsourced the management to management companies.

With regard to their annual turnover, as shown in Table 4, there is a wide dispersion in the income volumes of the different REITs depending on the size of their balance sheet, the amount of assets on it and the type of assets. Establishing a subjective criterion that considers companies with a turnover of less than €5 million small, those whose revenues are between €5 and €25 million medium, and those with revenues of between €25 million and €75 million large and the rest very large, it should be noted that almost two thirds of all SOCIMIs can be considered small; one fifth of the total, medium-sized, and only a small number of companies (around 10%) can be called large or very large.

⁴⁸ Only 12 of the 80 SOCIMIs currently in existence have 10 or more employees.

SOCIMI classification based on annual revenues

TABLE 4

Annual revenues (millions of euros)	No. of SOCIMIs	Percentage
≤ €5 million	52	65.0
≥ €5 million & ≤ €25 million	20	25.0
> €25 million & ≤ €75 million	5	6.2
> €75 million	3	3.7
Total	80	100.0

Source: CNMV.

4.2 Capitalisation

The analysis of the capitalisation of the companies also helps, to a certain extent, to give an idea of their size, although it is true that in the case of companies in the technology sectors or those with high growth prospects, their market value does not depend so much on current size or turnover as on the prospects of these variables in the future.

Growth companies

Table 5 and Figure 14 show the distribution of companies in terms of capitalisation and show that more than 90% of these have a capitalisation of less than €200 million, as defined by MiFID II for SMEs. Approximately a third of the companies in the market have a capitalisation of less than €25 million – three companies even have less than €5 million –, slightly more than another third have capitalisations of between €25 million and €100 million and only the rest exceed this figure, although there are two companies whose valuations are close to €800 million and €1.1 billion,⁴⁹ so based on this variable alone they could join the continuous market. In fact, it so happens that many companies currently listed on the continuous market⁵⁰ show capitalisation levels lower than those reached by some of the companies listed on BME Growth. In this sense, it should be noted that in other markets such as the London Stock Exchange, the transfer of securities from the alternative market to the main market and vice versa is common.

49 At the end of August 2022, Proeduca Altus and EiDF (Energy, Innovation and Photovoltaic Development) had market capitalisations of €799 million and €1.10 billion respectively.

50 On the same date of the estimates (end of August 2022), there were more than 30 companies listed on the continuous market that had a capitalisation of less than €200 million.

Distribution of growth companies by market capitalisation

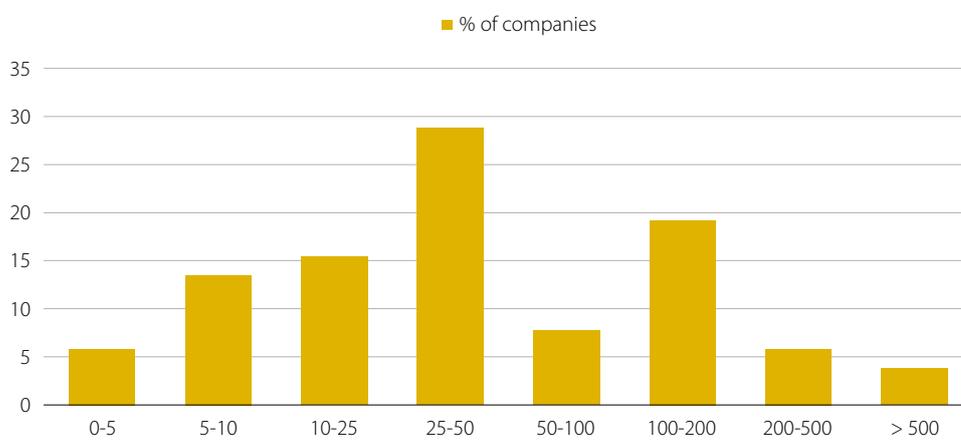
TABLE 5

Market value / capitalisation (millions of euros)	No. of companies	Percentage
≤ €5 million	3	5.8
≥ €5 million & ≤ €10 million	7	13.5
> €10 million & ≤ €25 million	8	15.4
> €25 million & ≤ €50 million	15	28.8
> €50 million & ≤ €100 million	4	7.7
> €100 million & ≤ €200 million	10	19.2
> €200 million & ≤ €500 million	3	5.8
> €500 million	2	3.8
Total	52	100.0

Source: CNMV. Note: market capitalisation at the end of August 2022.

Distribution of companies by capitalisation in BME Growth

FIGURE 14



Source: CNMV. Data on the size of the companies expressed in capitalisation in millions of euros.

SOCIMIs

In the case of SOCIMIs, as shown in Table 6 and Figure 15, it can be seen that more than 60% have a capitalisation of less than €100 million, which reflects a certain fragmentation of the sector. In fact, almost a quarter of the companies have a capitalisation of less than €25 million, which shows the attractiveness of this market for companies that own real estate assets that, under the umbrella of a SOCIMI, become an attractive vehicle for any investor from the fiscal point of view. Likewise, the results reflect a certain dispersion in the size of the companies, given that only 10 of these (less than 15%) can be considered large or very large, as they have a capitalisation of more than €500 million (two of them have capitalisations of more than €1 billion).⁵¹

51 At the end of August 2022, GMP Property, SOCIMI, and General de Galerías Comerciales, SOCIMI, had capitalisations of €1,071 and €3,666 million.

Distribution of SOCIMs by market capitalisation

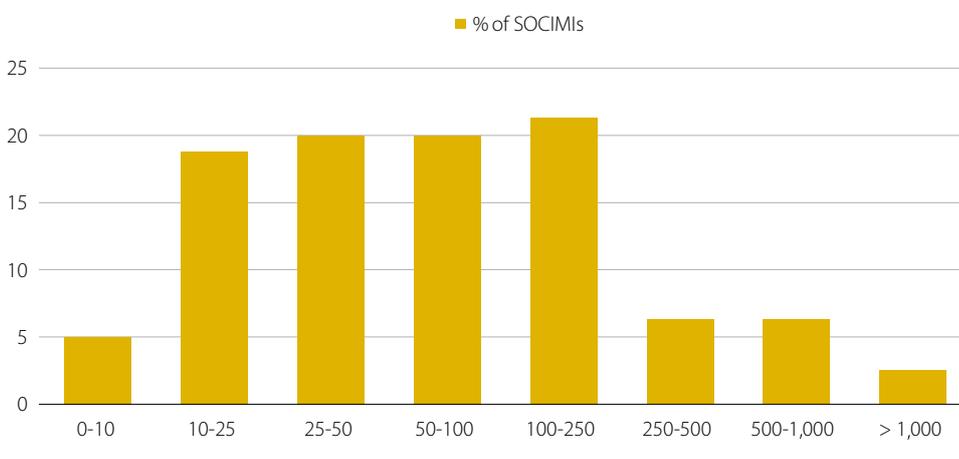
TABLE 6

Market value / capitalisation (millions of euros)	No. of companies	Percentage
≤ €10 million	4	5.0
≥ €10 million & ≤ €25 million	15	18.8
> €25 million & ≤ €50 million	16	20.0
> €50 million & ≤ €100 million	16	20.0
> €100 million & ≤ €250 million	17	21.3
> €250 & ≤ €500 million	5	6.3
> €500 million & ≤ €1 billion	5	6.3
> €1 billion	2	2.5
Total	80	100.0

Source: CNMV. Note: market capitalisation at the end of August 2022.

Distribution of SOCIMs by capitalisation in BME Growth

FIGURE 15



Source: CNMV. Capitalisation data in millions of euros.

4.3 Age, time since first admitted and term until listing

The analysis of the age of the companies, and how long after their creation they were admitted to the market provides an idea of the type of companies that are incorporated into BME Growth. The youngest companies, less than 10 years old, are usually in the growth phase, so they need resources to finance their growth, while the more mature ones are usually in a consolidation phase. On the other hand older companies usually have other types of incentives to enter the market, such as providing liquidity to their former shareholders or expanding their investor base.

Growth companies

Table 7 classifies the companies according to their age since their creation, their age upon admission to BME Growth and how long they have been listed on it. The results show that around half of the companies present in the market are less than

15 years old, and there is even a small group of companies that have been created in the last 5 years. Likewise, around half of the companies enter the market when they are young, that is, in the first 10 years after their creation.

On the other hand, almost a fifth of the companies present in the market are over 25 years old (three of them are over 50 years old) and many entered the market when they were already at least this old. This shows that not only growing companies come to the market, as would be expected, but also consolidated companies seeking to take advantage of the opportunities it offers (obtain financing for new projects, improving their projection and brand image...) or to give liquidity to current shareholders.

Distribution of growth companies by years listed

TABLE 7

Period (years)	Age since creation.	Age upon admittance to BME G.	Years listed on BME G.
	No. of companies	No. of companies	No. of companies
≤ 3	2	6	21
≥ 3 & ≤ 5	3	8	8
> 5 & ≤ 10	7	10	15
> 10 & ≤ 15	14	13	8
> 15 & ≤ 25	16	9	-
> 25 & ≤ 50	7	4	-
> 50	3	2	-
Total	52	52	52

Source: CNMV. Note: Estimate dated end of August 2022.

SOCIMIs

Unlike in the case of growth companies, in SOCIMIs there is a numerical balance between young and mature companies. Table 8 shows how more than 75% of SOCIMIs are young companies created in the last decade under Law 11/2009, of 26 October, as amended by Law 16/2012, of 27 December, granting SOCIMIs certain tax advantages. In addition, most of these companies have accessed the market in recent years since it is an essential condition that companies are listed to benefit from the tax advantages granted by the regulation.

On the other hand, a small number of SOCIMIs (around 10%) are very mature companies (over 25 years old) that have historically engaged in this activity and have transformed their corporate structure to take advantage of the regulatory change.

Distribution of SOCIMIs by age

TABLE 8

Period (years)	Age since creation	Age upon admittance to BME G.	Years listed on BME G.
	No. of companies	No. of companies	No. of companies
≤ 3	4	48	20
≥ 3 & ≤ 5	13	10	35
> 5 & ≤ 10	46	10	25
> 10 & ≤ 15	3	-	-
> 15 & ≤ 25	6	6	-
> 25 & ≤ 50	7	5	-
> 50	1	1	-
Total	80	80	80

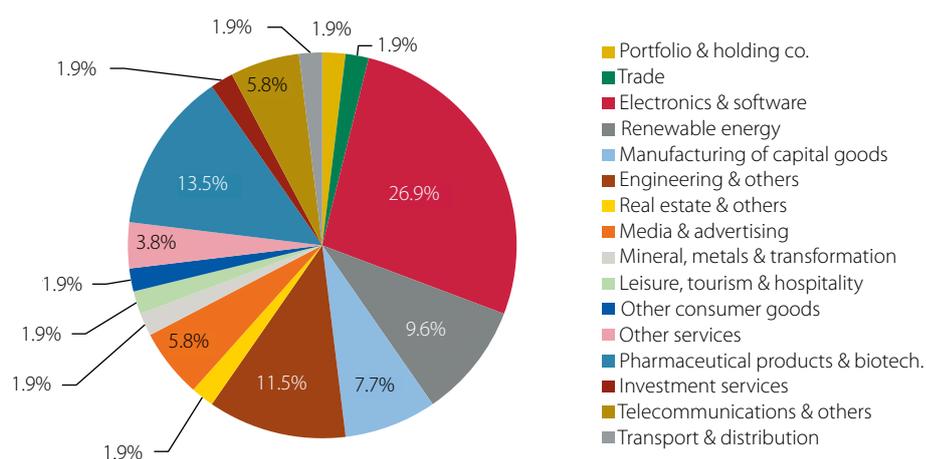
Source: CNMV. Estimate dated end of August 2022.

4.4 Sector and international activity

The analysis of the companies incorporated into the market by sector allows us to know what types of companies or sectors are most interested in taking advantage of the advantages offered by the market. Figure 16 shows the 16 economic sectors present in the market and reflects the most important by number of incorporated companies, The electronics and technology sector stands out, as do those of pharmaceuticals and biotechnology, engineering and renewable energies. All of them are highly attractive to investors due to their dynamism and growth prospects, but at the same time they are the ones that need the most resources to finance their expansion plans.

Sector classification of growth companies on BME Growth

FIGURE 16

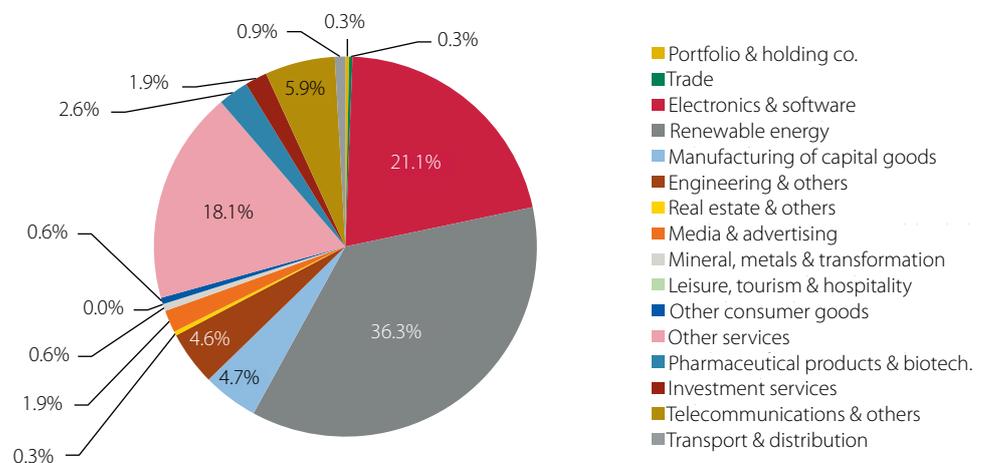


Source: CNMV.

Figure 17 shows the sector classification weighted by the capitalisation of each sector, which reveals significant changes with respect to the previous figure. In terms of value, the sector with the greatest weighting is renewable energies – it represents more than a third of the market value –, which highlights the good performance of the sector and the interest of investors in this type of company. Likewise, the weight of the electronics and software sectors, which are characterised by their dynamism, but also by the need for large investments in the form of capital, so going to the market can be an excellent alternative to finance its growth. On the other hand, the other services sector stands out for its market value due to the presence of Proeduca Altus, which has the interest of investors in companies in the training sector.⁵²

Weighted classification by capitalisation of BME Growth companies

FIGURE 17



Source: CNMV.

Regarding the international activity of the companies, almost 75% of the growth companies declare some type of international activity, presence and activities in Europe and Latin America being very significant for many of them, which again highlights their dynamism and the need to attract resources in order to grow. On the contrary, almost all SOCIMIs concentrate their activity in Spain and barely 10% of the total have some type of international activity or assets abroad.

⁵² In recent years, various corporate transactions have taken place in the training sector for significant amounts.

4.5 Other features

Regarding the registered office of the companies incorporated into the market, the Autonomous Regions of Madrid, Catalonia, Galicia and Valencia are, in that order, those that contribute most growth companies to the market,⁵³ while in the case of SOCIMIs, more than 80% are located in the Madrid Region.⁵⁴

Despite the fact that the introduction of tax incentives in principle favours investment in shares of SMEs, in Spain only three regions (Aragón, Galicia and Madrid) have established some type of tax benefit for investors who invest in shares of companies listed on BME Growth, while there are no tax incentives for issuers of securities (except SOCIMIs).

The geographical distribution of the registered office of the companies does not correspond to the contribution to the national GDP of each of the regions in which they are located, although it is true that the companies in the most dynamic sectors – such as technology, pharmacy or engineering – tend to be based in areas that concentrate the greatest economic activity in the country. It is worth highlighting the weight of companies located in Galicia, which is well above the proportion of the region's GDP in the country as a whole.

On the other hand, as far as the trading model is concerned, only 27 of the 52 expanding companies trade (and only one of the 80 SOCIMIs) trade under the general order-led continuous market model, while the rest do so on the basis of fixing, which highlights the narrowness of the secondary market. Despite the existence of liquidity providers, this circumstance is especially relevant because it affects the liquidity of the securities, which tends to be lower with the fixing format.

Finally, in the case of SOCIMIs, considering the type of portfolio assets, it should be noted that most of them are dedicated to renting out homes, offices and commercial premises, either with a specific or multi-asset approach. Also noteworthy is the growing number of SOCIMIs specialising in other assets such as logistics, hotels or residences for students and the elderly, as well as tourist apartments, with a focus on a single type of portfolio asset.

53 With 16, 9, 6 and 5 companies, respectively. Andalusia and the Basque Country each have four companies domiciled, while Asturias has two. Aragón, the Balearic Islands, Extremadura, the Canary Islands, Murcia and La Rioja each have a single company domiciled and the market has a single foreign company, located in Bulgaria.

54 Madrid has 67 domiciled SOCIMIs, Catalonia 12 and Valencia 1.

5 Conclusions

This article reviews the characteristics of alternative markets for growth companies, analysing in detail the particularities and evolution of the Spanish BME Growth market, as well as the companies that it comprises.

The main characteristic of these markets, which is extended to the Spanish market, is that it allows SMEs to access the securities markets and benefit from the advantages they offer. The main one is access to financing, but there are also others such as providing liquidity to the company's securities or increasing its visibility. The issue of access to financing through the markets is especially relevant for SMEs, because it opens up a range of possibilities for them to develop their growth and internationalisation projects, which makes them less dependent on bank credit and, therefore, less vulnerable in crisis situations. Access to markets allows companies to obtain resources in the form of capital and strengthen their balance sheets, but also in the form of debt, so the development of markets such as BME Growth or the MARF becomes a basic tool to facilitate specific financing for SMEs.

In order for smaller companies to be able to join the markets and benefit from their advantages, there needs to be more flexible regulation than that of traditional markets, which allows costs to be reduced and easier access processes to be established. In this sense we welcome the work carried out by the European Union with the introduction of the SME Growth Market, which simplifies the required regulation and in turn standardises the quality and transparency standards required to promote its development. Currently, most EU securities markets have an alternative market or, at least, have developed a specific segment of this type to promote the access of SMEs to their markets. The existence of these markets also significantly reduces the costs of companies that, having reached a second stage, consider progressing to the regulated market.

In the Spanish case, from the creation of the MAB in 2008 to the current BME Growth, the market has gone through different stages until reaching the period of expansion in which it finds itself today. There is no doubt that the market has become a relevant source of financing and resources for a significant number of companies, allowing them to carry out their growth projects. In this sense, the success of the market in attracting companies from the most dynamic and innovative sectors such as technology, pharmaceuticals or renewable energies, as well as SOCIMIs due to their tax advantages, is notable. It would be desirable that in the future there be representation of companies from other sectors such as tourism, services or industry, which have a relevant weight in the national economy.

Among the elements that present possibilities for improvement, liquidity stands out, since they are usually secondary markets, in general, quite narrow, a characteristic that discourages the interest of investors. There is also less monitoring of securities listed on these markets by analysts compared to securities on traditional

markets, which in turn reduces transparency⁵⁵ and therefore the demand for this type of securities.

As regards market prospects, it is clear that, taking into account the size of the Spanish economy and the high number of SMEs in it, there is still a long way left for it to develop further. This is demonstrated by the experience of other European alternative markets such as the United Kingdom or the Nordic countries, with the presence of a large number of SMEs from all kinds of sectors. To do this, it is necessary to promote the interest of market issuers, for example, by introducing appropriate tax incentives. The adoption of measures to reactivate investment, especially institutional investment, which is currently very low, could also be considered. Likewise, it is necessary to take into account the competition of other forms of financing in the market, such as private capital funds or private equity and even MARF itself, since they offer resources in the form of capital and debt and require less transparency, so they can provide resources at a lower cost.

55 With the aim of improving transparency and dissemination of information, the market manager's effort to promote independent analysis through its Lighthouse Analysis project is noteworthy.

Bibliographical references

Álvarez Otero, S. (2021). “Cómo hacer las bolsas más atractivas para las empresas”. *BME Growth*, January, pp. 1-27.

García, D. (2008). “El AIM británico y el Alternext francés como referencias para el MAB EE español”. *Análisis Financiero Internacional*, No. 132, pp. 21-29.

Cazorla Prieto, L.M. (2016). *Los mercados alternativos bursátiles como instrumentos de financiación empresarial en España*. Universidad Complutense, Working Document No. 2016/98.

Giralt Serra, A. and González Nieto-Márquez, J. (2015). “El mercado alternativo bursátil (MAB). Evolución y perspectivas”. *Papeles de Economía Española*, No. 146, pp. 78-89.

Palacín Sánchez, M.J. and Jara Corrales, M.E. (2012). “El mercado alternativo bursátil en España: una valoración”. *Cuadernos de Economía*, No. 35, pp. 77-88.

Palacín Sánchez, M.J. and Pérez López, C. (2016). “Los mercados alternativos bursátiles: una perspectiva regulatoria”. *Cuadernos de Economía*, No. 39, pp. 1-11.

Palacín Sánchez, M.J. and Pérez López, C. (2016). “La regulación de los mercados alternativos: ¿clave de éxito?”. *Revista de Bolsas y Mercados Españoles*, 1st quarter, pp. 2-13.

Vismara, S., Paleari, S. and Ritter, R. (2012). “Europe’s Second Markets for Small Companies”. *European Financial Management*, No. 18, Vol. 3, pp. 352-388.

Annex I Companies forming part of BME Growth

Growth companies

1NKEMIA	CLEVER GLOBAL
AETERNAL MENTIS	COMMCENTER
AGILE CONTENT	DOMO ACTIVOS
AKILES CORPORATION	ECG
ALQUIBER QUALITY	EiDF
ALTIA CONSULTORES	ELZINC (ASTURIANA DE LAMINADOS)
ARTECHE	ENDURANCE MOTIVE
AXON PARTNERS GROUP	ENERSIDE ENERGY
BIOTECHNOLOGY ASSETS	EUROESPES HEALTH
CATENON	FACEPHI BIOMETRIA
CLERHP ESTRUCTURAS	GIGAS HOSTING

GRIÑO ECOLOGIC
HANNUN
HOLALUZ
IFFE FUTURA
INCLAM GRUPO
INTERCITY C.F.
IZERTIS
KOMPUESTOS
LABIANA
LLEIDA.NET
LLYC (LLORENTE Y CUENCA)
MAKING SCIENCE
MEDCOM TECH
MIOGROUP
MONDO TV STUDIOS
NBI BEARINGS EUROPE
NETEX KNOWLEDGE FACTORY
PANGAEA ONCOLOGY
PARLEM TELECOM
PROEDUCA ALTUS
ROBOT
SECUOYA
SINGULAR
SOLAR PROFIT
SOLUCIONES CUATROCHENTA
SUBSTRATE ARTIFICIAL INTELLI-
GENCE
TECHNOMECA AEROSPACE
TIER₁ TECHNOLOGY
UMBRELLA SOLAR INVESTMENT
VYTRUS BIOTECH

SOCIMIs

ADRIANO CARE SOCIMI
ADVERO PROPERTIES SOCIMI
ALBIRANA PROPERTIES SOCIMI
ALL IRON RE I SOCIMI
AM LOCALES PROPERTY SOCIMI
AP67 SOCIMI
ARRIENDA RENTAL PROPERTIES
SOCIMI
ATOM HOTELES SOCIMI
AZARIA RENTAL SOCIMI
BARCINO PROPERTY SOCIMI
CASTELLANA PROPERTIES SOCIMI
CORPFIN CAPITAL PRIME RETAIL II
SOCIMI
CORPFIN CAPITAL PRIME RETAIL
III SOCIMI

DESARROLLOS ERMITA DEL SANTO
SOCIMI
ELAIA INVESTMENT SPAIN SOCIMI
ELIX VINTAGE RESIDENCIAL
SOCIMI
ENTRECAMPOS CUATRO SOCIMI
EURO CERVANTES SOCIMI
EXCEM CAPITAL PARTNERS S.I.R.
SOCIMIs
FIDERE PATRIMONIO SOCIMI
GALIL CAPITAL RE SPAIN SOCIMI
GAVARI PROPERTIES SOCIMI
GENERAL DE GALERÍAS COMER-
CIALES SOCIMI
GMP PROPERTY SOCIMI
GORE SPAIN HOLDINGS SOCIMI
GREENOAK SPAIN HOLDINGS
SOCIMI II
GRUPO ORTIZ PROPERTIES SOCIMI
HISPANOTELS INVERSIONES
SOCIMI
HOME CAPITAL RENTALS SOCIMI
IBERVALLES SOCIMI
IBI LION SOCIMI
INBEST PRIME I INMUEBLES
SOCIMI
INBEST PRIME II INMUEBLES
SOCIMI
INBEST PRIME III INMUEBLES
SOCIMI
INBEST PRIME IV INMUEBLES
SOCIMI
INBEST PRIME VI INMUEBLES
SOCIMI
INBEST PRIME VII INMUEBLES
SOCIMI
INBEST PRIME VIII INMUEBLES
SOCIMI
INHOME PRIME PROPERTIES
SOCIMI
INMOBILIARIA PARK ROSE
IBEROAMERICANA SOCIMI
INMOFAM 99 SOCIMI
INVERSA PRIME SOCIMI
INVERSIONES DOALCA SOCIMI
ISC FRESH WATER INVESTMENT
SOCIMI
JABA I INVERSIONES INMOBILIARI-
AS SOCIMI
JSS REAL ESTATE SOCIMI

LA FINCA GLOBAL ASSETS SOCIMI	QUONIA SOCIMI
MATRITENSE REAL ESTATE SOCIMI	SERRANO 61 DESARROLLO SOCIMI
MERCAL INMUEBLES SOCIMI	SILICIUS REAL ESTATE SOCIMI
MERIDIA REAL ESTATE III SOCIMI	STUDENT PROPERTIES SPAIN SOCIMI
MILLENIUM HOSPITALITY REAL ESTATE SOCIMI	TANDER INVERSIONES SOCIMI
MISTRAL IBERIA REAL ESTATE SOCIMI	TARJAR XAIRO SOCIMI
MISTRAL PATRIMONIO INMOBI- LIARIO SOCIMI	TEMPORE PROPERTIES SOCIMI
NEXTPOINT CAPITAL SOCIMI	TESTA RESIDENCIAL SOCIMI
NUMULAE GESTIÓN DE SERVICIOS SOCIMI	TORIMBIA SOCIMI
OLIMPO REAL ESTATE SOCIMI	TRIVIUM REAL ESTATE SOCIMI
OPTIMUM III VALUE-ADDED RESIDENTIAL SOCIMI	URBAN VIEW DEVELOPMENT SPAIN SOCIMI
OPTIMUM RE SPAIN SOCIMI	URO PROPERTY HOLDINGS SOCIMI
P ₃ SPAIN LOGISTIC PARKS SOCIMI	VBARE IBERIAN PROPERTIES SOCIMI
PERSEPOLIS INVESTMENTS ₁ SOCIMI	VERACRUZ PROPERTIES SOCIMI
NATIONAL HEALTH INSURANCE SOCIMI MANAGEMENT	VITRUBIO REAL ESTATE SOCIMI
QUID PRO QUO ALQUILER SEGURO SOCIMI	VIVENIO RESIDENCIAL SOCIMI
	ZAMBAL SPAIN SOCIMI

Results of the survey on crypto-currencies and effectiveness of the measures promoted by the CNMV

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Summary

The development of crypto-assets as a phenomenon linked to the appearance of blockchain technology has spread rapidly globally, and investing in them carries a number of risks for investors that they should be aware of before making their investment decisions. It is therefore appropriate to study the knowledge that investors have about these risks. In this work, the phenomenon of crypto-currencies in Spain has been specifically studied, analysing their degree of penetration. In addition, the effect on investors of the warnings issued by the CNMV about the risks associated with these assets has been analysed.

From the results it can be concluded that the majority of citizens claim to know what a crypto-currency is, although both declared and real knowledge seems to be somewhat more limited. A substantial proportion of citizens are unaware of the basic fundamentals of crypto-currencies and the fact that they are not, with minor exceptions such as the one mentioned below in relation to advertising, subject to a regulatory framework. Although the percentage of investors is still small, there is a high intention to invest in the future, mainly motivated by the high profitability and confidence in its future, both due to its projection as a means of payment and the potential of blockchain technology. In addition, investment in crypto-currencies is much more widespread among young people, which makes it foreseeable that the investment trend will continue in the future.

However, the perception that this type of product has more risks than other types of investment is widespread and represents an entry barrier to its acquisition. In addition, a substantial number of people familiar with crypto-currencies have seen or heard information about the risks involved in acquiring these products, especially on television, in the press and on social networks. Some of these warning messages come from public bodies such as the Bank of Spain or the CNMV.

The CNMV has carried out various initiatives to make investors aware of the risks of crypto-currencies so that they make informed investment decisions. Noteworthy among these initiatives is CNMV Circular 1/2022 of 10 January regarding advertising of crypto-assets presented as an object of investment, which introduced the obligation for advertisers to include in the advertising of this type of assets a warning of the risks involved in investing in them. These warnings have had an awareness-raising effect on about half of those who have seen them and a significant effect on those who have not invested but plan to do so.

1 Introduction

Crypto-asset markets have been expanding rapidly in recent years, as have their characteristics and functionalities. This development has been accompanied by significant technological advances (as is the case of blockchain), which may have the potential to improve and make the financial system more efficient.

Crypto-assets are a growing focus of attention for national and international authorities, aware that it is necessary to adequately weigh the possible gains associated with these technological changes against the risks for financial stability and for adequate protection of the financial client.

Given the growing relevance of this new phenomenon, public bodies are working to analyse the issue from various angles. Thus, for years, organisations such as the Bank for International Settlements (BIS), the Financial Stability Board (FSB) and the International Organisation of Securities Commissions (IOSCO) have been evaluating the potential risks of these products and markets from the point of view of financial stability.¹

In addition, campaigns have been promoted to make investors aware of the possible risks of these products. As examples of this, at the European level we can point to the warnings of the European Supervisory Authorities (ESA), the European Banking Authority (EBA), the European Securities and Markets Authority (ESMA) and the European Insurance and Occupational Pensions Authority (EIOPA) dated 12 November 2018, 17 March 2021 and 17 March 2022.²

At the national level, since 2018, the CNMV has carried out various initiatives aimed at making investors aware of the potential risks associated with investing in this type of asset.

In the first place, it has issued various warnings, together with other supervisors, highlighting the risk of this type of investment due, among other factors, to its extreme volatility, complexity and lack of transparency.³

Additionally, it has prepared multiple training materials as part of its financial education initiatives. Specifically, it has produced an infographic⁴ explaining what crypto-currencies are, what characteristics they have and what their risks are, as

1 For example, BIS Annual Economic Report (2022), BIS Working Papers (2022), FSB (2022), IOSCO Decentralised Finance Report (2022).

2 In 2018 the ESAs issued a warning about the risk of virtual currencies. Later, in March 2021 the authorities reminded investors of the risks associated with virtual currencies. Finally, in March 2022 they issued a new joint warning.

3 In 2018 it issued its first joint statement with the Bank of Spain on crypto-currencies and initial crypto-currency offerings (ICOs). Subsequently, in February 2021, both institutions issued a new statement on the risk of crypto-currencies as an investment, repeating the earlier warnings. In March 2022, the Bank of Spain, the General Directorate of Insurance and Pension Funds, and the CNMV issued a joint statement regarding the risks of crypto-assets endorsing the assessment of the risks identified in the joint warning of the ESAs.

4 https://www.cnmv.es/DocPortal/Publicaciones/Infografias/Infografia_Criptomonedas.pdf

well as an interactive course⁵ on the aspects that should be known and checked before investing in crypto-assets.

Finally, the CNMV approved and issued Circular 1/2022 of 10 January on the advertising of crypto-assets presented as an object of investment that defines the rules on the content and format of advertising messages in campaigns on these products. This circular determines, among other aspects, that advertising messages must include a warning message stating that “investing in crypto-assets is not regulated, may not be suitable for retail investors and you may lose the entire amount invested” with a format and position that guarantees its relevance within the advertising piece.

Derived from this concern to establish a regulation that protects investors and helps monitor and supervise the development of crypto-assets, in some geographical areas specific regulatory measures are being promoted, as is the case, for example, in the EU, where the MiCA Regulation is in the process of being approved,⁶ whose purpose is to regulate the issuance of crypto-assets and the entities that offer services related to them.

Finally, there is also an interest in obtaining data on the degree of penetration of crypto-assets among investors, especially among retail customers. Although there are no reliable or homogeneous data, those that are available at the international and national level, based on market sources and surveys, show that there is a growing interest on the part of retail investors in this type of product.

At a global level, although there are no precise data that are comparable by country and by type of crypto-asset, the holding of crypto-currencies seems to be between 4% and 19%,⁷ with its weight in emerging countries being particularly striking.⁸ In developed economies, the degree of adoption of crypto-currencies is lower.⁹

In Spain, various studies place the holding of this type of asset at between 5% and 12%.¹⁰ In addition, the data from searches on the Internet and on social networks in Spain for terms related to crypto-assets could point to an increase in interest in them from the year 2021.¹¹

This paper analyses the results of the survey of Spanish investors on crypto-currencies and the effectiveness of the measures promoted by the CNMV.

5 <https://www.cnmv.es/Cursos/Educacion-Financiera/Criptoactivos/index.html#/slide/YuhS-5zWV>

6 Proposal for a Regulation of the European Parliament and of the Council on Markets in Crypto-assets, and amending Directive (EU) 2019/1937

7 Triple A puts global crypto-currency adoption at 4.2%, while Finder estimates it at 19%.

8 According to the data provided by the Finder crypto-currency adoption index in December 2021, most of the emerging countries that are part of the classification were above the average (15.4%).

9 According to the classification provided by Finder on the degree of adoption of crypto-currencies in December 2021: Canada 13.4%; Norway 12.7%; United States 10.5%; Sweden 9.8%; New Zealand 8.7%; Germany 7.1%; United Kingdom 6.1%, and Japan, 5.8%. As an exception we find the case of Australia: 22.9%.

10 Funcas puts their adoption at 5%, while Statista estimates it at 10% and Finder at 12%.

11 Based on Google Trends data for search interest on the Internet and on YouTube for the terms “crypto-currency”, “bitcoin” and “token”.

Specifically, this work analyses the degree of penetration of crypto-currencies in Spain (awareness and degree of adoption), characterising the profile of investors in crypto-currencies. In addition, the degree of knowledge of the risks associated with these is studied. Lastly, an evaluation is made of the effectiveness of the measures promoted by the CNMV to protect investors.

2 Background

The CNMV, in view of the growing interest of investors in crypto-currencies, has considered it relevant to monitor and track the degree of acceptance that these assets have among the Spanish population.

In other countries, various authorities have carried out similar studies. By way of example, it may be mentioned that the Bank of Canada¹² found in 2017 that 5% of Canadians owned bitcoin, compared to 2.9% in 2016. In the United Kingdom the FCA¹³ found that 5.7% of the population had purchased crypto-currency at least once compared to 5.4% in 2020, although only 4.4% of the population owned crypto-currency at the time of the survey. In Ireland, the JPAC¹⁴ concluded that 11% of the population owned crypto-assets and of these 8% owned crypto-currencies in 2021. In the Netherlands, the AMF study¹⁵ revealed that 13% owned crypto-assets in 2021.

At the national level, various studies have also been carried out, although there is no consensus regarding the degree of adoption of crypto-currencies, since these studies place the holding by residents in Spain at disparate levels among themselves. These differences can be attributed to methodological issues, such as the size of the sample or the age range of the population under study. In addition, the time horizon in which the studies have been carried out must also be taken into account when making a comparison of the results.

In 2018 Bitpanda¹⁶ conducted an online survey among 10,826 Spanish residents between the ages of 16 and 64 and concluded that 4% of Spaniards in this age group owned crypto-currencies. The profile of the investor in crypto-currencies would be fundamentally that of a man under 35 years of age (25-34 years), with postgraduate studies and a high level of income.

Between March and April 2018, ING¹⁷ surveyed 1,000 Spanish residents and found that 67% of them had heard of crypto-currencies and 10% claimed to own crypto-currencies. In addition, 32% of the respondents indicated that they intended to buy crypto-currencies in the future. When asked about the projection of these, 38%

12 Bitcoin Awareness and Usage in Canada: An Update.

13 Cryptoasset consumer research (2021).

14 CCPC Investment Research (2021).

15 AFM Consumer Monitor (2021).

16 https://cdn.bitpanda.com/media/documents/research/bitpanda-globalwebindex-report-crypto-currency-holders-in-europe.pdf?_ga=2.158105149.689130837.1663922840-1030320140.1663922840

17 https://think.ing.com/uploads/reports/ING_International_Survey_Mobile_Banking_2018.pdf

responded that crypto-currencies are the future of online spending, while 37% indicated that they are the future of investment and 41% saw their value increasing during the following year. Furthermore, at the European level it was found that those familiar with crypto-currencies could consider them as safe an asset as cash or gold. On the other hand, nationally, 23% of those who had heard of crypto-currencies said they would never buy them.

In August 2019¹⁸ another ING survey conducted earlier that year among 1,000 Spanish residents concluded that 36% of the people participating in the study had acquired their knowledge of crypto-currencies through Internet research, while 29% had done so through the news. In addition, other sources of knowledge indicated were family and friends (16%) and, to a lesser extent, social networks (10%).

For its part, in December 2019 IE University¹⁹ found that 81.7% of Spaniards had heard of crypto-currencies and that 16% owned crypto-currencies. The profile of the investor in crypto-currencies would be, according to this study, that of a high-income person with high levels of education and fundamentally between the age range of 18 to 34 years. In addition, the main reason for holding crypto-currencies would be as a form of investment. On the other hand, among those who do not invest in crypto-currencies, the most common reason for not doing so is its high risk, while the second most common reason is not knowing how to buy this type of asset.

Between July and August 2021, Statista²⁰ decided to conduct a global study surveying between 2,000 and 7,000 adults aged 18 to 64 per country and found that 10% of those surveyed in Spain claimed to use or possess crypto-currencies. In addition, between October and December 2021, the same survey indicated that the percentage of holdings of crypto-assets had increased to 14%.

Also in 2021, Finder²¹ carried out a survey among 1,511 representative citizens of the Spanish population and found that 12% of the population owned crypto-currencies. In addition, the survey indicated that the holding of crypto-currencies was more widespread among young people between 25 and 34 years of age, without being negligible in the rest of the age groups under 44 years of age. By gender, 13% of men surveyed and 10% of women owned crypto-assets.

Funcas²² also carried out a similar study at the end of 2021 among a representative sample of 2,121 Spanish residents aged 18 to 70, concluding that about 5% of the population owned crypto-currencies. The profile of the investor is that of a young person between 18 and 29 years old who studies or works, with a high monthly income and who lives in a large population centre. The main motivation for its

18 <https://coincompare.eu/wp-content/uploads/2019/10/ING-International-Survey-New-Tech-From-cash-to-crypto-the-money-revolution.pdf>

19 https://static-frm.ie.edu/cgc/wp-content/uploads/sites/33/2018/11/IE_CGC_Money-and-Trust_SPAIN_2020.pdf

20 <https://es.statista.com/grafico/18425/adopcion-de-las-criptomonedas-en-el-mundo/>

21 https://dvh1deh6tagwk.cloudfront.net/finder-us/wp-uploads/sites/5/2021/06/Crypto_Adoption_final-compressed-1.pdf

22 <https://www.funcas.es/wp-content/uploads/2022/04/20220407-DIGIT-TRAS-LA-PANDEMIA.pdf>

acquisition is investment. In addition, it found that the main investment currency was the bitcoin. As for the reasons for not acquiring crypto-currencies, there is mainly lack of interest (close to 50%) and among those who do not invest for other reasons (22.7%) those who indicate having concerns about their security stand out.

Lastly, Bestinver and IESE²³ carried out a survey in April 2021 among men and women between the ages of 35 and 60 with annual personal income of more than €35,000 gross who had contracted at least one financial product and found that 14% of those surveyed owned crypto-currencies, the profile of the possessor being that of a man between 35 and 44 years of age with a high income.

3 Survey results

In May 2022, the CNMV decided to carry out a study,²⁴ with the collaboration of a specialised company, in line with the initiatives promoted by other analogous bodies. This study evaluates the degree of penetration of crypto-currencies in Spain, characterising the investors in these assets. In addition, it estimates the effectiveness of the measures taken by the CNMV and other supervisory bodies with the aim of protecting investors, with special attention to the effect that the warnings that entities that offer crypto-currencies have to include in advertisements of this type of assets in accordance with the Circular regarding the advertising of crypto-assets.

Specifically, the objective of this research was to identify the degree of penetration of crypto-currencies in the market, including both the level of knowledge about them and the degree of investment by investors. Likewise, the study sought to know the motivations and barriers to investment in crypto-currencies and identify the perception of the risks associated with them by investors, while establishing a profile of investors.

Finally, a significant part of the study focused on evaluating the effectiveness of the measures promoted by the CNMV in relation to crypto-currencies in order to assess whether additional measures were necessary in the short term. Specifically, the study analysed whether the warnings that entities that trade crypto-currencies had had to incorporate in their advertising, as well as the warnings from supervisors, had influenced the behaviour of investors in this type of product.

3.1 Methodology

The results shown in this work are based on the study mentioned above and which was carried out in collaboration with Análisis e Investigación, who took care of the collection and exploitation of the data based on a survey conducted on a representative panel of the Spanish population.

23 <https://www.bestinver.es/wp-content/uploads/NdP-III-OBSERVATORIO-DEL-AHORRO-Y-LA-INVERSION.pdf>

24 <https://www.cnmv.es/portal/verDoc.axd?t={714e1e4c-b334-4252-b1f5-677cf438bcb5}>

The semi-structured, multi-device online application questionnaire consisted of a total of 40 questions and was carried out between 2 and 10 June 2022. Of these, 10 questions were for classification, 5 for profiling the interviewee, 14 questions were related to knowledge about the world of crypto-currencies and investment in them, and 10 questions were related to information, communications and warnings about the risks of investing in crypto-currencies. Annex I contains the questions related to the issues on crypto-currencies.

The study sample was made up of 1,500 respondents, people in the age range of 16 to 70 years.

Flexible quotas were established based on gender, geographical distribution (Nielsen zones)²⁵ and age brackets. The information on the most significant demographic variables shows that 49.9% of the people in the total sample were male and 50.1% female. By age, 18.1% were between 16 and 24 years of age; 20.7% between 25 and 34 years old; 25.3% between 35 and 44; 15.2% between 45 and 54 and 20.6% between 55 and 70.

In order to obtain a sufficient sample of investors in crypto-currencies and carry out a more exhaustive profile of their characteristics, we over-sampled the age range of young people (16-24 years old), young adults (25-34 years old) and middle-aged people (35-44 years), given that the literature on the subject suggests a predominance of young investors in this type of investment.

By geographical origin, most live in the southern area (19.7%) and Levante (14.9%), as well as in the north-east and in Madrid-metropolitan area (12.3%). Finally, regarding the investment variable, 16% have investments in financial assets, while 84% have none. The margin of error for the total sample without segmentation is with a confidence level of 95% and $p = q = 0.50$.²⁶

The results shown have been weighted in order to integrate the socio-demographic characteristics of the Spanish population (by sex and age) and for the results to be statistically representative of said population.

25 This refers to the geographical areas, with relatively homogeneous marketing characteristics, into which AC Nielsen divides and studies the Spanish territory.

26 p refers to the proportion of the population that has a certain characteristic and q to the proportion that does not have it. In this context $p = q = 0.5$ refers to the case in which the population is as heterogeneous as possible.

Descriptive statistics of the data sample

TABLE 1

	%
Gender	
% men	49.90
% women	50.10
Age	
16-24 years	18.10
25-34 years	20.70
35-44 years	25.30
45-54 years	15.20
55-70 years	20.60
Residence	
North-east	12.30
Levante	14.90
South	19.70
Centre	9.20
North-east	9.30
North	9.10
Madrid-metropolitan area	12.30
Barcelona-metropolitan area	8.70
Canary Islands	4.50
Investment	
No investments	84
With investments	16

Source: CNMV.

Regarding the characteristics of the interviewees, they present a profile with a high degree of digitisation. Nearly 75% use social networks regularly, every day or almost every day, and carry out procedures with their bank or financial intermediary such as enquiries, payments and investments at least once a week. In addition, 84% look for information on the Internet at least every day or almost every day.

Regarding their investor profile, 77% of those surveyed only have bank or savings accounts, while 16% have some type of financial investment. Of them, 52% have mutual funds, 45% own shares, 4.6% invest in derivatives and 2% have bonds and Treasury bills.

3.2 Penetration of crypto-currencies in Spain

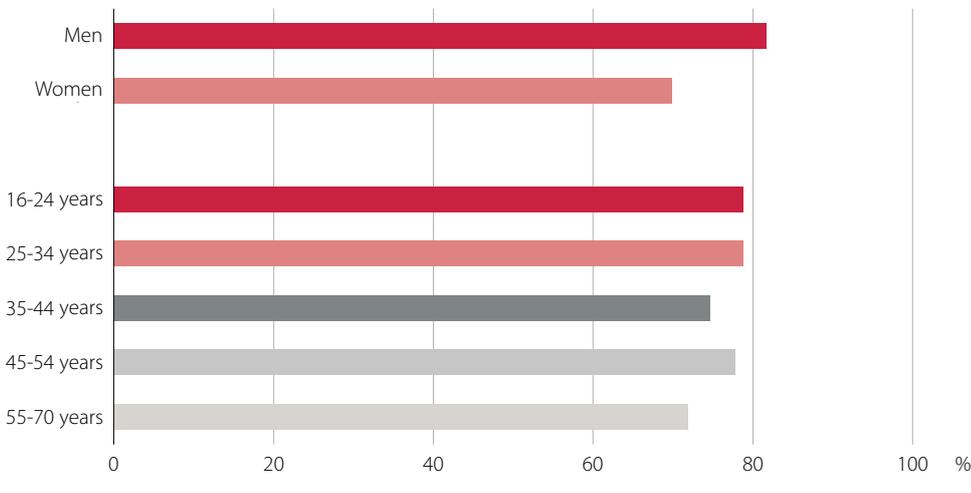
3.2.1 Knowledge of crypto-currencies

Of the respondents, 3 out of 4 (75.8%) claim to know crypto-currencies (81.7% of men and 70% of women). Young people under 34 years of age predominate (78.8%). By age groups, knowledge of crypto-currencies is slightly less common among

people aged 35 to 54 than among those under 34. It is the elderly (55-70 years old) that claim least frequently to know what a crypto-currency is (71.9%).

Knowledge about crypto-currencies

FIGURE 1



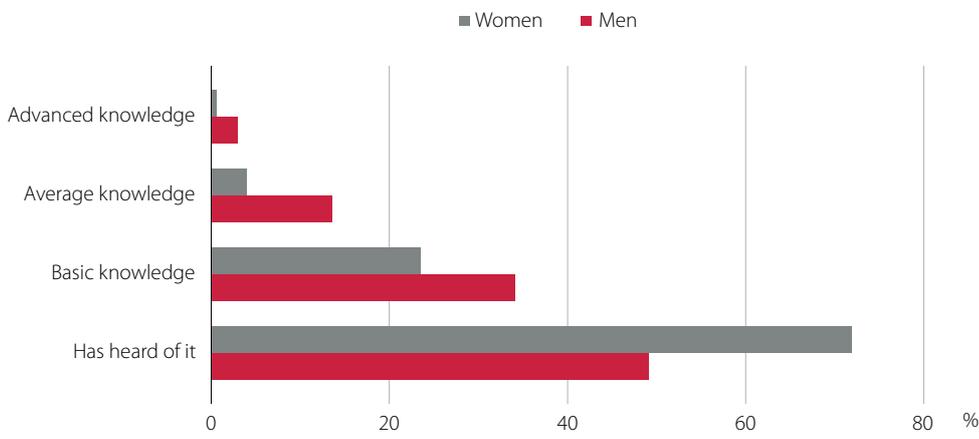
Source: CNMV. Based on data obtained in the study.

However, the knowledge that citizens have about crypto-currencies is limited, since more than half of those who claim to know what a crypto-currency is say they have heard something about them, but barely know this world (59.7%). The rest manifest, for the most part, having basic fundamentals (29.3%) and, to a lesser extent, average knowledge of the subject (9.1%). Only 2% claim to have a high level of knowledge about this type of asset.

The percentage of men who declare they have basic, medium or high knowledge is higher than that of women. Thus, the percentage of women who say they have only heard something about crypto-currencies is much higher than that of men (71.9% compared to 49.2% of men).

Declared level of knowledge about crypto-currencies by gender

FIGURE 2

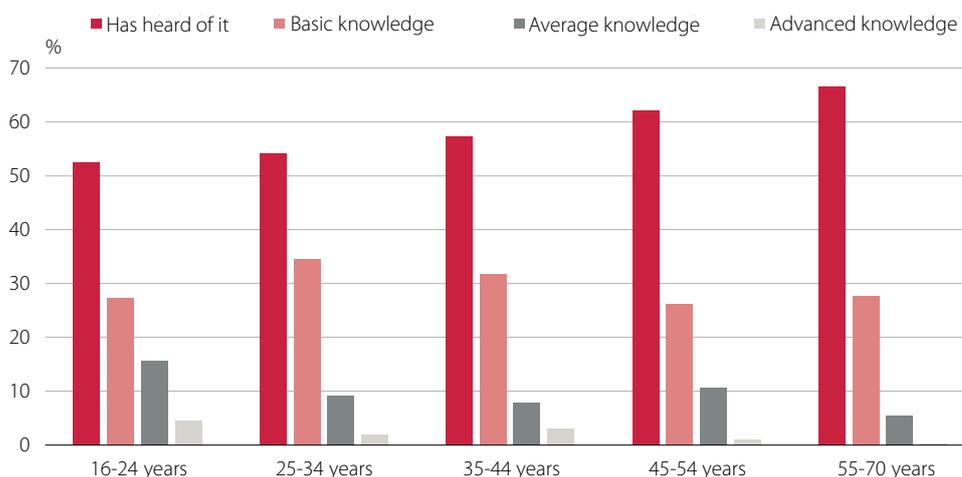


Source: CNMV.

By ages, the declared level of knowledge decreases as age increases. Young people claim to have more knowledge. 15.7% of people between 16 and 24 years old claim to have average knowledge and 4.5% claim to have advanced knowledge. At the opposite extreme are senior citizens. 66.6% of respondents aged 55 to 70 say they have only heard of crypto-currencies, while only 5.4% and 0.3% of them indicate having medium or advanced knowledge, respectively.

Declared level of knowledge about crypto-currencies by age

FIGURE 3



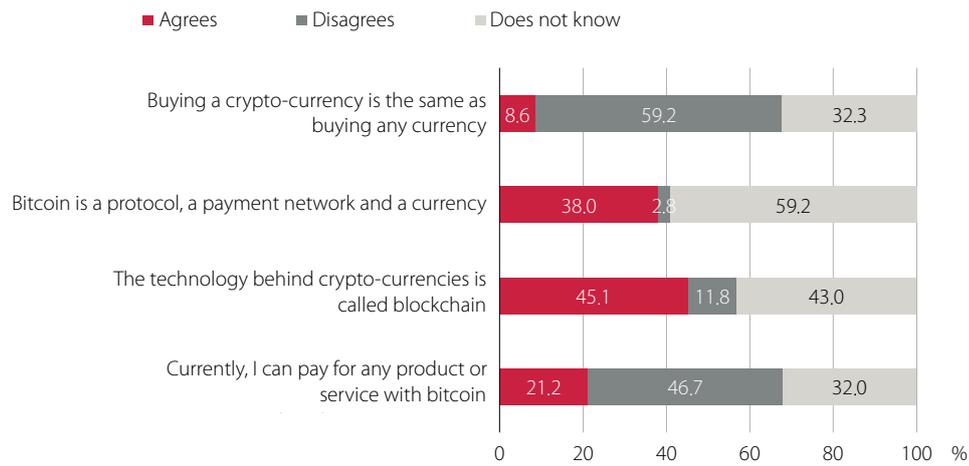
Source: CNMV.

Regarding the real knowledge of the fundamentals of crypto-currencies, more than a third of those who know crypto-currencies do not have a formed opinion on certain aspects that encompass both its structure and its operation. The greatest degree of ignorance revolves around the technology that supports them, blockchain technology. Thus, 59.2% of the people who claim to have knowledge about crypto-currencies do not know that this technology is what is behind it. Young people (47.5%) and those who invest in other financial assets (57.8%) are the ones who have the most knowledge about this issue. In addition, men have greater knowledge in this regard than women (47.8% v. 26.7%)

One notable finding was that 21.2% of people claiming to have knowledge about crypto-currencies had the false belief that buying a crypto-currency was the same as buying any other fiat currency. Furthermore, 8.6% mistakenly believed that they could pay for any product or service with a crypto-currency. This belief was slightly higher among young people (13%).

Real knowledge of the fundamentals of crypto-currencies

FIGURE 4

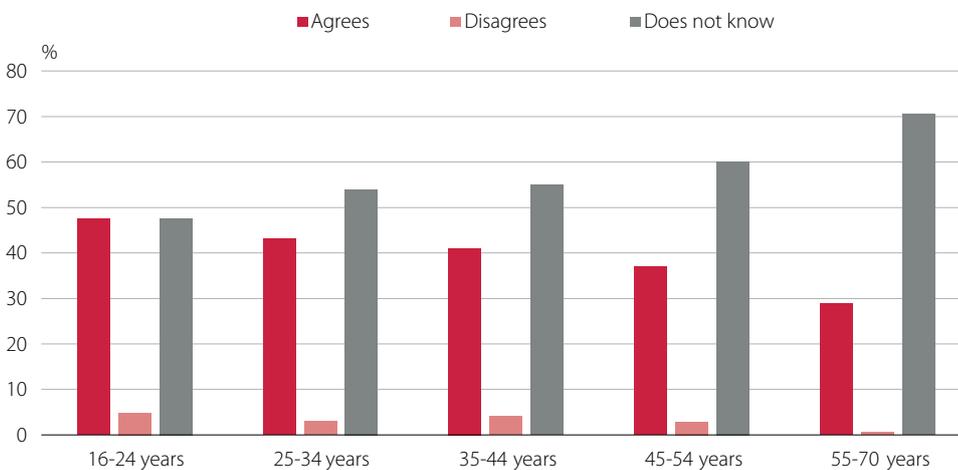


Source: CNMV.

By age, real knowledge of the fundamentals of crypto-currencies in terms of their technology is greater among the youngest. For its part, knowledge about the acceptance of crypto-currencies and their difference from fiat currencies is similar among the different age groups, except in the age group of people over 55 years of age, in which knowledge is somewhat lower.

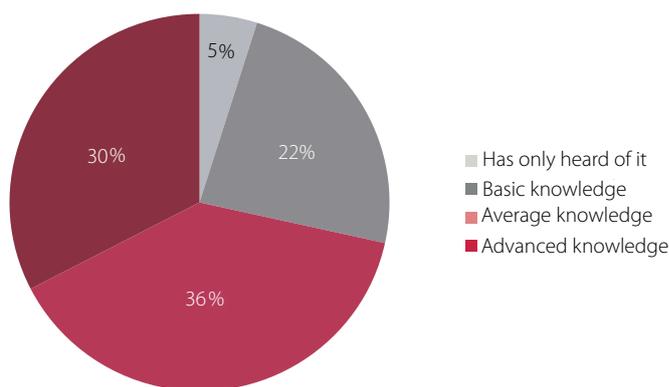
The technology behind crypto-currencies is called blockchain

FIGURE 5



Source: CNMV.

In addition, about 19% of people who claimed to be knowledgeable about crypto-currencies could not answer any of the questions related to crypto-currency fundamentals, while 13% answered all questions correctly. By levels of declared knowledge, 5% of those who declared having only heard about them were able to answer all the questions correctly. On the other hand, among those who declare they have basic, medium and high knowledge, the degree of success is between 22% and 36%. Therefore, a gap is observed between the declared knowledge and the real knowledge.

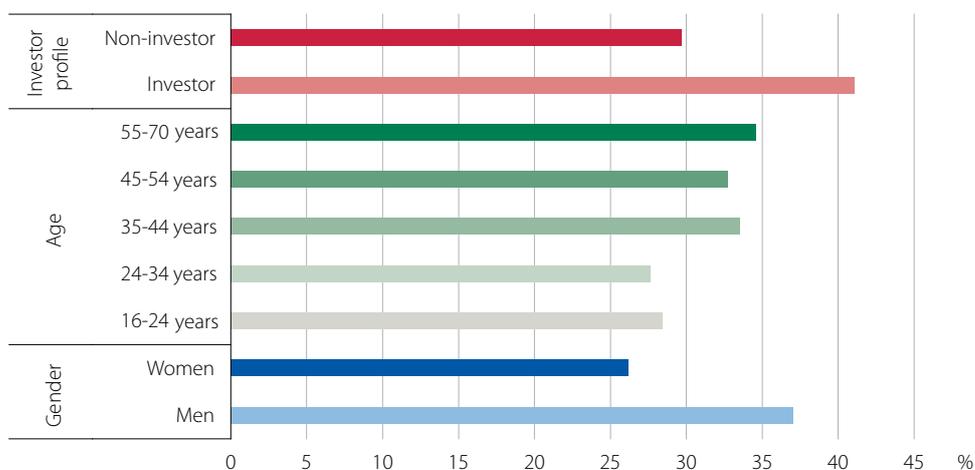


Source: CNMV.

On the other hand, among those who know crypto-currencies, about half of those surveyed (47.7%) do not know if crypto-currencies and the companies that sell them are regulated by law and supervised by some institution, although this figure decreases to 31.6% among the investing public in some type of asset.

20.3% of those surveyed believe that there is a legal framework that supports them. Of them, 12.7% consider that crypto-currencies are regulated by law, but not supervised by any institution, while 7.6% believe that, in addition to being regulated, they are supervised by some institution.

Only 32% of those who know the concept of crypto-currencies know that they are not effectively regulated by law or supervised by any institution. This percentage increases slightly with age and rises to 37% among men. In addition, among investors in financial assets, knowledge of this issue is more widespread, since 41.1% of them are aware of the absence of regulation and supervision of this type of asset.



Source: CNMV.

Finally, three main channels are identified through which the interviewees learn about crypto-currencies for the first time: i) general media such as television or radio (34.3%), ii) information that comes from the closest environment (family friends or colleagues) (30.6%) and iii) social networks (20.5%).

By age groups, the main source of knowledge of crypto-currencies for elderly citizens is the general media (47.8%), while for young people it is social networks, since 50.5% of those surveyed between 16 and 24 years old learned of the existence of crypto-currencies in this way. On the other hand, the most frequent way of learning about this asset for young people between 25 and 34 years of age is through people close to them (44.4%).

Regarding other less frequent channels of knowledge, it stands out that 17.1% of the population learned about crypto-currencies through specialised finance media. The predominance in this path of knowledge of men (19.8%) compared to women (13.9%) and of people between 45 and 54 years old (23.2%) stands out, the last-named group indicating this source of information as the third after the general press (36.2%) and the people around them (25%).

In addition, 7.8% of citizens first heard about crypto-currencies through advertising and 5.7% in forums. Through the latter route, 8.3% of men and 2.6% of learned about crypto-currencies. In addition, this route has been the predominant one for the age group of 25 to 34 years (10.6%) compared to the rest of the age groups.

Finally, banking officers were the least predominant source of knowledge (0.8%).

3.2.2 Investment in crypto-currencies

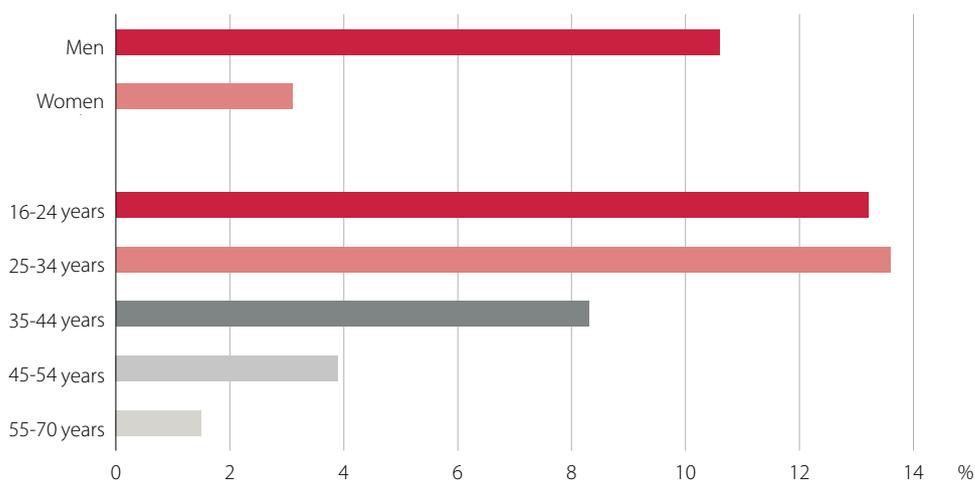
6.8% of the population has invested in crypto-currencies at some time, a behaviour that is accentuated among men, with 10.6% (compared to 3.1% among women), and those under 34 years of age (13.2% among young people between 16 and 24 years old and 13.6% among young people between 25 and 34 years old).

The proportion of investors in crypto-assets decreases as age increases. Thus, it can be seen that between 13% and 14% of young people aged 16 to 34 have invested in crypto-currencies, while only 8.3% of the population aged 35 to 44 have done so. These percentages drop to 3.9% in the age group of 45 to 54 years and to 1.5% in the group of people over 55 years of age.

In addition, about 20% of investors in other types of assets have invested in crypto-currencies. Specifically, 42.6% of those who have invested in derivatives such as options, futures, CFDs or warrants have also invested in crypto-currencies. Regarding those who invest in stocks, 19% have invested in crypto-currencies. Finally, of those who have invested in mutual funds, 16.4% have also invested in crypto-currencies.

Investment in crypto-currencies

FIGURE 8



Source: CNMV.

On the other hand, 38% of those who have invested in crypto-currencies do not currently invest, so 4.2% of the population currently owns some crypto-currency. Those over 35 years of age are those among whom the investment has most often not been maintained. Within this group, more than half of those who have invested in the past do not maintain the investment and this percentage increases with age.

Of current investors in crypto-currencies, just over half, 52%, do so occasionally when there are falls in the value of this asset (23.6%) or they have money to invest (28.3%) and approximately 10% invest an amount on a regular basis. The amount earmarked for this type of investment is mostly no more than 5% of capital.

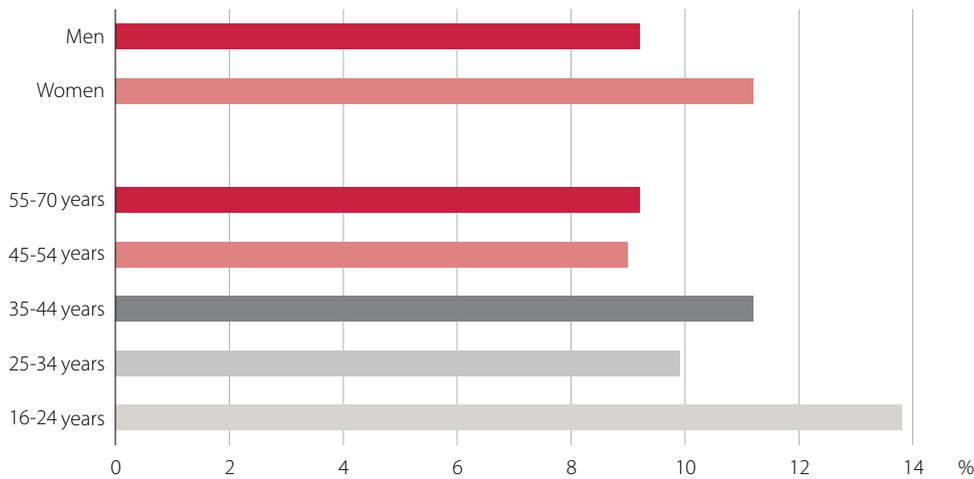
Among those who know crypto-currencies, 10.2% of the population has not invested, but intends to do so. The group that shows the greatest investment intention is that of people between 16 and 24 years old, since 13.8% of young people in this age range plan to do so, although there is an investor interest of between 9% and 11% in all other age groups.

On the other hand, among those who do not know crypto-currencies, once the definition of what a crypto-currency is shown,²⁷ this type of asset generates interest for 23% of them, who indicate that they intend to invest in the future. However, of them only 2.8% want to do it in the short term.

27 Crypto-currencies are digital assets that are not legal tender and do not pay returns such as interest or profits. Those who buy them usually do so hoping that the buying interest of others will grow and they will appreciate in the future.

Investment intention in crypto-currencies

FIGURE 9



Source: CNMV.

In addition, it is women and those over 45 who have the least intention of investing in the short or medium term, although they do show a certain predisposition to invest in the future.

Among the most recurrent reasons for making this type of investment among those who invest or would invest in crypto-currencies, the profitability that this type of asset can offer (36.5%) stands out, as well as the confidence in them as a means of payment in the future (34.9%) and in the projection of the technology on which they are created (29%). This aspect is the main investment reason for young people between 16 and 24 years old (45.3%), who also point to the fact that crypto-currencies maintain their anonymity when making payments (38.4%) and for whom crypto-currencies offer more benefits than traditional currency (37.1%). This is the only age group for which profitability is not the main reason for investing. All these reasons are especially relevant for those investors who currently invest in crypto-currencies, who highlight their technological base (48.7%) and the profitability they offer (45.2%).

Reasons to invest in crypto-currencies

FIGURE 10



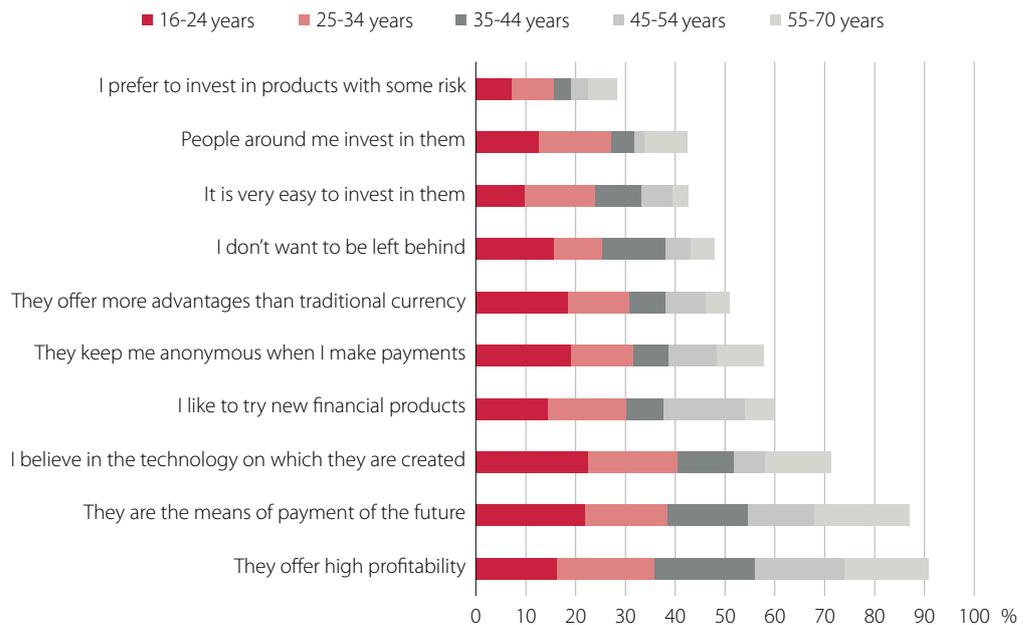
Source: CNMV.

For those who invested in the past, the main motivation was the high return they can offer (28.6%). In addition, many of them invested in this asset because they like to invest in new financial products (28.2%).

Lastly, for those people who have not invested but plan to do so in the future, the main motivation for wanting to do so is the projection that they consider to be a means of payment in the future (37.3%) and the high profitability that they can offer (35%).

Reasons to invest in crypto-currencies by age

FIGURE 11



Source: CNMV.

3.2.3 Knowledge of the risks associated with investing in crypto-currencies

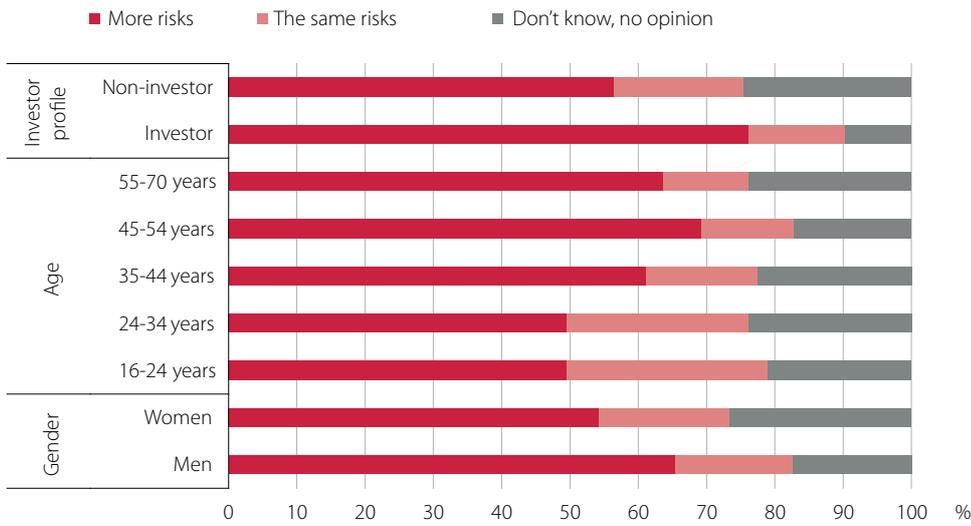
Regarding the risks associated with investing in crypto-currencies, the perception is widespread that this type of product carries more risks than other types of investments (60.3%). This perception is greater among men (65.5%), people over 45 years of age (69.2% from 45 to 54 years of age) and the investing public in financial assets (76.2%).

For their part, 18.1% consider that investing in crypto-currencies involves the same risks as investing in other assets. This belief is more widespread among those under 34 years of age: 29.5% of young people between 16 and 24 years of age and 26.7% of the group between 25 and 34 years of age consider it so.

Finally, it is notable that 21.6% of those surveyed have no knowledge or a formed opinion on the matter. This proportion rises to 26.5% in the case of women.

Perceived risk level of crypto-currencies in comparison with other assets

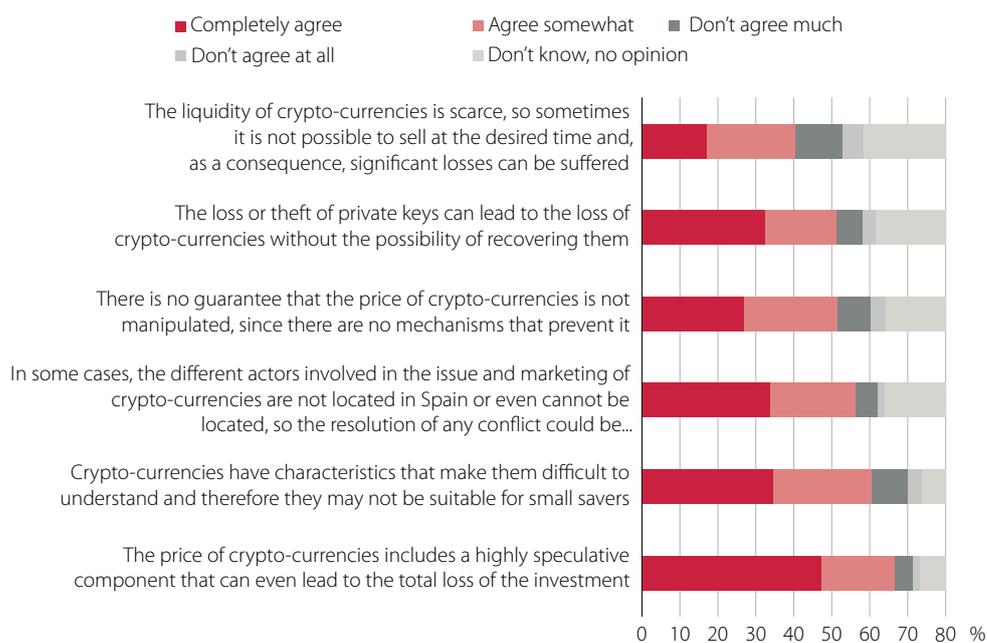
FIGURE 12



Source: CNMV.

When delving into the different types of risk, this lack of knowledge rises notably. Thus, 35.7% of those surveyed are unaware that there is no guarantee that the price of crypto-currencies is not manipulated, since there are no mechanisms to prevent it; 36.1% of those surveyed do not know that in some cases the different actors involved in the issue and marketing of crypto-currencies are not located in Spain or that they cannot even be located, so the resolution of any conflict could be costly and remain outside the scope of competence of the Spanish authorities; 38.4% are unaware that the loss or theft of private keys can lead to the loss of crypto-currencies without the possibility of recovering them, and 41.6% are unaware of the liquidity risk associated with them. However, it is notable that about half of those who know crypto-currencies are aware of these risks.

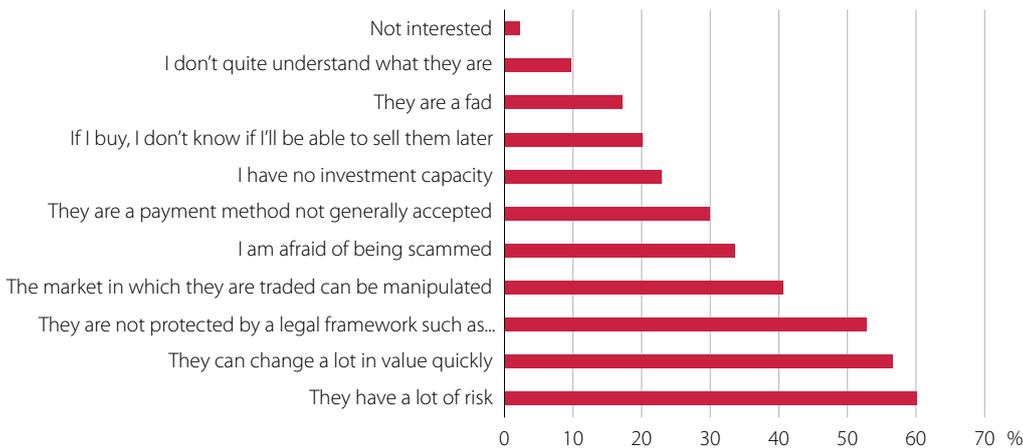
The best-known risks are the risk of investment loss, given the high speculative component of crypto-currencies (66.7%), and the difficulty of understanding them, given their characteristics, which mean that they may not be suitable for small savers (60.5%).



Source: CNMV.

Precisely, the high risk associated with crypto-currencies is the main reason why those people who know them would not invest in them (60.1%). Going deeper by type of risk, 56.7% of these people would not invest due to the volatility that they entail and the fact that they are not protected by a legal framework such as the Deposit Guarantee Fund or the Investment Guarantee Fund (52.8%). Among the reasons for not investing, the risk of manipulation of the market in which they are traded (40.6%), the risk of being scammed (33.6%) and the fact of not being a generally accepted means of payment (30%). In addition, 20.1% also point to liquidity risk. In addition, as could be deduced from the importance given to these risks, it is noteworthy that about half of those who know what a crypto-currency is and would not invest know the state of regulation regarding crypto-assets.

Therefore, the risks associated with this type of currency act as a major brake on investment and these are increasingly widespread reasons for not doing so as age increases. It should also be noted that 32.1% of young people who are aware of crypto-currencies would not invest in them because they consider them to be a fad, a consideration that is less widespread among the rest of the age groups.



Source: CNMV.

3.3 Effectiveness of warnings

More than two-thirds of those familiar with crypto-currencies (67.7%) claim to have seen or heard information about the risks involved in acquiring this product, a fact that is more frequent among men (72.5%) and those over 55 years (72.9%).

The content of these communications is associated with a warning about the possible loss of money invested, their high volatility and the fraud and scams that revolve around them.

In addition, one in four (25.6%) claim to have seen or heard warnings issued by a public body, highlighting those issued by the Bank of Spain, the Government (without specifying the body) and the CNMV. This information is received mainly through three channels: television (58.7%), press (33.3%) and social networks (18.9%).

Close to 5% of those who have seen risk warnings spontaneously recall that the CNMV was their issuer and point to the press (67.9%), as well as the websites of other entities (36.6%) and television (30.4%) as a channel for reproducing these warnings.

To verify the opportuneness of having introduced the obligation to include warning messages about the risks by companies that advertise crypto-currencies, two advertising pieces were shown about which a series of questions were raised.

On the one hand, it was checked whether the warnings could be easily read and whether they took up enough space within the advertising piece. In the advertisements shown, both the degree of comprehension of the message and its clarity were good. 57.3% indicated that the warning could be easily read, a characteristic that was especially pointed out by men (57.8%), young people under 24 (67.4%) and, above all, crypto-currency investors (71.5%). In addition, 52% of people

considered that the warnings took up enough space, with the aforementioned groups also being those who believed this to a greater extent.

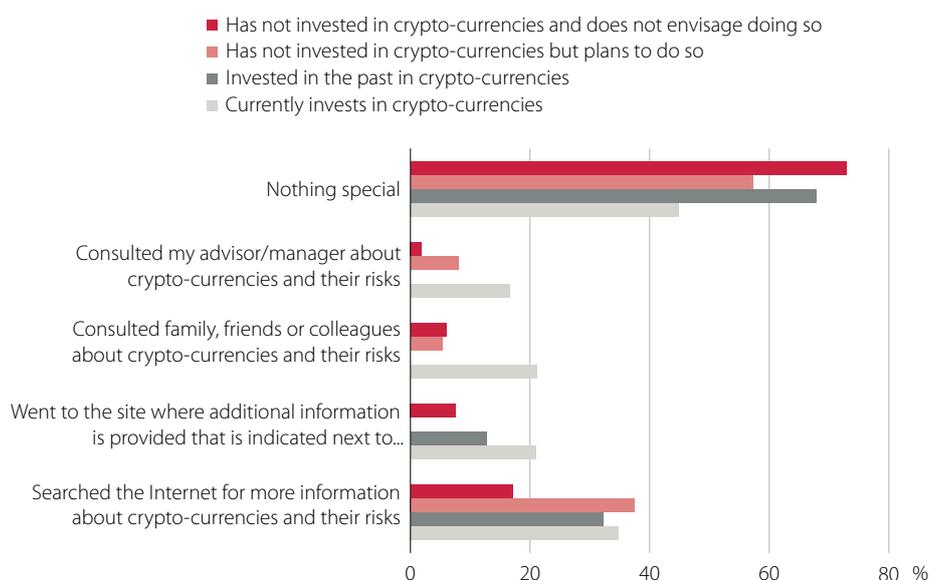
On the other hand, the comprehension of the transmitted message was checked, as well as that of the language and terms used. 85% of readers said they understood the message and 82% the language and terminology used. Again, these aspects were most widely noted by those under 24 (91.6% and 88.3% respectively), crypto-currency investors (87.3% and 86.3%) and, this time, women (87.6% and 83.2%).

Only one in ten (10.2%) recall seeing content similar to that used in ads displayed in other crypto-currency advertising pieces. For the majority of them (66.5%) seeing this warning for the first time did not lead to any subsequent action. However, 22% of people turned to internet search to find more information about crypto-currencies and their risks. In addition, 9.7% went to the site that provided additional information indicated next to the ad warning. For their part, 8.2% resorted to consulting family and friends and, finally, 4.8% consulted their advisor/manager about crypto-currencies and their risks.

Those people who invest and those who have not invested but plan to do so are the ones who have been most active in carrying out different information initiatives. The search for information on the Internet is more widespread among those who have not invested, but plan to do so (37.5%). Among those who invest, it is also widespread to go to the specific site as well as the advisor/manager. For their part, those who have not invested or plan to do so are the ones who carried out the fewest initiatives after seeing the announcement. 72.9% of them did nothing in particular.

Behaviour after seeing risk warning in advertisement

FIGURE 15



Source: CNMV.

43.3% of people consider that reading the warning has made them more aware of the risks. Thus, 29.9% of them assure that they will invest more cautiously in the future. However, 13.4% indicate that, although they are now more aware of the risks, they will continue to invest as they have done until then, since all products carry risks. This behaviour is more widespread among those under 24 years of age (21.1%).

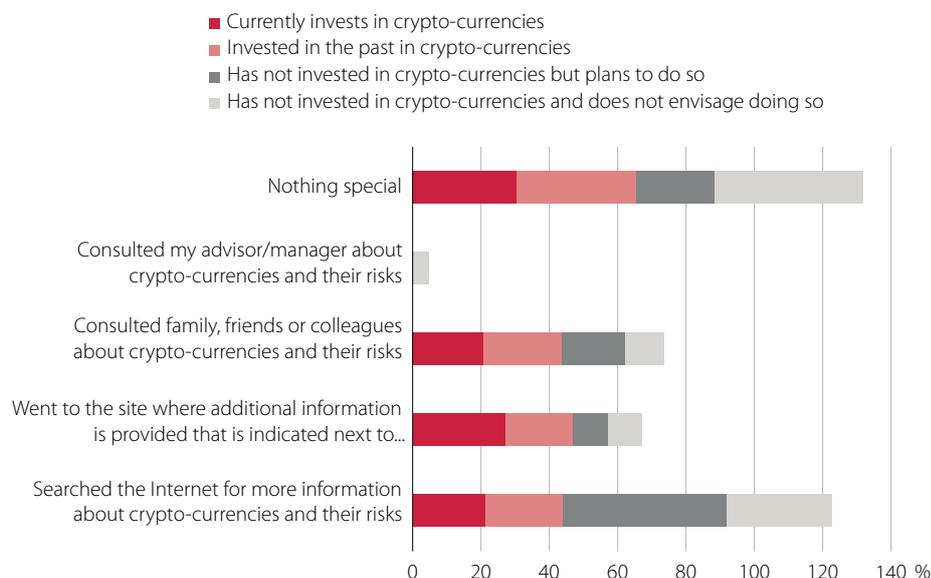
For their part, 17.6% indicate that reading the warning has not made them more aware of the risks associated with investing in crypto-currencies, since 14.3% of them indicate that more information is necessary than that provided in the warning and 3.3% do not understand what the warning is referring to.

On the other hand, about another 40% indicate that they were already aware of the risks.

Finally, the warning seems to have generated a high effect among those who have not invested, but plan to do so. 48.2% of them will be more cautious when it comes to investing. In addition, among those who have not invested, it stands out that a high percentage (43.4%) were already aware of the risks associated with this type of investment, in line with the barriers to investment exposed in the risks section.

Actions taken after seeing the risk warning in advertisements

FIGURE 16



Source: CNMV.

The degree of knowledge about crypto-currencies and the risks associated with them is higher among crypto-currency investors than in the general population. Despite this, it is striking that 40% consider that crypto-currencies are regulated by law and that 29% think that they carry the same risks as other investments.

4 Conclusions

This study has shown that in Spain the majority of citizens claim to know what a crypto-currency is, although both declared and real knowledge seems to be somewhat more limited. A good part of the citizens are unaware of the basic fundamentals of crypto-currencies and the fact that they are not subject to a regulatory framework. As a consequence, crypto-currency investors may find it difficult to distinguish projects with solid fundamentals in which to invest. This difficulty is increased given the absence of a framework for the authorisation and supervision of entities, and for the issue and admission to trading of this type of assets.

Comparatively, young people are the ones who claim to have the most knowledge and, although they have a higher knowledge of some basic aspects of crypto-currencies than other age groups, for example with respect to the technologies that support them, they are also the ones who demonstrate the least knowledge about the lack of regulation of these products and those that most under-estimate the risks of crypto-currencies, which suggests that there could be an overconfidence among these investors.²⁸

On the other hand, although the percentage of investors is still low (6.8%), there is significant future investment intention, mainly motivated by the high expected return and confidence in its future, both due to its projection as a means of payment and for the potential of the blockchain technology.

The results of this study are in line with some others at the national level, such as that carried out by Funcas,²⁹ who estimate the degree of adoption of crypto-currencies at 5%. Other studies on the matter place the adoption of crypto-currencies in Spain at somewhat higher levels, although these differences can be attributed to methodological issues such as the size of the sample or the age range of the population under study. In addition, crypto-currencies have been covered in this study without including other crypto-assets such as tokens.

Investment in crypto-currencies is much more widespread among young people, which makes it foreseeable that the investment trend will continue in the future. This result coincides with those of most national and international studies, which indicate a higher degree of adoption of crypto-currencies by people under 35 years of age.

28 The overconfidence bias is the tendency to overestimate subjective knowledge and judgements and to consider them accurate. When making decisions and forecasts, knowledge and personal experience are overestimated without taking into account the difference between what is actually known and what is believed to be known. For example, in this study, the lack of knowledge of the state of regulation of crypto-assets is recognised to a lesser extent among young people aged 16 to 24 compared to other age groups, although it is in this age group that the greatest lack of knowledge exists about the regulatory framework and where most respondents have the wrong idea of its status. Among young people between 25 and 34 years old, although a high level of ignorance is recognised, it is observed that it is the group with the second greatest degree of ignorance and in which there is also a greater misconception of the regulation and supervision of crypto-currencies.

29 Funcas (2022). *Digitalización tras la pandemia, ¿qué ha cambiado?* <https://www.funcas.es/wp-content/uploads/2022/04/20220407-DIGIT-TRAS-LA-PANDEMIA.pdf>

The perception that this type of product entails more risks than other types of investments is widespread and represents an entry barrier to its acquisition. In addition, a substantial number of people familiar with crypto-currencies have seen or heard information about the risks involved in acquiring these products, especially on television, in the press and on social networks. Specifically, the warnings introduced in crypto-currency advertising messages as a result of the application of the CNMV's Circular on the advertising of crypto-assets have had an awareness-raising effect in about half of those who have seen them and a high effect among those who have not invested, but plan to do so.

In view of the results, it is appropriate to continue promoting measures aimed at making investors aware of the characteristics of this type of product.

Bibliography

Autorité des Marchés Financiers (2021). *AFM Consumer Monitor Autumn 2021*. AFM Consumer Monitor (2021)

Bank of Canada (2018). *Bitcoin Awareness and Usage in Canada: An Update*. <https://www.bankofcanada.ca/wp-content/uploads/2018/07/san2018-23.pdf>

Bestinver and IESE Business School (2021). *III Observatorio del Ahorro y la Inversión en España*.

BIS (2022). "The future monetary system". *BIS Annual Economic Report 2022*. pp. 57-112. <https://www.bis.org/publ/arpdf/ar2022e3.pdf>

BIS (2022). *Banking in the shadow of Bitcoin? The institutional adoption of crypto-currencies*. BIS Working Papers, No. 1013. <https://www.bis.org/publ/work1013.pdf>

Bitpanda (2019). *Understanding Cryptocurrency Holders in Europe*. https://cdn.bitpanda.com/media/documents/research/bitpanda-globalwebindex-report-crypto-currency-holders-in-europe.pdf?_ga=2.158105149.689130837.1663922840-1030320140.1663922840

CCPC (2021). *CCPC Investment Research*. https://www.ccpc.ie/business/wp-content/uploads/sites/3/2021/09/CCPC-Investments-Research_Sept.-2021.pdf

FCA (2021). *Cryptoasset consumer research*. <https://www.fca.org.uk/publications/research/research-note-cryptoasset-consumer-research-2021#1f-chapter-id-research-design>

Finder. *Cryptocurrency Adoption Rates*. Finder Crypto Report. https://dvh1deh6tagwk.cloudfront.net/finder-us/wp-uploads/sites/5/2021/06/Crypto_Adoption_final-compressed-1.pdf

FSB (2022). *Assessment of Risks to Financial Stability from Crypto-assets*. <https://www.fsb.org/wp-content/uploads/P160222.pdf>

Funcas (2022). *Digitalización financiera tras la pandemia. ¿Qué ha cambiado?* <https://www.funcas.es/wp-content/uploads/2022/04/20220407-DIGIT-TRAS-LA-PANDEMIA.pdf>

IE (2019). *Crypto-currencies and the future of money – Money and trust in Spain*. https://static-frm.ie.edu/cgc/wp-content/uploads/sites/33/2018/11/IE_CGC_Money-and-Trust_SPAIN_2020.pdf

ING (2018). *Cracking the code on cryptocurrency – Bitcoin buy-in across Europe, the USA and Australia*. ING International Survey. Mobile Banking – Cryptocurrency. https://think.ing.com/uploads/reports/ING_International_Survey_Mobile_Banking_2018.pdf

ING (2019). *From cash to crypto: the money revolution*. ING International Survey – New Technologies. <https://coincompare.eu/wp-content/uploads/2019/10/ING-International-Survey-New-Tech-From-cash-to-crypto-the-money-revolution.pdf>

IOSCO (2022). *Decentralized Finance Report*.

Annex I

Interviewee profile

1- To start, we would like to ask you some general questions about your use and knowledge of new technologies, as well as your financial habits. Please tell us how often you do the following activities.

Please select the appropriate answer for each concept:

	On a very regular basis (several times a day)	Every or almost three times every day	Two or three times a week	At least once a week	Less or almost often	Never
Using social networks	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Buying online	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Carrying out procedures online with the bank or the financial intermediary (consultation, payments, investments...)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Looking at content platforms (Netflix, HBO, Amazon Prime, etc.)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Finding information on the Internet	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

2- Regarding your financial habits, please tell us whether you have investments or only bank accounts (for payments, payroll income, cards).

Please select only one of the following options:

- Bank/savings accounts only
- I have some investments
- I have neither investments nor bank accounts

3- What investment or investments do you currently have?

Please check the appropriate options:

- Investment funds
- Shares
- Deposits
- Insurance savings
- Pension plans
- Bonds/Treasury Bills
- Derivatives (options, futures, CFDs, warrants, etc.)
- Other investment products:

4- What approximate percentage of the total capital that you dedicate to investments do you currently have invested in the investment products that you have previously told us that you have?

Please select the appropriate answer for each concept:

	Less than 5%	Between 5 and 10%	Between 10 and 15%	Between 15 and 30%	Between 30 and 50%	More I don't know than / I prefer not to answer
Investment funds	<input type="checkbox"/>					
Shares	<input type="checkbox"/>					
Deposits	<input type="checkbox"/>					
Insurance savings	<input type="checkbox"/>					
Pension plans	<input type="checkbox"/>					
Bonds/Treasury Bills	<input type="checkbox"/>					
Derivatives (options, futures, CFDs, warrants, etc.)	<input type="checkbox"/>					
Other	<input type="checkbox"/>					

5- When deciding to invest, point out the option or options that best suit your case.

Please check the appropriate options:

<input type="checkbox"/>	I consult the information documents of the product (promotional material / website of the bank or broker)
<input type="checkbox"/>	I use online product comparison tools
<input type="checkbox"/>	I consult the specialist financial press (news on radio, television, newspapers, Internet...)
<input type="checkbox"/>	I consult the general press (news on radio, television, newspapers, Internet...)
<input type="checkbox"/>	I consult on social networks (Instagram, Twitter, YouTube...)
<input type="checkbox"/>	I consultation online forums
<input type="checkbox"/>	I consult with my adviser
<input type="checkbox"/>	I consult family, friends, co-workers...
<input type="checkbox"/>	I do not consult any source, I trust my intuition
<input type="checkbox"/>	I do not consult any source, I trust my manager's management of my assets

Crypto-currencies

1- Do you know what a crypto-currency is?

Yes

No

2- How would you rate your degree of knowledge about the environment of crypto-currencies in general?

Please select only one of the following options:

I have heard something about crypto-currencies, but I hardly know that world

I understand the basic fundamentals of crypto-currencies and the technology on which they are built

I have average knowledge of the operation of crypto-currencies and the technology on which they are developed

I have a lot of knowledge about crypto-currencies and the technology on which they are developed

3- How did you first learn about crypto-currencies? Please check the appropriate options:

Through media specialised in finance (radio/television, newspapers, websites...)

Through general media (radio/television, websites...)

Through social networks (Instagram, YouTube, Twitter...)

Through forums

Through advertising

Through my bank manager

Through family, friends, co-workers...

Other

I do not remember

4- Tell us how much you agree with each of the following statements:

	Agree	Disagree	Don't know / No opinion
Buying a crypto-currency (for example bitcoin) is the same as buying any currency (for example euros, dollars or yen)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Bitcoin is a protocol, a payment network and a currency	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The technology behind crypto-currencies is called blockchain	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Currently, I can pay for any product or service with bitcoin	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

5- Have you ever invested in crypto-currencies?

Yes

No

6- Do you intend to invest at some point in crypto-currencies?

Yes

No

7- How often do you invest in crypto-currencies?

Please select only one of the following options:

I regularly invest a monthly allowance

I invest only when their value falls

I invest when I have some money available to invest

I invested in the past, currently I have no investment in crypto-currencies

8- What approximate percentage, of the total capital that you dedicate to investments, do you currently have invested in crypto-currencies?

Please select only one of the following options:

Less than 5%

Between 5 and 10%

Between 10 and 15%

Between 15 and 30%

Between 30 and 50%

More than 50%

I don't know / I prefer not to answer

9- Do you know if crypto-currencies and the companies that sell them are regulated by law and supervised by any institution?

Please select only one of the following options:

They are regulated by law but not supervised by any institution

They are regulated by law and supervised by an institution

They are not regulated by law or supervised by an institution

I don't know

10- Tell us how much you agree with each of the following statements.

Please select the appropriate answer for each concept:

	Completely agree	Agree somewhat	Don't agree much	Don't agree at all	Don't know / No opinion
Crypto-currencies have characteristics that make them difficult to understand and therefore they may not be suitable for small savers	<input type="checkbox"/>				
The price of crypto-currencies includes a highly speculative component that can even lead to the total loss of the investment	<input type="checkbox"/>				
There is no guarantee that the price of crypto-currencies is not manipulated, since there are no mechanisms that prevent it	<input type="checkbox"/>				
The liquidity of crypto-currencies is scarce, so sometimes it is not possible to sell at the desired time and, as a consequence, significant losses can be suffered	<input type="checkbox"/>				
In some cases, the different actors involved in the issue and marketing of crypto-currencies are not located in Spain or even cannot be located, so the resolution of any conflict could be costly and fall outside the scope of competence of the Spanish authorities	<input type="checkbox"/>				
The loss or theft of private keys can lead to the loss of crypto-currencies without the possibility of recovering them	<input type="checkbox"/>				

11- Do you consider that crypto-currencies have more risk than other types of investments?

Please select only one of the following options:

- Yes, they have more risks
- No, the same
- Don't know/no opinion

12- Crypto-currencies are digital assets that are not legal tender and do not pay returns such as interest or profits. Those who buy them usually do so hoping that the buying interest of others will grow and they will appreciate in the future. Would you be interested in acquiring a financial product like this?

Please select only one of the following options:

- Yes, in the short or medium term
- Maybe in a while
- No

13- Of the reasons that we show you below, tell us for which one(s) you invest or would invest in crypto-currencies. You can mark as many reasons as you want.

Please check the appropriate options:

They offer high profitability

I prefer to invest in products with some risk

I like to try new financial products

They are the means of payment of the future

They offer more advantages than traditional currency

I don't want to be left behind

People around me invest in them

I believe in the technology on which they are created

They keep me anonymous when I make payments

It is very easy to invest in them

For other reasons:

14- Of the reasons that we show you below, tell us why you do not invest or would not invest in crypto-currencies. You can mark as many reasons as you want.

Please check the appropriate options:

They have a lot of risk

I don't quite understand what they are

They are not protected by a legal framework such as the Deposit Guarantee Fund or the Investment Guarantee Fund

I am afraid of being scammed

They are a payment method not generally accepted

They can change a lot in value quickly

If I buy, I don't know if I'll be able to sell them later

The market in which they are traded can be manipulated

They are a fad

I have no investment capacity

For other reasons:

Information, notices and warnings

1- Previously, have you seen or heard any information about risks related to investing in crypto-currencies?

Please select only one of the following options:

Yes

No

2- What was the content of that information on risks related to investing in crypto-currencies?

Please write your answer here:

3- And, more specifically, do you remember seeing, reading or hearing warnings issued by any public body about the risks of investing in crypto-currencies?

Please select only one of the following options:

Yes

No

4- Tell us, if you remember, which public body or bodies made those warnings about the risks of investing in crypto-currencies.

Please write your answer here:

5- Where did you see such information from a public body or bodies making those warnings about the risks of investing in crypto-currencies?

Please check the appropriate options:

<input type="checkbox"/>	Website of the public body itself
<input type="checkbox"/>	Social networks of the public body itself
<input type="checkbox"/>	Websites of other entities
<input type="checkbox"/>	Social networks of other individuals/entities
<input type="checkbox"/>	Press
<input type="checkbox"/>	TV
<input type="checkbox"/>	Radio
<input type="checkbox"/>	Other means or places:

6- Below we show you some advertisements about crypto-currencies.

In the ads, which we show you again, some warnings appear.

Please select the appropriate answer for each concept:

	Yes	No
... They can be easily read	<input type="checkbox"/>	<input type="checkbox"/>
... They occupy enough space within the advertisements	<input type="checkbox"/>	<input type="checkbox"/>

7- Next we show you the text of the warning again.

Please indicate if in these warnings...

	Yes	No
... The message that the warning seeks to convey is understood	<input type="checkbox"/>	<input type="checkbox"/>
... The language and terms used in the warning are understood	<input type="checkbox"/>	<input type="checkbox"/>

8- Do you remember ever seeing any of these advertisements or any other crypto-currency advertisement that included a warning similar to the one we have shown you previously?

Please select only one of the following options:

<input type="checkbox"/>	Yes
<input type="checkbox"/>	No

9- At the time, when you saw that ad or a similar one for the first time, after seeing this warning, did you perform any of the following actions?

Please check the appropriate options:

-
- Nothing special
-
- Went to the site where additional information is provided that is indicated next to the advertisement warning
-
- Searched the Internet for more information about crypto-currencies and their risks
-
- Consulted my advisor/manager about crypto-currencies and their risks
-
- Consulted family, friends or colleagues about crypto-currencies and their risks
-
- Other answers:
-

10- Did reading the warning make you more aware of the risks associated with investing in crypto-currencies?

Please select only one of the following options:

-
- Yes, I am now more aware of the risks associated with this type of investment and will invest more cautiously
-
- Yes, now I am more aware of the risks associated with this type of investment, although all products have their risks, so I will continue to invest as I have been doing until now
-
- No, I would need more information
-
- No, I don't understand what it's referring to
-
- No, I was already aware of the risks
-

III Legislative Annex

Since the publication of the *CNMV Bulletin* for the second quarter of 2022, the following legislative developments have taken place:

National regulations

- **Comprehensive Law 15/2022, of 12 July**, on equal treatment and non-discrimination.

Its purpose is to guarantee and promote the right to equal treatment and non-discrimination and respect for the equal dignity of persons in development of Articles 9.2, 10 and 14 of the Constitution. The Law regulates the rights and obligations of persons, natural or legal, public or private, establishes principles of action for public authorities and provides measures aimed at preventing, eliminating and correcting all forms of discrimination, direct or indirect, in the public and private sectors.

This Law will apply in the following areas:

- a) Employment, by others or self-employed, which includes access, working conditions, including remuneration and dismissal conditions, promotion and training for employment.
- b) Access, promotion, working conditions and training in public employment.
- c) Membership of and participation in political, union, business, professional and social or economic interest organisations.
- d) Education.
- e) Health.
- f) Transport.
- g) Culture.
- h) Citizen security.
- i) Administration of Justice.
- j) Social protection, benefits and social services.
- k) Access, offer and supply of goods and services available to the public, including housing, which are offered outside the sphere of private and family life.

- l) Access to and the right to be in establishments or spaces open to the public, as well as the use of public roads and the right to be on them.
 - m) Advertising, media and information society services.
 - n) Internet, social networks and mobile applications.
 - o) Sports activities, in accordance with Law 19/2007, of 11 July, against violence, racism, xenophobia and intolerance in sports.
 - p) Artificial intelligence and big data, as well as other analogous areas.
- **Organic Law 9/2022, of 28 July**, establishing rules to facilitate the use of financial and other information for the prevention, detection, investigation or prosecution of criminal offences, amending Organic Law 8/1980, of 22 September, on the Financing of the Autonomous Regions and other related provisions and amending Organic Law 10/1995, of 23 November, on the Criminal Code.

The purpose of this Law is to transpose Directive (EU) 2019/1153 of the European Parliament and of the Council, of 20 June 2019, laying down rules facilitating the use of financial and other information for the prevention, detection, investigation or prosecution of certain criminal offences, and repealing Council Decision 2000/642/JHA.

The Directive is configured as a specific, independent legal instrument allowing direct and immediate access to centralised records of bank accounts and payments.

In Spain, this register is called the *Fichero de Titularidades Financieras* (FTF) and it can be accessed by the competent authorities for purposes of prevention, detection, investigation or prosecution of criminal offences, as well as by asset recovery agencies. The FTF contains the identification data (name and surnames or company name and the type and number of identification document) of the owners or their representatives or authorised parties as the case may be, as well as of any other person with powers to operate the account; in addition, it will include the type of account or deposit and the date of opening and cancellation. However, we should point out that the FTF does not contain any information about balances and movements, only the identification of the financial product, the credit institution where it is held and the holders and authorised persons of the account.

The Law complements the regime of access to financial information and the exchange of information in the fight against money laundering and the financing of terrorism, the new feature being that it will no longer be confined to this sphere of action, but will be extended to the field of prevention, detection, investigation and prosecution of serious criminal offences.

It regulates the general provisions and obligations aimed at facilitating access to the financial information contained in the FTF under the protection of public liberties and fundamental rights.

It also facilitates access to information of the competent authorities by the Executive Service of the Commission for the Prevention of Money Laundering and Monetary Infractions (SEPBLAC), in its capacity as financial intelligence unit (FIU) for the prevention and combating of money laundering, related underlying crimes and the financing of terrorism.

One of the most significant aspects of this Law is the elimination of the need for prior authorisation, either judicial or from the Public Prosecutor's Office, to access the FTF, as previously provided by Article 43.3 of Law 10/2010, of 28 April, on the prevention of money laundering and the financing of terrorism, with a view to ensuring direct and immediate access, in the terms expressly provided by the Directive. That same Article created the FTF, which has been operational since 6 May 2016, understood as a centralised register of bank accounts containing millions of accounts and deposits. If access is required beyond these data, the Security Forces will request prior judicial authorisation or authorisation from the Public Prosecutor's Office.

Directive (EU) 2019/1153 of the European Parliament and of the Council, of 20 June 2019, does not displace or replace the action of the AML Directives, but is placed in parallel with them, in order to improve access and exchange of financial information; strictly speaking, the AML Directives are based on the regulation of the European single market, whereas the Directive transposed by Law 8/2022 focuses on reinforcing police and criminal justice cooperation.

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

- **Law 16/2022, of 5 September**, reforming the consolidated text of the Insolvency Law, approved by Royal Legislative Decree 1/2020, of 5 May, for the transposition of Directive (EU) 2019/1023 of the European Parliament and of the Council, of 20 June 2019, on preventive restructuring frameworks, on discharge of debt and disqualifications, and on measures to increase the efficiency of procedures concerning restructuring, insolvency and discharge of debt, and amending Directive (EU) 2017/1132 relating to certain aspects of company law (the Directive on restructuring and insolvency).

This reform will entail a comprehensive change in the situation of insolvency proceedings in Spain, being key to making them more flexible and streamlined, and to favouring pre-insolvency mechanisms, with the ultimate goal of facilitating the restructuring of companies that are viable and the rapid and orderly liquidation of those that are not.

In the first place, restructuring plans are introduced, a pre-insolvency instrument aimed at avoiding insolvency, or overcoming it, which enables action in a stage of difficulties prior to that of the current pre-insolvency instruments, without the stigma associated with insolvency and with characteristics that increase their effectiveness. Its introduction will encourage earlier restructuring and, therefore, with greater probabilities of success, and will contribute to unblocking the logjam in the courts and, consequently, to greater efficiency of insolvency.

In turn, the Law reforms the insolvency procedure to increase its efficiency, introducing multiple procedural changes aimed at streamlining the procedure, facilitating the approval of an agreement when the company is viable and a rapid liquidation when it is not.

Lastly, the Law configures a more efficient second chance procedure, expanding the list of forgivable debts and introducing the possibility of exoneration without prior liquidation of the debtor's assets and with a payment plan, thus allowing the debtor to keep his habitual residence and business assets.

This Law entered into force 20 days after its publication in the Official State Gazette (*BOE*), with the exception of the third book of the consolidated text of the Bankruptcy Law, which will enter into force on 1 January 2023, except for section 2 of Article 689, which will enter into force when the regulation referred to in the Second Transitional Provision of Law 17/2014, of 30 September, adopting urgent measures in matters of refinancing and restructuring of business debt is approved, and the eleventh additional provision, referring to the deferrals and arrangements for instalment payment of tax debts made by the State Tax Administration Agency, which will enter into force on 1 January 2023.

- **Law 18/2022, of 28 September**, on business creation and growth.

The objective of this Law is, on the one hand, to facilitate the creation of new companies and, on the other, to reduce the obstacles they face in their growth, whether of regulatory or financial origin, in order to achieve an increase in competition for the benefit of consumers, the productivity of the productive fabric, companies and the ability to create quality employment.

The Law amends the existing regulation so as to be able to create a limited liability company with a share capital of one euro and introduces reforms to facilitate and promote their fast, agile incorporation by electronic means through the Information Centre and Business Creation Network. The elimination of the requirement for €3,000 minimum share capital, in force to date, aims to promote the creation of companies by lowering the costs of incorporation and also aims to expand the options of founding shareholders regarding the capital they wish to subscribe based on their needs and preferences.

Chapter V introduces a new legal regime for crowdfunding platforms. These platforms have been regulated in Spain since 2015 in Title V of Law 5/2015, of 27 April, on the promotion of business financing. On 7 October 2020, the European Union approved Regulation (EU) 2020/1503 of the European Parliament and of the Council on European crowdfunding service providers for business, and amending Regulation (EU) 2017/1129 and Directive (EU) 2019/1937. This EU Regulation establishes a complete and exhaustive legal regime for crowdfunding platforms. The approval of this Regulation reflects the fact that crowdfunding represents an increasingly important type of intermediation in the EU and that several Member States (including Spain) have adopted different domestic legal regimes in recent years. The aim is to unify regulation at the European level, so that crowdfunding platforms

authorised and supervised in accordance with the EU Regulations can provide their services freely throughout the Union, without the need to obtain a different authorisation in each Member State in which they wish to provide their services.

This Law adapts Spanish legislation to the legal regime established at European level, so that platforms authorised in Spain will be able to freely provide their services throughout the EU in accordance with these regulations.

Among the main novelties of the European Regulation compared to the pre-existing national Regulation, it is worth mentioning, first of all, the inclusion of a new category of “portfolio management” to allow the crowdfunding service provider to invest in funds on behalf of the investor.

Secondly, it establishes a single individual investment limit per project for retail investors, which is set as the higher of €1,000 or 5% of the investor’s net worth (not including real estate or pension funds). Retail investors are not prevented from investing above the limit, but if they wish to do so, they will receive a risk warning and will have to give their express consent to the crowdfunding service provider.

In addition, it highlights the setting of an investment limit per project of €5 million, which can be exceeded up to the limit provided for in the legislation of each Member State, after which the issuance of a prospectus is required (but, in this case, without being able to have a European passport, only within that Member State).

The Regulation does not apply to certain platforms, such as those that only intermediate crowdfunding offers whose amount is greater than €5 million, despite the fact that this type of platform was included in the scope of application of Law 5/2015, of 27 April. It is for this reason that Article 14 of the Spanish law regulates “non-harmonized” platforms (meaning those to which the EU Regulation does not apply) so that these platforms do not face a situation of lack of legal certainty and clarity.

Finally, it is worth noting the stipulation to the effect that shares in limited liability companies are considered suitable securities for the development of the activities of crowdfunding platforms and investment firms provided for in the EU Regulation. The amendment allows crowdfunding platforms to create a limited liability company and group their investors in it, the corporate object and sole activity of the company being to hold the shares of the companies invested in, in an entity subject to the supervision of the CNMV or in other vehicles commonly used for these purposes in other EU Member States.

Chapter VI of the Law introduces a set of reforms that seek to promote and improve collective investment and venture capital in Spain, the proper functioning of which benefits economic activity as a whole and which must necessarily be linked to investor protection, particularly of the private individual investor.

It amends Article 40 of Law 35/2003, of 4 November, on Collective Investment Schemes, adding the necessary references in Spanish legislation to the institution regulated in Regulation (EU) 2015/760, of 29 April 2015, on European long-term investment funds. Other measures are introduced that will contribute to improving the competitiveness of the sector, such as the elimination of the compulsory nature of the quarterly report or the establishment of electronic means as the default form of communication with unitholders and shareholders.

A series of amendments is introduced to promote the venture capital industry in Law 22/2014, of 12 November. Article 9 is amended to expressly include, as the main object of venture capital, investment in financial entities whose activity is based above all on the application of technology to new business models, applications, processes or products.

Amendments are introduced in Articles 14, 16, 17, 18 and 23 to make the investment diversification regime of venture capital entities more flexible and adapt it to the international standards and practices of the sector.

An amendment is also introduced in Article 21.3 to place SME venture capital entities on the same footing as EU venture capital funds, by making the requirement for subject companies to have a maximum of 250 employees more flexible, raising this maximum to 499. The amendment introduced in section 3 of Article 26 reduces the initial outlay of venture capital companies from 50% to 25% of the committed capital. This measure is in line with the provisions for venture capital funds, but is adapted to the greater governance structure required by a company. The amendment in section 1 of Article 41 allows the possibility of setting up management companies of closed-ended CIS in the form of a limited liability company (SRL), as is already the case with all types of investment firms. With this, the limitations on the incorporation of management companies are reduced, since incorporation and operation as an SRL has lower requirements than a public limited company. This amendment is also introduced in Articles 40 and 43 of Law 35/2003, of 4 November, on Collective Investment Schemes, with the same purpose.

Likewise, Article 75.2 is amended in order to make the regime for non-professional investors in venture capital entities more flexible. As an alternative to the requirement of an initial investment of €100,000, marketing to retailers will be allowed providing they access the investment through the recommendation of an entity authorised to provide advisory services, with a minimum initial investment of €10,000 and further providing this does not exceed the client's financial assets if these are not more than €500,000.

These measures to improve the regulatory framework applicable to collective investment and venture capital will also serve to promote and reinforce public financing instruments such as those deployed by the ICO, Official Credit Institute: Fond-ICO Pyme (Pyme means SMEs), Fond-ICO Next Tech, Fond-ICO Global and Fond-ICO Infraestructuras ESG.

CNMV

- **CNMV Circular 3/2022, of 21 July**, on the prospectuses of collective investment schemes (CISs) and the registration of the key investor information document (KID).

It pursues as its main objectives:

- The elimination of the regulations relating to the content, form and reasons for updating of the key information document, since these aspects are already regulated in Regulation (EU) No. 1286/2014 of the European Parliament and of the Council, of 26 November 2014. Consequently, the new circular regulates, among other aspects, the form, content and presentation of the prospectus, and the causes and forms of its updating, as well as the manner in which both the prospectus and the KID regulated in Regulation (EU) No. 1286/2014 are to be sent to the CNMV for registration.
 - The elimination from the content of the prospectus of certain information that is not required by Directive 2009/65/EC of the European Parliament and of the Council of 13 July 2009, and that is already included in the KID for packaged retail investment products (PRIIPs), such as the current charges indicator, the return scenarios of structured collective investment institutions or the synthetic risk indicator. In this way the prospectus is simplified, repetitions are avoided and it is aligned with the prospectus of other neighbouring countries.
 - The elimination or amendment of certain essential elements and the introduction of a new one, establishing that the date of entry into force of the essential elements occurs with the registration of the prospectus. In this regard, section 1 of Article 24 of the Regulation implementing Law 35/2003, of 4 November, on Collective Investment Schemes states that the CNMV will establish the elements of the prospectus that are considered essential and that require prior registration. and, in the case of funds, prior verification, for their entry into force, requiring the prospectus to be updated when essential elements are modified.
- **Resolution of 21 July 2022**, of the Board of CNMV amending the Commission's Internal Regulations.

This reform of the Internal Regulations aims, on the one hand, to clarify the consideration as senior positions of certain managerial positions of the CNMV.

On the other hand, the reform aims to specify the attendance of the Deputy General Manager of the Legal Service at meetings of the Council and the Executive Committee, which he must attend for the presentation of the procedures corresponding to the sanctioning procedures, knowledge or approval of which corresponds to these collegiate bodies.

Finally, the regulations of the Management Committee of the CNMV are amended to convert it into a mandatory body given its importance, thus

altering its current configuration as a body whose existence depends solely on the will of the chairperson. The regulations of the Management Committee are also brought into line with those of the Executive Committee by explicitly establishing that, in addition to the Chairperson, the Vice-chairperson and the General Managers, any other employees may attend meetings of the Committee when called upon by the Chairperson depending on the matters to be discussed.

Other

- **Resolution of 19 September 2022**, of the Under-secretariat, publishing the Collaboration Agreement among the Spanish Radio and Television Corporation, the Bank of Spain, the CNMV and the Ministry of Economic Affairs and Digital Transformation, in the framework of the development of the Financial Education Plan.
- **Resolution of 19 September 2022**, of the Under-secretariat, publishing the Agreement between the Secretariat of State for Security and the CNMV for the prosecution of financial fraud by unauthorised persons or entities.

European Securities and Markets Authority (ESMA)

- **Guidelines on common procedures and methodologies on supervisory review and evaluation process of CCPs under Article 21 of EMIR**. (10 March 2022) European Securities and Markets Authority (ESMA).
- **Guidelines on stress tests scenarios under Article 28 of the money market funds (MMF) Regulation**. (4 May 2022) European Securities and Markets Authority (ESMA).

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

- **Commission Delegated Regulation (EU) 2022/1455**, of 11 April 2022, supplementing Regulation (EU) 2019/2033 of the European Parliament and of the Council with regard to regulatory technical standards for own funds requirement for investment firms based on fixed overheads.

Published in the *OJEU* (L) No. 229, of 5 September 2022, pp. 1–4.

- **Commission Delegated Regulation (EU) 2022/1622**, of 17 May 2022, supplementing Regulation (EU) No. 575/2013 of the European Parliament and of the Council with regard to regulatory technical standards on emerging markets and advanced economies.

Published in the *OJEU* (L) No. 244, of 21 September 2022, pp. 3–4.

- **Commission Implementing Regulation (EU) 2022/1650**, of 24 March 2022, amending the implementing technical standards laid down in Implementing Regulation (EU) 2016/1646 as regards the main indices and recognised exchanges in accordance with Regulation (EU) No. 575/2013 of the European Parliament and of the Council.

Published in the *OJEU* (L) No. 249, of 27 September 2022, pp. 1–9.

IV Statistics Annex

1 Markets

1.1 Equity

Share issues and public offerings¹

TABLE 1.1

	2019	2020	2021	2021		2022		
				III	IV	I	II	III
NO. OF ISSUERS								
Total	33	28	34	16	8	9	10	9
Capital increases	33	28	33	15	8	9	10	9
Primary offerings	1	1	1	0	0	0	0	1
Bonus issues	10	12	14	6	5	4	5	4
Of which, scrip dividend	9	12	13	6	4	4	5	4
Capital increases by conversion	3	2	4	3	0	0	1	1
For non-monetary consideration	2	1	4	2	0	1	0	0
With pre-emptive subscription rights	8	5	4	1	1	0	2	0
Without trading warrants	13	9	12	5	2	5	3	3
Secondary offerings	0	0	1	1	0	0	0	0
NO. OF ISSUES								
Total	52	40	52	19	9	10	12	9
Capital increases	52	40	51	18	9	10	12	9
Primary offering	1	1	1	0	0	0	0	1
Bonus issues	15	17	20	6	5	4	5	4
Of which, scrip dividend	14	17	19	6	4	4	5	4
Capital increases by conversion	4	2	4	3	0	0	1	1
For non-monetary consideration	2	2	5	3	0	1	0	0
With pre-emptive subscription rights	9	5	4	1	1	0	2	0
Without trading warrants	21	13	17	5	3	5	4	3
Secondary offerings	0	0	1	1	0	0	0	0
CASH VALUE (millions of euros)								
Total	9,806.0	10,852.1	17,138.3	4,898.8	321.7	1,368.9	701.9	1,006.8
Capital increases	9,806.0	10,852.1	14,938.1	2,698.6	321.7	1,368.9	701.9	1,006.8
Primary offerings	10.0	150.1	100.0	0.0	0.0	0.0	0.0	200.0
Bonus issues	1,565.4	1,949.0	1,264.9	131.1	165.5	422.8	347.8	694.6
Of which, scrip dividend	1,564.1	1,949.0	1,243.6	131.1	144.2	422.8	347.8	694.6
Capital increases by conversion	354.9	162.4	109.5	41.4	0.0	0.0	3.1	2.0
For non-monetary consideration ²	2,034.2	233.0	3,525.3	1,390.1	0.0	17.4	0.0	0.0
With pre-emptive subscription rights	4,729.8	6,837.2	7,060.4	6.3	21.2	0.0	254.2	0.0
Without trading warrants	1,111.8	1,520.3	2,878.1	1,129.6	135.0	928.7	96.8	110.3
Secondary offerings	0.0	0.0	2,200.2	2,200.2	0.0	0.0	0.0	0.0
NOMINAL VALUE (millions of euros)								
Total	1,336.9	1,282.0	5,021.7	1,991.7	188.5	131.9	174.3	116.5
Capital increases	1,336.9	1,282.0	4,939.4	1,909.4	188.5	131.9	174.3	116.5
Primary offerings	0.5	7.8	5.4	0.0	0.0	0.0	0.0	0.8
Bonus issues	307.6	799.6	796.2	131.1	165.3	68.3	149.6	111.5
Of which, scrip dividend	306.3	799.6	774.9	131.1	144.0	68.3	149.6	111.5
Capital increases by conversion	16.6	1.7	46.3	23.3	0.0	0.0	0.0	0.0
For non-monetary consideration	401.0	68.0	3,289.0	1,153.8	0.0	8.7	0.0	0.0
With pre-emptive subscription rights	372.1	370.9	98.8	5.1	21.2	0.0	22.9	0.0
Without trading warrants	239.1	34.1	703.7	596.1	1.9	54.9	1.7	4.1
Secondary offerings	0.0	0.0	82.3	82.3	0.0	0.0	0.0	0.0
Pro memoria: transactions BME Growth³								
No. of issuers	12	9	44	26	14	13	13	19
No. of issues	17	14	77	32	19	14	26	30
Cash value (millions of euros)	298.3	238.5	2,440.8	1,230.6	434.7	347.0	615.2	643.0
Capital increases	298.3	238.5	2,440.8	1,230.6	434.7	347.0	615.2	643.0
Of which, primary offerings	229.4	173.5	1,654.2	869.6	379.1	216.5	190.7	399.3
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 listed¹

TABLE 1.2

	2019	2020	2021	2021		2022		
				III	IV	I	II	III
Total electronic market ²	129	126	123	126	123	123	121	121
Of which, foreign companies	7	7	6	7	6	6	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	9	9	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	0	0	0
BME MTF Equity ³	2,709	2,580	2,432	2,458	2,432	2,402	2,350	2,093
Latibex	19	19	19	18	19	18	19	19

1 Data at the end of period.

2 Without ETFs (Exchange Traded Funds).

3 Alternative Stock Market.

Capitalisation¹

TABLE 1.3

Millions of euros

	2019	2020	2021	2021		2022		
				III	IV	I	II	III
Total electronic market ²	806,064.3	690,101.6	781,805.4	784,104.0	781,805.0	749,196.8	706,766.8	645,678.0
Of which, foreign companies ³	141,671.0	113,478.9	147,214.3	146,598.2	147,213.9	143,841.7	121,487.2	115,485.5
Ibex 35	494,789.4	424,167.3	475,870.0	482,298.0	475,870.0	460,787.9	432,155.2	391,213.3
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	1,299.5	1,319.3	1,222.1	1,118.0	1,153.2
Madrid	69.8	30.9	23.1	23.1	23.1	24.2	25.8	37.5
Barcelona	1,036.5	956.0	1,258.7	1,239.4	1,258.7	1,202.9	1,097.1	1,122.2
Bilbao	32.9	20.6	19.2	19.7	19.2	16.2	16.2	14.7
Valencia	80.4	76.0	45.3	45.3	45.3	0.0	0.0	0.0
BME MTF Equity ^{4, 5}	44,706.4	43,595.5	48,656.9	47,484.6	48,656.9	47,115.3	45,612.4	41,877.1
Latibex	199.0	128.7	144.3	184.7	196.1	281.9	187.1	203.4

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.

Millions of euros

	2019	2020	2021	2021		2022		
				III	IV	I	II	III
Total electronic market ¹	462,378.8	422,786.4	372,972.8	78,833.1	107,010.8	108,728.0	100,601.9	68,491.7
Of which, foreign companies	3,477.8	4,273.8	4,343.6	1,106.5	1,118.3	2,167.5	1,268.5	660.4
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	0.4	1.6	2.3	2.9	0.8
Madrid	0.8	0.1	0.1	0.0	0.0	0.2	0.1	0.1
Barcelona	3.2	2.4	7.4	0.4	1.6	2.1	2.9	0.8
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	639.8	1,110.4	933.0	985.0	759.0
Latibex	136.4	79.5	48.9	7.9	21.7	29.4	15.3	21.5

1 Without ETFs (Exchange Traded Funds).

2 Alternative Stock Market.

Trading on the electronic market by type of transaction¹

TABLE 1.5

Millions of euros

	2019	2020	2021	2021		2022		
				III	IV	I	II	III
Regular trading	450,575.7	405,120.5	355,841.2	75,244.2	100,331.1	106,941.7	95,453.0	66,656.5
Orders	258,242.2	278,516.1	237,430.5	54,975.2	60,141.9	77,695.7	64,453.9	52,307.0
Put-throughs	38,888.0	42,666.5	40,006.0	8,809.5	10,431.7	10,938.1	9,408.9	6,932.9
Block trades	153,445.5	83,938.0	78,404.7	11,459.5	29,757.6	18,308.0	21,590.2	7,416.7
Off-hours	3,098.1	4,174.3	4,890.0	435.6	1,763.2	964.2	1,772.6	343.2
Authorised trades	1,706.3	2,001.4	1,213.3	200.9	371.1	80.3	464.6	212.8
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	2,092.0	3,214.0	0.0	1,787.8	184.2
Public offerings for sale	634.4	967.8	1,723.2	0.0	0.0	75.0	172.5	220.0
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	633.9	1,005.6	327.2	599.7	551.1
Hedge transactions	1,799.4	1,902.4	1,211.5	226.5	325.7	339.5	351.9	323.9

1 Without ETFs (Exchange Traded Funds).

1.2 Fixed income

Gross issues registered at the CNMV

TABLE 1.6

	2019	2020	2021	2021		2022		
				III	IV	I	II	III
NO. OF ISSUERS								
Total	39	47	34	13	13	13	10	7
Mortgage-covered bonds	12	14	7	3	2	6	3	1
Territorial-covered bonds	2	3	3	0	1	3	0	1
Non-convertible bonds and debentures	13	11	11	5	8	3	3	4
Convertible bonds and debentures	0	0	0	0	0	1	2	0
Backed securities	13	15	12	4	1	4	2	2
Commercial paper	11	11	7	0	1	0	1	0
Of which, asset-backed	0	0	0	0	0	0	0	0
Of which, non-asset-backed	11	11	7	0	1	0	1	0
Other fixed-income issues	1	2	1	0	0	0	0	0
Preference shares	1	2	4	1	1	0	0	0
NO. OF ISSUES								
Total	298	244	156	43	18	27	30	29
Mortgage-covered bonds	29	26	16	7	2	8	4	5
Territorial-covered bonds	3	6	3	0	1	3	0	1
Non-convertible bonds and debentures	205	143	82	21	10	4	10	8
Convertible bonds and debentures	0	0	0	0	0	1	2	0
Backed securities	48	52	41	14	3	11	13	15
Commercial paper ¹	11	11	7	0	1	0	1	0
Of which, asset-backed	0	0	0	0	0	0	0	0
Of which, non-asset-backed	11	11	7	0	1	0	1	0
Other fixed-income issues	1	4	1	0	0	0	0	0
Preference shares	1	2	6	1	1	0	0	0
NOMINAL AMOUNT (millions of euros)								
Total	90,164.5	132,111.3	101,170.7	25,484.7	27,319.5	42,857.7	17,204.1	24,694.5
Mortgage-covered bonds	22,933.0	22,960.0	28,700.0	9,450.0	6,750.0	14,300.0	7,000.0	6,000.0
Territorial-covered bonds	1,300.0	9,150.0	5,500.0	0.0	2,000.0	3,040.0	0.0	500.0
Non-convertible bonds and debentures	29,605.6	33,412.5	25,256.7	807.4	13,984.4	4,371.8	549.5	547.4
Convertible bonds and debentures	0.0	0.0	0.0	0.0	0.0	300.0	1,000.0	0.0
Backed securities	18,740.9	36,281.0	18,375.7	7,184.2	488.0	14,021.8	1,911.4	1,359.1
Commercial paper ²	15,085.0	22,291.6	20,180.0	7,293.2	3,597.1	6,824.1	6,743.2	16,288.0
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	7,293.2	3,597.1	6,824.1	6,743.2	16,288.0
Other fixed-income issues	1,500.0	6,266.2	823.3	0.0	0.0	0.0	0.0	0.0
Preference shares	1,000.0	1,750.0	2,335.0	750.0	500.0	0.0	0.0	0.0
Pro memoria:								
Subordinated issues	3,213.5	14,312.1	4,599.5	1,805.9	563.4	951.3	745.2	258.1
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 AIAF¹

TABLE 1.7

Nominal amount in millions of euros

	2019	2020	2021	2021		2022		
				III	IV	I	II	III
Total	114,034.0	119,230.2	113,205.9	26,630.3	20,115.9	40,160.8	30,703.6	23,970.6
Commercial paper	15,036.1	22,293.8	20,190.1	4,763.2	6,189.7	5,272.3	8,029.1	13,566.4
Bonds and debentures	45,082.0	20,407.1	37,664.0	1,316.1	2,135.0	15,926.6	1,363.1	1,045.1
Mortgage-covered bonds	29,375.0	23,058.3	29,020.0	12,670.0	7,750.0	14,300.0	7,000.0	6,000.0
Territorial-covered bonds	3,300.0	9,150.0	5,500.0	0.0	2,000.0	3,040.0	0.0	2,000.0
Backed securities	18,740.9	36,281.0	18,375.7	7,131.0	1,541.2	1,621.8	14,311.4	1,359.1
Preference shares	1,000.0	1,750.0	1,625.0	750.0	500.0	0.0	0.0	0.0
Matador bonds	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other fixed-income issues	1,500.0	6,290.1	831.0	0.0	0.0	0.0	0.0	0.0

1 Only corporate bonds are included.

	2019	2020	2021	2021		2022		
				III	IV	I	II	III
NO. OF ISSUERS								
Total	331	321	292	301	292	284	278	275
Corporate bonds	299	289	257	266	257	248	241	238
Commercial paper	9	8	40	7	7	6	6	5
Bonds and debentures	40	41	39	40	39	35	31	32
Mortgage-covered bonds	35	29	27	29	27	27	26	25
Territorial-covered bonds	7	8	6	7	6	5	4	4
Backed securities	227	222	198	202	198	192	190	187
Preference shares	6	5	5	4	5	5	5	5
Matador bonds	5	5	3	4	3	3	3	3
Government bonds	32	32	35	35	35	36	37	37
<i>Letras del Tesoro</i>	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	13	13	13	13	13
Other public debt	8	8	8	8	8	9	10	10
NO. OF ISSUES								
Total	2,775	2,610	2,451	2,492	2,451	2,415	2,391	2,337
Corporate bonds	1,834	1,655	1,465	1,508	1,465	1,401	1,375	1,334
Commercial paper	84	53	54	36	54	45	53	49
Bonds and debentures	718	589	481	519	481	440	411	380
Mortgage-covered bonds	209	200	183	195	183	181	177	174
Territorial-covered bonds	23	22	18	21	18	19	17	14
Backed securities	787	777	715	723	715	702	703	703
Preference shares	8	9	11	10	11	11	11	11
Matador bonds	5	5	3	4	3	3	3	3
Government bonds	941	955	986	984	986	1,014	1,016	1,003
<i>Letras del Tesoro</i>	12	12	12	12	12	12	12	12
Long government bonds	236	231	233	227	233	236	235	234
Regional government debt	173	167	171	170	171	170	167	165
Foreign public debt	508	533	558	564	558	572	574	564
Other public debt	12	12	12	11	12	24	28	28
OUTSTANDING BALANCE¹ (millions of euros)								
Total	6,421,003.0	6,297,532.5	6,261,335.6	6,358,591.6	6,261,335.6	6,311,600.3	6,191,763.7	6,099,991.9
Corporate bonds	463,816.1	464,170.7	456,613.9	472,718.8	456,613.9	419,260.8	421,386.1	409,648.5
Commercial paper	6,423.1	4,812.4	5,688.6	3,915.7	5,688.6	5,092.2	5,278.4	4,833.2
Bonds and debentures	62,477.8	53,696.1	68,584.8	78,850.0	68,584.8	39,352.9	36,685.9	37,359.7
Mortgage-covered bonds	195,719.1	199,054.1	199,681.7	201,689.8	199,681.7	206,148.4	202,387.6	200,556.4
Territorial-covered bonds	20,762.3	18,262.3	17,544.0	19,144.0	17,544.0	19,694.0	19,220.0	14,585.0
Backed securities	172,878.9	181,341.0	156,695.2	161,139.6	156,695.2	140,553.8	149,394.6	143,894.7
Preference shares	5,240.0	6,690.0	8,225.0	7,725.0	8,225.0	8,225.0	8,225.0	8,225.0
Matador bonds	314.8	314.8	194.6	254.7	194.6	194.6	194.6	194.6
Government bonds	5,957,186.8	5,833,361.8	5,804,721.7	5,885,872.8	5,804,721.7	5,892,339.5	5,770,377.7	5,695,638.7
<i>Letras del Tesoro</i>	68,335.5	79,765.7	79,409.6	76,253.7	79,409.6	79,174.4	76,799.5	76,859.5
Long government bonds	937,290.9	1,026,625.5	1,094,574.1	1,096,361.5	1,094,574.1	1,156,820.9	1,145,533.0	1,177,934.7
Regional government debt	35,247.6	32,775.5	36,131.2	35,127.5	36,131.2	36,099.7	36,134.3	40,889.9
Foreign public debt	4,914,792.7	4,692,674.9	4,592,786.5	4,676,809.9	4,592,786.5	4,579,819.9	4,470,006.7	4,359,064.7
Other public debt	1,520.2	1,520.2	1,820.2	1,320.2	1,820.2	40,424.6	41,904.1	40,889.9

¹ Nominal amount.

AIAF. Trading

TABLE 1.9

	2019	2020	2021	2021		2022		
				III	IV	I	II	III
BY TYPE OF ASSET								
Total	158,807.2	140,509.4	47,659.3	5,855.1	2,766.8	5,178.6	6,219.2	3,222.3
Corporate bonds	275.2	170.2	174.3	35.5	50.7	32.1	30.9	18.4
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	35.5	50.7	32.1	30.9	18.4
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	5,819.6	2,716.1	5,146.5	6,188.3	3,203.9
<i>Letras del Tesoro</i>	25,858.4	27,975.5	5,186.3	1,305.0	50.3	50.0	305.0	170.3
Long government bonds	92,592.8	83,478.8	21,997.4	1,491.1	1,026.1	1,996.3	2,238.3	501.4
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	3,023.5	1,639.7	3,100.2	3,645.0	2,532.1
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	5,855.1	2,766.8	5,178.6	6,219.2	3,222.3
Outright	158,807.2	140,509.4	47,659.3	5,855.1	2,766.8	5,178.6	6,219.2	3,222.3
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

	2019	2020	2021	2021		2022		
				III	IV	I	II	III
Total	158,792.5	140,495.9	47,564.1	5,829.9	2,757.2	5,175.5	6,214.1	5,161.4
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	5,829.9	2,757.2	5,175.5	6,214.1	5,161.4
Credit institutions	385.5	176.6	278.3	162.8	37.5	23.0	25.4	27.2
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	5,667.0	2,719.7	5,152.5	6,188.7	5,134.2
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

	2019	2020	2021	2021		2022		
				III	IV	I	II	III
NO. OF ISSUERS								
Total	13	11	10	10	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	6	6	6	6	6
Regional governments	2	2	2	2	2	2	2	2
NO. OF ISSUES								
Total	54	44	49	48	49	48	45	43
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	37	38	37	34	32
Regional governments	20	18	26	26	26	26	25	25
OUTSTANDING BALANCES² (millions of euros)								
Total	7,340.4	6,158.4	8,399.3	8,413.9	8,399.3	8,397.0	8,206.2	7,886.8
Private issuers	481.1	366.3	319.4	330.5	319.4	307.9	297.3	283.4
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	330.5	319.4	307.9	297.3	283.4
General government ¹	6,859.2	5,792.2	8,079.9	8,083.4	8,079.9	8,089.1	7,908.8	7,603.3
Regional governments	6,260.7	5,179.3	7,549.3	7,549.3	7,549.3	7,549.3	7,398.6	7,398.6

1 Without public book-entry debt.

2 Nominal amount.

SENAF. Public debt trading by type

TABLE 1.12

Nominal amount in millions of euros

	2019	2020	2021	2021		2022		
				III	IV	I	II	III
Total	150,634.0	120,706.0	174,959.0	48,400.0	36,783.0	28,045.0	26,974.0	30,343.0
Outright	150,634.0	120,706.0	174,959.0	48,400.0	36,783.0	28,045.0	26,974.0	30,343.0
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

	2019	2020	2021	2021		2022		
				III	IV	I	II	III
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	1,430,095	1,423,426	1,664,446	1,375,678	1,303,319
Ibex 35 plus futures	5,965,905	5,905,782	5,260,568	1,377,802	1,344,510	1,587,224	1,314,389	1,258,725
Ibex 35 mini futures	145,489	154,351	92,657	21,059	22,896	33,042	23,030	20,341
Ibex 35 micro futures	0	0	0	0	0	0	0	0
Ibex 35 dividend impact futures	144,831	91,571	45,450	3,793	15,218	4,320	1,240	1,650
Ibex 35 sector futures	6	0	0	0	0	0	0	0
Call mini options	177,369	104,132	69,667	12,332	10,020	11,728	11,292	9,023
Put mini options	192,393	139,521	79,257	15,109	30,781	28,131	25,727	13,580
Stock products ⁴	32,841,027	30,313,892	25,434,719	6,083,100	5,772,331	6,925,765	4,746,892	5,283,881
Futures	15,298,027	10,968,411	11,346,047	3,410,227	1,463,869	3,919,655	956,444	1,549,644
Stock dividend futures	758,700	130,055	2,100	400	1,700	25	75	6,050
Stock plus dividend futures	0	7,752	20,800	8,729	4,159	9,040	0	0
Call options	7,405,619	8,564,019	6,131,488	1,066,620	1,630,386	1,499,642	2,069,208	1,969,545
Put options	9,378,681	10,643,655	7,934,284	1,597,124	2,672,217	1,497,403	1,721,165	1,758,642

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

	2019	2020	2021	2021		2022		
				III	IV	I	II	III
WARRANTS								
Premium amount (millions of euros)	1,837.7	1,167.7	2,142.7	496.7	510.4	1,236.0	1,498.2	1,289.1
On stocks	901.4	445.7	792.8	169.3	202.7	289.7	575.7	344.1
On indexes	809.3	674.0	1,258.6	315.8	289.5	868.8	671.1	754.5
Other underlyings ¹	127.1	48.1	91.3	11.6	18.2	77.4	251.4	190.5
Number of issues	5,496	3,081	4,581	1,006	1,010	2,299	1,765	1,819
Number of issuers	6	5	4	2	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		
				III	IV	I	II	III
WARRANTS								
Trading (millions of euros)	291.6	319.7	289.2	66.5	76.3	106.0	159.7	161.4
On Spanish stocks	81.1	121.1	123.3	20.4	22.7	23.0	21.9	20.8
On foreign stocks	19.7	26.0	18.2	3.8	5.6	6.0	7.5	4.4
On indexes	186.6	161.7	143.4	41.4	47.3	73.6	114.4	119.8
Other underlyings ¹	3.7	10.9	4.3	0.9	0.8	3.4	15.9	16.5
Number of issues ²	3,605	3,785	3,249	781	779	1,126	1,078	970
Number of issuers ²	8	7	4	4	4	2	2	3
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	0	0	0	0	0
Number of issuers ²	1	1	1	0	0	0	0	0
ETFs								
Trading (millions of euros)	1,718.8	2,548.1	1,549.0	404.5	398.7	556.9	428.5	328.5
Number of funds	6	5	5	5	5	5	5	5
Assets ³ (millions of euros)	229.2	241.5	259.8	267.1	274.1	256.7	225.6	220.1

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

	2019	2020	2021	2021		2022		
				III	IV	I	II	III
BROKER-DEALERS								
Spanish firms	39	38	33	33	33	33	32	34
Branches in Spain	19	14	13	13	13	14	12	15
Agents operating in Spain	1,944	1,407	1,359	1,336	1,359	1,149	1,180	1,194
Branches in EEA ¹	9	8	4	4	4	4	4	4
Firms providing services in EEA ¹	25	25	20	20	20	21	21	21
Passports to operate in EEA ^{1,2}	205	205	161	153	161	173	173	192
BROKERS								
Spanish firms	56	57	58	59	58	60	61	62
Branches in Spain	23	24	21	22	21	22	22	19
Agents operating in Spain	361	353	729	375	729	887	1,063	1,102
Branches in EEA ¹	1	0	4	4	4	6	5	6
Firms providing services in EEA ¹	24	30	30	30	30	32	32	34
Passports to operate in EEA ^{1,2}	144	205	200	198	200	200	214	211
PORTFOLIO MANAGEMENT COMPANIES								
Spanish firms	1	1	0	1	0	0	0	0
FINANCIAL ADVISORY FIRMS								
Spanish firms	140	140	140	141	140	140	142	144
Branches in Spain	22	23	21	21	21	21	21	21
Branches in EEA ¹	2	2	1	1	1	1	1	0
Firms providing services in EEA ¹	29	27	26	27	26	26	25	25
Passports to operate in EEA ^{1,2}	51	47	49	54	49	48	48	48
CREDIT INSTITUTIONS³								
Spanish firms	112	110	108	110	108	108	109	109

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

	2019	2020	2021	2021		2022		
				III	IV	I	II	III
Total	3,567	3,617	1,369	1,364	1,369	1,413	1,422	1,430
Investment services firms	3,088	3,131	952	951	952	963	971	974
From EU Member states	3,085	3,128	947	946	947	958	966	969
Branches	65	66	41	42	41	42	43	43
Free provision of services	3,020	3,062	906	904	906	916	923	926
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	413	417	450	451	456
From EU Member states	473	480	412	408	412	445	446	450
Branches	54	50	52	52	52	52	51	52
Free provision of services	419	430	360	356	360	393	395	398
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	6
Branches	3	4	3	3	3	3	3	3
Free provision of services	3	2	2	2	2	2	2	3

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

Intermediation of spot transactions¹

TABLE 2.3

Millions of euros

	2019	2020	2021	2021			2022	
				II	III	IV	I	II
FIXED INCOME								
Total	3,222,363.2	3,782,640.8	2,878,970.7	757,396.9	472,152.2	765,546.2	1,461,771.6	4,030,581.8
Broker-dealers	2,263,416.4	3,345,439.9	2,865,236.9	755,486.3	470,699.2	758,238.6	1,457,060.8	4,022,815.2
Spanish organised markets	909,992.9	1,261,885.8	1,199,193.3	338,861.7	250,039.0	195,093.3	338,104.3	1,031,483.2
Other Spanish markets	1,012,359.1	1,721,922.5	1,006,802.5	280,240.9	134,635.1	282,867.6	863,779.6	2,122,886.2
Foreign markets	341,064.4	361,631.6	659,241.1	136,383.7	86,025.1	280,277.7	255,176.9	868,445.8
Brokers	958,946.8	437,200.9	13,733.8	1,910.6	1,453.0	7,307.6	4,710.8	7,766.6
Spanish organised markets	17,314.9	1,229.4	1,307.0	217.0	160.0	617.0	382.8	596.9
Other Spanish markets	803,742.9	405,199.7	80.2	19.5	10.4	32.8	41.8	264.9
Foreign markets	137,889.0	30,771.8	12,346.6	1,674.1	1,282.6	6,657.8	4,286.2	6,904.8
EQUITY								
Total	1,213,388.9	1,816,691.4	1,220,967.9	438,252.0	135,727.2	59,953.7	38,266.9	89,105.0
Broker-dealers	1,194,473.3	1,793,180.4	1,195,799.7	432,767.3	131,370.6	50,183.9	31,152.3	76,578.7
Spanish organised markets	329,666.8	261,188.7	86,911.0	22,207.0	6,346.7	22,507.0	15,078.2	39,586.3
Other Spanish markets	1,771.0	5,938.7	8,150.6	1,774.8	1,055.1	2,088.0	995.4	429.5
Foreign markets	863,035.5	1,526,053.0	1,100,738.1	408,785.5	123,968.8	25,588.9	15,078.7	36,562.9
Brokers	18,915.6	23,511.0	25,168.2	5,484.7	4,356.6	9,769.8	7,114.6	12,526.3
Spanish organised markets	7,712.5	7,137.8	10,221.7	1,734.4	1,155.7	5,579.5	3,164.2	7,443.6
Other Spanish markets	1,006.8	1,094.9	1,501.6	498.5	404.4	299.8	313.4	259.5
Foreign markets	10,196.3	15,278.3	13,444.9	3,251.8	2,796.5	3,890.5	3,637.0	4,823.2

1 Period accumulated data. Quarterly.

Intermediation of derivative transactions^{1,2}

TABLE 2.4

Millions of euros

	2019	2020	2021	2021			2022	
				II	III	IV	I ³	II
Total	10,807,586.8	11,557,923.7	9,509,509.7	2,441,759.7	2,182,511.2	2,223,001.2	2,916,659.6	4,027,795.4
Broker-dealers	10,523,995.1	11,261,186.5	9,372,575.4	2,410,453.9	2,173,689.4	2,209,947.6	2,618,051.4	3,229,828.1
Spanish organised markets	5,058,147.9	3,839,450.0	4,280,290.6	1,147,718.4	1,081,941.0	1,041,657.9	1,215,920.1	1,179,609.6
Foreign organised markets	4,160,941.8	5,884,599.5	4,135,376.7	997,145.4	917,068.7	1,067,723.1	1,280,776.1	1,757,023.1
Non-organised markets	1,304,905.4	1,537,137.0	956,908.1	265,590.1	174,679.7	100,566.6	121,355.2	293,195.4
Brokers	283,591.7	296,737.2	136,934.3	31,305.8	8,821.8	13,053.6	298,608.2	797,967.3
Spanish organised markets	29,601.4	12,975.9	6,858.9	2,340.5	672.8	63.7	5,702.7	13,355.0
Foreign organised markets	116,038.0	195,686.4	126,635.7	27,800.9	7,987.5	10,932.4	291,509.7	781,588.8
Non-organised markets	137,952.3	88,074.9	3,439.7	1,164.4	161.5	2,057.5	1,395.8	3,023.5

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.

3 Data revised and modified in October 2022.

Portfolio management. Number of portfolios and assets under management¹

TABLE 2.5

	2019	2020	2021	2021			2022	
				II	III	IV	I	II
NUMBER OF PORTFOLIOS								
Total ²	25,388	44,982	89,646	65,053	75,875	89,646	115,246	100,549
Broker-dealers. Total	3,219	3,585	19,317	8,968	13,246	19,317	38,571	21,949
CIS ³	40	42	38	40	38	38	39	39
Other ⁴	3,179	3,543	19,279	8,928	13,208	19,279	38,532	21,910
Brokers. Total	22,169	41,397	70,329	56,085	62,629	70,329	76,675	78,600
CIS ³	79	82	64	66	65	64	55	60
Other ⁴	22,090	41,315	70,265	56,019	62,564	70,265	76,620	78,540
ASSETS UNDER MANAGEMENT (thousands of euros)								
Total ²	4,925,671	6,098,558	8,088,415	6,776,795	7,230,753	8,088,415	8,345,884	7,843,069
Broker-dealers. Total	2,266,997	2,687,786	2,907,767	2,393,001	2,551,997	2,907,767	3,056,177	2,714,109
CIS ³	1,059,718	1,280,966	592,849	586,695	598,536	592,849	408,400	402,884
Other ⁴	1,207,279	1,406,820	2,314,918	1,806,306	1,953,461	2,314,918	2,647,777	2,311,225
Brokers. Total	2,658,674	3,410,772	5,180,648	4,383,794	4,678,756	5,180,648	5,289,707	5,128,960
CIS ³	1,346,615	1,256,276	1,125,208	1,081,072	1,096,336	1,125,208	762,344	864,387
Other ⁴	1,312,059	2,154,496	4,055,440	3,302,722	3,582,420	4,055,440	4,527,363	4,264,573

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	2021			2022	
				II	III	IV	I	II
NUMBER OF CONTRACTS								
Total ³	26,561	31,169	34,006	31,626	32,296	34,006	49,082	49,475
Broker-dealers. Total	6,163	8,721	9,727	9,349	9,537	9,727	17,009	17,300
Retail clients	6,115	8,670	9,674	9,297	9,481	9,674	16,950	17,243
Professional clients	31	45	48	46	50	48	54	48
Eligible counterparties	17	6	5	6	6	5	5	9
Brokers. Total	20,398	22,448	24,279	22,277	22,759	24,279	32,073	32,175
Retail clients	20,125	22,128	24,007	22,034	22,515	24,007	31,776	31,858
Professional clients	229	282	235	201	203	235	256	279
Eligible counterparties	44	38	37	42	41	37	41	38
Pro memoria: commission received for financial advice⁴ (thousands of euros)								
Total ³	37,583	39,803	48,086	12,672	19,595	48,086	6,176	24,373
Broker-dealers	23,400	5,813	7,944	2,764	4,315	7,944	1,633	3,248
Brokers	14,183	33,990	40,142	9,908	15,280	40,142	4,543	21,125

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 euros¹

	2019	2020	2021	2021		2022		
				III	IV	I ²	II	III ³
I. Interest income	38,125	35,957	41,565	23,451	41,565	2,543	28,205	42,388
II. Net commission	279,650	310,868	265,790	218,104	265,790	47,003	95,650	123,361
Commission revenues	427,813	525,812	481,945	406,485	481,945	73,205	147,660	191,376
Brokering	164,606	254,307	164,293	145,125	164,293	26,620	52,868	67,353
Placement and underwriting	8,849	5,279	86,324	83,778	86,324	2,640	5,384	6,952
Securities deposit and recording	42,643	39,260	36,880	27,534	36,880	9,711	18,425	22,883
Portfolio management	15,102	13,128	15,860	10,248	15,860	3,532	6,669	8,783
Design and advice	34,751	16,282	20,316	13,238	20,316	4,165	8,797	11,405
Stock search and placement	1,302	1,960	5,306	3,090	5,306	261	883	892
Market credit transactions	0	0	0	0	0	0	0	0
CIS marketing	53,506	50,985	64,608	46,730	64,608	15,977	31,693	42,344
Other	107,055	144,611	88,356	76,741	88,356	10,298	22,941	30,764
Commission expenses	148,163	214,944	216,155	188,381	216,155	26,202	52,010	68,015
III. Financial investment income	29,452	97,113	32,733	25,906	32,733	14,434	24,760	35,374
IV. Net exchange differences and other operating products and expenses	29,066	91,278	35,370	33,957	35,370	360	1,384	1,831
V. Gross income	376,293	535,216	375,458	301,418	375,458	64,340	149,999	202,954
VI. Operating income	55,978	124,993	88,966	65,910	88,966	12,537	46,277	65,260
VII. Earnings from continuous activities	54,528	102,928	93,481	69,599	93,481	12,478	45,703	63,911
VIII. Net earnings from the period	54,528	102,928	90,708	69,599	90,708	12,478	45,703	63,911

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

2 Data revised and modified in October 2022.

3 Available data: August 2022.

Results of proprietary trading. Broker-dealers

TABLE 2.8

Thousands of euros¹

	2019	2020	2021	2021			2022	
				II	III	IV	I	II
TOTAL								
Total	101,039	221,894	108,249	61,827	81,777	108,249	17,333	54,477
Money market assets and public debt	2,625	23,229	3,039	3,870	3,271	3,039	-442	-558
Other fixed-income securities	27,811	18,457	19,224	11,010	14,438	19,224	10,438	19,341
Domestic portfolio	13,186	11,796	4,920	2,101	3,354	4,920	2,586	5,475
Foreign portfolio	14,625	6,661	14,304	8,909	11,084	14,304	7,852	13,866
Equities	8,009	21,860	6,845	5,920	5,097	6,845	3,936	4,943
Domestic portfolio	7,006	22,859	5,281	3,847	4,359	5,281	3,310	3,757
Foreign portfolio	1,003	-999	1,564	2,073	738	1,564	626	1,186
Derivatives	-3,873	28,367	-21,138	-18,759	-20,864	-21,138	351	646
Repurchase agreements	-3,492	-6,851	-6,446	-4,281	-6,470	-6,446	-21	-48
Market credit transactions	0	0	0	0	0	0	0	0
Deposits and other transactions with financial intermediaries	1,084	-6,207	3,177	202	2,139	3,177	1,146	2,643
Net exchange differences	118	-981	971	281	585	971	102	485
Other operating products and expenses	28,949	92,259	34,398	29,888	33,372	34,398	258	900
Other transactions	39,808	51,761	68,179	33,696	50,209	68,179	1,565	26,125
INTEREST INCOME								
Total	38,127	35,957	41,564	9,585	23,449	41,564	2,542	28,205
Money market assets and public debt	1,027	922	804	469	643	804	113	236
Other fixed-income securities	3,319	1,347	732	633	749	732	56	84
Domestic portfolio	734	556	81	152	179	81	18	30
Foreign portfolio	2,585	791	651	481	570	651	38	54
Equities	2,767	962	973	513	798	973	723	1,113
Domestic portfolio	2,456	766	539	263	470	539	131	292
Foreign portfolio	311	196	434	250	328	434	592	821
Repurchase agreements	-3,492	-6,851	-6,446	-4,281	-6,470	-6,446	-21	-48
Market credit transactions	0	0	0	0	0	0	0	0
Deposits and other transactions with financial intermediaries	1,084	-6,207	3,177	202	2,139	3,177	1,146	2,643
Other transactions	33,422	45,784	42,324	12,049	25,590	42,324	525	24,177
FINANCIAL INVESTMENT INCOME								
Total	29,451	97,113	32,734	23,638	25,905	32,734	14,436	24,762
Money market assets and public debt	1,598	22,307	2,235	3,401	2,628	2,235	-555	-794
Other fixed-income securities	24,492	17,110	18,492	10,377	13,689	18,492	10,382	19,257
Domestic portfolio	12,452	11,240	4,839	1,949	3,175	4,839	2,568	5,445
Foreign portfolio	12,040	5,870	13,653	8,428	10,514	13,653	7,814	13,812
Equities	5,242	20,898	5,872	5,407	4,299	5,872	3,213	3,830
Domestic portfolio	4,550	22,093	4,742	3,584	3,889	4,742	3,179	3,465
Foreign portfolio	692	-1,195	1,130	1,823	410	1,130	34	365
Derivatives	-3,873	28,367	-21,138	-18,759	-20,864	-21,138	351	646
Other transactions	1,992	8,431	27,273	23,212	26,153	27,273	1,045	1,823
EXCHANGE DIFFERENCES AND OTHER ITEMS								
Total	33,461	88,824	33,951	28,604	32,423	33,951	355	1,510
Net exchange differences	118	-981	971	281	585	971	102	485
Other operating products and expenses	28,949	92,259	34,398	29,888	33,372	34,398	258	900
Other transactions	4,394	-2,454	-1,418	-1,565	-1,534	-1,418	-5	125

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 euros¹

	2019	2020	2021	2021		2022		
				III	IV	I	II	III ²
I. Interest income	1,252	932	454	216	454	72	975	970
II. Net commission	130,293	143,162	173,785	114,528	173,785	36,111	86,222	114,300
Commission revenues	150,842	165,094	202,333	131,945	202,333	43,561	100,861	134,375
Brokering	23,194	22,035	14,140	10,824	14,140	4,591	8,349	11,129
Placement and underwriting	580	2,157	1,481	1,584	1,481	15	362	466
Securities deposit and recording	879	754	425	361	425	80	155	198
Portfolio management	14,890	14,554	22,874	14,648	22,874	5,921	11,812	15,963
Design and advice	14,426	34,128	40,421	15,480	40,421	4,648	21,619	30,598
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	63,776	91,375	22,325	45,929	61,224
Other	34,008	29,331	31,617	25,273	31,617	5,981	12,634	14,795
Commission expenses	20,549	21,932	28,548	17,417	28,548	7,450	14,639	20,075
III. Financial investment income	910	-5,562	666	478	666	-658	-1,195	-914
IV. Net exchange differences and other operating products and expenses	1,194	-968	-776	-2,809	-776	384	1,066	1,225
V. Gross income	133,648	137,564	174,129	112,414	174,129	35,910	87,068	115,582
VI. Operating income	9,284	3,339	26,155	21,604	26,155	2,039	4,890	4,717
VII. Earnings from continuous activities	6,163	2,836	22,802	19,338	22,802	2,213	7,666	7,777
VIII. Net earnings of the period	6,163	2,836	22,802	19,338	22,802	2,213	7,666	7,777

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: August 2022.

Capital adequacy. Broker-dealers and brokers^{1, 2}

TABLE 2.10

	2018	2019	2020	2021
TOTAL³				
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 taxes¹

TABLE 2.11

	2019	2020	2021	2021			2022	
				II	III	IV	I	II
TOTAL²								
Average (%) ³	9.22	18.71	13.68	20.95	11.79	13.68	9.81	19.33
Number of companies according to annualised return								
Losses	32	32	30	30	33	30	35	35
0-≤ 15%	22	15	20	19	16	20	15	10
> 15-≤ 45%	18	20	14	13	15	14	15	18
> 45-≤ 75%	7	9	9	12	7	9	11	7
> 75%	12	15	17	17	20	17	16	22
BROKER-DEALERS								
Average (%) ³	8.87	19.72	11.48	19.74	9.18	11.48	10.34	20.26
Number of companies according to annualised return								
Losses	13	12	13	10	14	13	12	8
0-≤ 15%	13	6	8	10	8	8	8	9
> 15-≤ 45%	7	9	6	8	7	6	7	7
> 45-≤ 75%	1	6	4	4	2	4	2	3
> 75%	2	2	1	1	1	1	3	4
BROKERS								
Average (%) ³	12.05	12.48	23.97	28.08	23.92	23.97	7.71	15.23
Number of companies according to annualised return								
Losses	19	20	17	20	19	17	23	27
0-≤ 15%	9	9	12	9	8	12	7	1
> 15-≤ 45%	11	11	8	5	8	8	8	11
> 45-≤ 75%	6	3	5	8	5	5	9	4
> 75%	10	13	16	16	19	16	13	18

1 ROE has been calculated as:

$$ROE = \frac{\text{Earnings before taxes (annualized)}}{\text{Own Funds}}$$

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 figures¹

TABLE 2.12

Thousands of euros	2017	2018	2019	2020	2021
ASSETS UNDER ADVICE²					
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 INCOME³					
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

	2019	2020	2021	2021		2022		
				III	IV	I	II	III ¹
Total financial CIS	4,233	4,018	3,815	3,859	3,815	3,785	3,677	3,553
Mutual funds	1,595	1,515	1,452	1,469	1,452	1,455	1,450	1,450
Investment companies	2,569	2,427	2,280	2,307	2,280	2,244	2,140	2,015
Funds of hedge funds	7	7	10	10	10	10	9	8
Hedge funds	62	69	73	73	73	76	78	80
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	1,068	1,074	1,069	1,077	1,079
Foreign funds marketed in Spain	399	407	416	424	416	411	412	411
Foreign companies marketed in Spain	634	641	658	644	658	658	665	668
Management companies	123	123	123	124	123	123	123	122
CIS depositories	36	35	33	33	33	33	34	35

¹ Available data: August 2022.

Number of CIS investors and shareholders

TABLE 3.2

	2019	2020	2021	2021		2022		
				III	IV	I	II	III ¹
Total financial CIS	12,132,581	13,015,104	16,160,034	15,121,845	16,160,034	16,597,453	16,480,209	16,459,789
Mutual funds	11,734,029	12,654,439	15,810,134	14,777,155	15,810,134	16,306,045	16,268,335	16,259,891
Investment companies	398,552	360,665	349,900	344,690	349,900	291,408	211,874	199,898
Total real estate CIS ²	799	798	691	690	691	691	691	691
Real estate mutual funds	483	483	482	482	482	482	482	482
Real estate investment companies	316	315	209	208	209	209	209	209
Total foreign CIS marketed in Spain ³	3,361,901	4,312,340	6,073,537	5,609,293	6,073,537	6,120,550	6,377,747	–
Foreign funds marketed in Spain	521,648	592,053	776,206	723,358	776,206	782,936	846,890	–
Foreign companies marketed in Spain	2,840,253	3,720,287	5,297,331	4,885,935	5,297,331	5,337,614	5,530,857	–

¹ Available data: July 2022.

² Investors and shareholders who invest in different 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

	2019	2020	2021	2021		2022		
				III	IV	I	II	III ¹
Total financial CIS	308,170.1	306,654.5	353,203.3	343,722.2	353,203.3	343,159.8	326,391.0	336,680.8
Mutual funds ²	279,377.4	279,694.5	324,701.0	315,632.6	324,701.0	316,020.4	302,684.2	313,475.6
Investment companies	28,792.7	26,960.0	8,502.3	28,089.6	28,502.3	27,139.4	23,706.8	23,205.2
Total real estate CIS	1,072.9	1,218.0	1,224.3	1,221.5	1,224.3	1,258.6	1,262.9	1,265.2
Real estate mutual funds	309.4	310.8	311.0	311.0	311	312.5	312.6	313.4
Real estate investment companies	763.5	907.1	913.2	910.5	913.2	946.1	950.2	951.8
Total foreign CIS marketed in Spain ³	178,841.5	199,419.3	276,231.9	261,733.8	276,231.9	227,194.6	209,314.4	–
Foreign funds marketed in Spain	30,843.4	27,355.5	36,662.6	34,459.8	36,662.6	32,253.8	30,442.1	–
Foreign companies marketed in Spain	147,998.1	172,063.8	239,569.4	227,274.0	239,569.4	194,940.8	178,872.3	–

1 Available data: July 2022.

2 Mutual funds investment in financial mutual funds of the same management company reached €9,274.1 million in June 2022.

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

	2019	2020	2021	2021			2022	
				II	III	IV	I	II
Asset	279,377.4	279,694.5	324,701.0	309,047.2	315,632.6	324,701.0	316,020.4	302,684.2
Portfolio investment	256,750.7	256,257.2	299,434.9	282,168.2	288,531.1	299,434.9	291,983.4	280,372.8
Domestic securities	66,520.4	54,587.8	54,715.8	55,270.4	56,360.1	54,715.8	50,851.1	49,626.0
Debt securities	44,637.7	38,394.5	35,648.2	34,519.9	34,914.9	35,648.2	32,823.9	32,086.7
Shares	9,047.9	6,185.3	6,828.5	6,863.3	6,833.9	6,828.5	6,472.4	6,314.9
Collective investment schemes	8,581.9	8,511.0	11,396.5	12,322.3	13,050.0	11,396.5	10,499.3	10,141.3
Deposits in credit institutions	4,004.8	1,341.5	627.2	1,364.6	1,349.0	627.2	888.7	928.2
Derivatives	243.2	140.9	168.3	177.1	174.8	168.3	114.1	97.2
Other	4.9	14.6	47.1	23.3	37.5	47.1	52.8	57.7
Foreign securities	190,224.5	201,664.8	244,715.5	226,894.2	232,167.3	244,715.5	241,128.5	230,741.8
Debt securities	83,817.5	86,151.5	95,131.8	92,596.8	92,917.5	95,131.8	99,183.7	102,155.0
Shares	33,115.9	33,886.1	46,254.3	41,191.2	42,944.2	46,254.3	44,921.3	41,171.1
Collective investment schemes	73,054.4	81,358.2	103,089.9	92,971.0	96,006.2	103,089.9	96,972.6	87,306.3
Deposits in credit institutions	4.5	0.1	0.0	0.0	0.0	0.0	0.0	0.0
Derivatives	231.3	268.0	238.6	121.4	282.9	238.6	50.2	108.8
Other	0.9	0.8	1.0	13.9	16.5	1.0	0.6	0.6
Doubtful assets and matured investments	5.8	4.6	3.5	3.6	3.8	3.5	3.8	5.0
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	25,490.7	25,805.1	23,950.8	23,728.2	20,480.2
Net balance (Debtors - Creditors)	891.6	1,234.3	1,315.3	1,388.3	1,296.4	1,315.3	308.7	1,831.3

Asset allocation of investment companies

TABLE 3.5

Millions of euros

	2019	2020	2021	2021			2022	
				II	III	IV	I	II
Asset	28,792.7	26,960.0	28,502.3	28,291.2	28,089.6	28,502.3	27,139.4	23,706.8
Portfolio investment	25,940.3	24,548.9	25,729.9	25,598.8	25,317.6	25,729.9	23,556.8	17,719.0
Domestic securities	4,588.3	3,419.9	3,525.2	3,517.6	3,460.0	3,525.2	3,637.6	3,828.0
Debt securities	1,217.1	734.3	734.3	619.3	630.9	734.3	972.8	1,510.1
Shares	1,982.8	1,601.2	1,633.7	1,714.8	1,636.2	1,633.7	1,541.6	1,260.8
Collective investment schemes	1,232.2	967.7	1,067.4	1,089.2	1,092.5	1,067.4	1,036.4	982.4
Deposits in credit institutions	98.6	47.7	19.1	27.8	30.6	19.1	19.5	15.4
Derivatives	0.8	3.2	-0.4	-0.6	1.4	-0.4	-1.2	-1.2
Other	56.8	65.9	71.1	67.1	68.4	71.1	68.4	60.5
Foreign securities	21,348.2	21,125.7	22,202.8	22,078.8	21,855.4	22,202.8	19,917.9	13,889.9
Debt securities	4,617.7	3,243.8	2,683.8	2,852.4	2,822.6	2,683.8	2,294.7	1,893.4
Shares	6,133.8	6,548.1	7,157.9	7,150.3	6,943.3	7,157.9	6,501.0	4,761.4
Collective investment schemes	10,549.0	11,297.4	12,335.3	12,049.4	12,050.8	12,335.3	11,085.2	7,212.2
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	12.4	23.5	8.3	18.5	4.5
Other	12.5	12.6	17.5	14.4	15.2	17.5	18.5	18.5
Doubtful assets and matured investments	3.8	3.2	1.8	2.4	2.2	1.8	1.3	1.1
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	2,541.8	2,517.3	2,476.4	3,239.8	5,592.3
Net balance (Debtors - Creditors)	192.1	191.4	295.5	150.0	254.2	295.5	342.2	395.0

Financial mutual funds: number, investors and total net assets by category^{1, 2}

TABLE 3.6

	2019	2020	2021	2021		2022		
				III	IV	I	II	III ³
NO. OF FUNDS								
Total financial mutual funds	1,710	1,644	1,611	1,604	1,611	1,622	1,625	1,627
Fixed income ⁴	281	276	266	265	266	264	268	268
Mixed fixed income ⁵	173	174	181	183	181	180	175	175
Mixed equity ⁶	185	186	192	187	192	195	198	201
Euro equity	113	104	94	96	94	92	89	85
Foreign equity	263	276	307	295	307	319	328	327
Guaranteed fixed income	66	55	43	50	43	43	42	43
Guaranteed equity ⁷	155	133	114	117	114	111	102	102
Global funds	255	248	263	252	263	275	280	285
Passive management ⁸	133	118	88	93	88	81	81	82
Absolute return	84	72	61	64	61	60	60	57
INVESTORS								
Total financial mutual funds	11,739,183	12,660,100	15,816,557	14,783,710	15,816,557	16,314,155	16,276,281	16,268,743
Fixed income ⁴	3,668,324	4,135,294	5,476,096	4,766,153	5,476,096	5,483,985	5,517,117	5,511,078
Mixed fixed income ⁵	1,087,881	1,203,280	1,459,004	1,411,225	1,459,004	1,412,031	1,222,259	1,278,897
Mixed equity ⁶	707,159	745,112	721,346	681,278	721,346	731,053	715,504	713,453
Euro equity	598,901	530,107	778,138	774,026	778,138	864,790	875,675	861,206
Foreign equity	2,655,123	3,043,542	3,882,184	3,671,230	3,882,184	4,342,851	4,294,359	4,279,767
Guaranteed fixed income	154,980	135,320	77,430	109,449	77,430	74,099	81,826	83,403
Guaranteed equity ⁷	428,470	356,439	265,043	273,878	265,043	235,945	202,655	201,668
Global funds	1,359,915	1,409,759	1,989,428	2,046,838	1,989,428	1,992,279	2,179,303	2,154,107
Passive management ⁸	429,428	511,251	505,514	522,529	505,514	494,585	494,942	503,587
Absolute return	646,042	587,040	659,411	524,138	659,411	679,573	689,677	678,613
TOTAL NET ASSETS (millions of euros)								
Total financial mutual funds	279,377.4	279,694.5	324,701.0	315,632.6	324,701.0	316,020.4	302,684.2	313,508.0
Fixed income ⁴	78,583.2	81,015.9	88,422.8	86,173.0	88,422.8	90,688.1	92,858.9	93,516.0
Mixed fixed income ⁵	40,819.9	43,200.4	50,869.7	48,904.9	50,869.7	46,975.3	39,139.4	41,674.7
Mixed equity ⁶	28,775.8	30,432.7	28,141.1	25,970.6	28,141.1	27,072.9	24,638.2	25,629.1
Euro equity	10,145.1	7,091.1	8,279.6	8,180.2	8,279.6	7,650.0	7,366.7	7,613.1
Foreign equity	34,078.9	37,722.5	51,222.2	47,217.0	51,222.2	50,254.2	45,344.7	49,596.1
Guaranteed fixed income	4,809.3	4,177.0	2,346.7	3,356.7	2,346.7	2,166.9	2,458.4	2,588.9
Guaranteed equity ⁷	13,229.1	11,037.1	8,094.9	8,394.1	8,094.9	7,054.3	6,089.1	6,112.2
Global funds	43,041.9	40,944.5	67,591.0	67,783.8	67,591.0	65,204.9	66,365.4	67,971.3
Passive management ⁸	14,073.8	14,014.3	12,500.4	13,137.3	12,500.4	11,570.7	11,336.4	11,879.4
Absolute return	11,818.3	10,057.4	7,231.2	6,513.4	7,231.2	7,382.7	7,086.8	6,926.9

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: July 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		2022		
				III	IV	I	II	III ¹
INVESTORS								
Total financial mutual funds	11,739,183	12,660,100	15,816,557	14,783,710	15,816,557	16,314,155	16,276,281	16,268,743
Natural persons	11,534,957	12,437,954	15,541,300	14,518,217	15,541,300	16,034,295	15,994,598	15,988,614
Residents	11,440,086	12,339,829	15,427,337	14,408,799	15,427,337	15,917,149	15,876,177	15,869,050
Non-residents	94,871	98,125	113,963	109,418	113,963	117,146	118,421	119,564
Legal persons	204,226	222,146	275,257	265,493	275,257	279,860	281,683	280,129
Credit institutions	1,928	1,403	746	1,483	746	903	907	880.00
Other resident institutions	201,408	219,849	273,421	262,995	273,421	277,849	279,658	278,130
Non-resident institutions	890	894	1090	1,015	1,090	1,108	1,118	1,119
TOTAL NET ASSETS (millions of euros)								
Total financial mutual funds	279,377.4	279,694.5	324,701.0	315,632.6	324,701.0	316,020.4	302,684.2	313,508.0
Natural persons	231,434.8	230,573.8	264,075.7	255,030.4	264,075.7	258,828.7	247,585.8	257,023.4
Residents	228,214.4	227,444.5	260,321.1	251,485.0	260,321.1	255,130.5	244,052.6	253,340.9
Non-residents	3,220.4	3,129.3	3,754.6	3,545.4	3,754.6	3,698.2	3,533.2	3,682.6
Legal persons	47,942.6	49,120.7	60,625.3	60,602.2	60,625.3	57,191.7	55,098.4	56,484.6
Credit institutions	523.7	480.0	472.5	482.8	472.5	518.5	324.7	329.6
Other resident institutions	46,628.9	47,995.2	59,288.6	59,358.6	59,288.6	55,835.3	53,941.7	55,284.0
Non-resident institutions	790.0	645.4	864.2	760.8	864.2	837.8	832.0	871.0

1 Available data: July 2022.

Subscriptions and redemptions of financial mutual funds by category^{1, 2}

TABLE 3.8

Millions of euros

	2019	2020	2021	2021			2022	
				II	III	IV	I	II
SUBSCRIPTIONS								
Total financial mutual funds	156,702.7	113,265.7	149,415.0	51,735.6	27,554.9	35,082.0	41,176.0	41,415.0
Fixed income	91,050.8	51,487.7	58,255.2	16,922.1	11,740.5	15,696.3	18,575.6	19,905.2
Mixed fixed income	14,154.1	15,496.2	21,134.0	6,481.4	3,653.1	4,895.4	4,314.9	2,506.1
Mixed equity	11,156.0	8,861.2	11,113.2	3,042.2	2,078.5	3,029.9	2,478.3	1,658.0
Euro equity	2,998.4	2,232.1	3,005.8	976.7	467.4	553.0	786.1	1,235.3
Foreign equity	16,864.0	15,974.8	19,019.8	5,883.0	3,526.1	4,416.3	8,535.0	4,803.0
Guaranteed fixed income	854.1	424.7	9.0	4.7	0.7	1.3	2.1	437.5
Guaranteed equity	898.2	74.2	86.8	30.5	11.7	11.6	13.6	61.1
Global funds	12,713.7	11,391.1	30,193.0	16,386.3	5,197.2	4,954.4	4,239.9	8,438.0
Passive management	2,261.9	4,944.6	2,827.9	936.6	374.8	453.5	1,303.2	1,671.8
Absolute return	3,751.5	2,379.0	3,770.3	1,072.2	505.1	1,070.4	927.4	698.7
REDEMPTIONS								
Total financial mutual funds	154,273.0	112,634.4	121,839.9	41,143.4	21,214.5	31,446.3	39,216.8	37,376.8
Fixed income	80,046.4	47,611.0	49,850.1	14,936.3	9,133.2	13,217.9	14,617.7	15,545.9
Mixed fixed income	16,004.2	14,974.6	13,671.0	3,710.1	2,972.4	2,962.9	4,253.2	7,929.2
Mixed equity	7,943.7	7,667.5	14,639.8	10,262.5	979.20	1,603.1	2,101.3	2,274.2
Euro equity	6,540.2	4,205.3	2,979.1	838.3	546.2	668.8	846.7	1,031.8
Foreign equity	12,963.1	13,449.4	13,586.3	4,393.9	2,974.9	3,097.5	7,185.0	4,157.4
Guaranteed fixed income	1,136.7	1,030.6	1,720.9	340.1	229.5	997.6	122.8	91.8
Guaranteed equity	2,739.2	2,245.2	2,914.0	1,437.3	832.6	311.5	920.7	862.6
Global funds	15,133.7	12,743.7	15,234.6	3,400.7	2,404.0	6,679.7	6,935.7	3,680.6
Passive management	5,272.0	4,985.6	4,372.9	1,231.4	869.4	1,496.1	1,648.5	1,175.5
Absolute return	6,493.7	3,721.4	2,871.1	592.8	273.1	411.2	585.2	627.6

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

	2019	2020	2021	2021			2022	
				II	III	IV	I	II
NET SUBSCRIPTIONS/REDEMPTIONS								
Total financial mutual funds	2,467.5	660.3	27,620.3	10,633.7	6,337.3	3,639.6	1,952.9	3,943.9
Fixed income	10,732.6	2,062.6	7,674.2	1,237.0	2,632.1	2,480.2	3,801.7	4,461.7
Mixed fixed income	-1,506.1	2,619.5	6,574.7	-705.8	761.9	1,728.9	-2,338.6	-5,840.5
Mixed equity	3,288.8	1,601.4	-4,179.3	-8,279.2	1,091.9	1,632.7	132.2	-620.5
Euro equity	-3,588.2	-2,007.7	13.8	135.8	-88.8	-115.3	-164.4	202.8
Foreign equity	4,113.8	2,633.1	5,260.9	1,257.6	600.9	1,320.5	1,402.6	603.8
Guaranteed fixed income	-282.6	-707.4	-1,787.1	-335.5	-228.7	-996.8	-120.6	345.6
Guaranteed equity	-1,857.0	-2,254.2	-2,949.3	-1,406.6	-943.3	-299.9	-906.8	-831.3
Global funds	-2,553.9	-1,501.2	22,755.0	18,527.0	4,878.0	-1,725.3	378.4	5,158.6
Passive management	-3,026.8	-23.8	-2,700.6	-294.8	-500.6	-1,043.0	-523.0	516.6
Absolute return	-2,852.9	-1,761.9	-3,041.9	498.4	-1,866.2	657.6	291.3	-52.8
RETURN ON ASSETS								
Total financial mutual funds	18,002.8	-310.6	17,471.5	5,558.4	260.2	5,483.3	-10,623.0	-17,270.1
Fixed income	961.9	371.5	-265.8	56.8	38.4	-230.3	-1,536.0	-2,290.9
Mixed fixed income	1,866.9	-220.0	1,160.1	481.2	5.4	284.3	-1,549.8	-1,990.7
Mixed equity	2,231.0	55.5	1,890.4	572.3	-14.1	538.5	-1,199.6	-1,814.0
Euro equity	1,556.4	-1,044.9	1,176.4	325.1	37.3	215.1	-464.8	-485.7
Foreign equity	5,561.1	1,012.7	8,242.5	2,462.1	151.6	2,687.0	-2,370.0	-5,511.9
Guaranteed fixed income	204.4	75.2	-43.3	-8.5	-0.1	-13.3	-59.1	-54.1
Guaranteed equity	530.0	62.2	7.2	0.6	-1.9	0.7	-133.9	-133.9
Global funds	3,460.8	-595.3	3,894.8	1,265.6	-7.1	1,535.1	-2,764.3	-3,996.0
Passive management	1,133.2	-28.7	1,192.9	310.4	55.0	406.1	-404.5	-750.9
Absolute return	498.7	1.7	216.5	92.6	-4.3	60.2	-139.8	-241.9

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 deregistrations 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 category¹

TABLE 3.10

% of daily average total net assets

	2019	2020	2021	2021			2022	
				II	III	IV	I	II
MANAGEMENT YIELDS								
Total financial mutual funds	7.67	0.85	6.81	2.14	0.36	1.97	-3.14	-5.38
Fixed income	1.83	0.99	0.15	0.19	0.16	-0.15	-1.63	-2.41
Mixed fixed income	5.75	0.50	3.37	1.31	0.23	0.80	-3.04	-4.68
Mixed equity	9.79	1.60	8.43	2.79	0.26	2.35	-4.10	-6.75
Euro equity	16.01	-12.72	16.30	4.46	0.81	2.99	-5.64	-5.96
Foreign equity	21.00	4.76	19.98	5.97	0.85	5.85	-4.41	-11.10
Guaranteed fixed income	4.52	2.18	-0.85	-0.12	0.10	-0.43	-2.51	-2.31
Guaranteed equity	4.20	1.00	0.59	0.09	0.11	0.20	-1.70	-2.04
Global funds	9.24	-0.30	8.04	2.58	0.40	2.56	-3.85	-5.55
Passive management	7.88	0.29	9.61	2.43	0.53	3.38	-3.39	-6.63
Absolute return	4.93	0.87	3.78	1.38	0.08	1.04	-1.79	-3.23
EXPENSES. MANAGEMENT FEE								
Total financial mutual funds	0.85	0.83	0.86	0.22	0.21	0.22	0.20	0.20
Fixed income	0.44	0.42	0.40	0.10	0.10	0.10	0.09	0.09
Mixed fixed income	0.92	0.88	0.88	0.22	0.21	0.22	0.21	0.22
Mixed equity	1.29	1.28	1.28	0.32	0.29	0.33	0.28	0.29
Euro equity	1.49	1.45	1.30	0.33	0.32	0.32	0.31	0.30
Foreign equity	1.41	1.31	1.31	0.33	0.30	0.34	0.29	0.29
Guaranteed fixed income	0.36	0.36	0.36	0.09	0.09	0.09	0.09	0.08
Guaranteed equity	0.47	0.44	0.44	0.11	0.11	0.11	0.10	0.10
Global funds	1.03	1.07	1.15	0.30	0.28	0.29	0.29	0.29
Passive management	0.42	0.41	0.37	0.09	0.09	0.09	0.09	0.09
Absolute return	0.81	0.78	0.68	0.19	0.14	0.15	0.13	0.13
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	0.01	0.01	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	0.01	0.01	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 category¹

TABLE 3.11

%

	2019	2020	2021	2021		2022		
				III	IV	I	II	III ²
Total financial mutual funds	7.12	0.78	6.31	0.10	1.81	-3.16	-5.38	3.43
Fixed income	1.38	0.62	-0.31	0.05	-0.28	-1.71	-2.51	1.45
Mixed fixed income	4.75	-0.03	2.49	0.02	0.56	-3.18	-4.76	2.63
Mixed equity	9.25	0.59	7.18	-0.03	2.05	-4.21	-6.81	4.32
Euro equity	14.27	-8.75	16.72	0.42	2.66	-5.62	-6.06	3.80
Foreign equity	22.18	2.83	21.14	0.42	5.77	-4.11	-10.67	8.09
Guaranteed fixed income	3.98	1.68	-1.29	-0.02	-0.54	-2.55	-2.35	1.59
Guaranteed equity	3.62	0.70	0.06	-0.03	0.01	-1.79	-2.08	1.13
Global funds	8.45	-0.31	7.90	0.01	2.32	-3.90	-5.61	3.28
Passive management	7.45	0.44	9.82	0.40	3.48	-3.38	-6.62	4.39
Absolute return	3.94	0.94	3.02	-0.07	0.95	-1.88	-3.27	1.49

¹ Data on side-pocket sub-funds are only included in aggregate figures, and not in each individual category.

² Available data: July 2022.

Hedge funds and funds of hedge funds

TABLE 3.12

	2019	2020	2021			2022		
			2021	II	III	IV	I ¹	II
HEDGE FUNDS								
Investors/shareholders ²	7,548	7,961	8,786	8,299	8,450	8,786	9,033	9,444
Total net assets (millions of euros)	2,832.4	2,912.6	3,543.4	3,273.0	3,352.5	3,543.4	3,543.1	3,435.3
Subscriptions (millions of euros)	1,290.0	454.5	845	245.6	157.5	307.6	257.3	209.7
Redemptions (millions of euros)	937.0	407.2	409.2	157.1	62.8	126.8	143.2	141.1
Net subscriptions/redemptions (millions of euros)	353.0	47.3	435.8	88.5	94.6	180.8	114.0	68.7
Return on assets (millions of euros)	217.2	27.7	193.1	98.9	-16.4	9.7	-114.4	-177.6
Returns (%)	10.37	1.75	6.47	3.38	-0.98	0.46	-2.92	-4.89
Management yields (%) ³	9.94	2.35	7.39	3.76	-0.41	0.57	-2.99	-4.80
Management fees (%) ³	1.19	1.43	1.47	0.58	0.26	0.34	0.21	0.22
Financial expenses (%) ³	0.00	0.02	0.14	0.03	0.03	0.05	0.08	0.04
FUNDS OF HEDGE FUNDS								
Investors/shareholders ²	2,859	2,858	5,385	3,848	4,457	5,385	5,379	5,309
Total net assets (millions of euros)	566.7	652.8	831.0	727.3	676.1	831.0	889.6	681.3
Subscriptions (millions of euros)	72.3	32.4	237.8	45.9	26.8	160.5	41.7	0.4
Redemptions (millions of euros)	0.3	3.1	121.8	0.2	91.4	18.5	-2.3	222.8
Net subscriptions/redemptions (millions of euros)	71.4	29.3	116.0	45.7	-64.6	142.0	44.0	-222.4
Return on assets (millions of euros)	26.5	56.8	62.2	15.6	13.4	12.9	14.6	14.1
Returns (%)	5.23	3.71	9.35	2.18	1.78	1.94	1.63	0.92
Management yields (%) ⁴	6.32	4.24	10.68	2.72	2.53	2.26	2.24	1.60
Management fees (%) ⁴	1.63	1.39	1.37	0.34	0.38	0.37	0.39	0.59
Depository fees (%) ⁴	0.06	0.06	0.06	0.01	0.02	0.02	0.02	0.01

1 Return (%) revised and modified in October 2022.

2 Data on sub-funds.

3 % of monthly average total net assets.

4 % of daily average total net assets.

Management companies. Number of portfolios and assets under management

TABLE 3.13

	2019	2020	2021		2022			
			2021	III	IV	I	II	III ¹
NUMBER OF PORTFOLIOS²								
Mutual funds	1,595	1,515	1,452	1,469	1,452	1,455	1,450	1,450
Investment companies	2,560	2,421	2,275	2,301	2,275	2,239	2,135	2,010
Funds of hedge funds	7	7	10	10	10	10	9	8
Hedge funds	62	69	72	72	72	75	77	79
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	315,632.6	324,701.0	316,020.4	302,684.2	313,508.0
Investment companies	28,385.5	26,564.8	28,049.3	27,625.4	28,049.3	26,710.5	23,307.8	22,789.3
Funds of hedge funds	566.7	652.8	831.0	725.2	831.0	889.6	889.6	-
Hedge funds	2,832.4	2,912.6	3,543.4	3,267.4	3,543.4	3,543.1	3,534.2	-
Real estate mutual funds	309.4	310.8	311.0	311.0	311.0	312.5	312.6	313.4
Real estate investment companies	763.5	907.1	913.2	910.5	913.2	946.1	950.2	951.8

1 Available data: July 2022.

2 Data source: registers of Collective Investment Schemes.

Foreign Collective Investment Schemes marketed in Spain¹

TABLE 3.14

	2019	2020	2021	2021			2022	
				II	III	IV	I	II
INVESTMENT VOLUME² (millions of euros)								
Total	178,841.5	199,419.3	276,231.9	249,927.6	261,733.8	276,231.9	227,194.6	209,314.4
Mutual funds	30,843.4	27,355.5	36,662.6	32,797.0	34,459.8	36,662.6	32,253.8	30,442.1
Investment companies	147,998.1	172,063.8	239,569.4	217,130.6	227,274.0	239,569.4	194,940.8	178,872.3
INVESTORS/SHAREHOLDERS²								
Total	3,361,901	4,312,340	6,073,537	5,231,449	5,609,293	6,073,537	6,120,550	6,377,747
Mutual funds	521,648	592,053	776,206	697,470	723,358	776,206	782,936	846,890
Investment companies	2,840,253	3,720,287	5,297,331	4,533,979	4,885,935	5,297,331	5,337,614	5,530,857
NUMBER OF SCHEMES³								
Total	1,033	1,048	1,074	1,058	1,068	1,074	1,069	1,077
Mutual funds	399	407	416	423	424	416	411	412
Investment companies	634	641	658	635	644	658	658	665
COUNTRY³								
Luxembourg	462	472	501	486	493	501	497	498
France	222	225	222	229	228	222	220	219
Ireland	220	222	231	224	225	231	232	240
Germany	48	45	50	50	50	50	50	52
United Kingdom	23	23	0	0	0	0	0	0
The Netherlands	4	3	3	3	3	3	3	3
Austria	30	32	33	34	33	33	33	33
Belgium	5	5	5	5	5	5	5	3
Denmark	1	1	1	1	1	1	1	1
Finland	11	13	14	14	14	14	14	14
Liechtenstein	4	4	5	4	4	5	5	5
Portugal	3	3	0	3	3	0	0	0
Sweden	0	0	9	5	9	9	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 schemes¹

TABLE 3.15

	2019	2020	2021	2021		2022		
				III	IV	I	II	III ²
REAL ESTATE MUTUAL FUNDS								
Number	2	2	2	2	2	2	2	2
Investors	483	483	482	482	482	482	482	482
Assets (millions of euros)	309.4	310.8	311.0	311.0	311.0	312.5	312.6	313.4
Return on assets (%)	-0.02	0.47	0.07	-0.01	0.01	0.47	0.04	0.23
REAL ESTATE INVESTMENT COMPANIES								
Number	3	3	2	2	2	2	2	2
Shareholders	316	315	209	208	209	209	209	209
Assets (millions of euros)	763.5	907.1	913.2	910.5	913.2	946.1	950.2	951.8

1 Real estate investment schemes which have sent reports to the CNMV, excluding those in process of dissolution or liquidation.

2 Available data: July 2022.

