

ESMA Market Report

Costs and Performance of EU Retail Investment Products 2023



*ESMA Market Report on Costs and Performance of EU Retail Investment Products 2023**

() The publication of this report has been brought forward into 2023. Therefore, two ESMA Market Reports on Costs and Performance of EU Retail Investment Products have been published in the current year, one covering the period from 2012 to 2021 and the current one the period from 2013 to 2022.*

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Executive summary

Our 2023 *ESMA Market Report on the Costs and Performance of EU Retail Investment Products* provides an overview of key developments up to the end of 2022, a year characterised by elevated inflation and subdued returns. Similarly to previous editions, this year's analysis covers Undertakings for Collective Investment in Transferable Securities (UCITS), retail Alternative Investment Funds (retail AIFs), and Structured Retail Products (SRPs). Compared with the previous edition, we provide a more in-depth analysis of equity UCITS costs and performance by strategy and for the first time a preliminary analysis of AIF costs. Improvements in data availability continue, but significant data issues persist. For UCITS, entry and exit costs are still subject to limitations, while no data is available for distribution costs. In case of AIFs, the information on costs is very scarce.

Investment funds – UCITS

UCITS are the largest retail investment sector in the EU. Our sample covers assets worth around EUR 8.4tn, of which retail investors held around EUR 5.5tn in 2022. The samples for both retail and institutional UCITS (excluding ETFs) decreased by 15% compared to 2021. Confirming trends from previous editions, fund costs, including ongoing and one-off fees, continued to decline. Retail investors need to adapt to the high inflation environment and to anticipate the consequences on the real value of their investment and their savings. A hypothetical ten-year retail investment of EUR 10,000, in a stylised portfolio of equity, bond and mixed assets funds, provided a value of EUR 14,850, net of EUR 2,000 paid in costs. When including inflation, the real net value decreased to around EUR 13,500. Despite the cost decline for active equity funds between 2021 and 2022, active equity funds once more underperformed, in net terms, passive non-ETF funds and ETFs. Across EU Member States, cost heterogeneity persisted. Net performance can also significantly vary depending on the investment strategy (geographical focus and main sector of investment). Ongoing costs of ESG funds are lower than or similar to the ongoing costs of non-ESG equivalents. Overall, ESG funds underperformed their non-ESG equivalents in 2022, a likely consequence of the energy crisis and related soaring energy prices. However, ESG funds still outperformed their non-ESG equivalents on the three-year investment horizon.

Investment funds – retail AIFs

Alternative Investment Funds (AIFs), the second largest market for retail investment, exceeded EUR 6.7tn in assets in 2022, more than EUR 900bn of which was held by retail investors (retail AIFs). Those figures are broadly unchanged compared to 2021. Around half of the total retail investment in AIFs remains concentrated in funds primarily focusing on traditional asset classes, like equities and bonds. Retail investment in real estate slightly increased compared to the previous year. Annualised returns of AIFs offered to retail investors significantly declined in 2022 amid persistent growth concerns, elevated inflation and rising interest rates. A hypothetical five-year investment of EUR 10,000 between 2018 and 2022, based on a stylised portfolio of AIFs, would yield around EUR 11,100, in net terms, and EUR 10,100 when taking into account the effect of inflation.

Structured retail products

SRPs, with an outstanding value of just under EUR 350bn in 2022 (representing a slight increase from the previous year), remain a much smaller market than UCITS and AIFs sold to retail investors. The share of products sold with terms over three years increased to around three quarters of sales volumes. We provide an EU-wide analysis of disclosed performance scenarios and costs, drawing on commercial data. Costs – largely charged in the form of entry costs – rose in 2022 for a majority of product types and issuers, although they vary substantially by payoff type and country. The

analysis of performance scenarios shows that the returns of one in eight SRPs would be negative even in a moderate scenario. Overall, taking as a reference the return of the median SRP in the moderate scenario, a hypothetical five-year investment of EUR 10,000 undertaken in 2022 would yield around EUR 10,800, in net terms, at maturity. This figure increases to EUR 13,000 in a favourable scenario, but drops to EUR 5,300 in an unfavourable scenario. Looking at the actual performance of a smaller sample of SRPs, we can see that autocall products tended to perform well, while other, less numerous product types – chiefly reverse convertibles – often delivered gross negative returns even though these figures are not yet adjusted for the costs paid by investors.

Essential statistics – UCITS

UCITS

Costs and performance (2018–2022)	Funds (non-ETF)			ETFs
	Equity	Bond	Mixed	Equity
Costs (% , per annum (p.a.))	1.7	1.1	1.7	0.4
Ongoing charges	1.5	1.0	1.5	0.2
Subscription fees	0.16	0.14	0.15	0.09
Redemption fees	0.02	0.03	0.04	0.08
Net performance (% , p.a.)	4.9	-0.5	0.9	6.7
Change in ongoing costs 2018–2022 (%)	-4.3	-11.7	-2.7	-42.5
Inflation (% , p.a.)	3.2	3.2	3.2	3.2
Net real performance (% , p.a.)	1.7	-3.7	-2.3	3.5

ESG UCITS

Costs and performance (2020–2022)	Funds		
	Equity	Bond	Mixed
Costs (% , p.a.)	1.6	1.1	1.9
Ongoing charges	1.2	0.7	1.5
Subscription fees	0.3	0.4	0.4
Redemption fees	0.04	0.02	0.01
Net performance (% , p.a.)	6.9	-2.9	0.3

Hypothetical UCITS portfolio performance

EUR 10,000 UCITS portfolio performance over time	10Y (2013–2022)	5Y (2018–2022)
Net value (EUR)	14,851	10,847
Costs paid (EUR)	1,976	750
Inflation (EUR)	1,360	993
Net real value (EUR)	13,491	9,854

Note: UCITS – costs and performance for EU-27 UCITS (ESG and non-ESG), for main retail investors' asset classes, at a five-year investment horizon between 2018 and 2022, %; change in ongoing costs from 2018–2022 refers to the changes in ongoing costs for an investment horizon of one year as calculated at the end of 2018 and at the end of 2022. ESG UCITS – costs and performance for EU-27 ESG UCITS for main retail investors' asset classes, at a three-year investment horizon between 2020 and 2022, %. The definition of ESG funds relies on the Morningstar definition of a sustainable investment fund, which classifies a product as a 'sustainable investment' "if the use of one or more approaches to sustainable investing is central to the investment product's overall investment process, based on its prospectus or other regulatory filings". Hypothetical UCITS portfolio performance – value of hypothetical EUR 10,000 after 10 years and 5 years, for retail investors, in EUR. Statistics presented in this report fall after the withdrawal of the United Kingdom from the EU on 31 January 2020. Comparisons with statistics we had published in the first three editions are, therefore, limited.

Essential statistics – AIFs, SRPs

Retail AIFs

Performance (2018–2022)	FoFs	Other AIFs	RE	RoM
Gross performance (% p.a.)	3.0	2.6	3.7	-0.4
Net performance (% p.a.)	2.0	1.9	2.5	-0.8

Hypothetical AIFs portfolio performance

EUR 10,000 AIFs portfolio performance over time	5Y (2018–2022)
Gross value (EUR)	11,627
Net value (EUR)	11,098
Inflation (EUR)	1,016
Net real value (EUR)	10,081

Structured Retail Products

Performance scenarios	Stress	Unfavourable	Moderate	Favourable
Simulated net return (core 50% of products, % p.a.)	-36 to -19	-20 to 0	1 to 5	3 to 8
Costs				
Reduction in yield (% p.a.)			1.03	
from subscription fees (% p.a.)			1.01	

Hypothetical SRPs performance

EUR 10,000 SRPs performance over time	RHP
Net value (EUR) in the unfavourable scenario	5,300
Net value (EUR) in the moderate scenario	10,800
Net value (EUR) in the favourable scenario	13,000

Note: Retail AIFs – EEA30 retail AIFs annualised monthly gross and net performance by fund type, %. Predominant fund type FoFs = funds of funds; “Other AIFs” = fixed income funds, equity funds, infrastructure funds, commodity funds and other funds; RE = real estate funds; RoM = rest of the market and includes hedge funds, private equity and those funds whose type is not indicated; no cost reporting available from regulatory data sources. Hypothetical AIFs portfolio performance – value of hypothetical EUR 10,000 after 5 years, for retail investors, in EUR. Structured Retail Products – forecasts of performance and costs for structured retail products, %. Figures for performance refer to the interquartile range (25th and 75th percentiles) of potential per-annum returns over the product’s recommended holding period under four scenarios: stress, unfavourable, moderate and favourable. Figures for costs are the median reduction in yield per-annum over a product’s recommended holding period. Hypothetical SRPs performance – value of hypothetical EUR 10,000 based on the median of potential returns over the product’s recommended holding period under three scenarios: unfavourable, moderate and favourable, in EUR. RHP = recommended holding period. Statistics presented in this report fall after the withdrawal of the United Kingdom from the EU on 31 January 2020. Comparisons with statistics we had published in the first three editions are, therefore, limited.

Market monitoring

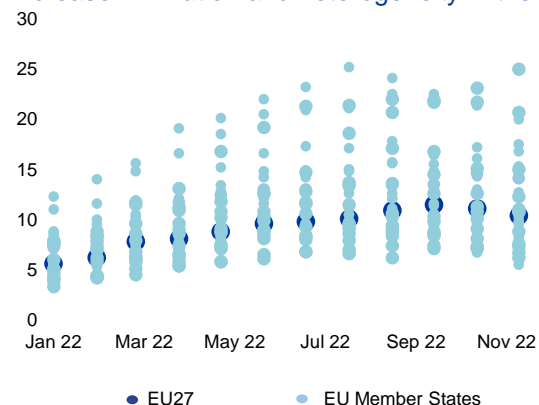
Market environment 2022

The global macroeconomic environment deteriorated in 2022, affected by increased inflation and high commodity prices. In this context, economic activity slowed down in 2022 in the EU (3.5%), the United States (US) (2.1%) and China (3.0%).¹

MR-CP.1

EU HICP inflation

Increase in inflation and heterogeneity in the EU



Note: EU27 HICP monthly inflation dispersion, %.
Sources: Eurostat, ESMA.

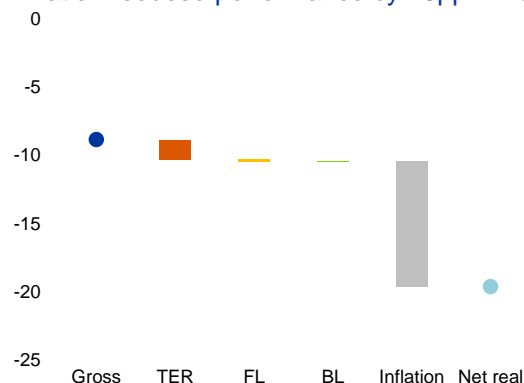
After years at a low level, inflation² became more prominent in 2021 and surged in 2022. Between 2009 and 2020, the annual inflation rate in the EU stood at 1.3% on average but increased to 2.9% in 2021 and 9.2% in 2022 (AMR-CP-S.20). Specifically in 2022, the monthly variation of the Harmonised Index of Consumer Prices (HICP) went from 5.6% in January to 10.4% in December in the EU (MR-CP.1). Significant disparities exist across member states: the inflation rate ranged between 5.9% in France and 19.4% in Estonia in 2022. This disparity across members states grew over the months with the spread between the highest and the lowest inflation rate going from 9.8 percentage points (pp) in January 2022 to 19.5pp in December 2022.

Inflation developments are particularly relevant for consumers and retail investors who need to account for these new macroeconomic conditions. After years of very low inflation, retail investors may not be aware of the effects of inflation and their dynamics on their portfolios. Indeed, inflation had a growing impact on the final

investment outcome since 2021, in both the short (MR-CP.2) and long-term (MR-CP.3).

MR-CP.2

Equity funds real net performance at the 1Y horizon Inflation reduced performance by 10pp in 2022



Note: EU27 UCITS equity funds annual performance classified as gross performance (dark blue dot), ongoing costs (TER, orange bar), subscription (FL, yellow bar) and redemption loads (BL, green bar), inflation (grey bar) and net real performance (sky blue dot). Retail investors, 1Y horizon %.
Sources: Refinitiv Lipper, Eurostat, ESMA.

At the one-year investment horizon (MR-CP.2), inflation reduced investor return by almost 10pp, with the net performance at -10.5% and the net real performance at -19.6% for an investment in an equity UCITS. The impact of inflation at the ten-year investment horizon appears to be lower but nonetheless reduces the net performance by 2pp, on average, at the EU level (MR-CP.3). With a net performance of 7.4% for a ten-year investment in an equity UCITS, the net real performance stood at 5.4%.

The impact of inflation can be underestimated or overlooked by retail investors who may overestimate the real value of their savings and investments. This can lead to insufficient savings, excessive spending or ill-judged allocation of capital, all of which will have detrimental effects on investors' long-term wealth.

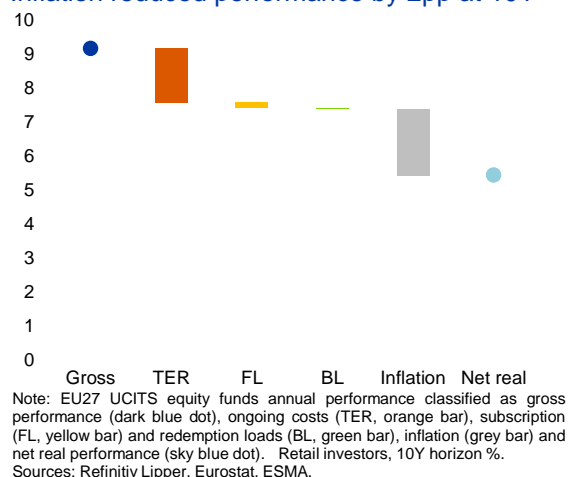
¹ ESMA, [TRV No.1, 2023](#), February 2023.

² Inflation measured by the Harmonised Index of Consumer Prices (HICP). According to the Eurostat definition, the HICP measures the changes over time in the prices of

consumer goods and services acquired by households. It is calculated according to harmonised definitions.

MR-CP.3

Equity funds real net performance at the 10Y horizon
Inflation reduced performance by 2pp at 10Y



In addition to the rising inflation, investors had to face degraded returns in 2022. The growth concerns and elevated inflation exerted downward pressures on equity prices, especially during the first and third quarter of 2022, before bouncing back in the fourth quarter.³ Overall, the performances of the main equity indices around the globe were negative in 2022 (-9% for the EURO STOXX 50, -18% for the S&P 500 and -20% for the CSI 300). Those macroeconomic conditions and rising interest rates also weighed on bond prices. Consequently, the performance of sovereign and bond indexes declines ranging between -12% for the HY bond index and -18% for the EU sovereign index.⁴

³ See footnote 1 p. 9.

⁴ The indexes used are the ICE BofAML Euro corporate / Sovereign bond indices.

Investment funds – UCITS

Summary

UCITS are the largest retail investment sector in the EU. Our sample covers assets worth around EUR 8.4tn, of which retail investors held around EUR 5.5tn in 2022. The samples for both retail and institutional UCITS (excluding ETFs) decreased by 15% compared to 2021. Confirming trends from previous editions, fund costs, including ongoing and one-off fees, continued to decline. Retail investors need to adapt to the high inflation environment and to anticipate the consequences on the real value of their investment and their savings. A hypothetical ten-year retail investment of EUR 10,000, in a stylised portfolio of equity, bond and mixed assets funds, provided a value of EUR 14,850, net of EUR 2,000 paid in costs. When including inflation, the real net value decreased to around EUR 13,500. Despite the cost decline for active equity funds between 2021 and 2022, active equity funds once more underperformed, in net terms, passive non-ETF funds and ETFs. Across EU Member States, cost heterogeneity persisted. Net performance can also significantly vary depending on the investment strategy (geographical focus and main sector of investment). Ongoing costs of ESG funds are lower than or similar to the ongoing costs of non-ESG equivalents. Overall, ESG funds underperformed their non-ESG equivalents in 2022, a likely consequence of the energy crisis and related soaring energy prices. However, ESG funds still outperformed their non-ESG equivalents on the three-year investment horizon.

Market overview

At the end of 2022, the EU UCITS segment remained the largest fund investment sector in the EU, with almost EUR 10tn of assets.⁵ In this report we cover more than 85% of the EU UCITS universe as reported by the European Fund and Asset Management Association (EFAMA): a total of EUR 8.4tn, of which EUR 5.5tn was held by retail investors. Excluding ETFs, our sample covers assets worth around EUR 7.3tn, of which retail investors held around EUR 4.4tn in 2022 (AMR-CP-S.22). Samples for both retail and institutional⁶ UCITS excluding ETFs decreased by approximately 15% compared to 2021.⁷

The EU, with 30% of global net assets, is the second largest market globally in terms of open-

ended regulated funds, after the US, with 48% of global net assets.⁸ In our sample, in 2022, retail investors held 60% of total EU UCITS assets outstanding. This is lower than in the US, where households held 88% of the total net assets of US mutual funds at the end of 2022.⁹ Also, as observed previously, EU investment funds were, on average, much smaller than US funds.¹⁰ This partially explains the substantial differences in the fund cost level between the EU and the US.¹¹

More than 90% of retail investment centres on equity, bond and mixed assets (AMR-CP-S.24), which are the focus of this report. The distribution of retail investment across these assets is heterogeneous in the EU. For example, in 2022, the share of investment mainly focusing on equity

⁵ EFAMA, [Quarterly Statistical Release](#), No 92, February 2023, Table 1, p. 12. Only EU Member States were included.

⁶ Refinitiv Lipper accounts for share classes declaring themselves as institutional. If the share class does not declare itself as institutional, the share class is considered as being retail. Therefore, high net-worth investors can still account as retail. This potentially means a downward bias in the size of the market for institutional investors, especially for domiciles characterised mainly by non-retail investors.

⁷ The drop in asset valuation is probably the driver of this decline. We observe a similar decline in the case of AIFs fund type 'Other' whose investment is mostly

concentrated in equity and fixed income. However, this is more than compensated for by the increase in Private Equity, Real Estate and Hedge Funds net assets.

⁸ EFAMA, [International Quarterly Statistics](#), March 2023, Exhibit 7.

⁹ ICI, [Investment Company Factbook](#), 2023, p. 37.

¹⁰ EFAMA, [International Quarterly Statistics](#), March 2023, Table 2 and Table 4. In 2022, a US fund held an average of EUR 2,618mn assets, while an EU fund held just below EUR 300mn.

¹¹ EFAMA, [The costs of UCITS and US mutual funds](#), *Market Insights*, Issue 8, March 2022.

was 12% in Italy while it was around 63% in the Netherlands (AMR-CP-S.27).

The number of funds marketed and sold cross-border in the EU has remained smaller than that of funds sold exclusively domestically (AMR-CP-S.32).¹² In terms of assets, however, funds effectively sold cross border accounted for 58% of the total EU UCITS funds (AMR-CP-S.31).¹³

Cost and performance

EU aggregate fund costs: gradual decline

Confirming trends from previous editions, fund costs, including ongoing and one-off fees, continued to decline. Table MR-CP.4 details this decline in prices across fund categories.¹⁴ Even though the cost decline is marginal from one year to the next, it is more significant when we look at the current publication compared to the one published five years ago. For equity UCITS, ongoing costs for investments over the one-year horizon in this year's edition (2022) are clearly lower compared to one-year horizon investments in 2018 (-4%) but similar to the one-year investment horizon in last year's edition (2021). We can draw similar conclusions for the ten-year investment horizon. For bond funds, the decline in costs was around 2% between this edition and the last one for both the one-year and the ten-year investment horizons. Between this year report, covering the period 2013–2022, and the report covering the period 2009–2018, the decrease was more substantial with a 12% decline for the one-year investment horizon and

a 6% decline for the ten-year horizon. For mixed funds a consistent decreasing trend across different cost types could not be observed. Even though this, in principle, is good news, the figures reported are averages across thousands of funds, and the costs of individual funds can vary greatly (as an illustration, we show hereafter that costs and performance might significantly vary even within equity funds when considering different risk classes or investment strategies). Therefore, investors should continue to take individual investment decisions with caution.

Across investment horizons and asset classes, as observed in the previous report, larger funds (in terms of net assets) have lower costs than smaller funds. Total costs for larger funds are on average 24% lower than in the case of smaller funds. Focusing on ongoing costs, larger funds are around 20% cheaper than smaller funds. The main drivers of these disparities are economies of scale (i.e., smaller impact of fixed costs over total assets).

An exception, similar to what was observed in the previous edition, is represented by domestic UCITS that, despite being on average smaller than cross-border UCITS (EUR 209mn compared to EUR 352mn respectively), are cheaper mostly due to lower ongoing costs (Total Expense Ratio (TER) equal to 1.2% versus 1.4%) and to lower one-off costs (0.1% versus to 0.2%, AMR-CP-S.58). The heterogeneity of distribution channels and costs, and the related cost treatment that impact the cross-border marketing of a fund are the two main underlying reasons behind these differences.

¹² For the purpose of this report, a cross-border fund is defined as a fund sold in two countries in addition to the funds domicile country.

¹³ This share increases to 61% if we consider funds which were registered to be marketed cross-border but did not get sold across borders.

¹⁴ The five-year investment horizon was introduced in the report covering 2020, therefore the comparison with the earlier editions of the report is focused only on the one- and ten-year horizons.

MR-CP.4

UCITS costs across periods
Declining yet only marginally

	2018	2019	2020	2021	2022
Equity UCITS					
<i>Ongoing costs</i>					
1Y	1.51	1.47	1.48	1.44	1.44
5Y			1.52	1.52	1.50
10Y	1.66	1.63	1.60	1.61	1.59
<i>Subscription and redemption fees (*)</i>					
1Y	0.19	0.13	0.18	0.24	0.19
5Y			0.16	0.18	0.19
10Y	0.21	0.19	0.17	0.18	0.19
Bond UCITS					
<i>Ongoing costs</i>					
1Y	1.02	0.99	0.96	0.92	0.90
5Y			1	0.99	0.97
10Y	1.10	1.09	1.07	1.05	1.03
<i>Subscription and redemption fees (*)</i>					
1Y	0.20	0.17	0.18	0.18	0.11
5Y			0.19	0.19	0.17
10Y	0.28	0.26	0.23	0.22	0.20
Mixed UCITS					
<i>Ongoing costs</i>					
1Y	1.52	1.49	1.50	1.50	1.48
5Y			1.52	1.53	1.51
10Y	1.54	1.54	1.54	1.56	1.55
<i>Subscription and redemption fees (*)</i>					
1Y	0.22	0.13	0.15	0.20	0.19
5Y			0.20	0.20	0.19
10Y	0.24	0.24	0.23	0.21	0.23

(*) For subscription and redemption fees, the data reports the maximum level for each fund share class, in line with regulatory requirements. However, the actual entry and exit fees are subject to negotiations among parties and can be significantly lower than what is reported. In addition, as indicated in the methodology, one-off costs are weighted by the net flows. Depending on the year and the financial context, this can lead to variations in entry and exit costs from one year to the next. For more details, please see the annex.

Note: EU27 UCITS ongoing costs and subscription and redemption fees, by investment horizon and asset type, geometric mean aggregation, retail investors, %. 2022 covers the 2013–2022 reporting period. 2021 covers the 2012–2021 reporting period. 2020 covers the 2011–2020 reporting period. 2019 covers the 2010–2019 reporting period. 2018 covers the 2009–2018 reporting period. For the 2018 and 2019 editions the five-year investment horizon is not available as it was only introduced in the 2020 edition.

Sources: Refinitiv Lipper, ESMA.

While costs only moderately change over time, gross performance is highly volatile. After a year marked by the recovery from COVID-19 and elevated performances, 2022 returns were strongly impacted by the deterioration of the global macroeconomic environment and the strong uncertainties related to the Russia's invasion of Ukraine. The growth concerns, elevated inflation and interest rates exerted downward pressures on the valuation of equity and bond indices. 2022 then saw a generalised

drop in assets valuation, which translated to lower UCITS annual performances (MR-CP.5).¹⁵ The largest decline was observed for equity funds with an average annual net performance of -10.5% in 2022. The annual net performance of bond funds for 2022 was higher but still negative at -7.7%. For mixed funds that have investments allocated across both equities and bonds, performances were higher than equity fund performances but lower than bond fund performances.

¹⁵ The investment horizon analysis is calculated as an average of annual performances at the end of all the four quarters of the year. The focus may differ from the focus of the UCITS Key Investor Information Document (KIID), as indicated in the Committee of European Securities

Regulators 09/949 document published in October 2009. End of year analysis is reported in the statistical annex. This is also in line with the previous editions of the report.

MR-CP.6

EU inflation across periods

Inflation increasing from 2021

	2018	2019	2020	2021	2022
1Y	1.8	1.4	0.7	2.9	9.2
5Y	0.8	1.0	1.1	1.7	3.2
10Y	1.4	1.4	1.3	1.3	2.0

Note: EU-27 inflation by investment horizon, mean aggregation, %. 2022 covers the 2013–2022 reporting period. 2021 covers the 2012–2021 reporting period. 2020 covers the 2011–2020 reporting period. 2019 covers the 2010–2019 reporting period. 2018 covers the 2009–2018 reporting period. Sources: Refinitiv Lipper, ESMA.

Until 2020, inflation did not exceed 2% but things notably changed from 2021 (MR-CP.6). Due to high valuations in 2021, real returns remained largely positive in 2021, despite an inflation close to 3% for the one-year investment horizon (MR-CP.7). Conversely, in 2022, inflation significantly reduced the real net return for investors, which declined to around -17% for bond and mixed UCITS and even lower for equity UCITS (-19.7%).

Inflation is a factor that is exogenous to all financial market participants (investors, fund managers, etc.) and common to all investments. It has a strong impact on the final real investor outcome, particularly when performance is low and inflation rises sharply, as has been the case in 2022. Against this background, investors should factor in the inflation component.¹⁹

Taking the effect of inflation into account, the same ten-year investment of EUR 10,000 considered above yields, in real terms, approximately EUR 13,500, after costs and inflation. Inflation, thus, decreases the net value by almost EUR 1,400.²⁰ If inflation had stayed at this 2020 level (i.e., 0.7%), the reduction of net value would only stand at EUR 100. This hypothetical portfolio, however, yields a higher performance compared to what would have been obtained with a current account. Assuming no fees and a 0% yield, a banking account with EUR 10,000 would still be worth EUR 10,000 after 10 years, in net terms. Taking into account the inflation, the banking account would be worth EUR 9,100 after ten years.

¹⁹ In May 2023 the three European supervisory authorities (the European Banking Authority, the European Insurance and Occupational Pensions Authority and ESMA) published a [factsheet](#) to help consumers understand how the rise of inflation and interest rates can affect their money.

²⁰ The methodology to calculate the impact of inflation has been slightly revised compared to previous editions. For more details, please refer to the statistical methods section from the annex.

MR-CP.7

UCITS real net annual performance across periods
Strong volatility driven by gross performance

	2018	2019	2020	2021	2022
Equity UCITS					
1Y	-0.4	7.7	-1.1	27.5	-19.7
5Y			2.6	8.5	1.7
10Y	7.6	7.8	5.1	8.0	5.4
Bond UCITS					
1Y	-3.9	3.9	-2.1	1.5	-16.9
5Y			0.4	-0.3	-2.7
10Y	2.5	2.4	1.3	1.6	-0.8
Mixed UCITS					
1Y	-3.9	3.0	-2.5	11.0	-17.6
5Y			-0.6	2.1	-2.3
10Y	2.4	3.1	2.8	3.0	0.8

Note: EU-27 UCITS real annual performance net of ongoing costs, subscription and redemption fees, ten-year investment horizon by asset type, geometric mean aggregation, %. 2022 covers the 2013–2022 reporting period. 2021 covers the 2012–2021 reporting period. 2020 covers the 2011–2020 reporting period. 2019 covers the 2010–2019 reporting period. 2018 covers the 2009–2018 reporting period. For the 2018 and 2019 editions the five-year investment horizon is not available as it was only introduced in the 2020 edition.

Sources: Refinitiv Lipper, ESMA.

Costs and performance by risk

We analyse performance and costs accounting for differences in the level of risk within each asset class based on the packaged retail investment and insurance products (PRIIPs) Summary Risk Indicator (SRI).²¹ For each asset, UCITS are grouped by risk class according to the SRI classification from 1 to 7 with 1 indicating the lowest risk category and 7 the highest. In 2022 assets were invested for the largest part in equity funds belonging to PRIIPs SRI classes 4 (69% of equity UCITS) and 5 (27% of equity UCITS). When considering UCITS Synthetic Reward and Risk Indicator (SRRI), this changes with most of the funds belonging to SRRI classes 5 (16%) and 6 (77%). This change is explained in box MR-CP.8 below. This dynamic is similar for bond and mixed funds. Bond fund assets, for example concentrate in SRI classes 2 and 3 while they belong to 3 and 4 in the case of SRRI (AMR-CP-S.62).

MR-CP.8

UCITS SRRI and PRIIPs SRI
Differences in methodology

From January 2023, PRIIPs Key Information Document (KID) reporting substituted UCITS KIID reporting. This also implied

a change of the categorisation of risks moving from the UCITS SRRI to the PRIIPs SRI.

Both UCITS SRRI and PRIIPs SRI measure risk on a scale of 1 to 7, but they use different methodologies that have an impact on the risk class for UCITS given in particular the wide scope of the PRIIPs regulation, which also includes structured products and insurance products. Under PRIIPs SRI, UCITS funds will be assigned to lower classes compared to the UCITS SRRI. For example, many equity UCITS funds that belonged to SRRI risk class 5 or 6 move to SRI class 4 or 5.

The SRRI is based only on the volatility of the UCITS products (calculated by taking the standard deviation of the five-year historical returns of the fund). In other words, it accounts mainly for the market risk.

The SRI takes into account the market risk, considering the volatility (based on the value-at-risk) and its expected changes over a period of 2 to 5 years. In addition, it also accounts for the credit risk of the issuer (Annex II Part 3 (52) of Commission Delegated Regulation 2017/653). The credit risk of UCITS may be low (e.g., segregated accounts for fund assets), scaling down the market risk assessment.

This implies that moving from UCITS to PRIIPs may imply an overall reduction in the assigned class or risk for a specific product. For example, considering equity UCITS, only 1% of the funds belonging to SRRI class 6 remain in SRI class 6, the rest is mostly concentrated in SRI class 4 (65%) and SRI class 5 (33%). However, investors should be aware that this does not necessarily mean a reduction in the risk of the product and should carefully consider this in their investment choices.

Across risk categories and asset classes, fund annual performances were very low or negative in 2022, reflecting the weak performance of the underlying companies. Across asset classes, the

²¹ [Commission Delegated Regulation 653/2017](#). The SRI aims to provide investors with a meaningful indication of what are the risks of PRIIPs and of the different degrees of risk within the same asset class. Details on its methodology can be found in Annex II of the same Regulation.

From January 2023, it substitutes the UCITS SRRI, whose methodology is reported in [CESR's guidelines on the methodology for the calculation of the synthetic risk and reward indicator in the key investor information document](#).

riskier the product the larger the decline in performance and the larger the cost of the fund. Therefore, the impact on final net performance is larger the higher the risk class of the products (AMR-PC-S.64 to AMR-PC-S.69).

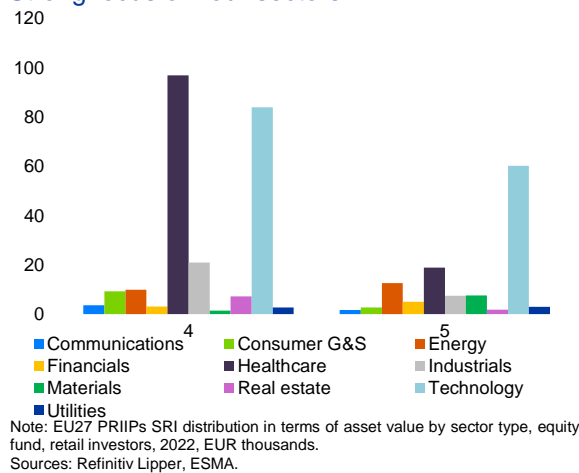
Costs and performance by strategy

Main sector of investment

In addition to the risk category, the costs and performance of equity UCITS are also analysed according to the fund's strategy (i.e., main sector of investment, size of underlying companies and geographical focus).

Starting with the sector, more than 800 funds in our sample have a predominant sectoral focus.²² Around 90% of those funds within SRI classes 4 and 5²³ focus on the energy, healthcare, industrial and technology sectors (MR-CP.9).

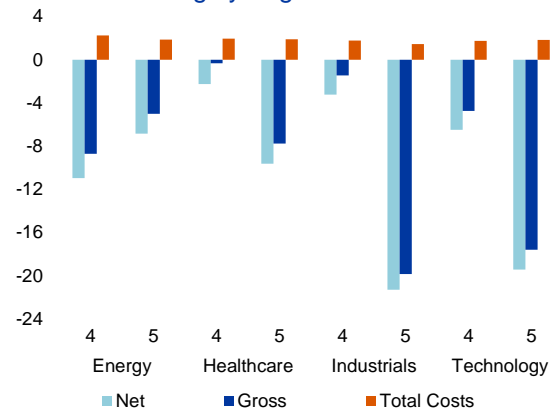
MR-CP.9
Equity UCITS value of assets by sector
Strong focus on four sectors



Total costs for the industrial (1.8% for risk class 4 and 1.4% for risk class 5) and technology (1.7% for risk class 4 and 1.8% for risk class 5) sectors are lower compared to the energy (2.3% for risk class 4 and 1.9% for risk class 5) and healthcare (1.9% for both risk classes) sectors irrespective of the risk class considered. The lower costs, though, are not enough to compensate for the strong negative performance of the first two sectors compared to the last two mentioned above. Overall, however, 2022 has been a very difficult year across all sectors (MR-CP.10).

²² The information regarding the fund main sector of investment is taken, when available, from national competent authorities (NCA) regulatory data, otherwise from EFAMA or Morningstar. The sector classification follows the EFAMA classification and includes: communication, consumers, energy, financials,

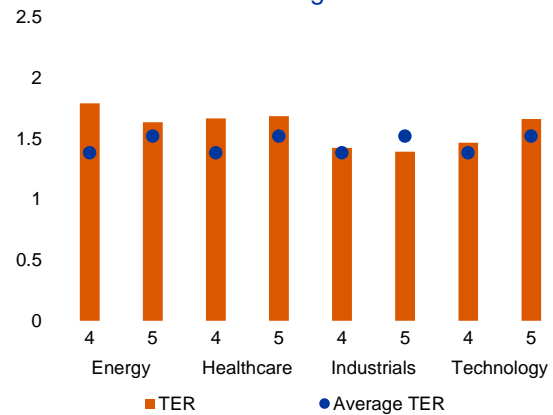
MR-CP.10
Performance and total costs by sector and risk class
Performance highly negative in 2022



Note: EU27 UCITS equity fund shares annual gross and net returns, and total costs, selected sectors, retail investors, by PRIIPs SRI risk class, 2022, %.
Sources: Morningstar Direct, Refinitiv Lipper, ESMA.

Focusing on ongoing costs,²⁴ those for the four sectors considered are higher than the average costs across all equity funds belonging to risk classes 4 and 5, respectively 1.4% and 1.5%. The only exceptions are in the industrial sector (MR-CP-S.11).

MR-CP.11
Ongoing costs by sector and risk
Lower TER funds focusing on industrials



Note: EU27 UCITS equity fund shares annual ongoing costs (TER) for products classified in risk classes 4 or 5, selected sectors, retail investors, 2022, %.
Sources: Morningstar Direct, Refinitiv Lipper, ESMA.

Size of underlying companies

Looking now at the size of the underlying companies (i.e., whether the fund focuses more on small or large caps), we identified more than 1,000 equity funds investing primarily in small-

healthcare, industrials, materials, real estate, technology, utilities.

²³ As already mentioned, equity investment in terms of assets is concentrated in SRI classes 4 and 5.

²⁴ We exclude one off loads due to the limitations we face around them. See the annex on methods.

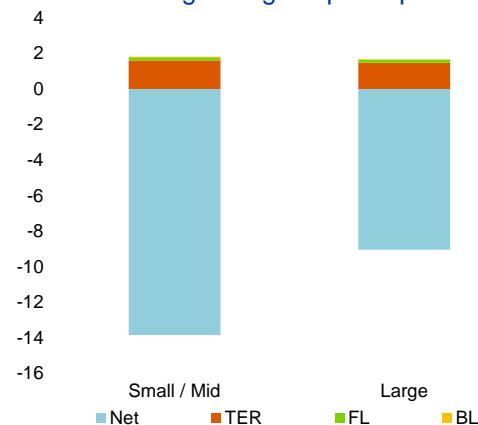
caps or mid-caps and almost 3,000 funds investing mainly in large companies.²⁵

As expected, total costs are higher for funds focusing on small caps as trading those securities is usually associated with lower liquidity.

While small caps stocks have the potential to outperform large caps stocks, especially on longer investment horizons,²⁶ 2022 favoured large caps stocks. With a net performance of -9.1%, funds investing in large-caps outperformed funds focusing on small-caps and mid-caps (-13.9%). This result is coherent with the analysis by risk class, which demonstrated that funds in higher risk classes are associated with lower performance. Indeed, small-caps stocks are usually more volatile and risky. There is an additional aspect which merits further investigation that, however, could not be a subject in the current analysis, namely the interaction between those different aspects (i.e., is there a correlation for a company between the sector of activity and the market capitalisation?).

MR-CP.12

Net performance of equity funds by stocks size Funds investing in large caps outperformed



Note: EU UCITS equity fund categorised according to the size of underlying companies, and classified as net performance, ongoing costs (TER), subscriptions (FL) and redemption fees (BL), retail investors, 2022, %.
Sources: Refinitiv Lipper, ESMA.

Geographical focus

Finally, the costs and performance of equity UCITS are also analysed according to the fund's geographical focus.²⁷ The majority of retail equity UCITS (53%) have a global geographical focus

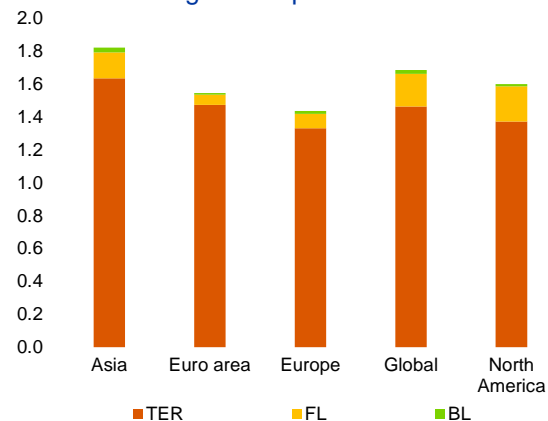
and almost one quarter (23%) invest in the euro area or Europe (AMR-PC-S 72).²⁸

The net performance appears to be very different according to the geographical focus considered (AMR-PC-S 73). With a net performance of -4.6%, equity funds investing in North America are the best performing funds. At the opposite side of the ranking, funds focusing on the euro area have the lowest net performance (-15.4%). However, those results obtained in 2022 only, shouldn't be generalised as macroeconomic factors may temporarily negatively impact one region more than others.

In terms of costs, funds investing mainly in the euro area or more broadly in Europe have the lowest costs (lowest ongoing costs for funds investing in Europe and lowest one-off fees for funds focusing on the euro area). Investing outside Europe can be more costly as the assets may be denominated in a currency that is different from the fund currency (this might then require exchange fees or a currency hedging).

MR-CP.13

Total costs of equity funds by investment area Funds investing in Europe have the lowest costs



Note: EU UCITS retail equity fund shares total costs, classified as ongoing costs (TER), subscription (FL) and redemption loads (BL), by geographical focus, 2022, %.
Sources: Refinitiv Lipper, ESMA.

²⁵ The information regarding the size of underlying companies is taken, when available, from NCA regulatory data, otherwise from Morningstar.

²⁶ See MSCI, [Small Caps Have Been a Big Story After Recessions](#), July 2023.

²⁷ The information regarding the fund investment area is taken, when available, from NCA regulatory data, otherwise from Morningstar. We grouped the different geographical focuses into eight categories: North

America, South America, Asia and Pacific, Africa and Middle East, euro area, EU-27 excluding euro area, Europe (broad European focus or European countries not part of the EU-27) and global.

²⁸ For the cost and performance analysis, we will exclude the investment areas whose aggregated assets under management are too small, namely Africa and Middle East, EU-27 excluding euro area and South America.

UCITS ETFs and analysis by management type: costs remain higher for actively managed UCITS

The EU UCITS ETF segment slightly decreased in 2022 from EUR 1.22tn in 4Q21 to EUR 1.16tn in 4Q22. However, their share in the total of EU UCITS grew from 13% in 2021 to 16% at the end of 2022 (AMR-CP-S.37).²⁹ At the end of 2022, 72% of EU UCITS ETFs were invested in equity, 24% in bonds and the residual 4% in other assets (AMR-CP-S.38). Net annual inflows in equity ETFs significantly dropped, from EUR 92bn at the end of 2021 to EUR 37bn at the end of 2022. The decrease of net annual inflows into bond ETFs was more contained during the same period, from EUR 26bn to EUR 24bn (AMR-CP-S.39).

In our sample, passive equity and bond UCITS non-ETFs accounted for EUR 383bn and EUR 156bn, respectively 17% and 9% of actively managed equity and bond UCITS.³⁰ Active equity UCITS assets were at EUR 2.2tn and bond UCITS at EUR 1.7tn (AMR-PC-S.41 and AMR-PC-S.42). ETFs were the only category to record positive net flows in 2022. Passive funds (excluding ETFs) in 2022 experienced net outflows (EUR -5 bn for equity and EUR -3 bn for bonds), as did active funds (EUR -117 bn for equity funds and EUR -222 bn for bond funds).³¹

In the equity UCITS market segment the share of passive UCITS non-ETFs and UCITS ETFs continued to grow, reaching 36% in 4Q22. In the bond segment, the share of passively managed funds grew as well but remained lower (20%) in comparison to the equity UCITS market (AMR-CP-S.41, AMR-CP-S.42).

The analysis of ongoing costs³² by type of management shows a decline in costs for active funds and ETFs at the one-year investment horizon (MR-CP.14). From 2019 to 2022, ongoing costs for the one-year investment horizon declined by 6% for active equity UCITS and 23% in the case of ETFs. The decline of active funds and ETFs ongoing costs is also visible at the ten-year investment horizon but appears to be less linear. Ongoing costs of passive non-ETFs, on the other hand, appear to have been relatively stable since 2020.

Despite the strong decline in costs of active UCITS, equity active funds (-10.6%) underperformed in net terms, both passive funds (-7.2%) and ETFs (-4.8%) in 2022, irrespective of the investment horizons. Bond active funds (-7.4%) however outperformed passive funds (-10.6%) but underperformed versus ETFs (-6%).³³

The difference in ongoing costs between the top-25% best-performing equity active funds and the overall sample of active funds while being negative (-5 basis points (bps)) is marginal at the short one-year investment horizon. At the longer ten-year investment horizon, this result reverses (i.e., the top-25% best-performing active funds are more expensive). Similar dynamics are observable in the case of bond funds.

In terms of net performance, the top 25% best-performing active equity funds outperformed, in net terms, the top 25% best-performing passive peers at the one-year investment horizon but underperformed at the ten-year horizon (MR-CP.15).

²⁹ The sample includes both retail and institutional investors. The analysis is performed similarly to UCITS non-ETFs.

³⁰ The sample includes both retail and institutional investors. We distinguish between UCITS ETFs and passive UCITS non-ETFs. Even if UCITS ETFs can primarily be considered passively managed funds, they differ from passive funds because ETF shares are listed on stock markets and can be traded more easily.

³¹ The sample includes both retail and institutional investors as not all the funds report the information related to the

management type and the share of passively managed funds, especially for bond UCITS, is still small.

³² The focus on ongoing costs is due to the fact that for ETFs subscription and redemption fees are borne mainly on the primary market. Retail investors are mostly concerned with the secondary market.

³³ Contrary to Table MR-CP.4, the figures provided in Tables MR-CP.14 and MR-CP.15 rely on a sample composed of both retail and institutional funds, in order to ensure a large enough sample for each category.

MR-CP.14

UCITS costs and net performance by management type

Passive funds are on average about 60–80% cheaper than active funds

	Active funds		Passive funds		ETFs	
	1Y	10Y	1Y	10Y	1Y	10Y
			<i>Ongoing costs</i>			
			<i>Equity UCITS</i>			
2019	1.40	1.50	0.32	0.40	0.30	0.30
2020	1.37	1.51	0.36	0.52	0.24	0.33
2021	1.34	1.50	0.38	0.53	0.23	0.31
2022	1.32	1.47	0.37	0.50	0.23	0.29
			<i>Bond UCITS</i>			
2021	0.76	0.90	0.29		0.23	0.25
2022	0.74	0.87	0.28		0.23	0.25
			<i>Net performance</i>			
			<i>Equity UCITS</i>			
2019	9.2	9.6	11.8	10.3	11.7	10.2
2020	-0.4	6.6	-0.7	7.4	-2.2	7.3
2021	30.1	9.4	32.2	10.6	31.7	10.4
2022	-10.6	7.5	-7.2	8.7	-4.8	8.9
			<i>Bond UCITS</i>			
2021	4.7	3.1	3.9		2.1	3.5
2022	-7.4	1.4	-10.6		-6.0	1.9

Note: EU-27 UCITS ongoing costs and annual performance net of ongoing costs, by management type, investment horizon and asset type, geometric mean aggregation, retail and institutional investors, %. 2022 covers the 2013–2022 reporting period. 2021 covers the 2012–2021 reporting period. 2020 covers the 2011–2020 reporting period. 2019 covers the 2010–2019 reporting period. For bond passive UCITS, data is not available at longer horizons. Sources: Refinitiv Lipper, ESMA.

MR-CP.15

UCITS costs and net performance top-25% of funds by management type

Top 25% best-performing active equity funds outperformed top 25% best-performing passive peers at one-year

	Top-25% active funds		Top-25% passive funds	
	1Y	10Y	1Y	10Y
			<i>Ongoing costs</i>	
			<i>Equity UCITS</i>	
2020	1.42	1.63	0.40	0.40
2021	1.30	1.63	0.41	0.39
2022	1.27	1.54	0.37	0.49
			<i>Bond UCITS</i>	
2021	1.01	1.14	0.61	
2022	0.78	1.13	0.30	
			<i>Net performance</i>	
			<i>Equity UCITS</i>	
2020	11.0	10.5	5.7	11.2
2021	41.2	13.1	38.7	14.1
2022	1.5	11.2	0.5	12.8
			<i>Bond UCITS</i>	
2021	13.3	5.9	15.7	
2022	1.1	3.9	0.9	

Note: EU-27 equity and bond UCITS ongoing costs and annual performance net of ongoing costs per management type for top 25% best performers, by investment horizon and asset type, geometric mean aggregation, retail and institutional investors, %. 2020 covers the 2011–2020 reporting period. 2021 covers the 2012–2021 reporting period. 2022 covers the 2013–2022 reporting period. For bond passive UCITS, data is not available at longer horizons. Sources: Refinitiv Lipper, ESMA.

Fund and investor domicile

Fund domicile analysis

Structural differences across markets, and differences in investor preferences, marketing channels, distribution costs and their regulatory treatment linger. This weighs on heterogeneity in in terms of costs and performance limiting comparability across Member States.

Limitations to data availability remain, especially for distribution costs, impacting the composition of the sample used in the analysis. In this respect, analyses carried out by the single jurisdictions, such as those in Greece and Austria,³⁴ are crucial to gathering information on the characteristics and main developments in national markets. This is even more relevant in the case of several jurisdictions for which an analysis cannot be developed because of the scarcity of data from the commercial provider.

Costs remained very heterogeneous among Member States. Similar to previous editions, the funds domiciled in the Netherlands and Sweden exhibited the lowest total costs. The highest cost levels were observed for Italy, Austria,³⁵ Luxembourg and Portugal.³⁶ At the one-year investment horizon, the difference of costs between the most expensive and the cheapest jurisdiction ranges from 0.9pp in case of bond funds to 1.6pp in case of equity funds. Drivers behind these dissimilarities include differences in distribution channels and costs.³⁷

Such heterogeneity emerges also from the analysis of management fees (AMR-CP-S.107)³⁸ and transaction fees (AMR-CP-S.108). In this last case, however, the numbers should be treated with caution, given the large data impediments surrounding the calculation of transaction costs.

The unavailability or unreliability of data on performance fees continued to hinder a full analysis of this type of fee.

Investor domicile analysis

When moving from the analysis of the fund domicile to that of the investor domicile, the heterogeneity across Member States largely declines, with a clear decrease in national differences. For example, ongoing costs for equity UCITS, over the ten-year horizon, were in the range of 1.6% in the Netherlands and Sweden and 1.8% in Italy and Portugal (AMR-CP-S.109).

These results are primarily due to the composition of the sample. The information in terms of assets, flows, and costs is only provided on an aggregated basis at the level of the fund's domicile. No information on the distribution of these metrics is available for the countries where these funds are sold. Therefore, we apply the fund's domicile-based data to the country in which a fund is marketed. This analysis may involve some double counting of funds and related metrics.³⁹ In order to comprehensively conduct an accurate analysis on a country-by-country basis, improvements in availability and usability of data are essential.

The impact of inflation

As highlighted in the market environment, inflation has been very different across Member States. This disparity adds to the cost heterogeneity described earlier. Given the lack of data regarding the actual marketing of funds outside their domicile, inflation is measured at the fund-domicile level. This measure of inflation may diverge from the inflation at the investor-domicile

³⁴ Financial Market Authority (FMA), [FMA Market Study on fund fees of Austrian retail funds 2023](#), June 2023. Hellenic Capital Market Commission, '[HCMC's Survey on fees and charges applicable on UCITS in Greece](#)', August 2023.

³⁵ The values of ongoing costs reported for Austria in 2022 are higher than what reported in the [FMA's 2023 market study](#). Sample is based on UCITS reporting from Refinitiv Lipper based on the domicile of the fund and can differ from the Austrian FMA sample. This highlights how essential improvements to the availability and usability of data are.

³⁶ The country ranking doesn't change significantly when considering ongoing costs instead of total costs. Specifically, considering the one-year investment horizon in 2022, equity funds domiciled in Portugal, Italy, Austria and Luxembourg exhibit the higher ongoing costs. For bond funds, the highest costs levels are observed for Italy, Ireland, Luxembourg and Portugal. Regarding mixed

funds, funds domiciled in Ireland, Italy, Belgium and Luxembourg exhibit the highest ongoing costs.

³⁷ The survey on distribution costs published in [the third edition](#) of this report (p. 69) details the differences in the types of the predominant marketing channels and in the treatment of distribution cost treatment across Member States.

³⁸ The management fees exclude distribution fees, which in several countries are entirely included in management fees. This will imply a level of fees higher than that observed here and how this adds to the divergences across markets.

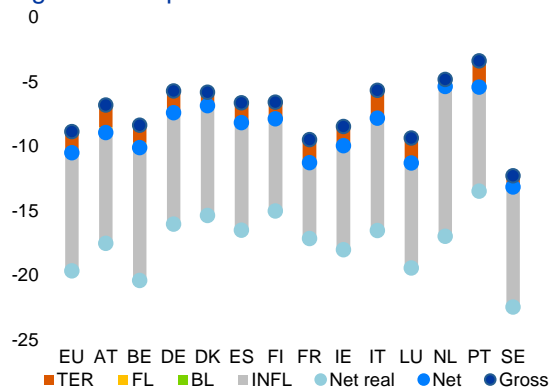
³⁹ Very similar cost levels across countries in the analysis based on investor domicile are driven by the weighting used when aggregating funds, based on the net asset value (NAV) of the fund domicile and not that of the investor domicile. In the Netherlands, for example, the cost figure would have been lower if it accounted for the country's inducement ban.

level, given the cross-border nature of the UCITS market.

At the one-year horizon, the decrease in performance due to inflation was close to 10pp (MR-CP.16) at the EU level. This hides significant disparity across countries, with the annual inflation rate ranging from 5.9% in France to 11.6% in the Netherlands. Among the 13 countries analysed, 11 faced an inflation rate higher than 8%.

MR-CP.16

Equity UCITS real net performance at 1Y
Significant impact of inflation in 2022

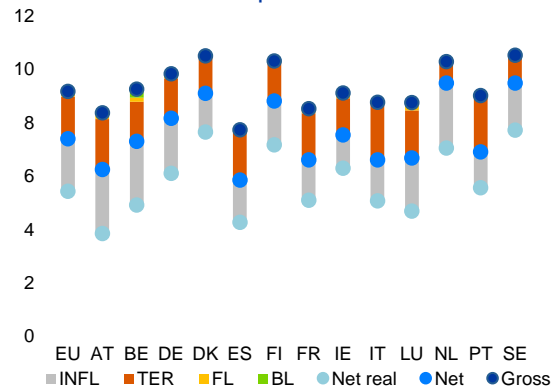


Note: EU27 UCITS equity funds annual performance classified as gross performance, net performance, net real performance, ongoing costs (TER), inflation (INFL), subscription (FL) and redemption loads (BL), retail investors, by domicile, 1Y horizon %. Other EU27 countries not reported as data not available.
Sources: Refinitiv Lipper, Eurostat, ESMA.

The impact of inflation was more moderate at the ten-year investment horizon with an average rate of inflation of 2% (MR-CP.17) and limited disparity (difference of 1.2pp between the highest and the lowest level of inflation).

MR-CP.17

Equity UCITS real net performance at 10Y
Moderate inflation impact at 10Y



Note: EU27 UCITS equity funds annual performance classified as gross performance, net performance, net real performance, ongoing costs (TER), inflation (INFL), subscription (FL) and redemption loads (BL), retail investors, by domicile, 10Y horizon %. Other EU27 countries not reported as data not available.
Sources: Refinitiv Lipper, Eurostat, ESMA.

R-CP.18

Inflation and domestic-only UCITS
High inflation and high heterogeneity in 2022

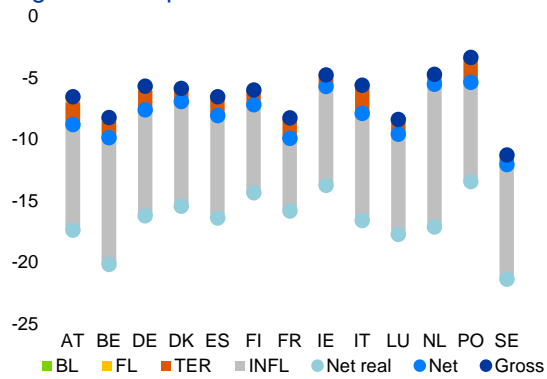
To circumvent the lack of data regarding the actual marketing of funds outside their domicile, this analysis focuses on funds which are sold only domestically (domestic funds) so that fund and investor domiciles overlap.⁴⁰

Chart MR-CP.19 reports costs, inflation and performances for equity domestic UCITS at the one-year investment horizon. Compared with chart MR-CP.16, results remain similar: inflation disparities add to the heterogeneity of costs.

⁴⁰ This criterion significantly reduces the sample of funds. The sample of equity domestic funds includes 2,518 EU funds.

MR-CP.19

Equity domestic UCITS real net performance at 1Y
Significant impact of inflation in 2022

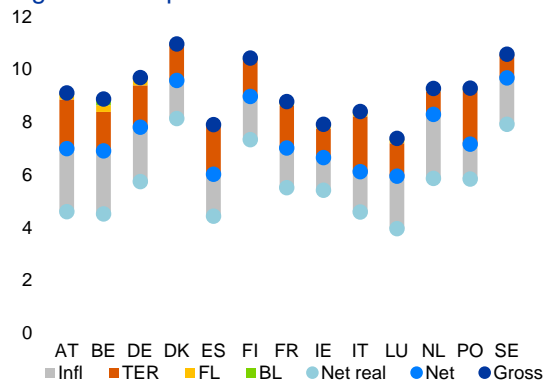


Note: EU27 UCITS domestic equity funds annual performance classified as gross performance, net performance, net real performance, ongoing costs (TER), inflation (INFL), subscription (FL) and redemption loads (BL), retail investors, by domicile, 1Y horizon %. Other EU27 countries not reported as data not available.
Sources: Refinitiv Lipper, Eurostat, ESMA.

This finding is confirmed if we consider a ten-year horizon (MR-CP.20).

MR-CP.20

Equity domestic UCITS real net performance at 10Y
Significant impact of inflation in 2022



Note: EU27 UCITS domestic equity funds annual performance classified as gross performance, net performance, net real performance, ongoing costs (TER), inflation (INFL), subscription (FL) and redemption loads (BL), retail investors, by domicile, 10Y horizon %. Other EU27 countries not reported as data not available.
Sources: Refinitiv Lipper, Eurostat, ESMA.

ESG UCITS

In 2022, ESG funds (i.e., investment funds following ESG strategies according to Morningstar⁴¹) attracted positive inflows, contrary to non-ESG funds. Net flows into EU ESG UCITS equity, bond and mixed funds reached EUR 48bn. In contrast, non-ESG equity, bond and mixed funds faced outflows of EUR 141bn in 2022. Despite positive flows, the macroeconomic context affected the ESG fund asset valuations. As a consequence, the assets under management (AuM) of ESG funds decreased by 4% during 2022 to settle at EUR 1,058bn at the end of the year (AMR-CP-S.126). At the end of 2022, the share of ESG funds reached almost 21%. Equity funds still account for the largest share of ESG UCITS funds, with EUR 619bn in AuM (i.e., 58% of ESG fund assets in our sample).

The broad market trends observed in 2021 regarding ESG ETFs continued. ESG equity ETFs still attracted investors, with net flows of EUR 25bn. Despite the unfavourable economic context, the AuM of ESG equity ETFs increased in 2022 (from EUR 158bn in the first quarter to EUR 162bn at the end of the year).

In 2022, the ongoing costs of ESG UCITS (1.1%) were on aggregate similar to the ongoing costs of non-ESG funds (1.1%). One-off fees were, however, higher for ESG funds. This cost difference was mainly driven by the front charges, which were substantially higher for ESG funds (0.23%) than for non-ESG funds (0.11%).⁴²

MR-CP.21

UCITS gross performance and costs over one year ESG funds underperformed in 2022

	ESG	Non-ESG
All funds (equity, bond and mixed UCITS)		
Ongoing costs	1.1%	1.1%
One-off costs	0.3%	0.1%
Net performance	-9.3%	-8.3%
No of funds	3,313	13,326

Equity UCITS

Non-ETFs		
Ongoing costs	1.4%	1.5%
One-off costs	0.2%	0.2%
Net performance	-10.0%	-11.0%
No of funds	1,492	4,567

ETFs

Ongoing costs	0.2%	0.2%
One-off costs	0.3%	0.2%
Net performance	-6.5%	-4.4%
No of funds	240	706

Bond UCITS

Ongoing costs	0.6%	0.8%
One-off costs	0.3%	0.1%
Net performance	-8.8%	-7.3%
No of funds	726	3,492

Mixed UCITS

Ongoing costs	1.5%	1.5%
One-off costs	0.3%	0.2%
Net performance	-9.5%	-8.1%
No of funds	855	4,561

Note: EU27 ESG and non-ESG UCITS total costs and net annual performance in 2022 (one year investment horizon) and number of funds in 4Q2022, aggregated and by asset type, geometric mean aggregation, %. Retail funds only. "ESG funds" sample based on the Morningstar definition of sustainable investments (see footnote 41). Funds for which the sustainability information is not available are excluded from the sample (e.g., funds that are neither considered as ESG or non-ESG are excluded). ESG bond and mixed ETFs are included but not presented in a separate category given the low number of ESG ETFs in those asset classes (around 60 ESG bond ETFs while there are no ESG mixed ETFs). Sources: Refinitiv Lipper, Morningstar, ESMA.

Looking at each individual asset class, ongoing costs of equity ETFs and mixed funds were similar for ESG and non-ESG funds. However, ESG funds reported higher one-off costs mainly

⁴¹ For this year's report, we rely again on the Morningstar definition of sustainable investment fund. Morningstar classifies a product as a 'sustainable investment' "if the use of one or more approaches to sustainable investing is central to the investment products overall investment process based on its prospectus or other regulatory filings" (see Morningstar, Morningstar Sustainable Attributes – Framework and definitions for the 'Sustainable Investment' and 'Employs Exclusions' attributes, August 2022). We use the latest available information as of August 2023. This constitutes a slight change of methodology compared to last year's report. Indeed, the approach used last year defined ESG funds as funds identified as ESG in December 2020. Applying the same methodology this year would mean keeping all funds considered as ESG in December 2021. However, Morningstar significantly reviewed its criteria to identify

ESG funds, this resulted in the 'declassification' of around 5,000 funds during the summer 2022. Some of the funds identified as ESG in December 2021 are then considered as non-ESG since the summer of 2022. Including those funds in the analysis of ESG funds seemed therefore misleading. For this reason, we now use the last available information. An assessment of how this methodological change impacts the results is available in the data sources and limitations section of the annex and a discussion of the results is included below.

⁴² We recall here that the results regarding subscription and redemption fees should be treated with caution as the data reported are maximum levels. The actual levels can be significantly lower. For more details, please see the annex on data sources and limitations.

driven again by higher subscription fees: ESG funds front charges were higher by 14bps in the case of equity ETFs and by 12bps for mixed funds. Elsewhere, ongoing costs of ESG equity non-ETFs and bond funds were lower compared to non-ESG peers. Subscription fees still appeared higher for ESG funds but were more than compensated for by lower TER. The regressions presented in annex show that, when controlling for various factors such as the asset class, the size or the age of the funds,⁴³ TER of ESG funds was lower (with a difference of around 8bps) and statistically significant at the 1% confidence level.

In terms of performance, the average net performance of ESG UCITS funds over one year was -9.3% (1 pp lower than for non-ESG UCITS funds).⁴⁴ In 2022, non-ESG funds were favoured by the strong performance⁴⁵ of the energy sector, which is usually underweighted by ESG funds. The performance of non-ESG funds was higher for equity ETFs (+2.1pp), bond (+1.5pp) and mixed funds (+1.4pp). Equity non-ETFs ESG funds were the only category of funds outperforming their peers (net performance of -10% compared to -11% for non ESG equivalents).

The conclusions obtained this year sometimes differ with the results from past editions. It seems clear from the robustness checks that the underperformance of ESG funds is driven by macroeconomic factors rather than by a sample change (AMR-CP-S.1). Keeping a sample aligned with previous editions (i.e., keeping in the sample funds reclassified during the summer of 2022) would have increase the difference of ongoing costs between ESG and non-ESG funds, in favour of ESG funds (AMR-CP-S.1). The regression in the annex (AMR-CP-S.3) confirms that the ongoing costs of ESG funds is significantly lower than the ongoing costs of non-ESG funds. The coefficients associated with the ESG variable (ranging between -0.077 and -0.082 depending on the quarter considered) are not so far from the coefficients obtained last year for the same variable (ranging between -0.084

and -0.103 depending on the quarter considered). Finally, the increase of subscription fees observed this year might be driven, to some extent, by methodological choices. As indicated in the statistical methods section of the annex, entry and exit costs are weighted by the net flows. Given that ESG funds had on aggregate net inflows while non-ESG funds had on aggregate net outflows, this could have increase the entry costs presented for ESG funds.

At the three-year investment horizon⁴⁶, ongoing costs of ESG funds were lower. With higher subscription fees for ESG funds (+15bps), total costs of ESG and non-ESG funds were similar. On aggregate, ESG funds outperformed non-ESG peers between 2020 and 2022, despite the negative impact of the 2022 energy crisis on the ESG funds. This outperformance was mainly driven by the outperformance of ESG equity funds, as both ESG bond and mixed funds underperformed their non-ESG equivalents (MR-CP.22), and by the outperformance observed in 2020 and 2021.⁴⁷

⁴³ For a detailed analysis of the factors potentially impacting the cost and performance of ESG funds, see ESMA, [The drivers of the costs and performance of ESG funds](#), ESMA Report on Trends, Risks and Vulnerabilities Risk Analysis, 23 May 2022.

⁴⁴ The regressions on gross performance presented in the statistical annex show that ESG funds underperformed versus non-ESG equivalents from the second quarter of 2022.

⁴⁵ In 2022, the performance of the MSCI Europe energy reached 36.9% while the performance of the broader MSCI Europe index was negative at -9.5% ([MSCI Europe Energy Index](#)).

⁴⁶ For the three-year analysis, ESG funds are the funds continuously identified as ESG by Morningstar between 2020 and 2022.

⁴⁷ In 2020 and 2021 ESG funds outperformed. See the last two editions of the report for additional details.

MR-CP.22

UCITS gross performance and costs over 3 years ESG funds still outperformed over 3 years

	ESG	Non-ESG
All funds (equity, bond and mixed UCITS)		
Ongoing costs	1.2%	1.4%
One-off costs	0.3%	0.2%
Net performance	3.5%	0.8%
No. of funds	1,043	6,589

	Equity UCITS	
Ongoing costs	1.2%	1.7%
One-off costs	0.3%	0.3%
Net performance	6.9%	4.0%
No. of funds	548	2,326

	Bond UCITS	
Ongoing costs	0.7%	1.0%
One-off costs	0.4%	0.2%
Net performance	-2.9%	-1.8%
No. of funds	220	1,699

	Mixed UCITS	
Ongoing costs	1.5%	1.6%
One-off costs	0.4%	0.2%
Net performance	0.3%	0.5%
No. of funds	275	2,564

Note: EU27 ESG and non-ESG UCITS total costs and net annual performance (three-year investment horizon) and number of funds in 4Q22, aggregated and by asset type, geometric mean aggregation, %. Retail funds only. "ESG funds" sample based on the Morningstar definition of sustainable investments (see footnote 41, p. 24). Funds for which the sustainability information is not continuously available between 2020 and 2022 are excluded from the sample. ETFs are excluded from the sample.

Sources: Refinitiv Lipper, Morningstar, ESMA.

Sustainable finance disclosure regulation disclosure regime

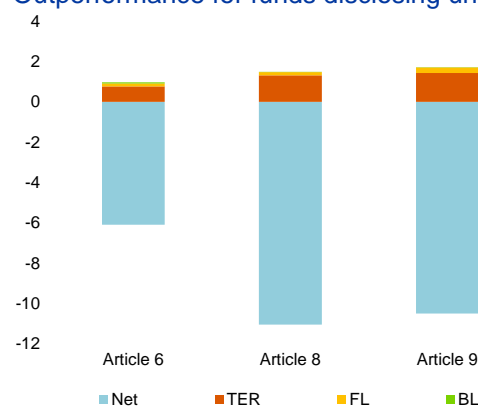
Additional sustainability-related information is now being provided by EU fund managers under the sustainable finance disclosure regulation (SFDR). Our sample includes around 7,500 funds disclosing under Article 8 (around half of them are equity funds) and around 500 disclosing under Article 9 (approximately two thirds are equity funds).⁴⁸

In line with the results for ESG funds, funds disclosing under Article 6 outperformed funds disclosing under either Article 8 or Article 9 in 2022, also a likely consequence of the energy crisis. This result holds for the three asset classes analysed. For equity funds, the performance gap is the highest between funds disclosing under Article 6 and Article 8 (+5pp, MR-CP.23). For bond and mixed funds, the largest difference can

be observed between funds disclosing under Article 6 funds and Article 9 (respectively +4.2pp and +5.5pp). The regressions confirm that, overall, funds disclosing under Article 6 significantly outperformed in gross terms funds disclosing under Article 8, which outperformed, in gross terms, funds disclosing under Article 9.

MR-CP.23

Net performance equity funds by disclosure regime Outperformance for funds disclosing under Art.6



Note: Gross annual performance in 2022 of EU equity UCITS for retail investors categorized as SFDR Article 8, Article 9 or Article 6 products and classified as net performance, ongoing costs (TER), subscription (FL) and redemption loads (BL), %. Equity UCITS ETFs are included.

Sources: Morningstar Direct, Refinitiv Lipper, ESMA.

In terms of costs, results differ significantly according to the asset class considered. For equity funds, funds disclosing under Article 6 had the lowest ongoing costs (0.8%) and total costs (1%) followed by those disclosing under Article 8 (1.3% and 1.5%) and Article 9 (1.4% and 1.7%, MR-CP.24). For bond funds, funds disclosing under Article 9 had the lowest ongoing costs (0.7%), but funds disclosing under Article 6 had the lowest total costs (0.8%). Finally, for mixed funds, funds disclosing under Article 8 were the cheapest category, both in terms of ongoing costs (1.4%) and total costs (1.5%). The differences observed between ongoing costs and total costs is driven by the one-off costs, and notably by subscription fees, which on average reached 0.3% for funds disclosing under Article 9, compared to 0.1% for funds disclosing under Article 6 and Article 8. However, controlling for traditional factors influencing funds' costs (e.g., type of management, fund' size, fund' age) the results change significantly. Indeed, the regressions show that among equity funds, the difference of TER is not statistically significant between funds disclosing under Articles 6, 8 or 9.

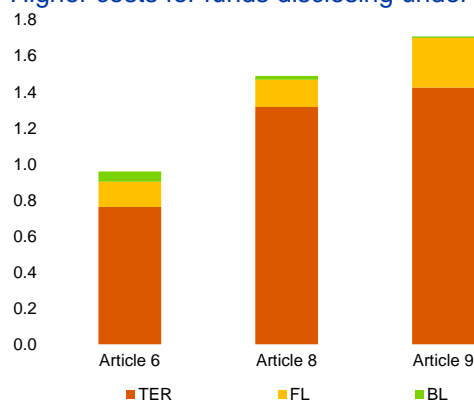
⁴⁸ Article 8 funds are investment products promoting sustainability characteristics. Those disclosing under Article 9 are investment products with sustainable investment as their objective and Article 6 funds have

neither sustainability characteristics nor a sustainable investment objective. The SFDR disclosure regime is at of August 2023.

For bond funds, funds disclosing under Article 8 tend to be cheaper than those disclosing under Article 6 but more expensive than those disclosing under Article 9 (making the latter the cheapest category). Finally, mixed funds disclosing under Article 6 tend to be the most expensive funds. Those results are aligned with the analysis of ESG funds: non-ESG funds and funds disclosing under SFDR Article 6 tend to be more expensive. Sample composition seems then to drive, at least partially, the averages. For instance, the share of passive funds among equity funds disclosing under Article 6 is close to 20%, while it is below 10% for funds disclosing under Article 8 and Article 9. This higher share of passive funds among funds disclosing under Article 6 may explain why the average TER of those funds appears lower at first.

MR-CP.24

Total costs of equity funds by disclosure regime Higher costs for funds disclosing under Art.9



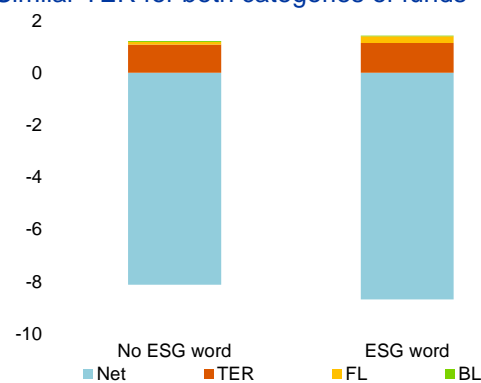
Note: Total costs in 2022 of EU equity UCITS for retail investors categorized as SFDR Article 8, Article 9 or Article 6 products and classified as ongoing costs (TER), subscription (FL) and redemption loads (BL), %. Equity UCITS ETFs are included.
Sources: Morningstar Direct, Refinitiv Lipper, ESMA.

related word were identified.⁵⁰ Funds increasingly use ESG-related words in their names and investors tend to prefer funds whose name contains an ESG word. In that context, managers of funds whose name contains an ESG word might be tempted to take advantage of investors preferences by charging higher fees. Our sample includes almost 2,000 funds whose name contains an ESG word.

Funds with an ESG word in their name had higher total costs in 2022 (1.4% versus 1.2%). However, this result was driven by subscription fees. TER remained very similar between funds with an ESG word in their name (1.1%) and funds without an ESG word in their name (1.1%). In fact, regressions demonstrated that the TER of funds with an ESG word in their name was slightly lower than the TER of other funds.⁵¹

MR-CP.25

Total costs according to the funds' name Similar TER for both categories of funds



Note: Gross annual performance in 2022 of EU UCITS for retail investors split between funds with ESG word in their name and funds without ESG word in their name and classified as net performance, ongoing costs (TER), subscription (FL) and redemption loads (BL), %. Equity UCITS ETFs are included.
Sources: Morningstar Direct, Refinitiv Lipper, ESMA.

Funds advertising ESG in their names

Building on the work done by Amzallag et al. (2023)⁴⁹, funds whose name contains an ESG-

⁴⁹ ESMA, [ESG names and claims in the EU fund industry](#), ESMA Report on Trends, Risks and Vulnerabilities Risk Analysis, 2 October 2023.

⁵⁰ ESMA constructed a tool to identify ESG and sustainability-related language in fund names, based on more than 1,200 ESG-related words covering various European languages and various spellings (investment fund names can sometimes contain abbreviations). Most of those words (80%) are either broad ESG terms such as "ESG" or "better world" or environmental-related terms

such as "net-zero" or "carbon reduction". For additional details, please refer to ESMA, [ESG names and claims in the EU fund industry](#), ESMA Report on Trends, Risks and Vulnerabilities Risk Analysis, 2 October 2023.

⁵¹ The sample composition might explain the discrepancies in results between the chart and the regression. For instance, funds with an ESG word in their name include more than 50% of equity funds compared to 40% for the rest. The higher proportion of equity funds can explain the higher average TER.

Summary findings

Costs and performance

- **Costs:** Costs have declined over time, but investors should continue to carefully consider costs when evaluating their investment.
- **Investment value:** Investors paid around EUR 2,000 in costs for an investment of EUR 10,000, gaining a net value of EUR 14,900 after ten years.
- **Inflation:** Inflation plays an exogenous but significant role on top of fund costs. For a ten-year EUR 10,000 investment, an investor loses almost EUR 1,400 due to inflation. For a ten-year EUR 10,000 investment, this leads to a net real value of around EUR 13,500.
- **Cross-border sales:** Costs for cross-border funds were higher than those for domestic funds, mainly due to differences in distribution channels and costs.
- **Fund characteristics:** The analyses by asset class, risk class, strategy (sector or area of investment, size of underlying assets), type of management or type of clients show that costs and performance might significantly vary across these different dimensions. For instance, funds investing mainly in the Euro area or in Europe have the lowest ongoing costs. Elsewhere, funds focusing on large caps outperformed funds focusing on small and mid caps. Fund's characteristics have a critical role when assessing the performance and overall value of an investment for an individual. Therefore, the availability of clear and understandable information is crucial.
- **Time horizon:** Investing long-term significantly reduces the risks related to swift and large changes in the valuation of financial products. It also reduces the impact of one-off costs.

Structural market features

- **Heterogeneity across Member States:** The main drivers of heterogeneity were structural market differences, and a lack of harmonisation in national regulation. It decreased when moving from the fund domicile to the investor domicile, given the cross-border nature of the UCITS market.
- **Inflation by fund domicile:** Inflation differences across Member States, measured at the level of the fund's domicile, adds to the cost heterogeneity.
- **Cross-border funds:** On average, these are larger than funds sold only in their domicile.

ESG UCITS

- **Costs:** Ongoing costs of ESG funds are lower or similar to the ongoing costs of non-ESG equivalents. Splitting the sample according to the SFDR disclosure regime give coherent results: according to the econometric regressions, funds disclosing under Article 6 of the SFDR tend to have higher ongoing costs. Elsewhere, while being increasingly popular, funds whose name contains an ESG word are not more expensive than funds with no ESG word in their name.
- **Net performance:** Overall, ESG funds underperformed their non-ESG equivalents in 2022. Non-ETF equity ESG funds is the only category of funds to outperform their peers. However, ESG funds still outperformed their non-ESG equivalents on the three-year investment horizon (2020–2022).

Investment funds – retail AIFs

Summary

Alternative Investment Funds (AIFs), the second largest market for retail investment, exceeded EUR 6.7tn in assets in 2022, more than EUR 900bn of which was held by retail investors (retail AIFs). Those figures are broadly unchanged compared to 2021. Around half of the total retail investment in AIFs remains concentrated in funds primarily focusing on traditional asset classes, like equities and bonds. Retail investment in real estate slightly increased compared to the previous year. Annualised returns of AIFs offered to retail investors significantly declined in 2022 amid persistent growth concerns, elevated inflation and rising interest rates. A hypothetical five-year investment of EUR 10,000 between 2018 and 2022, based on a stylised portfolio of AIFs, would yield around EUR 11,100, in net terms, and EUR 10,100 when taking into account the effect of inflation.

The incentive to invest in AIFs is related to the potential for above-average returns and risks. However, AIFs often involve lower market transparency, lower market liquidity and so potentially a higher risk than more traditional types of investment.

The following analysis is based on data from the directive on AIF managers (AIFMD), regulating managers of AIFs in the EU,⁵² and excluding those authorised under the UCITS directive. The AIF types encompass not only hedge funds (HF), but also private equity (PE) funds, venture capital (VC), real estate (RE), funds of funds (FoFs), other AIFs (Others)⁵³ and, as a residual category, “None” of the above.⁵⁴

Market overview

The size of the EU AIF industry was almost

EUR 6.8tn at the end of 2022. The market for EU AIFs marginally decreased losing less than EUR 150bn compared to 2021.⁵⁵ The market remained dominated by professional investors.⁵⁶ The share of retail investors remained broadly unchanged, around 13.8% at the end of 2022 (AMR-CP-S.145).⁵⁷ ⁵⁸ Similarly to the size of the EU AIF industry, the total net asset value (NAV) for retail AIFs slightly diminished to EUR 930bn at the end of 2022 from EUR 940bn in 2021.

The vast majority (almost 90%) of the assets of AIFs sold to retail investors benefited from the passporting regime (i.e., they can be sold across the EU) (AMR-CP-S.146). Retail clients were primarily invested in AIFs classified as Others (36%, AMR-CP-S.147), FoFs (22%) and RE

⁵² [Directive 2011/61/EU](#). For an overview of the EU AIF market please see ESMA, [ESMA Annual Statistical Report on EU Alternative Investment Funds](#), 3 February 2022.

⁵³ Almost half of retail AIFs classified as other AIFs are either equity funds or bond funds (respectively 25% and 21%). However, the strategy for 53% of other retail AIFs is unclear as they are classified as “other funds”.

⁵⁴ Annex IV, Commission Delegated Regulation (EU) No 231/2013 supplementing Directive 2011/16/EU. The residual category of ‘other AIFs’, labelled as ‘Others’ includes the following investment strategies: commodity and infrastructure funds together with conventional non-UCITS investment funds pursuing more traditional strategies and targeting primarily traditional asset classes such as equities and bonds. The ‘other AIF’ type includes a further residual category of other unspecified strategies, ‘other-other’. Often ‘special funds’ set up by single investors like insurance undertakings and pension funds fall into this residual category. According to the ESMA guidelines, AIFMs should select “None” as predominant AIF type where the investment strategy of the AIF does not permit the identification of a predominant AIF type.

⁵⁵ Please note that the data reported last year excluded the category ‘None’. If we exclude from the sample AIFs classified in the category ‘None’, the evolution between 2021 and 2022 remains limited, from EUR 6.5tn to EUR 6.4tn. This is different if we consider only the fund type category ‘Other’, mostly concentrated in more traditional type of investment, in which we can observe a 12% decline in the value of assets, in line with what observe for UCITS funds in the previous section. The decline in value of assets for other funds is more than compensated by the increase in Private Equity, Real Estate and Hedge Funds net assets.

⁵⁶ Professional investors are identified following the criteria specified in [Directive 2011/61/EU](#), Article 4 (1ag) and Annex II of [Directive 2014/65/EC](#).

⁵⁷ However, retail investment in AIFs is subject to underestimation, as retail investors may buy products invested in AIFs through banks or insurance firms, which fall into the category of professional investors.

⁵⁸ If we exclude from the sample AIFs classified in the category ‘None’, the share of retail investors diminishes to 12.4% (compared to 12.6% in 2021).

(22%)⁵⁹.

AIFs can invest in a variety of assets, including property and commodities, and rely on a high degree of flexibility around the strategy followed when they invest.⁶⁰ Focusing on retail clients, most of the NAV was concentrated in the strategy 'Other' (52%), a similar share compared to the previous report. This 'Other' category can be further divided between other funds (20%), other FoFs (29%) and other HFs, PE and RE funds (3%). Investment in the commercial real estate (CRE) strategy increased to 17%. The share of funds focusing on fixed income (FI) and equities remained broadly stable (respectively 9% and 14%, AMR-CP-S.148).

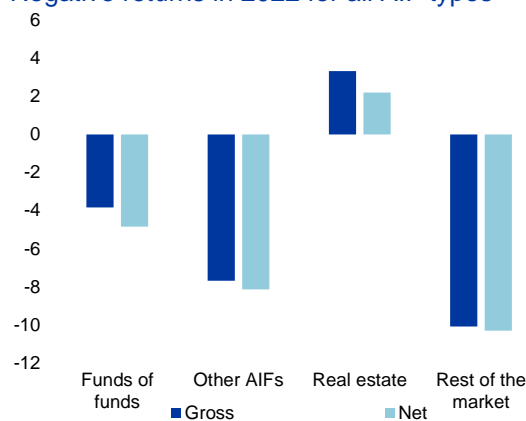
Retail AIF performance

The sample of funds available for the performance analysis represents around 75% of the total NAV for AIFs sold for more than 90% to retail investors, around EUR 589bn.⁶¹

MR-CP.26 shows the annualised monthly performance in 2022 by fund type. The performance of AIFs significantly declined in 2022 with negative returns for the funds in the AIF types 'FoFs', 'Other' and 'Rest of the market'.

MR-CP.26

Retail AIFs gross and net performance at 1Y horizon Negative returns in 2022 for all AIF types



Note: Note: EEA30 AIFs annualised monthly gross and net performance by fund type, %, 2022. Reported according to AIFMD. Rest of the market includes Hedge Funds, Private Equity and None.
Sources: National competent authorities, ESMA.

Putting the rest of the market aside, the fund in the AIF type 'Other' experienced the largest underperformance with an annualised monthly gross return of -8%. The annualised monthly gross performance of funds of funds was around -4%. Similarly, net returns decreased by 9% for 'Other' and by 5% for FoFs.⁶² Real estate funds were the only category of retail AIFs with positive gross (3.3%) and net returns (2.2%) in 2022. However, things are expected to change in 2023 (MR-CP.27).

MR-CP.27

Developments in real estate markets Market downturn expected in 2023

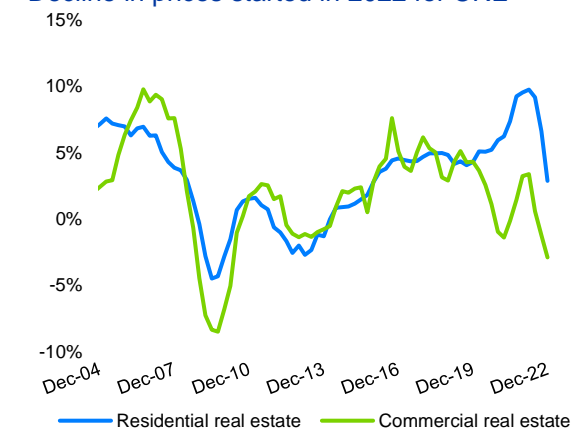
With EUR 208bn of real estate AIFs held by retail investors in 2022, the recent developments in the real estate market might be a concern from an investor protection angle.

Since 2022, real estate markets have faced significant challenges.⁶³ By reducing the borrowing capacity, the rise in interest rates weighs notably on the demand. In addition, the development of remote technologies (i.e., teleworking or growing share of e-commerce) also negatively impacts the demand for commercial real estate (CRE, as opposed to residential real estate, RRE).

Consequently, both CRE and RRE prices in the euro area were affected in 2022 (MR-CP.28). In the RRE segment, the rise in prices slowed down but remained positive. However, the prices in the CRE market started to decline in late 2022.

MR-CP.28

Real estate prices Decline in prices started in 2022 for CRE



Note: Year over year growth of nominal quarterly residential and commercial real estate prices in the Euro Area, in %.
Sources: ECB, ESMA.

With ECB further increasing the interest rates in 2023 (+2pp until October) the decline of real estate prices is expected to

⁵⁹ ESMA, "[ESMA Annual Statistical Report on EU Alternative Investment Funds](#)", 10 January 2020. In [Commission Delegated Regulation \(EU\) No 231/2013](#), AIFs are classified into five main types: hedge funds (HF), real estate funds (RE), funds-of-funds (FoFs), private equity funds (PE), and other AIFs (Others). See footnote 53 for details on this last category.

⁶⁰ ESMA, '[AIFMD – A framework for risk monitoring](#)', ESMA Report on Trends, Risks and Vulnerabilities, No 1, 2018, p. 40.

⁶¹ For the computation of gross and net performance, AIFs sold for 90% or more to retail investors are considered.

⁶² The net performance is subject to reporting issues that ESMA and the national competent authorities (NCAs) aim to resolve through joint work. See the annex on data sources and limitations.

⁶³ ESMA, [TRV No 1, 2023](#), Textbox 1, p. 13, February 2023.

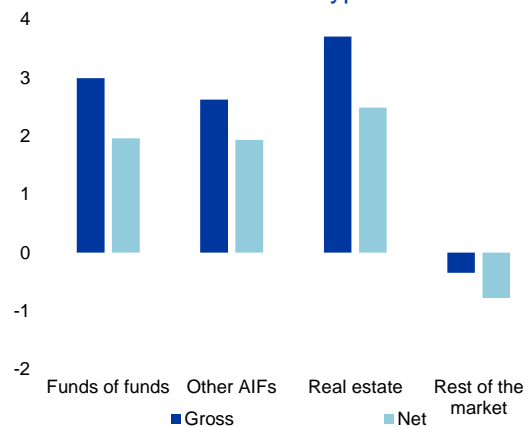
continue, and the performance of real estate funds is likely to deteriorate. This could result in losses for retail investors exposed to this market.

However, the households' exposure to real estate through AIFs remains limited (i.e., EUR 208bn) compared to the holding of UCITS products (i.e., EUR 5.5tn).

In 2022, the historical depth of data became sufficient to undertake an analysis of performance at the five-year horizon (2018–2022). The performance over 5 years appears positive except for the AIFs in the fund type 'Rest of the market' (MR-CP.29). Despite negative returns in 2022 for FoFs and other funds, this underperformance was more than compensated for by elevated returns in 2019 and to a lesser extent in 2020 and 2021.⁶⁴ After 5 years, real estate funds have the highest performance across AIF types in gross and net terms (respectively 3,7% and 2,5%).

MR-CP.29

Retail AIFs gross and net performance at 5Y horizon Positive returns for all AIF types



Note: EEA 30 AIFs annualised monthly gross and net performance by fund type, 5Y horizon, %. Reported according to AIFMD. Rest of the market includes Hedge Funds, Private Equity and None.
Sources: National competent authorities, ESMA.

A hypothetical five-year investment of EUR 10,000 between 2018 and 2022, based on a stylised portfolio composed of other AIFs (40%), FoFs and real estate funds (30% each), would yield around EUR 11,100 in net terms.⁶⁵ Taking the effect of inflation into account, the same investment yields in real terms approximately EUR 10,100, an amount just above the initial investment.

⁶⁴ For more details, see the previous editions of the report.

⁶⁵ The calculation are based on the net performance reported by AIFMs through the AIFM reporting.

⁶⁶ PRIIPs being fully applicable since January 2023, the data reported are extracted from 2023 documents.

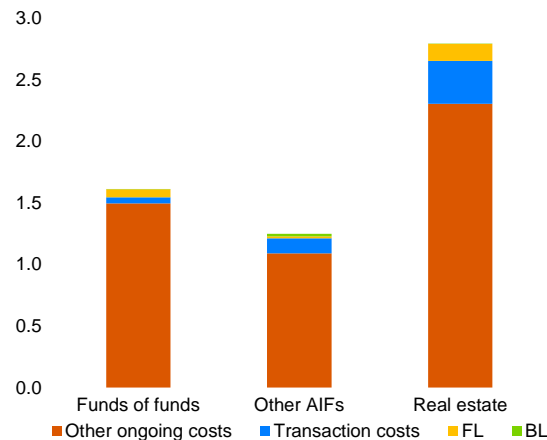
Retail AIF costs

For the first time, we provide an analysis of the AIFs' costs based on PRIIPs data.⁶⁶ Information on costs is reported by our commercial data provider for 10% of the retail sample (EUR 93bn), with significant disparity of coverage across fund type. While data on costs are available for 35% of the real estate funds, this share drops respectively to 4% for other funds and 3% for funds of funds.

AIFs in the category 'Other' (i.e., almost half of other AIFs are either equity funds or bond funds but 53% are classified as 'other funds') have the lowest costs with ongoing and total costs both at 1.2% (MR-CP.30), followed by FoFs (ongoing costs at 1.5% and total costs at 1.6%). However, the conclusions for these two types of AIFs should be taken with caution given the low coverage. The real estate funds display the highest costs due to higher transaction costs (0.3% versus 0.1% for the other categories) and higher other ongoing costs (2.3%).⁶⁷

MR-CP.30

Retail AIFs total costs Lowest total costs for 'Other' funds



Note: EEA 30 AIFs total costs classified as other ongoing costs, transaction costs, front (FL) and back loads (BL), by fund type, %, 2022. Rest of the market includes Hedge funds, Private Equity and None.
Sources: Morningstar, ESMA.

⁶⁷ Unfortunately, a comparison with equivalents UCITS funds is impeded by the small number of equity and bond AIFs with available information on costs (respectively 28 and 24 funds).

Summary findings

- **Retail investment:** In 2022, retail investors accounted for almost 14% of the total NAV for the AIF market.
- **Fund type:** Assets invested in retail AIFs were concentrated in the type of AIFs classified as 'Others' (42%), RE (26%) and FoFs (26%). Most of the NAV was concentrated in the strategy 'Other' (52%). Investment in commercial real estate increased (from 15% to 17%), while equity and fixed income strategies remained broadly stable at 14% and 9%, respectively, in 2022.
- **Investment value:** A hypothetical five-year investment of EUR 10,000 between 2018 and 2022, based on a stylised portfolio composed of other AIFs (40%), FoFs and RE funds (30% each), would yield around EUR 11,100 in net terms. Taking the effect of inflation into account, the same investment yields in real terms approximately EUR 10,100, an amount just above the initial investment.
- **Performance:** In 2022, annualised monthly gross and net performance of FoFs and Other funds, significantly decreased, in connection with the global macroeconomic conditions. The gross and net performances of real estate funds remained positive, but a downturn should be expected for 2023.
- **Costs:** A first preliminary analysis of costs was made possible using PRIIPs reporting. The results show that 'Other' AIF funds display the lowest ongoing and total costs. However, the conclusions should be taken with caution given the low coverage.

Structured Retail Products

Summary

SRPs, with an outstanding value of just under EUR 350bn in 2022 (representing a slight increase from the previous year), remain a much smaller market than UCITS and AIFs sold to retail investors. The share of products sold with terms over three years increased to around three quarters of sales volumes. We provide an EU-wide analysis of disclosed performance scenarios and costs, drawing on commercial data. Costs – largely charged in the form of entry costs – rose in 2022 for a majority of product types and issuers, although they vary substantially by payoff type and country. The analysis of performance scenarios shows that the returns of one in eight SRPs would be negative even in a moderate scenario. Overall, taking as a reference the return of the median SRP in the moderate scenario, a hypothetical five-year investment of EUR 10,000 undertaken in 2022 would yield around EUR 10,800, in net terms, at maturity. This figure increases to EUR 13,000 in a favourable scenario, but drops to EUR 5,300 in an unfavourable scenario. Looking at the actual performance of a smaller sample of SRPs, we can see that autocall products tended to perform well, while other, less numerous product types – chiefly reverse convertibles – often delivered gross negative returns even though these figures are not yet adjusted for the costs paid by investors.

Structured products are investments the return of which is linked to the performance of one or more reference indices, prices or rates (reference values). Several types of structured products are offered to retail investors in the EU, many with complex pay-off structures and with different risk levels. This, together with the existence of significant costs and charges for retail investors, prompts continued market surveillance. Moreover, unlike long-term investment products such as funds, many structured products may be designed for hedging purposes or to speculate on price movements over a period of months or years.⁶⁸

Product distribution is another source of heterogeneity in the market for structured products. First, some standardised products are issued on a continuous basis, while others are issued as part of a specific offer with a pre-determined subscription period.⁶⁹ Second, the EU market involves both bank-issued and exchange-issued products. There is geographical variation in this respect, for example, exchange-based issuance tends to be more common in Germany while bank-based issuance tends to be more common in Italy.

⁶⁸ Such reference values may include stock indices, the prices of individual equities or other assets, and interest rates. For more details on structured retail products please see [the 2022 edition](#) of this report.

Market overview

SRPs had an outstanding value of just under EUR 350bn in 2022, up slightly from the previous year. The market for SRPs remains a much smaller market than that for UCITS and AIFs sold to retail investors.

Only around a quarter of SRP sales volumes were capital-protected products, down from around a half of sales volumes 10 years previously, though up from a low point of 7% in 2021. The share of short-term products (less than 1 year maturity) fell from 14% in 2021 to 9% in 2022, while the share of sales volumes in products with a term of at least 3 years rose from 60% in 2021 to 74% in 2022.

As for the asset classes referenced by SRPs, around 90% of sales volumes were for products with equities or equity indices as underlying. 2022 saw some increase in the share of sales volumes referencing interest rates, albeit from a very low base (5% in 2022, up from 1% in 2021), to a level last seen in 2017.

Costs – largely charged in the form of entry costs – rose in 2022 for a majority of product types and issuers, although they vary substantially by payoff type and country. The

⁶⁹ According to the commercial data used in this section, approximately 73% of outstanding product volumes at the end of 2021 in the EU were tranche products.

analysis of performance scenarios shows that the returns of one in eight SRPs would be negative even in a moderate scenario.

Costs and performance

Our calculations are based on a data sample of SRP Key Information Documents (issued since 2018 under the PRIIPs KIDs delegated regulation⁷⁰), including information on various cost figures, absolute and percentage product returns under different performance scenarios, and the SRI. The following analysis mainly focuses on 13,997 SRPs issued in 2022.⁷¹ Sales of products in this sample are estimated to amount to EUR 31bn, which accounts for 50% of the total sales of SRPs in 2022 in the EU.

Costs

The two key types of costs involved are those embedded in the product when it is issued (reduction in yield (RIY) attributed to costs), and costs involved in distributing the product, such as sales commissions. The analysis in this report focuses on the former.

The SRPs available in the EU are characterised by a significant variation in costs both across countries and by payoff type (MR-CP.31, MR-CP.32). The variation in costs across payoff types may reflect the degree of complexity in the product (e.g., the extent of 'structuredness' of the SRP). However, costs can vary widely even within the same payoff structure and country of sale, which demonstrates the importance for prospective investors to compare alternative SRP manufacturers and offers.

In terms of underlying asset type, most SRPs backed by multiple underlying asset classes ('Hybrid') tend to present relatively high costs, while 'Interest rate' underlying assets tend to be associated with the cheapest products, although with some notable exceptions (MR-CP.33). Products backed by equity display large cost ranges, regardless of whether they are backed by single assets ('Single share', 'Single index') or a plurality of underlying assets ('Share basket', 'Index basket').

MR-CP.34 examines how the costs of SRPs offered in 2022 evolved compared to similar products in our dataset issued in 2021, using the RIY over a product's recommended holding period (RHP). To allow for some comparability between products offered at different times, SRPs are grouped based on their payoff type and manufacturer. For each of these groups of products, the median cost of products offered in 2022 is compared with the median cost of products issued in 2021. MR-CP.34 shows the difference between these two measures. The chart suggests that, for a majority of SRP manufacturers and payoff types, products issued in 2022 tended to be more expensive than analogous products issued in the previous year. For example, the median cost of "autocall" products increased for 12 out of 21 manufacturers, decreased for six manufacturers, and remained the same for three. The largest increases in costs were for manufacturers issuing a large number of products of this type (over a thousand each). The median cost of products of "reverse convertible" and "barrier reverse convertible" type increased for 16 out of 22 issuers. This picture confirms the trend observed in the previous edition of this report and warrants further monitoring of developments in this market.

In terms of the composition of the total costs (RIY) of SRPs in the dataset, expenses are usually front-loaded in the form of entry costs (these are the only costs in almost 97% of the KIDs where information on costs was retrieved, compared with 92% in the previous edition of this report). Only 2.5% of the products are expected to incur recurring costs over their lifetime. Other cost types are absent or not indicated in the KID, which, according to the regulation, should be the case only if these cost categories do not apply to such products. Finally, in rare cases, single cost components exceed the total cost indicated elsewhere in the KID, suggesting that investors may occasionally be presented with inconsistent cost figures (MR-CP.35).

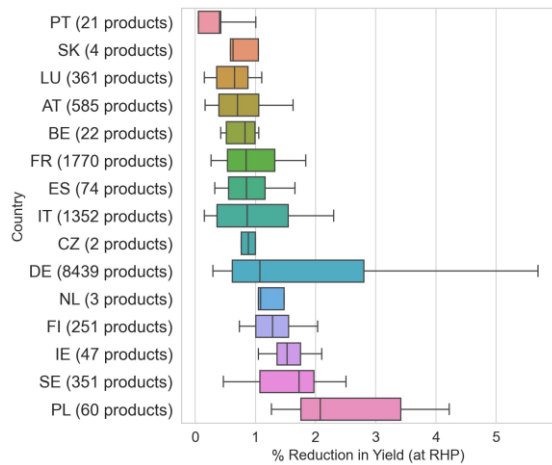
⁷⁰ Commission Delegated Regulation (EU) 2017/653 on key information documents for packaged retail and insurance-based investment products (PRIIPs KIDs delegated regulation).

⁷¹ Sample sizes in the following charts will vary as some information either may not have been possible to extract from PDF documents or may not have been reported for certain products.

MR-CP.31

Total costs for SRPs by country

Substantial variation in product cost by country

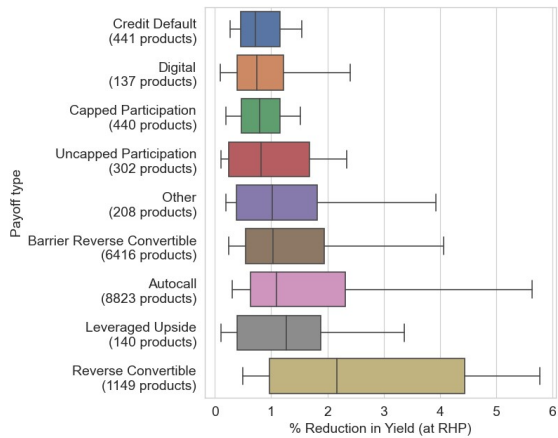


Note: Each bar displays the range in percentage total cost (RIY) over the recommended holding period, across SRPs in the data sample, grouped by country. Countries indicate locations of sale (one product can be sold in multiple countries). The vertical line in each box shows the median percentage cost. Box edges are the 25th and 75th percentiles, and additional lines ('whiskers') represent the 10th and 90th percentiles for that country group. Sources: ESMA, Structuredretailproducts.com, financial entities' websites.

MR-CP.32

Total costs for SRPs by payoff type

Substantial variation in product cost by payoff type

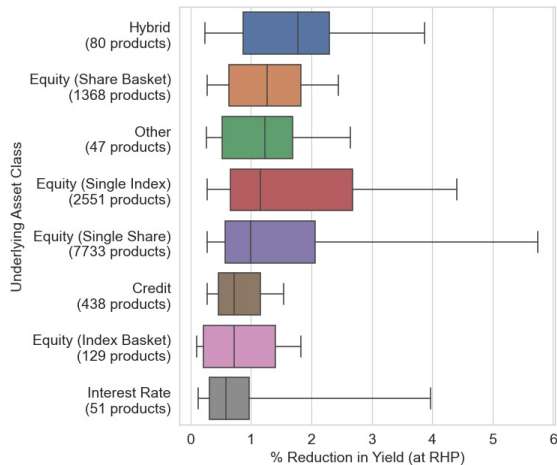


Note: Each bar displays the range in percent total cost (RIY) over the recommended holding period, across SRPs in the data sample, grouped by payoff type. The vertical line in each box shows the median percent cost. Box edges are the 25th and 75th percentiles, and additional lines ('whiskers') represent the 10th and 90th percentiles for that payoff type. 'Other' comprises all SRPs containing payoff types that have 100 or fewer observations in the data sample. Note that one product can appear under multiple payoff types. Sources: ESMA, Structuredretailproducts.com, financial entities' websites.

MR-CP.33

Total costs for SRPs by underlying asset

Cheapest products based on interest rate

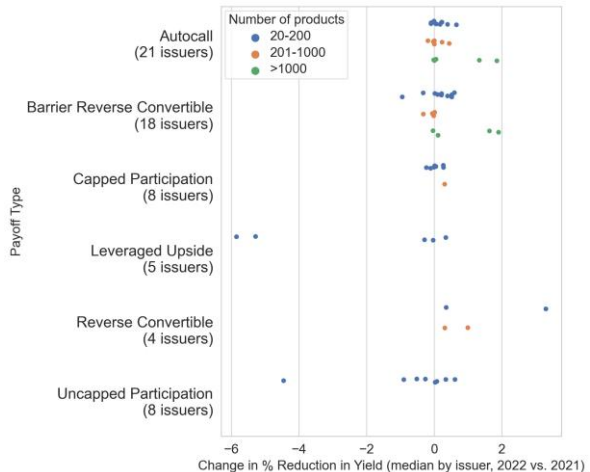


Note: Each bar displays the range in percent total cost (RIY) over the recommended holding period, across SRPs in the data sample, grouped by underlying asset types. Box edges are the 25th and 75th percentiles, and additional lines ('whiskers') represent the 10th and 90th percentiles for that underlying asset type. 'Other' comprises all SRPs containing underlying asset classes that have 20 or fewer observations in the data sample, such as funds, foreign exchange rates and commodities. Sources: ESMA, Structuredretailproducts.com, financial entities' websites.

MR-CP.34

Change in total costs in 2022 from 2021

Several product types got more expensive



Note: Each dot in the chart represents the difference between the median percent total cost (RIY) over the recommended holding period for SRPs issued in 2022 and the same figure for SRPs issued in 2021, for products of the respective payoff type and a specific issuer. Only issuers (dots) with at least ten products for that payoff type both in 2021 and in 2022 are shown. Payoff types with less than three issuers are not shown. Note that one product can appear under multiple payoff types. Sources: ESMA, Structuredretailproducts.com, financial entities' websites.

MR-CP.35

Breakdown of SRPs expenses

Entry costs make up the majority of total costs

	Entry costs	Exit costs	Transaction costs	Other ongoing costs	Performance fees	Carried interest
Above the RIY	0.2%	0.1%	0%	0.1%	0%	0%
Equal to the RIY	96.6%	0%	0%	0%	0%	0%
Above 0% and smaller than the RIY	2.6%	0%	0%	2.4%	0%	0%
Equal to 0% / Not provided	0.6%	99.9%	100%	97.5%	100%	100%

Note: This table shows the breakdown of the total costs of each individual SRP over its recommended holding period into the cost components mandated to be reported in the KID. The sample includes 11,340 products.

Sources: StructuredRetailProducts.com, financial entities' websites, ESMA calculations.

Performance

MR-CP.36 displays the range of investment returns across the four performance scenarios laid out in the KID.⁷² The simulated product returns under the 'stress' and 'unfavourable' scenarios are well below the 'moderate' scenario returns. At the same time, the simulated 'favourable' scenario returns do not seem to display a markedly higher upside potential than the returns under the 'moderate' scenario.⁷³ This limited differentiation might be due to payoff structures that often "cap" outperformance, such as with reverse convertible and capped participation products. Conversely, looking at downside risk, the moderate scenario appears to be considerably adverse for a number of products, with 12% of the SRPs offering negative returns, despite this being the second-best scenario out of four. This share increases to 23% of SRPs when looking at the returns after one year rather than at a product's maturity (not shown), which illustrates the unfavourable implications for retail investors of not respecting a product's RHP. Most of the products that are expected to deliver negative returns under the moderate scenario can be attributed to one of several payoff type categories, such as "autocall", "barrier reverse convertible" and "leveraged upside" (MR-CP.37). Overall, taking as a reference the return of the median SRP in the 'moderate' scenario, a hypothetical five-year investment of EUR 10,000 undertaken in 2022 would yield around EUR 10,800, in net terms, at

maturity. This figure increases to EUR 13,000 in a 'favourable' scenario, but drops to EUR 5,300 in an 'unfavourable' scenario.⁷⁴

To complement this picture, we examine how the simulated performance of SRPs offered in 2022 evolved compared to similar products (in terms of payoff type and manufacturer) offered in 2021. The 'moderate' performance scenario tended to forecast higher returns in 2022 compared to products issued in the year before, with the median return increasing for 41 out of 53 product types and manufacturers overall, driven by "autocall" and "barrier reverse convertible" products (MR-CP.38). This pattern suggests that these products, notwithstanding the increasing costs observed in MR-CP.34, still have the potential to add value for EU retail investors.

Looking at how simulated returns vary depending on a product's SRI, within the favourable scenario high-SRI products are associated with higher returns (MR-CP.39). This appears sensible as the favourable scenario represents 'upside risk' for an investor. Conversely, the higher the SRI for a SRP, the lower the simulated returns in both the 'unfavourable' and 'stress' scenarios. Within the 'moderate' scenario, there is little variation in simulated returns across SRI categories. This pattern confirms that the SRI calculation methodology is functioning as intended.

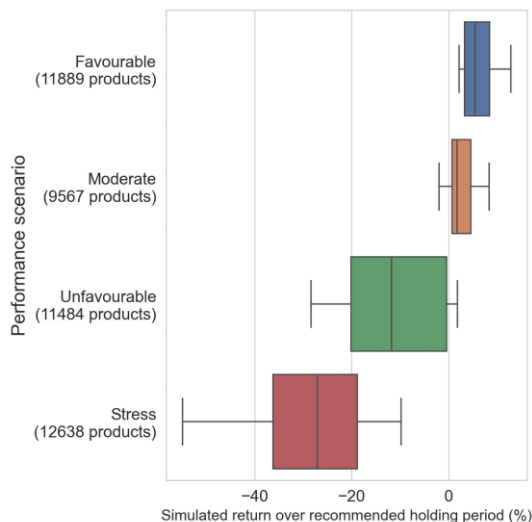
⁷² The scenarios are 'favourable' (90th percentile of simulated returns), 'moderate' (50th percentile of returns, i.e. the median), 'unfavourable' (10th percentile), and 'stress' (1st or 5th percentile, depending on the type of product). PRIIPs KIDs do not include any backward-looking (ex-post) performance information; only forward-looking simulations are available in the KID.

⁷³ In 27% of the products, the favourable and moderate scenarios present the same return at the RHP.

⁷⁴ This hypothetical five-year investment assume an initial investment of 10,000 in 2022. The inflation rate at the end of the holding period is then unknown. For this reason, only the net outcome can be calculated.

MR-CP.36

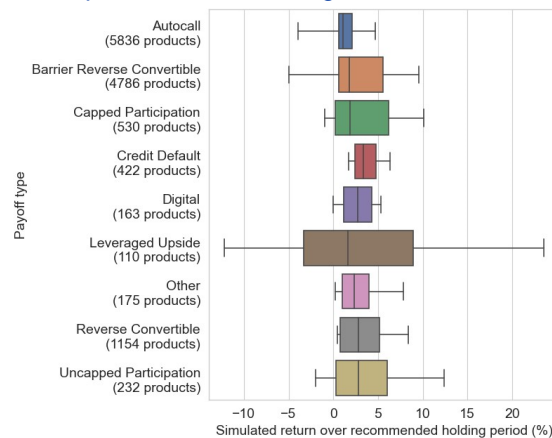
Simulated returns across scenarios
Similar favourable and moderate scenarios



Note: The chart shows the range in annual returns for SRPs in each performance scenario, over a product's RHP. The number of products in each sample varies slightly as information for some scenarios could not be retrieved from some documents. The scenario calculation methodology is set out in the PRIIPs KIDs regulation. The vertical line in each box shows the median simulated return in that performance scenario category. Box edges are the 25th and 75th percentiles, and additional lines ('whiskers') represent the 10th and 90th percentiles for that category. Sources: ESMA, Structuredretailproducts.com, financial entities' websites.

MR-CP.37

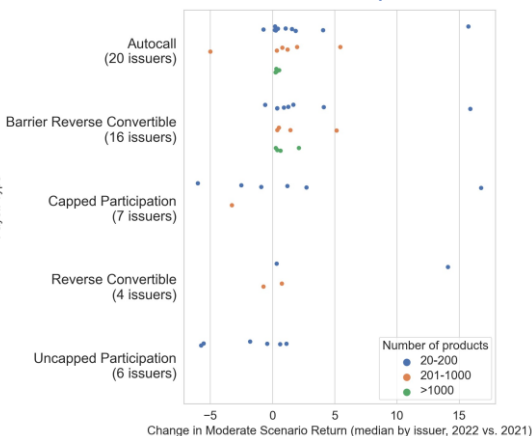
Moderate scenario returns across payoff types
Some products foresee negative returns



Note: The chart presents the range in annual returns under the moderate scenario over a RHP for SRPs grouped by payoff type. The vertical line in each box shows, within each payoff type, the median moderate scenario returns (after costs) at the recommended holding period. Box edges are the 25th and 75th percentiles, and additional lines ('whiskers') represent the 10th and 90th percentiles for that payoff type. Note that one product can contain multiple payoff types. 'Other' comprises all SRPs containing payoff types that have 100 or fewer observations in the data sample. Sources: ESMA, Structuredretailproducts.com, financial entities' websites.

MR-CP.38

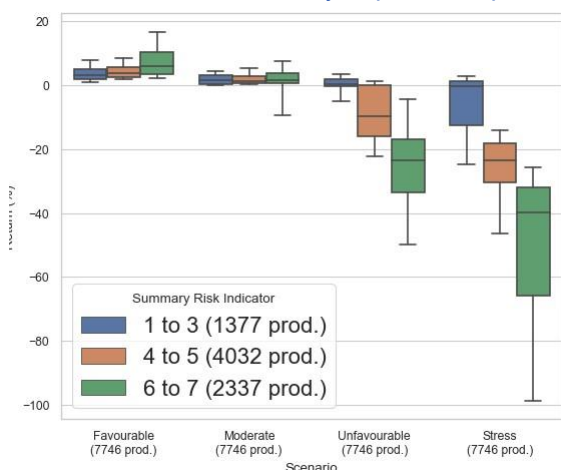
Change in simulated returns in 2022 from 2021
Moderate scenario often more optimistic



Note: Each dot in the chart represents the difference between the median moderate scenario return of SRPs issued in 2022 and the median moderate scenario return of SRPs issued in 2021, for products of the respective payoff type and a specific issuer. Only issuers (dots) with at least 10 products for that payoff type both in 2021 and in 2022 are shown. Payoff types with less than three issuers are not shown. Note that one product can appear under multiple payoff types. Sources: ESMA, Structuredretailproducts.com, financial entities' websites.

MR-CP.39

SRI and simulated returns
SRI consistent with volatility of product's performance

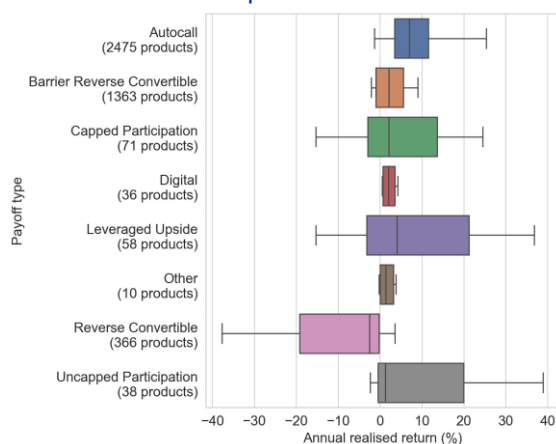


Note: The chart shows the range of returns (at RHP) in each scenario for SRPs grouped by the SRI. The SRI aggregates the estimated credit risk and market risk associated with the SRP and ranges from 1 (lowest risk) to 7 (highest risk). The horizontal line in each box shows the median simulated return for a specific performance scenario and SRI. Box edges are the 25th and 75th percentile simulated returns across the group, and additional lines ('whiskers') represent the 10th and 90th percentiles. Only products with all performance scenarios available are included. Sources: ESMA, Structuredretailproducts.com, financial entities' websites.

Separately, we looked at the actual performance of a smaller sample of SRPs – issued from late 2017 onwards – that matured in 2022 (MR-CP.40). While autocall products tended to perform well, other, less numerous product types – chiefly reverse convertibles – often delivered negative returns even though these figures are not yet adjusted for the costs paid by investors. A likely reason for this differentiation is the higher sensitivity to market downturns of certain payoff types lacking downside protections, such as barriers.

MR-CP.40

Actual returns for SRPs that matured in 2022 Reverse convertible products suffered most



Note: The chart presents the range in annual returns for 3,312 SRPs that matured or expired in 2022, grouped by payoff type. The returns reflect both the coupons paid over an SRP's life and the capital return, and are not adjusted for the costs paid by investors. The vertical line in each box shows the median return for SRPs of the respective payoff type. Box edges are the 25th and 75th percentiles, and additional lines ('whiskers') represent the 10th and 90th percentiles for that payoff type. One product can be assigned to multiple payoff types. 'Other' comprises all SRPs containing payoff types that have 20 or fewer observations in the data sample.

Sources: ESMA, Structuredretailproducts.com, financial entities' websites.

observed in recent years was likely made possible by the increase in interest rates.

- **Costs:** Total costs for SRPs are usually paid at subscription. These costs appear to vary substantially depending on the country in which they are marketed and by the underlying pay-off type.
- Costs of products issued in 2022 increased for a majority of payoff types and issuers compared to products issued in the previous year, continuing an increase in expenses for some popular products observed in the previous edition of this report. Continued monitoring of the SRP market is warranted to assess the significance of this trend.
- **Performance:** Once costs were taken into account, the simulated returns for one in eight SRPs (one in four if the investor cashes out after one year) were below zero even in a moderate performance scenario. This highlights that prospective SRP investors should carefully consider their investment horizon and make appropriate comparisons between alternative investment products.
- **Risk:** There is a significant negative correlation between a product's risk indicator (SRI) and the simulated returns in negative performance scenarios: the higher the SRI, the lower the simulated returns in both the unfavourable and the stress scenarios. This provides evidence that the SRI calculation methodology used in the KID is functioning as intended from an investor protection perspective.

Summary findings

The key findings are as follows:

- **SRP market:** The total value of SRPs held by EU retail investors increased slightly in 2022 to approximately EUR 350bn, a relatively small market compared to other financial instruments such as UCITS. Volumes and types of SRPs sold in national markets within the EU showed high heterogeneity.
- **Capital protection:** The share of products with some form of capital protection rose to one quarter. This inversion of a downward trend

Annexes

In the annexes to the report, we provide details on the data and data limitations, the statistical methods at the basis of the analysis report, and statistics reporting extensive and up-to-date charts and tables with key data on UCITS, retail AIFs, SRPs. These annexes can be accessed on ESMA's website.

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List of abbreviations

AIF	Alternative Investment Fund
AIFM	Alternative Investment Fund Manager
AIFMD	Alternative Investment Fund Managers Directive
AMF	Autorité des marchés financiers
ASR	Annual Statistical Report
AuM	Assets under Management
BaFin	Bundesanstalt für Finanzdienstleistungsaufsicht
BIS	The Bank of International Settlements
BL	Redemption fees (back loads)
BPS	Basis points
CESR	Committee of European Securities Regulators
CMU	Capital Market Union
CONSOB	Commissione Nazionale per le Società e la Borsa
CSSF	Commission de Surveillance du Secteur Financier
EA	Euro Area
EBA	European Banking Authority
ECB	European Central Bank
EEA	European Economic Area
EFAMA	European Fund and Asset Management Association
EIOPA	European Insurance and Occupational Pensions Authority
ESA	European Supervisory Authorities
ESG	Environmental, Social and Governance
ESMA	European Securities and Markets Authority
ESRB	European Systemic Risk Board
ETF	Exchange Traded Fund
EU	European Union
FCA	Financial Conduct Authority
FL	Subscription fees (front loads)
FMA	Financial Market Authority
FoF	Fund of funds
FSMA	Financial Services and Markets Authority
HCMC	Hellenic Capital Market Commission
HICP	Harmonised Index of Consumer Prices
HF	Hedge Funds
IBIP	Insurance-based investment products
IDD	Insurance Distribution Directive
IORP	Directive on the activities and supervision of institutions for occupational retirement provision
KID	Key Information Document
KIID	Key Investor Information Document
MiFID	Markets in Financial Instruments Directive
MiFIR	Markets in Financial Instruments Regulation
MMF	Money Market Fund
NAV	Net Asset Value
NCA	National Competent Authority
PE	Private Equity
PRIIP	Packaged retail investment and insurance products
PPP	Personal pension products
pp	Percentage points
RE	Real Estate
RTS	Regulatory Technical Standards
SFDR	Sustainable Finance Disclosure Regulation
SMSG	Securities and Markets Stakeholder Group
SRI	Summary Risk Indicator
SRPs	Structured Retail Products
SRRI	Synthetic Risk and Reward Indicator
TER	Total Expense Ratio
TRV	Trends Risk and Vulnerabilities
UCITS	Undertaking for Collective Investment in Transferable Securities
	Countries abbreviated according to ISO standards except for United Kingdom (UK)
	Currencies abbreviated according to ISO standards



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