



Annexes

# Costs and Performance of EU Retail Investment Products 2023

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# Statistical methods

# Data sources and limitations

An assessment of the performance and cost of investment products in the remit of ESMA is structurally impeded by the absence of relevant regulatory data: UCITS fund data are not accessible at EU level, AIFMD regulatory data do not cover granular evidence on fund costs, and on SRPs, comprehensive coverage by regulatory data do not exist, nor do commercially available data provide the level of granularity and accuracy required for the purposes of our reporting.

This annex reports on data and related limitations for this ESMA market report, distinguishing by type of retail product considered.

## UCITS

The largest amount of data is gathered from Refinitiv Lipper and Morningstar Direct. Data based on disclosure requirements stemming from EU directives and regulations have only started to become available over the most recent years and currently do not cover the complete time horizon as requested by the European Commission. Data from the UCITS Directive and PRIIPs are not yet available and usable at EU level.

This lack of data has three main implications:

- Information based on the domicile of the fund rather than on the domicile of the investor is used.
- There is limited granularity and lack of harmonisation in cost data and absence of information on distribution costs and performance fees.
- Commercial providers' cost data partly use a different cost taxonomy from that used in the current EU regulation, as reported below.

The issue concerning the use of information based on the domicile of the fund rather than that of the investor remains. Available data are based on the domicile of the fund. This is related to the absence of information on the investor domicile, which has a significant impact if a fund is sold cross-border. Therefore, we are unable to capture what are known as "round-trip" cases, where a fund management company of a specific Member State produces a fund through its subsidiary based in another market and then sells the fund in the Member State (this is usually the case when a market serves as a global platform, such as in Ireland and Luxembourg). This situation is relevant for a number of Member States, such as Italy. Moreover, relying on commercial data implies that the distributions within asset classes are dependent on the availability of data. As, clarified in the methodology, the funds are retained in the sample if information on gross annual performance, ongoing costs, flows, and asset value is jointly available. It may be that we need to discard several observations because of a lack of information. This, in turn, may skew the final results towards higher or lower values. This was the case, for example, for bond and mixed UCITS, respectively in 2019.

### Ongoing costs and entry and exit fees

Using commercial data has the implication that the costs considered are aggregated into ongoing costs and one-off (entry and exit) fees.

Ongoing costs – These are proxied by the total expense ratio (TER). The TER includes all charges paid to the fund itself to cover the costs of resources used to design and operate the fund, as well as to pay for external services employed in the process. However, the TER is provided at an aggregate level and components of the TER are not available in our database. Accordingly, potential different practices in the TER computation are not captured (including the costs charged by funds in which UCITS invest) and that contributes to explaining the high variability of costs across countries.

Availability of data has been improving. Compared with the first edition of this report, we developed an analysis based on more data available at a more disaggregated level: management fees and transaction fees. The data source is Morningstar Direct. These fees stem from the reporting related to MiFID II requirements<sup>1</sup> and are based on what the firm, or

<sup>&</sup>lt;sup>1</sup> Commission Delegated Regulation (EU) 2015/565, Annex 2.

the fund in our case, declares, involving a large degree of heterogeneity as well as methodological issues. This, in turn, relates to the fact that a methodological debate on the calculation of these costs is ongoing. Therefore, extreme variability may be visible and results across domiciles should be analysed critically.

Entry and exit fees – These are reported at their maximum level for each fund share class by Refinitiv Lipper. This is in line with regulatory requirements. It may lead to an overestimation, as actual entry and exit fees are often subject to negotiation and may vary for individual fund transactions. EC regulation No 583/2010 specifies that a statement disclosing the actual entry and exit fees should be issued where applicable.<sup>2</sup> This means that the UCITS KIIDs will report them. These statements, however, are either not accessible or not reported in a harmonised format (layout or languages, etc.).

For UCITS ETF, Refinitiv Lipper also reports entry and exit fees at their maximum level for each share class. We include this information in the analysis. However, the focus goes to ongoing costs, as one-off fees apply only when investors subscribe or redeem shares on the primary market, whereas they do not apply when investors trade on the secondary market, where bid–ask spreads should be factored in.

### Performance fees

We do not include performance fees in our analysis as the reporting field for performance fees is not adequately completed, either in Refinitiv Lipper or Morningstar Direct, to provide consistent results.

An underlying reason for the scarcity of data is the heterogeneity in the way performance fees are computed across markets due to a lack of EU regulatory requirements on calculation and reporting of performance fees.

### **Distribution fees**

Distribution costs are a crucial component affecting the total cost borne by investors. The assessment of distribution costs is, however, significantly impaired due to scarce data availability and significant heterogeneity across markets and across channels, but also, for the same channel, across investors. Lack of harmonisation means there is variation in the level of granularity, data format and language. Distribution costs may be part of the analysis to the extent that they are included in ongoing costs and/or the entry charges presented in the KIID. However, they are not included as a specific cost as we are not able to identify such fees.

Previous ESMA reports highlight the lack of transparency and the heterogeneity across Member States. From a regulatory perspective, Directive 2019/1160<sup>3</sup> aims, among other things, to eliminate regulatory barriers to the cross-border distribution of funds, as well as to improve transparency by aligning national marketing requirements and regulatory fees.

In order to obtain more in-depth information on distribution fees across Member States, ESMA carried out a detailed survey of Member States, through NCAs, in August 2020<sup>4</sup> and another in August 2021, aiming to identify the main changes from the previous year. No significant changes were identified. As for previous years, the key finding remains the lack of harmonisation in distribution channels and cost treatment.

### Inflation

The reporting of real returns after inflation falls in the context of long-term/retirement savings, where these are a key element for investment decisions.

The analysis reports, initially, gross and net fund performance in nominal terms without taking inflation into account. The impact of inflation follows in a separate section, taking into account that inflation is exogenous for fund managers, referring to the annual HICP rate of change for the Euro Area changing composition.

The reporting of returns after cost and inflation only provides information about real returns for end investors where investor and fund are domiciled in the same member state. When we consider cross-border funds, the inflation taken into account only refers to the domicile of the fund and not to the domicile of the investor.

# Taxonomy of costs: EU regulation and commercial data

There are differences in the definitions of costs used by Refinitiv Lipper and by current EU

cross-border distribution of collective investment undertakings.

<sup>&</sup>lt;sup>2</sup> Articles 10 and 11, Commission Regulation (EU) No 583/2010.

<sup>&</sup>lt;sup>3</sup> Directive (EU) 2019/1160 of the European Parliament and of the Council of 20 June 2019 amending Directives 2009/65/EC and 2011/61/EU with regard to

<sup>&</sup>lt;sup>4</sup> Please see detailed results of this survey carried out in August 2020 across EU jurisdictions in the annex on Data sources and limitations of the <u>ESMA third annual</u> <u>statistical report</u> published in April 2021, page 69.

Regulation: UCITS Directive and Delegated Acts, MiFID II and the PRIIPs regulation.

### Ongoing costs

UCITS: Chapter IX, Section 3, of the Level 1 Directive (2009/65/ES) refers to key investor information (KIID) and art. 78(3) specifies that KIID must also provide information on cost and charges. Details of the content and format are to be provided in delegated acts adopted by the Commission (art. 78(7)).

UCITS KIID: From the UCITS Directive, details on content and format have been left to be developed further by means of implementing measures, which should be specific enough to ensure that investors receive the information they need in respect to particular fund structures (Recital (1) Commission Regulation (EU) No 583/2010). Article 10 (3) of the Commission Regulation No 583/2010 defines the charges and their presentation.

For ongoing costs (Article 10 (2)(b)), a single figure is to be shown for charges taken from the UCITS over a year, representing all annual charges and other payments taken from the assets of the UCITS over the defined period, and based on the figures for the preceding year.

The following is the definition of the reporting of charges in Annex II of the UCITS regulation:

"Ongoing charge: []% charges taken from the fund under certain specific conditions."

CESR guidelines: CESR guidelines on the methodology for the calculation of the ongoing charges figure in the KIID contain the definition of the ongoing charge figures to be disclosed, including an indicative but not exclusive list of the types of ongoing charges. As per the guidelines, ongoing charges include the following:

- All payments to the management company of the UCITS, directors of the UCITS if an investment company, the depositary, the custodian(s) and any investment adviser, also including any person to whom they have delegated any function.
- All payments to any person providing outsourced services to any of the above.
- Registration, regulatory fees and similar charges.
- Audit fees.
- Payments to legal and professional advisers.
- Any costs of distribution.
- Cost charged to the funds in which the UCITS are invested where such funds represent a material share of the UCITS' portfolio.

 Charges and payments that do not form part of the amount to be disclosed as ongoing charges in the KIID including but not limited to entry/exit charges, a performance-related fee payable to the management company or investor advisor, transaction costs, interest on borrowing and payments to third parties.

PRIIPs: Readers are referred to the Commission Delegated Regulation (EU) 2017/653.

Annex VI refers to the methodology for the calculation of costs. Part I refers to the list of costs, one-off fees, recurring costs and incidental costs. Recurring costs are payments deducted from the assets of an AIF or UCITS and represent the following: expenses necessarily incurred in their operations; any payments, including remunerations, to parties connected with the AIF or UCITS or providing services to them; and costs. Annex VI sets out the harmonised way to measure and disclose transaction costs.

The cost indicator to be used is the reduction in yield (RIY). In terms of what recurring costs include (as per the CESR guidelines previously reported (see above)), this is in line with PRIIPs.

Regarding undue costs, ESMA has produced a supervisory briefing on the supervision of costs addressed to NCAs, which focuses on how NCAs supervise the relevant cost-related provisions under UCITS and AIFMD and on the managers' obligation to prevent undue costs being charged to investors.

MIFID II: Directive 2014/65/EU of the European Parliament and of the Council.

Article1 of MiFID II sets out the scope: "The MIFID II Directive applies to investment firms, market operators, data reporting service providers and third-country firms providing investment services or performing investment activities through the establishment of a branch in the Union. [...]".

UCITS funds and managers are generally exempt from MIFID II, except to the extent that they also conduct MIFID investment services and activities in relation to financial products.

Articles 24(4) and (5) of MiFID II refer to costs and charges to be reported and how to report them. Article 24(13) of MiFID II empowers the Commission to adopt delegated acts to ensure compliance with the principles set out in Art. 24 of MiFID II. Article 50 of the Commission Delegated Regulation 2017/565 then prescribes in more detail how the disclosures should be made. Annex II of this regulation includes examples on disclosures on ongoing charges.

Commercial data: Refinitiv Lipper data are mainly based on information provided by the fund management company. Total Expense Ratio (TER) can include one of the following figures:

- Expense Ratio (ER)
- Fund Expense Ratio (FER)
- Management Expense Ratio (MER)
- Ongoing Charges (OC)
- Total Expense Ratio (TER)

For the EU, TER mostly refers to ongoing charges and is used as a proxy for ongoing costs.

More details can be found in the Refinitiv Lipper paper "Adjusted Performance Lipper Calculation Definition Methodology Research Team".

### Entry and exit charges

UCITS KIID: Article 10 (2)(a) of Commission Regulation No 583/2010 clarifies that entry and exit charges shall each be the maximum percentage that might be deducted from the investor's capital commitment to the UCITS".

Article 11(1)(a) follows by clarifying that:

- regarding entry and exit charges, it must be made clear that the charges are always maximum figures, as in some cases the investor might pay less.
- a statement must be included stating that the investor can find out the actual entry and exit charges from their financial adviser or distributor.

PRIIPs: Annex VI, Part 1 (list of costs) includes the definition of one-off costs. A one-off cost is an entry or exit cost that is either paid directly by the retail investor or deducted from a payment received by or due to the retail investor.

One-off costs include, but are not limited to, the following types of up-front initial costs that are to be taken into account in the cost amount to be disclosed in the KIID: distribution fee, to the extent that the amount is known to the management company.

If the actual amount is not known to the management company, the maximum of the possible known distribution costs for the specific PRIIP must be shown: constitution costs (up-front part), marketing costs (up-front part) and subscription fee including taxes.

MIFID II: Annex II of Regulation 2017/585 shows how entry and exit fees should be reported by MiFID investment firms.

Commercial data: Maximum subscription (redemption) fees or front (back) loads are disclosed as percentages of the initial investment (withdrawals). Both are reported according to the fund disclosure.

As most institutions report the maximum fees, as required by the regulation, these are the fees available.

### Performance fees

UCITS KIID: Article 12(3) of the Regulation No 583/2010 provides for the inclusion of a performance fee to be disclosed in accordance with Article 10(2) (c) of the same regulation. The amount charged during the UCITS previous financial year is to be included as a percentage. Details on the presentation of charges are reported in the annex Regulatory Developments.

PRIIPs KID: Annex VI harmonises the way to measure and disclose performance fees.

CESR guidelines: In the guidelines (p 2) it is specified that a performance-related fee payable to the management company or any investor advisor "shall not form part of the amount to be disclosed as ongoing charges in the KIID".<sup>5</sup>

MIFID II: Annex II of Regulation 2017/585 includes examples of how to report performance fees. These are considered incidental costs.

Commercial data: Performance fees are not included in the TER.

ESMA Guidelines on performance fees in UCITS and certain types of AIFs: The Guidelines aim to harmonise the way fund managers charge performance fees to retail investors, as well as the circumstances in which performance fees can be paid. The guidelines are applicable to both UCITS and certain types of AIFs, in order to ensure a level playing field and a consistent level of protection to retail investors. Based on the guidelines, any losses/underperformances should be compensated for a period of at least five years before a performance fee can be paid.

## UCITS ESG

Although the SFDR introduced a possible definition of ESG funds disclosing under Articles 8 or 9 of the SFDR, the classification process by fund managers appears to be still in progress,

<sup>&</sup>lt;sup>5</sup> <u>CESR/09-949</u>.

with several reclassifications observed at the end of 2022 and beginning of 2023.<sup>6</sup> For this reason the report relies both on the SFDR classification and on the Morningstar definition of "Sustainable investment".

The definition of ESG funds used in this report relies on the flag "Sustainable investment overall" available in Morningstar data. Morningstar defines an investment fund as a Sustainable Investment fund "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).

According to Morningstar, sustainable investments include two main types of funds: funds with general ESG investments and funds with a sustainability themed investment (climate action, healthy ecosystems, basic needs, resource security and human development).

We use the latest available information as of August 2023. This constitutes a slight change of methodology compared to last year 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 review 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 now considered as non-ESG. Including those funds in the analysis of ESG funds seemed therefore misleading. For this reason, we now use the last available information.

This methodological change might impact the comparability of our results with the previous edition. To assess the robustness of the results two robustness checks are performed.

First, the results we would have obtained for 2022 with the old methodology are analysed. The sample is then composed of all funds identified as ESG by Morningstar as of December 2021 and include funds that have been reclassified as non-ESG during the summer 2022. AMR-CP-S.1 shows that ESG funds still underperformed in 2022 with the old methodology. With the list of

ESG funds as of December 2021, ongoing costs of non-ETF ESG equity funds still are lower but the gap with the ongoing costs of non-ESG equivalent appears to be wider. There is no significant change of costs for equity ETFs or bond funds when moving from one sample to the other. Using the list of ESG funds as of December 2021, mixed ESG funds would report slightly lower ongoing costs.

AMR-CP-S.1 Robustness chec	k on 2022	2 results		
ESG funds unde	erperforr	ned in 2	022	
	ESG fur	nds as of	ESG fun	ds as of
	Decemb	oer 2021	Augus	t 2023
	ESG	Non-	ESG	Non-
		ESG		ESG
	Equity	UCITS		
Non-ETFs				
Net performance	-11.4%		-10.0%	
Ongoing costs	1.3%	1.6%	1.4%	1.5%
One-off costs	0.2%	0.2%	0.2%	0.2%
ETFs				
Net performance	-6.9%	-4.4%	-6.5%	-4.4%
Ongoing costs	0.2%	0.2%	0.2%	0.2%
One-off costs	0.3%	0.2%	0.3%	0.2%
	Bond	UCITS		
Net performance	-8.6%	-7.1%	-8.8%	-7.3%
Ongoing costs	0.6%	0.8%	0.6%	0.8%
One-off costs	0.2%	0.1%	0.3%	0.1%
		UCITS		
Net performance	-9.8%		-9.5%	-8.1%
Ongoing costs	1.4%		1.5%	1.5%
One-off costs	0.2%	0.2%	0.3%	0.2%
Note: EU27 ESG and	non-ESG	UCITS ne	t annual pe	erformance,

Note: EU27 ESG and non-ESG UCTIS net annual performance, ongoing costs, and one-off costs in 2022 (one year investment horizon), aggregated and by asset type, geometric mean aggregation, %. Retail funds only. Sources: Refinitiv Lipper, Morningstar, ESMA.

Second, the analysis for 2021 is performed after excluding from the sample funds that were reclassified by Morningstar during summer 2022 (AMR-CP-S.2). For equity non-ETFs, even if the differences between ESG and non-ESG funds decrease, ESG funds remain cheaper and outperformed non-ESG equivalents. For equity ETFs, the net performance of both ESG and non-ESG reduces with the sample excluding declassified funds and ESG equity ETFs underperformed non-ESG equity ETFs. The change of sample mainly impact mixed funds. While ESG mixed funds were cheaper and outperformed non-ESG equivalents, using the sample excluding declassified funds reverses the conclusion.

<sup>&</sup>lt;sup>6</sup> ESMA, <u>TRV No.2, 2023</u>, September 2023.

	(publ	ample ished ults)	with declas	ample nout ssified nds
	ESG	Non- ESG	ESG	Non- ESG
	Equity	UCITS		
<i>Non-ETFs</i> Net performance Total costs	32.8% 1.4%	28.8% 1.9%	31.6% 1.6%	29.3% 1.8%
ETFs				
Net performance	31.8%	31.8%	31.6%	31.8%
Total costs	0.6%	0.4%	0.5%	0.4%
	Bond	UCITS		
Net performance	3.6%	4.2%	3.1%	4.2%
Total costs	0.9%	1.0%	1.0%	1.0%
	Mixed	UCITS		
Net performance	15.0%	13.1%	12.7%	13.4%
Total costs	1.6%	1.8%	1.9%	1.7%

Sources: Refinitiv Lipper, Morningstar, ESMA.

## AIFs sold to retail investors

The reporting obligations established by the AIFMD and the Implementing Regulation provide a standard data collection framework and ultimately improve transparency to NCAs. These

obligations together with PRIIPs requirements should ultimately enable NCAs and ESMA to acquire a complete overview of the structure of AIFs and AIFMs. However, the quality of relevant information poses challenges from an analytical perspective. ESMA together with NCAs is continuing to improve the coverage and quality of AIFMD data.

Focusing on the current analysis, given the lack of data and lingering data quality issues, a full analysis has not yet been fully developed. This implies a sample analysis of gross and net performances and not of the full universe. Data reporting is however improving. Because, in the AIFMD, reporting on costs is not required, a cost analysis is, so far, missing. In addition, there is no commercial database at our disposal that consistently and comprehensively covers this segment of the market.

### SRPs

No regulatory data are available on SRPs across the EU. The data on SRPs' costs and performance scenarios are extracted from a sample of KIDs retrieved from a specialised commercial data provider, manufactured and sold in the EU according to the PRIIPs regulation. The PRIIPs regulation has been applicable since 1 January 2018; KIDs-based data do not cover products issued before this date.

# Statistical methods

We have developed a specific methodology when calculating past performance and costs for funds to account for different aggregation and investment horizons as well as type of data available. This annex reports on the following:

- Statistical methods referring to the main methodology of the analysis.
- Robustness checks focusing on survivorship bias and on potential issues related to the choice of type of panel if balanced or unbalanced.

## **UCITS** analysis

Data is at entity-specific share class level and cover a ten-year period between January 2012 and December 2021. As previously mentioned, for the UCITS analysis we rely on commercial data providers, as data based on reporting requirements under EU law are not available for the entire reporting period.

We use the following data for our analysis:

- Gross annual performances.
- TER data as a proxy for ongoing costs.
- Annual fund value as a proxy for NAV.
- Annual net flows.
- EU Member State inflation rates.

Data scope and availability are likely to change and improve over time. Therefore, the methodology is designed in a flexible way. In practice this means that the different cost elements are treated separately. This allows the addition of cost categories over time and the incorporation of data from different data sources where this improves the analysis. This is reflected in this year's report, which includes an analysis of management fees following the merging of data gathered from Morningstar Direct with those obtained from Refinitiv Lipper.

We distinguish between the following:

- Gross performances.
- Ongoing costs.
- Performance net of ongoing costs, which equals the difference between gross returns and TER.
- Net performances, which equals gross returns net of TER and subscription and redemption fees charged directly by the fund (proxied by entry and exit charges).

 Net performances minus inflation, where annual inflation is provided on a monthly basis. It is downloaded from Eurostat.

Given the potential misclassification of asset classes between commercial providers and national supervisors, we relied on the classification of national supervisors when possible.

We exclude extreme values  $(\pm 1\%)$  from the distribution of gross performance.

The analysis does not cover the impact of taxation on fund performance.

Turning to the technical specification of individual metrics used in this study, the gross performance of a fund,  $r^{G}$ , represents the gross performance of the portfolio, in which the fund is invested in and ongoing costs are proxied by the TER. Both  $r^{G}$  and TER are obtained directly from the data provider. Performance net of TER,  $r^{N}$ , is therefore:

 $r^N = r^G - TER$ 

Next, we factor in subscription and redemption fees (front load (FL) and back load (BL)) by deducting respective fees as weighted by the ratio of net flows to fund values (FV). Hence performance net of *TER* and subscription and redemption fees,  $r^{NL}$ , is:

 $r^{NL} = r^{N} - (net flows/FV) * (FL/BL)$ 

The variable  $r^{NL}$  denotes the performance net of ongoing costs *FL* and *BL*. These fees are provided as time-invariant information and the maximum fees are used when information on actual fees is not available. This implies a potential upward bias.

Information on net flows is considered to take into account the fact that these fees are not applied constantly over time, but rather depend on actual redemptions or subscriptions of investors. We weight these fees by the ratio of net flows over fund value across quarters, limiting their impact. The weighting is structured in this way in order to account for potential variability in the holding period. In future reports, once more granular data on actual subscription and redemption fees are available a more accurate calculation will be possible. Finally, we also subtract inflation (e.g., the inflation rate  $\pi$  for the country in which the respective fund is domiciled), and generate the metric on returns net of TER, subscription and redemption fees, and inflation:

$$r^{NLI} = r^{NL} - \pi$$

Data on inflation is retrieved from Eurostat and refers to the annual rate of change of the Harmonised Index of Consumer Prices (HICP) for EU27. For each calendar year, we consider annual inflation to be the average across the four quarters of the year.

Data are available at share class level. To have data at an aggregated level, we aggregate data at share class level through a weighted average by the size of the share class within the size of the domicile for the specific asset class considered. To have data by time horizon, we then compute a geometric average across time according to the time horizon considered.

Finally, we also compute the final value for a EUR 10,000 investment over ten years in equity (40%), bond (30%) and mixed funds (30%). We distinguish between the gross outcome, the net outcome, the real net outcome, the amount of fees paid and the impact of inflation. With *FL* being the front loads, *TER* the ongoing costs, *BL* the back loads,  $r_g$  the annual gross return and  $\pi$  the inflation, the different outcomes for an investment in a single asset class can be obtained with the below formula.

*Gross outcome* = 10 000 × 
$$\prod_{i=1}^{10} (1 + r_{gi})$$

To obtain the net outcome after the first year, the front loads and the TER should be deducted:

$$Net_1 = 10\ 000\ \times (1 - FL) \times (1 + r_{g1}) \times (1 - TER_1)$$

For the remaining periods, the FL do not apply anymore. At the end of the ten years, before the application of the back loads, the net outcome is the following:

$$Net_{10} = 10\ 000 \times (1 - FL) \\ \times \prod_{i=1}^{10} (1 + r_{gi}) \times (1 - TER_i)$$

Then the back loads need to be deducted:

$$Net_{10} = 10\ 000 \ \times (1 - FL) \\ \times \prod_{i=1}^{10} (1 + r_{gi}) \times (1 - TER_i) \\ \times (1 - BL)$$

Finally, to obtain the net real outcome, the impact of inflation should be taken into account. The impact of inflation only materialises at the end of the investment period:

Net 
$$Real_{10} = 10\ 000 \times (1 - FL)$$
  
  $\times \prod_{i=1}^{10} (1 + r_{gi}) \times (1 - TER_i)$   
  $\times (1 - BL) \times (1 - \pi)$ 

To estimate the amount of fees paid by the investor, we sum all the fees paid across years. The first year, the investor pays the front loads and the ongoing costs. From the second year to the last year of investment, the investor pays each year the ongoing costs. When the investor redeems her investment, the back loads have to be deducted.

Then. the impact of inflation corresponds to the difference between the final net outcome and the final real net outcome.

# Regressions on the UCITS ESG sample

In order to statistically validate our findings regarding ESG funds, we perform a series of quarterly regressions on 2022 data. To start, the following equation was estimated using OLS with robust standard errors:

 $TER_{i,q} = \alpha_0 + \beta 1 \text{ Domicile}_i + \beta_2 \text{ Mgm}_i + \beta_3 \text{ Asse}$  $t_i + \beta_4 ESG_i + \beta_5 \text{ Age}_{l,q} + \beta_6 \text{ Log}(\text{Net}$  $\text{Assets})_{l,q} + \beta_7 \text{ AMC}_i + \varepsilon_{i,q}^7$ 

<sup>&</sup>lt;sup>7</sup> TER<sub>i,q</sub> is the total expense ratio per share class at the end of each year, *Domicile<sub>i</sub>* is a dummy indicating the domicile of the fund, *Mgmt<sub>i</sub>* is a dummy distinguishing active funds and passive funds, *Asset<sub>i</sub>* is a dummy indicating the funds' underlying assets (equities, bonds or mixed), *ESG<sub>i</sub>* is a dummy indicating wether the fund

is an ESG fund,  $Age_{i,q}$  is the age of the share class,  $Log(Net \ assets)_{i,q}$  is the logarithm of the share class value at the end of each year and  $AMC_i$  is a dummy identifying the asset management company.

## Regression analysis of TER for ESG funds ESG funds remain cheaper

### OLS with robust errors

Dependent variable TER				
	1Q22	2Q22	3Q22	4Q22
Passive	-0.747***	-0.746***	-0.740***	-0.743***
Equity	0.507***	0.514***	0.512***	0.510***
Mixed	0.448***	0.448***	0.449***	0.452***
ESG	-0.077***	-0.080***	-0.079***	-0.082***
Age	0.017***	0.017***	0.017***	0.017***
Size	-0.022***	-0.021***	-0.022***	-0.021***
Obs.	48,454	49,781	50,760	53,342
Adj R2	0.466	0.466	0.462	0.459

Note: *Passive* is a dummy taking the value of 1 if the fund is passively managed. *Equity (Mixed)* is a dummy taking the value of 1 if a fund belongs to the equity (mixed) asset class, the base class is the bond fund class. *ESG* is a dummy taking the value of 1 if a fund is an ESG fund. *Age* measures the age of the share class from its inception day expressed in years. *Size* represents share class size in terms of net assets in log terms. Significance levels are reported: 0.01 (\*\*\*), 0.05 (\*\*), 0.1 (\*).

Source: Morningstar Direct, Refinitiv Lipper, ESMA

The results (AMR-CP-S.3) show that ESG funds are less expensive compared to their non ESG peers across the four quarters even after controlling for the age and the size of the funds.

### AMR-CP-S.4

## Regression analysis of the return for ESG funds ESG funds underperformed

OLS with robust errors Dependent variable: quarterly gross performance

	1Q22	2Q22	3Q22	4Q22
Passive	1.773***	0.974***	0.619***	0.473**
Equity	7.384***	-1.984***	-3.591***	-4.817***
Mixed	4.580***	0.800***	0.083	-1.222***
ESG	-0.182*	-0.711***	-1.258***	-1.669***
Age	0.014**	0.028***	0.032***	0.076***
Size	-0.128***	-0.198***	-0.173***	-0.239***
Obs.	48,454	49,781	50,760	53,342
Adj R2	0.229	0.141	0.149	0.191

Note: *Passive* is a dummy taking the value of 1 if the fund is passively managed. *Equity (Mixed)* is a dummy taking the value of 1 if a fund belongs to the equity (mixed) asset class, the base class is the bond fund class. *ESG* is a dummy taking the value of 1 if a fund is an ESG fund. *Age* measures the age of the share class from its inception day expressed in years. *Size* represents share class size in terms of net assets in log terms. Significance levels are reported: 0.01 (\*\*\*), 0.05 (\*\*), 0.1 (\*).

Source: Morningstar Direct, Refinitiv Lipper, ESMA

For the second regression, the TER is replaced by the quarterly gross performance. The results (AMR-CP-S.4) show that ESG funds underperformed non-ESG equivalents, especially from the second quarter.

### AMR-CP-S.5

## Regression analysis of TER by SFDR regime Art.6 funds have higher TER

OLS with robust errors

	Deper	ndent varia	ble I ER	
	1Q22	2Q22	3Q22	4Q22
Passive	-0.757***	-0.757***	-0.752***	-0.756***
Equity	0.501***	0.508***	0.505***	0.504***
Mixed	0.445***	0.446***	0.447***	0.450***
Art. 9	-0.012	-0.015	-0.007	-0.018
Art. 6	0.013**	0.015**	0.017***	0.020***
Age	0.017***	0.017***	0.017***	0.017***
Size	-0.021***	-0.021***	-0.022***	-0.021***
Obs.	48,220	49,543	50,536	53,114
Adj R2	0.463	0.464	0.460	0.457

Note: *Passive* is a dummy taking the value of 1 if the fund is passively managed. *Equity (Mixed)* is a dummy taking the value of 1 if a fund belongs to the equity (mixed) asset class, the base class is the bond fund class. Art. 9 (Art. 6) is a dummy taking the value of 1 if a fund is disclosing under SFDR Art 9 (Art. 6), the reference is the funds disclosing under SFDR Art. 8. Age measures the age of the share class from its inception day expressed in years. *Size* represents share reported: 0.01 (\*\*\*), 0.05 (\*\*), 0.1 (\*).

Source: Morningstar Direct, Refinitiv Lipper ESMA

In the following regression, the ESG dummy is replaced by the disclosure regime under SFDR. The results (AMR-CP-S.5) show that on aggregate funds disclosing under SFDR Article 9 have similar ongoing costs than funds disclosing under SFDR Article 8. The results also show that funds disclosing under SFDR Article 6 have higher TER compared to funds disclosing under SFDR Article 8.

The three following tables (AMR-CP-S.6 to AMR-CP-S.8) show the results for each asset class.

### AMR-CP-S.6

## Regression analysis of equity funds' TER by SFDR regime

No significant difference of TER

OLS with robust errors Dependent variable TER

	1Q22	2Q22	3Q22	4Q22
Passive	-0.982***	-0.982***	-0.979***	-0.977***
Art. 9	0.008	0.004	0.020	0.008
Art. 6	-0.014	-0.012	-0.011	-0.008
Age	0.023***	0.023***	0.023***	0.022***
Size	-0.021***	-0.020***	-0.020***	-0.029***
Obs.	20,535	21,178	21,704	23,323
Adj R2	0.525	0.526	0.520	0.513

Note: *Passive* is a dummy taking the value of 1 if the fund is passively managed. Art. 9 (Art. 6) is a dummy taking the value of 1 if a fund is disclosing under SFDR Art 9 (Art. 6), the reference is the funds disclosing under SFDR Art. 8. *Age* measures the age of the share class from its inception day expressed in years. *Size* represents share class size in terms of net assets in log terms. Significance levels are reported: 0.01 (\*\*\*), 0.05 (\*\*), 0.1 (\*). Source: Morningstar Direct, Refinitiv Lipper ESMA

Regression analysis of bond funds' TER by SFDR regime

### Art.6 funds have higher TER

OLS with robust errors Dependent variable TER

	1Q22	2Q22	3Q22	4Q22
Passive	-0.444***	-0.451***	-0.448***	-0.448***
Art. 9	-0.120***	-0.124***	-0.120***	-0.138***
Art. 6	0.012	0.016*	0.019**	0.021**
Age	0.013***	0.013***	0.014***	0.014***
Size	-0.027***	-0.028***	-0.028***	-0.028***
Obs.	16,240	16,652	16,944	17,531
Adj R2	0.393	0.395	0.394	0.402

Note: *Passive* is a dummy taking the value of 1 if the fund is passively managed. Art. 9 (Art. 6) is a dummy taking the value of 1 if a fund is disclosing under SFDR Art 9 (Art. 6), the reference is the funds disclosing under SFDR Art. 8. *Age* measures the age of the share class from its inception day expressed in years. *Size* represents share class size in terms of net assets in log terms. Significance levels are reported: 0.01 (\*\*\*), 0.05 (\*\*), 0.1 (\*).

Source: Morningstar Direct, Refinitiv Lipper ESMA

AMR-CP-S.8

Regression analysis of mixed funds' TER by SFDR regime

### Art.6 funds have higher TER OLS with robust errors

	Depe	endent varia	able IER	
	1Q22	2Q22	3Q22	4Q22
Passive	-0.271***	-0.291***	-0.276***	-0.303***
Art. 9	-0.003	-0.009	-0.048	-0.005
Art. 6	0.057***	0.058***	0.059***	0.068***
Age	0.013***	0.013***	0.013***	0.013***
Size	-0.008***	-0.007***	-0.007***	-0.006**
Obs.	11,445	11,713	11,888	12,260
Adj R2	0.418	0.410	0.406	0.398
Note: Pass	<i>ive</i> is a dumm	y taking the va	lue of 1 if the fu	und is passively
managed.	Art. 9 (Art. 6) i	is a dummy ta	king the value	of 1 if a fund is
disclosing	under SEDP	Art Q (Art 6)	the reference	o is the funds

disclosing under SFDR Art 9 (Art. 6), the reference is the funds is disclosing under SFDR Art 8. Age measures the age of the share class from its inception day expressed in years. Size represents share class size in terms of net assets in log terms. Significance levels are reported: 0.01 (\*\*\*), 0.05 (\*\*), 0.1 (\*). Source: Morningstar Direct, Refinitiv Lipper ESMA

### AMR-CP-S.9

## Regression analysis of performance by SFDR regime Art.9 funds underperformed

### OLS with robust errors

Dependent variable: quarterly gross performance				
	1Q22	2Q22	3Q22	4Q22
Passive	1.695***	0.567***	0.057	-0.233
Equity	7.431***	-1.891***	-3.512***	-4.740***
Mixed	4.530***	0.636***	-0.143	-1.508***
Art. 9	-1.274***	-1.760***	-1.687***	-2.417***
Art. 6	0.342***	1.442***	1.992***	2.385***
Age	0.012**	0.026***	0.031***	0.075***
Size	-0.125***	-0.188***	-0.160***	-0.226***
Obs.	48,220	49,543	50,536	53,114
Adj R2	0.227	0.144	0.153	0.197

Note: *Passive* is a dummy taking the value of 1 if the fund is passively managed. *Equity* (*Mixed*) is a dummy taking the value of 1 if a fund belongs to the equity (mixed) asset class, the base class is the bond fund class. Art. 9 (Art. 6) is a dummy taking the value of 1 if a fund is disclosing under SFDR Art 9 (Art. 6), the reference is the funds disclosing under SFDR Art. 8. *Age* measures the age of the share class from its inception day expressed in years. *Size* represents share class size in terms of net assets in log terms. Significance levels are reported: 0.01 (\*\*\*), 0.05 (\*\*), 0.1 (\*).

Source: Morningstar Direct, Refinitiv Lipper ESMA

Regarding performance, funds disclosing under SFDR Article 6 outperformed (AMR-CP-S.9). The results are coherent with (AMR-CP-S.4).

### AMR-CP-S.10

### Regression analysis of TER by fund name Funds with an ESG name are cheaper OLS with robust errors

	Deper	ndent varial	ble: TER	
	1Q22	2Q22	3Q22	4Q22
Passive	-0.822***	-0.818***	-0.822***	-0.822***
Equity	0.700***	0.706***	0.704***	0.703***
Mixed	0.526***	0.528***	0.527***	0.530***
Name	-0.049***	-0.048***	-0.043***	-0.045***
ESG				
Age	0.006***	0.006***	0.006***	0.006***
Size	-0.026***	-0.025***	-0.026***	-0.026***
Obs.	14,778	15,066	15,182	15,671
Adj R <sup>2</sup>	0.641	0.643	0.643	0.638

Note: *Passive* is a dummy taking the value of 1 if the fund is passively managed. *Equity (Mixed)* is a dummy taking the value of 1 if a fund belongs to the equity (mixed) asset class, the base class is the bond fund class. *Name ESG* is a dummy taking the value of 1 is the fund name includes an ESG word. *Age* measures the age of the share class from its inception day expressed in years. *Size* represents share class size in terms of net assets in log terms. Significance levels are reported: 0.01 (\*\*\*), 0.05 (\*\*), 0.1 (\*).

Source: Morningstar Direct, Refinitiv Lipper ESMA

The last regressions compare funds whose name include an ESG word with funds whose name don't contain an ESG word. The results (AMR-CP-S.10 and AMR-CP-S.11) show that funds whose name contain an ESG word are cheaper but underperformed.

Regression analysis of performance by fund name
Funds with an ESG name underperformed
OLS with robust errors

Dependent variable: quarterly gross performance								
	1Q22	2Q22	3Q22	4Q22				
Passive	1.286***	0.203	-0.379	-0.028				
Equity	7.976***	-2.363***	-3.918***	-4.743***				
Mixed	4.417***	-0.139	-0.823***	-1.517***				
Name	-0.355*	-1.247***	-1.553***	-1.756***				
ESG								
Age	-0.017**	-0.024**	-0.036**	0.012				
Size	-0.062*	-0.265***	-0.254***	-0.370***				
Obs.	14,778	15,066	15,182	15,671				
Adj R <sup>2</sup>	0.275	0.193	0.206	0.228				

Note: *Passive* is a dummy taking the value of 1 if the fund is passively managed. *Equity (Mixed)* is a dummy taking the value of 1 if a fund belongs to the equity (mixed) asset class, the base class is the bond fund class. *Name ESG* is a dummy taking the value of 1 is the fund name includes an ESG word. *Age* measures the age of the share class from its inception day expressed in years. *Size* represents share reported: 0.01 (\*\*\*), 0.05 (\*\*), 0.1 (\*). Source: Morningstar Direct, Refinitiv Lipper ESMA

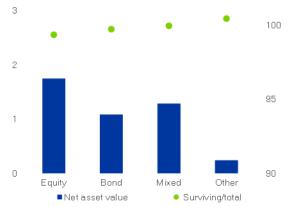
UCITS robustness checks

# Regressions on the UCITS ESG sample

This section refers to the potential for survivorship bias. Survivorship bias stems from the reliance on a sample of performances of only existing funds in the market without considering those that have disappeared. In turn, this may result in an overestimation of fund past performance. The same analysis previously focusing only on funds identified as surviving is now run for both surviving and nonsurviving funds.

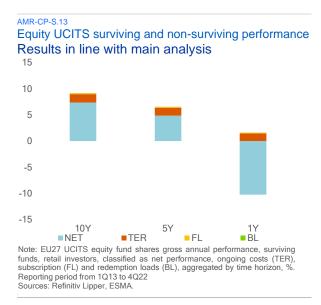
Focusing only on retail investors at the end of 2022, the overall sample of funds, surviving and non-surviving, stood at EUR°4.4tn, less than 0.5% higher than the sample focusing only on surviving funds (AMR-CP.S.12). The difference is the highest for funds primarily investing in equity (if we exclude the category other funds). Surviving funds represented, at the global level, more than 99% of surviving and non-surviving funds.

AMR-CP-S.12 Surviving and non-surviving funds for retail investors Limited differences



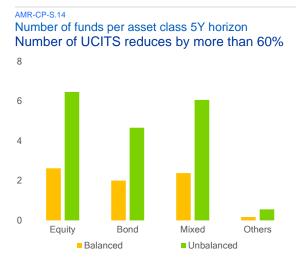
Note: EU27 UCITS universe, in terms of fund value by asset class, surviving and non surviving funds, retail investors, 4022, EUR th. Ratio only surviving funds over total funds by asset class on right-hand axis. Sources: Refinitiv Lipper, ESMA.

The two samples yield similar results. Performance and costs remained at the same levels across time horizons and asset classes. As an example, focusing on equity, AMR-CP-S.13 shows that net annual performance for the ten-year horizon was 7.4% for the surviving sample. Table MR-CP.5 of the report also shows the same performance for the sample including both surviving and non-surviving funds. Similarly, the difference in terms of net performance for the one-year horizon is around 0.2 ppt.



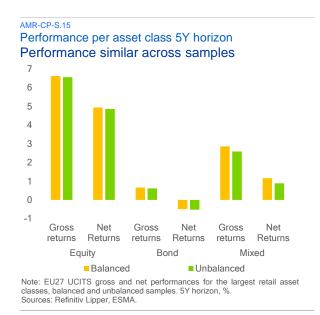
### Balanced and unbalanced panels

The long horizon that the report needs to cover, 2013-2022, implies that we would have a large number of funds entering and exiting the market. This issue raises the question regarding the type of sample to rely on: balanced or unbalanced. A balanced sample will include only funds with data over the entire time horizon. The number of fund shares remains constant in the sample (e.g., over the three-year horizon we consider only those funds present from the beginning to the end of the three years). An unbalanced sample includes all fund shares for which data are available at some point during 2013-2022. The number of fund shares will therefore change over time. This may raise concerns about if and how results might change when the two different samples are considered. The following analysis reports on the comparison between balanced and unbalanced samples at an aggregate level for the five-year horizon.



Note: EU27 UCITS universe, number of funds per asset class, balanced and unbalanced samples. 5Y horizon, thousands. Others include alternative strategies and money market. Sources: Refinitiv Lipper, ESMA.

Focusing on the three largest retail asset classes, moving from an unbalanced to a balanced panel over the five-year horizon the number of fund shares reduced by more than 60% (AMR-CP-S.14).<sup>8</sup> For equity and mixed funds, the unbalanced sample reports, on average, around 3,800 funds more than the balanced sample. In the case of bonds this difference was about 2,700 funds.



In terms of gross and net performances, when we considered the two different samples, the difference was negligible for equity and bond

the reduced size of the sample for alternative and money market UCITS, especially at longer time horizons, does not provide noteworthy results.

<sup>&</sup>lt;sup>8</sup> Alternative and money market UCITS are not considered in the analysis on performances of balance and unbalanced sample. This is due to the fact that the larger asset classes on which retail investment is focused are equity, bond and mixed funds. Moreover,

funds, and limited for mixed funds (AMR-CP-S.15).

Moving from five- to one year, as expected, the differences were much smaller as the two samples, balanced and unbalanced, were more similar. In terms of number of funds, the unbalanced sample reduces by around 19% on aggregate. In terms of performances, deviations were also negligible. The highest difference can be observed for equity funds with a deviation of 0.5pps in case of net returns.

Because the differences were limited, we based the main analysis on an unbalanced panel in order to use the largest number of observations.

## AIFs sold to retail investors

Data come from AIFMD reporting. Over 2019, coverage largely improved, with data now covering the entire market. Data concerning market size, by type of investor, fund category and geographical focus, are yearly fund level data. Aggregation is then performed using the mean of a simple average.

#### AIF gross and net performance analysis

The current report also provides a sample analysis of fund gross and net returns for 2022 and for the period 2018 - 2022. The definition of gross returns stems from the European Commission regulation<sup>9</sup> delegated supplementing the AIFMD. This means having monthly returns at a fund-by-fund level (gross/net of management and performance fees). We then annualise the monthly returns and aggregate across funds. This aggregation consists of a weighted average across fund categories, using NAV or AuM as available.<sup>10</sup>

The focus is on those funds with 90% retail investment. For 2022, this was around EUR 688bn or 74% of the total retail investment in AIFs.

Unlike the market overview analysis, however, we based this analysis on a smaller sample of funds. The sample reduced because we excluded certain types of funds:

Funds for which data on performance were not at all available.

- Funds for which data were available only • for less than eight out of the twelve months of the year 2022.
- Funds for which data on gross and net performances, and NAV were not jointly available.
- Those funds reporting monthly gross performance outside the range  $\pm$  10%. The decision was linked to background analysis on hedge fund data based on Heurekahedge. The maximum and minimum gross performance for the ten years up to 2022 did not exceed the range identified above.

In the absence of cost reporting in AIFMD, figures are extracted from Morningstar Direct. Costs are taken from PRIIPs Key Investor Document (KID) and correspond to the costs as defined in the PRIIPs regulation (see above). For the purpose of this analysis, we retain entry and exit fees and ongoing costs split between transaction costs and other ongoing costs. The aggregation of costs by AIFs type consists in a weighted average across categories, using NAV.

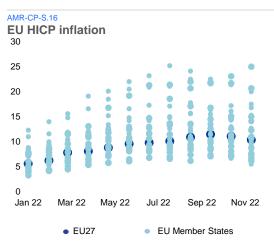
In our sample NAV and AuM do not significantly differ.

<sup>9</sup> Commission Delegated Regulation 231/2013 supplementing Directive2011/61/EU (reporting obligations of NCAs are reported in Article 24 of the Directive). The details on the reporting templates can

also be found in the "AIFMD reporting IT technical guidance (rev.4). [Updated]" published by ESMA.

# Statistical annex

# Market environment



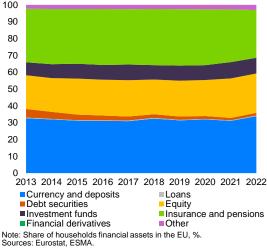
Note: EU27 HICP monthly inflation dispersion, %. Sources: Eurostat, ESMA.

### AMR-CP-S.18

Household financial assets 40 35 30 25 20 15 10 5 0 2013 2014 2015 2016 2017 2018 2019 2020 2021 2022 Currency and deposits Loans Debt securities Equity Investment funds Insurance and pensions Financial derivatives Other Note: Households financial assets in the EU, EUR tn. Sources: Eurostat, ESMA.

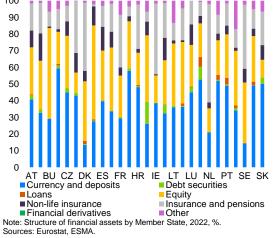
### AMR-CP-S.17

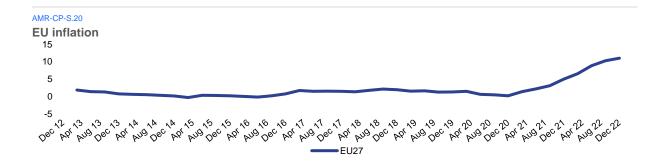
Structure of household financial assets



AMR-CP-S.19

Structure of household financial assets by domicile



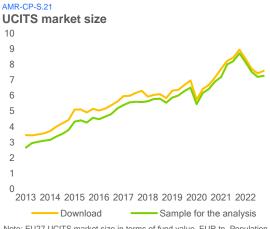


	2014	2015	2016	2017	2018	2019	2020	2021	2022
EU27	0.4	0.1	0.2	1.6	1.8	1.4	0.7	2.9	9.2
AT	1.5	0.8	1.0	2.2	2.1	1.5	1.4	2.8	8.6
BE	0.5	0.6	1.8	2.2	2.3	1.3	0.4	3.2	10.3
BU	-1.6	-1.1	-1.3	1.2	2.6	2.5	1.2	2.9	13.0
CY	-0.3	-1.5	-1.2	0.7	0.8	0.6	-1.1	2.3	8.1
CZ	0.4	0.3	0.7	2.4	2.0	2.6	3.3	3.3	14.8
DE	0.8	0.7	0.4	1.7	1.9	1.4	0.4	3.2	8.6
DK	0.4	0.2	0.0	1.1	0.7	0.7	0.3	2.0	8.5
EE	0.5	0.1	0.8	3.6	3.4	2.3	-0.6	4.5	19.4
ES	-0.2	-0.6	-0.4	2.0	1.7	0.8	-0.3	3.0	8.3
FI	1.2	-0.2	0.4	0.8	1.2	1.1	0.4	2.1	7.2
FR	0.6	0.1	0.3	1.2	2.1	1.3	0.5	2.1	5.9
GR	-1.4	-1.1	0.0	1.1	0.8	0.5	-1.3	0.6	9.3
HR	0.2	-0.3	-0.6	1.3	1.6	0.8	0.0	2.7	10.7
HU	0.0	0.1	0.5	2.4	2.9	3.4	3.4	5.2	15.2
IE	0.3	0.0	-0.2	0.3	0.7	0.9	-0.5	2.5	8.1
IT	0.2	0.1	-0.1	1.3	1.3	0.7	-0.2	2.0	8.7
LT	0.3	-0.7	0.7	3.7	2.5	2.2	1.1	4.6	18.8
LU	0.7	0.1	0.1	2.1	2.0	1.6	0.0	3.5	8.1
LV	0.7	0.2	0.1	2.9	2.6	2.8	0.1	3.3	17.1
MT	0.8	1.2	0.9	1.2	1.7	1.5	0.8	0.7	6.1
NL	0.3	0.2	0.1	1.3	1.6	2.7	1.1	2.8	11.6
PL	0.1	-0.7	-0.2	1.6	1.2	2.1	3.7	5.2	13.2
PT	-0.2	0.5	0.6	1.6	1.2	0.3	-0.1	0.9	8.1
RO	1.4	-0.4	-1.1	1.1	4.1	3.9	2.4	4.1	12.0
SE	0.4	-0.8	-0.2	1.6	1.9	1.7	-0.3	2.0	9.3
SI	-0.1	-0.3	-0.5	1.4	2.5	2.8	2.0	2.8	12.1
SK	0.2	0.7	1.1	1.9	2.1	1.7	0.7	2.7	8.0

Note: Annual rate of change of the Harmonised Index of Consumer Prices (HICP), %. The table reports average across all months of each year. Sources: Eurostat.

# UCITS

### **Market Overview**



Note: EU27 UCITS market size in terms of fund value, EUR tn. Population, all observations for which fund value and fund performance are available. Sample, all observations for which fund value, fund performance, net flows, subscription and redemption loads are available. Sources: Refinitiv Lipper, ESMA.

### AMR-CP-S.23

2013

AMR-CP-S.25

2014

Equity

2016

UCITS retail market size by asset class 2,800 2,400 2,000 1,600 1,200 800 400 0

Note: EU27 UCITS market size in terms of fund value, by asset class, retail investors, EUR bn. Sources: Refinitiv Lipper, ESMA.

2017

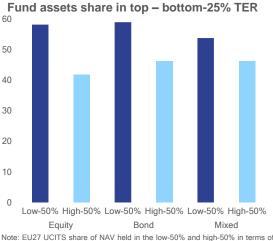
2019

Mixed

2020

2022

Bond

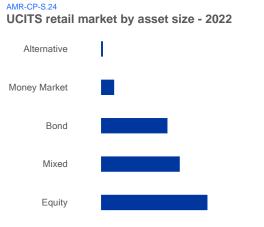


Note: EU27 UCITS share of NAV held in the low-50% and high-50% in terms of ongoing costs as measured by the TER, %. Sources: Refinitiv Lipper, ESMA





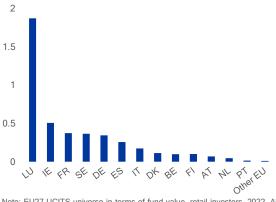
Note: EU27 UCITS market size in terms of fund value, by type of investor, EUR tn. Sources: Refinitiv Lipper, ESMA,



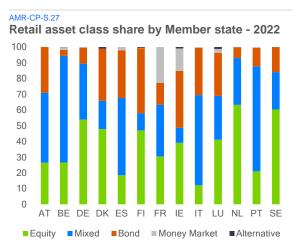
-450 50 550 1,050 1,550 2,050 2,550 Note: EU27 UCITS universe, in terms of fund value by asset class, retail investors, 2022, EUR bn. Sources: Refinitiv Lipper, ESMA.

AMR-CP-S.26

UCITS retail market by country - 2022

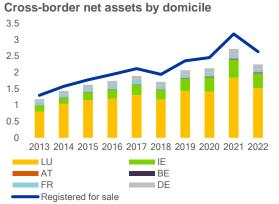


Note: EU27 UCITS universe in terms of fund value, retail investors, 2022. All observations for which information on fund value, fund performance, netflows, subscription and redemption loads available, EUR tr. Other EU27 includes: BG, CY, CZ, EE, GR, HR, HU, LT, LV, MT, PL, SI, SK, RO. Sources: Refinitiv Lipper, ESMA.



Note: EU27 UCITS share of asset classes over total national fund value per domicile, retail, 2022, %. Other EU27 not reported. Sources: Refinitiv Lipper, ESMA.

### AMR-CP-S.29

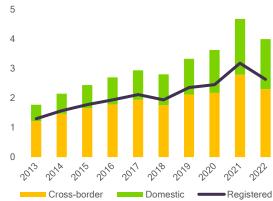


Note: EU27 UCITS cross-border fund, AuM. Cross-border UCITS are funds available for sale in at least three countries including their domicile, retail investors. Reported are selected domiciles presenting the largest number of cross-border funds in the EU27. Registered for sale refer to those UCITS that can be sold cross-border.

Sources: Morningstar Direct, Refinitiv Lipper, ESMA

### AMR-CP-S.31

UCITS assets: cross-border marketing by 3 countries



Note: Domestic and cross-border EU27 UCITS total net assets. Cross-border funds are defined as funds distributed at least in three countries including their domicile, EUR tn. Sources: Refinitiv Lipper, ESMA.

AMR-CP-S.28 Domestic funds and funds marketed abroad

100% 80% 60% 40% 20% 0% BE DE DK ES FI FR IE IT LU NL AT PT SF Domestic Marketed abroad

Note: EU27 UCITS share of net asset value, by destination (domestic and marketed abroad) per member state, 2022. Domestic funds are those funds distributed only in the member state where the fund is domiciled, and those domiciled in LU and IE and distributed only in LU and IE and the reported member state. Marketed abroad represent those funds distributed in at least one member state other than the domicile. Sources: Morningstar Direct, Refinitiv Lipper, ESMA

### AMR-CP-S.30

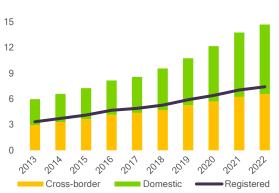
Cross-border number of funds by domicile 8



Note: Number of cross-border EU-domiciled UCITS, defined as UCITS available for sale in at least three countries including their domicile, retail investors. Reported are selected domiciles presenting the largest number of cross-border funds in the EU, thousands. Registered for sale refer to those UCITS that can be sold cross-border Sources: Morningstar Direct, Refinitiv Lipper, ESMA.

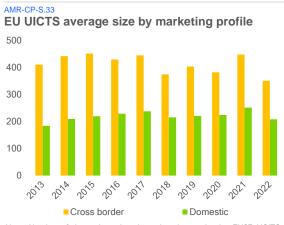
### AMR-CP-S.32 UCITS fund number: cross-border marketing by 3 countries

18



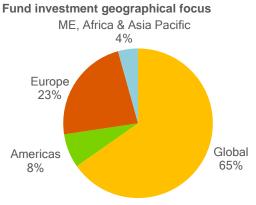
Note: Number of domestic and cross-border EU27 UCITS. Cross-border are defined as funds distributed at least in three countries including their domicile, thousands.

Sources: Refinitiv Lipper, ESMA.



Note: Number of domestic and registered and cross-border EU27 UCITS. Registered are funds registered to be sold beyond domicile's borders. Crossborder are defined as funds distributed at least in three countries including their domicile, EUR mln. Sources: Refinitiv Lipper, ESMA.

### AMR-CP-S.35



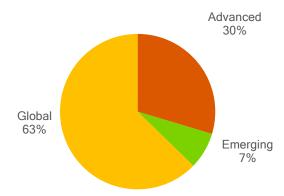
Note: EU27 UCITS share of total net asset value by geographical investment focus, 2022, retail investors %. Sources: Morningstar Direct, Refinitiv Lipper, ESMA

AMR-CP-S.37

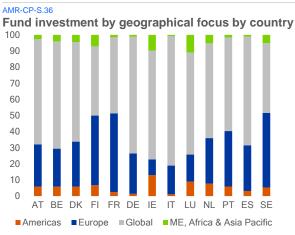


AMR-CP-S.34

Fund investment by economic development focus

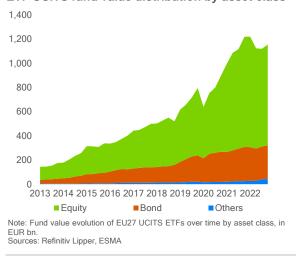


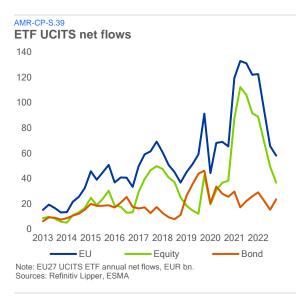
Note: EU27 UCITS share of total net asset value by investment focus based on the economic development of a country, 2022, %. Sources: Morningstar Direct, Refinitiv Lipper, ESMA



Note: EU27 UCITS share of total net assets across EU Member States by geographical investment focus for retail investors, 2022, %. ME = Middle East. Global refers to those funds not specifically indicating if the investment focus is Europe or outside Europe. Other EU not reported. Sources: Morningstar Direct, Refinitiv Lipper, ESMA.

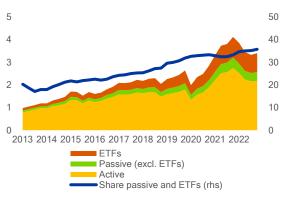






AMR-CP-S.41

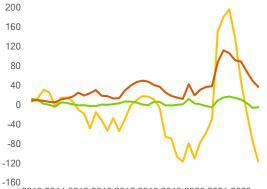
UCITS equity active and passive fund size



Note: Market size for EU-domiciled UCITS equity, actively and passively managed, and ETFs. All observations for which information on fund value, fund performance, net flows, subscription and redemption loads are available, EUR tn. Share of passive and ETFs in %, right-hand size. Sources: Refinitiv Lipper, ESMA.

AMR-CP-S.43

UCITS equity active and passive fund net flows

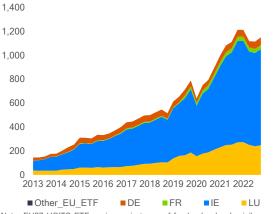


 2013 2014 2015 2016 2017 2018 2019 2020 2021 2022

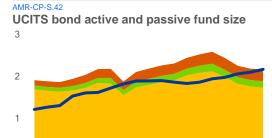
 Active
 Passive (excl. ETFs)

Note: EU27 equity UCITS by management type, active passive, and ETFs. Annual net flows at quarterly frequencies, EUR bn. Sources: Refinitiv Lipper, ESMA. AMR-CP-S.40





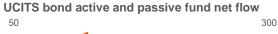
Note: EU27 UCITS ETFs universe in terms of fund value by domicile, over time, EUR bn. Only the four largest domiciles reported. Sources: Refinitiv Lipper, ESMA.



0 2018 2019 2020 2021 2022 ETFs Passive (excl. ETFs) Active Share passive and ETFs (rhs)

Note: Market size for EU-domiciled UCITS bond, actively and passively managed and ETFs. All observations for which information on fund value, fund performance, net flows, subscription and redemption loads are available, EUR to. Share of passive and ETFs in %, right-hand size. Sources: Refinitiv Lipper, ESMA.

### AMR-CP-S.44



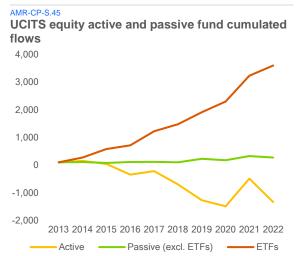


Note: EU27 bond UCITS by management type, active passive and ETFs. Annual net flows at quarterly frequencies, EUR bn. Active on right-hand axis (rhs). Sources: Refinitiv Lipper, ESMA.

30

20

10



UCITS bond active and passive fund cumulated flows



Note:: EU27 equity UCITS by management type, active passive, and ETFs. Cumulative netflows, 2013 = 100. Sources: Refinitiv Lipper, ESMA.

Note:: EU27 bond UCITS by management type, active passive and ETFs. Cumulative netflows, 2018 = 100 Sources: Refinitiv Lipper, ESMA.

AMR-CP-S.47									
UCITS share by domicile									
	AT	BE	DE	DK	ES	FI	FR	IE	
Equity	1.0	1.5	10.7	3.1	2.7	2.7	6.5	11.4	
Mixed	2.4	5.1	9.5	1.6	9.8	0.8	9.6	3.8	
Bond	1.8	0.3	3.2	3.5	7.2	3.8	4.8	17.0	
	IT	LU	NL	PT	SE				
Equity	1.2	44.3	1.6	0.2	12.7	-			
Mixed	7.7	40.9	1.0	0.8	6.7	-			
Bond	4.8	47.3	0.3	0.2	5.3	-			
Note: Share of n	national fund	value over the	total EU27 pe	er domicile, ret	ail investors.	bv asset class	. 2022. %. If s	hare less than	

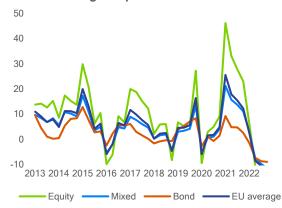
Note: Share of national fund value over the total EU27 per domicile, retail investors, by asset class, 2022, %. If share less than 0.1% not reported.

Sources: Refinitiv Lipper, ESMA.

### Performance and costs

### AMR-CP-S.48

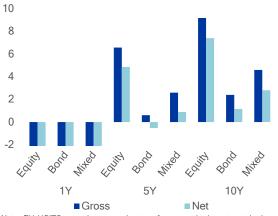
UCITS annual gross performance retail investors



Note: EU27 UCITS universe, gross annual performance by asset class, retail investors, in %. Primary y-axis cut-off at +50% and -10%. Sources: Refinitiv Lipper, ESMA.

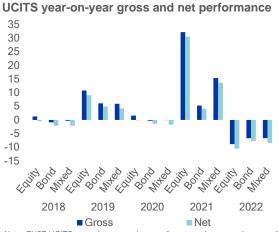
### AMR-CP-S.50

## UCITS gross and net performance by investment horizon

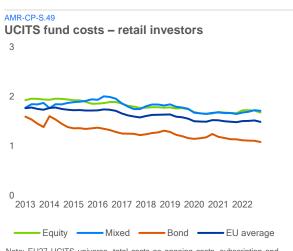


Note: EU UCITS annual gross and net performance, by investment horizon and asset class, retail investors, %. Sources: Refinitiv Lipper, ESMA.

### AMR-CP-S.52



Note: EU27 UCITS annual gross and net performance, by asset class, retail investors, 1Y investment horizon, %. Sources: Refinitiv Lipper, ESMA.



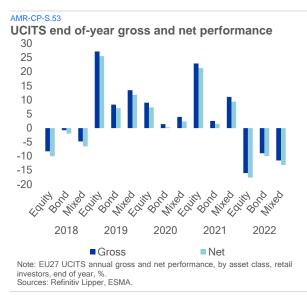
Note: EU27 UCITS universe, total costs as ongoing costs, subscription and redemption loads, by asset class, retail investors, in %. Sources: Refinitiv Lipper, ESMA.

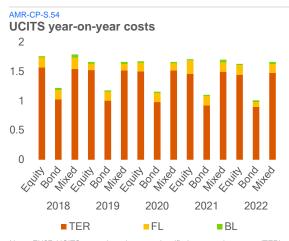
AMR-CP-S.51

### UCITS costs by investment horizon



Note: EU UCITS annual total costs, classified as ongoing costs (TER), subscription (FL) and redemption (BL) loads, by investment horizon and asset class, retail investors, %. Sources: Refinitiv Lipper, ESMA.





Note: EU27 UCITS annual total costs, classified as ongoing costs (TER), subscription (FL) and redemption loads, by asset class, retail investors, 1Y investor horizon, %. Sources: Refinitiv Lipper, ESMA.



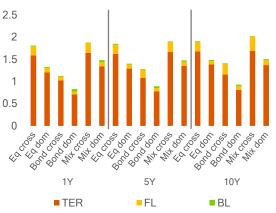




Note: EU27 UCITS total costs, classified as ongoing costs (TER), subscription (FL) and redemption (BL) loads, by size and asset class, %. L=largest-25% and S=smallest-25%. Sources: Refinitiv Lipper, ESMA.

AMR-CP-S.58

UCITS total costs by marketing profile

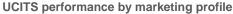


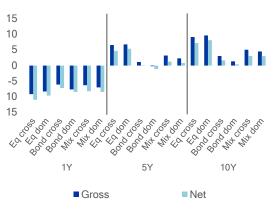
Note: EU UCITS annual total costs, classified as ongoing costs (TER), subscription (FL) and redemption (BL) loads, by marketing country and asset class, %.



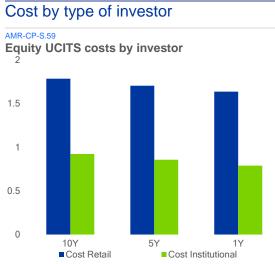
Note: EU27 UCITS annual total costs, classified as ongoing costs (TER), subscription (FL) and redemption loads, by asset class, retail investors, end of year, %. Sources: Refinitiv Lipper, ESMA.

AMR-CP-S.57





lote: EU UCITS annual gross and net performance, by marketing country nd asset class, %. ources: Refinitiv Lipper, ESMA.



Note: EU27 UCITS equity fund shares total costs classified as ongoing costs (TER), subscription (FL) and redemption loads (BL), aggregated by time horizon and type of investor, %. Sources: Refinitiv Lipper, ESMA.

AMR-CP-S.61

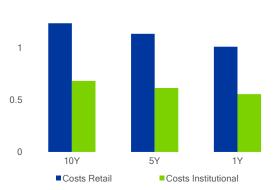
### Mixed UCITS costs by investor type



Note: EU27 UCITS mixed fund shares total costs classified as ongoing costs (TER), subscription (FL) and redemption loads (BL), aggregated by time horizon and type of investor, %. Sources: Refinitiv Lipper, ESMA.

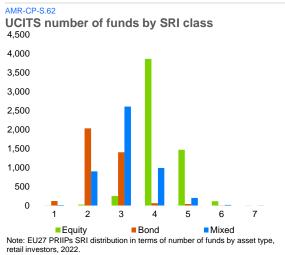
### AMR-CP-S.60 Bond UCITS costs by investor type





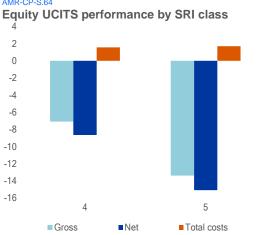
Note: EU27 UCITS bond fund shares total costs classified as ongoing costs (TER), subscription (FL) and redemption loads (BL), aggregated by time horizon and type of investor, %. Sources: Refinitiv Lipper, ESMA.

### Performance and costs by risk class



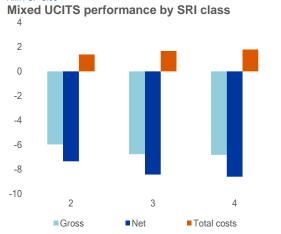
Sources: Morningstar Direct, Refinitiv Lipper, ESMA.



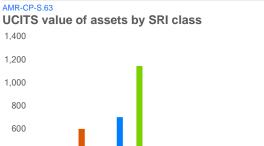


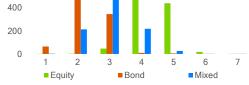
Note: EU27 UCITS equity fund shares annual gross and net returns, and total costs, retail investors, by PRIIPs SRI risk class, 2022, %. Sources: Refinitiv Lipper, ESMA.

#### AMR-CP-S.66

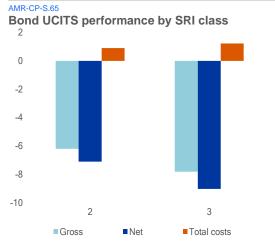


Note: EU27 UCITS mixed fund shares annual gross and net returns, and total costs, retail investors, by PRIIPs SRI risk class, 2022, %. Sources: Refinitiv Lipper, ESMA.



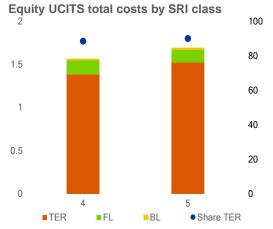


Note: EU27 PRIIPs SRI distribution in terms of asset value by asset type, retail investors, 2022, EUR thousands. Sources: Morningstar Direct, Refinitiv Lipper, ESMA.

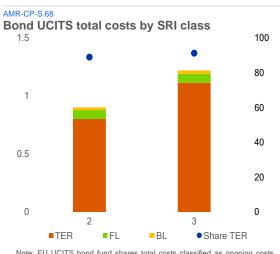


Note: EU27 UCITS bond fund shares annual gross and net returns, and total costs, retail investors, by PRIIPs SRI risk class, 2022, %. Sources: Refinitiv Lipper, ESMA.

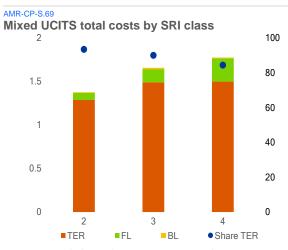
AMR-CP-S.67



Note: EU UCITS equity fund shares total costs classified as ongoing costs (TER), subscriptions (FL) and redemption fees (BL), retail investors, by PRIIPs SRI class, 2022, %. Sources: Refinitiv Lipper, ESMA.

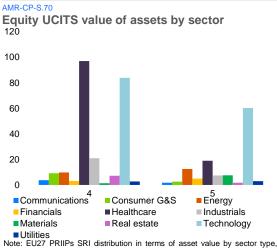


Note: EU UCITS bond fund shares total costs classified as ongoing costs (TER), subscriptions (FL) and redemption fees (BL), retail investors, by PRIIPs SRI class, 2022, %. Sources: Refinitiv Lipper, ESMA.



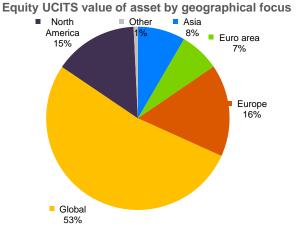
Note: EU UCITS mixed fund shares total costs classified as ongoing costs (TER), subscriptions (FL) and redemption fees (BL), retail investors, by PRIIPs SRI class, 2022, %. Sources: Refinitiv Lipper, ESMA.



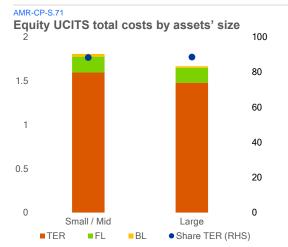


Note: EU2/ PRIIPS SRI distribution in terms of asset value by sector type, equity fund, retail investors, 2022, EUR thousands. Sources: Refinitiv Lipper, ESMA.



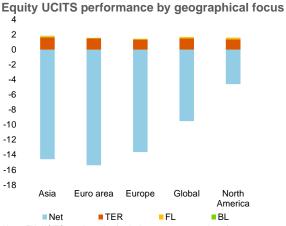


Note: EU27 retail equity UCITS share of total net asset value, by geographical focus, 2022, %. Sources: Refinitiv Lipper, Morningstar, ESMA.



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

AMR-CP-S.73

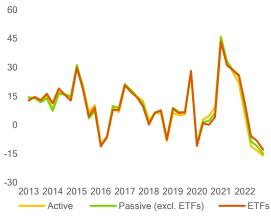


Note: EU UCITS retail equity fund shares gross annual performance, classified as net performance, ongoing costs (TER), subscription (FL) and redemption loads (BL), by geograpical focus, 2022, %. Sources: Refinitiv Lipper, Morningstar, ESMA.

### Performance and costs by management type

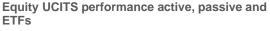
### AMR-CP-S.74

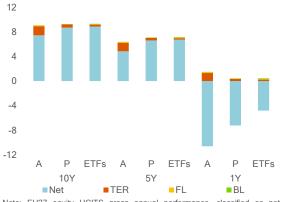
UCITS annual gross performance by management type



Note: EU27 UCITS equity, active passive and ETFs, evolution of gross annual performance, %. Retail and institutional investors. Sources: Refinitiv Lipper, ESMA.

### AMR-CP-S.76

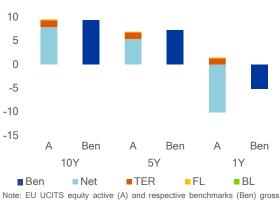




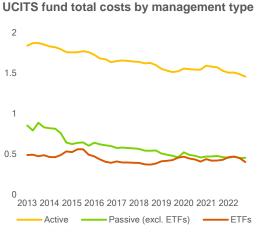
Note: EU27 equity UCITS gross annual performance, classified as net performance, ongoing costs (TER), subscription (FL) and redemption (BL) loads, by management type, active (A), passive (P) and ETFs, by time horizon, in %. Sources: Refinitiv Lipper, ESMA.

### AMR-CP-S.78

Active equity UCITS and prospectus benchmarks 15



annual performance, classified as net performance, ongoing costs (TER), subscription (FL) and redemption (BL) loads, by time horizon, %. Sources: Refinitiv Lipper, ESMA.

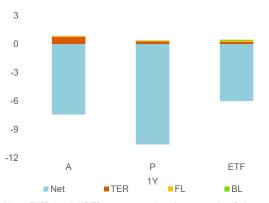


Note: EU27 UCITS equity, active passive and ETFs, evolution of total costs calculated as ongoing costs, subscription and redemption loads, %. Retail and institutional investors. Sources: Refinitiv Lipper, ESMA.

### AMR-CP-S.77

AMR-CP-S.75

Bond UCITS performance active, passive and ETFs

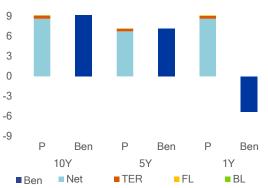


Note: EU27 bond UCITS gross annual performance, classified as net performance, ongoing costs (TER), subscription (FL) and redemption (BL) loads, by management type, active (A), passive (P) and ETFs, by time horizon, in %. Sources: Refinitiv Lipper, ESMA.

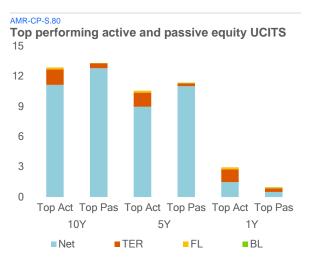
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AMR-CP-S.79

Passive equity UCITS and prospectus benchmarks 12



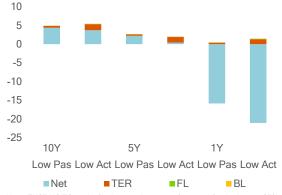
Note: EU UCITS equity passive (P) and respective benchmarks (Ben) annual gross performance, in % classified as net performance, ongoing costs (TER), subscription (FL) and redemption (BL) loads, by time horizon. Sources: Refinitiv Lipper, ESMA.



Note: EU27 UCITS equity funds annual gross performance, top-25% performing active and passive funds, classified as net performance, ongoing costs (TER), subscription (FL) and redemption (BL) loads, and time horizon, in %. Sources: Refinitiv Lipper, ESMA.

AMR-CP-S.82



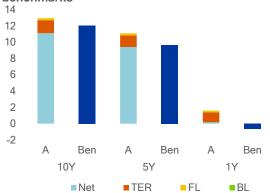


Note: EU27 UCITS equity funds annual gross performance for the bottom-25% performing active and passive funds, classified as net performance, ongoing costs (TER), subscription (FL) and redemption (BL) loads, and time horizon, in %

Sources: Refinitiv Lipper, ESMA.

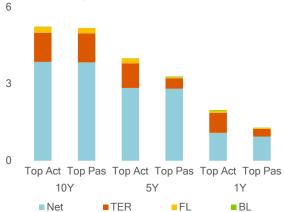
### AMR-CP-S.84

Top performing active equity UCITS and benchmarks



Note: EU27 UCITS equity active (A) and respective benchmarks (Ben) gross annual performance for the top-25% performing funds, classified as net performance, ongoing costs (TER), subscription (FL) and redemption (BL) loads, by time horizon, %. Sources: Refinitiv Lipper, ESMA. AMR-CP-S.81

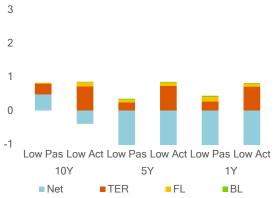
Top performing active and passive bond UCITS



Note: EU27 UCITS bond funds annual gross performance, top-25% performing active and passive funds, classified as net performance, ongoing costs (TER), subscription (FL) and redemption (BL) loads, and time horizon, in %. Sources: Refinitiv Lipper, ESMA.

### AMR-CP-S.83

Bottom performing active and passive bond UCITS

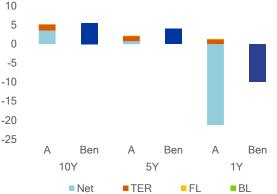


Note: EU27 UCITS bond funds annual gross performance for the bottom-25% performing active and passive funds, classified as net performance, ongoing costs (TER), subscription (FL) and redemption (BL) loads, and time horizon, in  $\frac{9}{100}$ 

Sources: Refinitiv Lipper, ESMA.

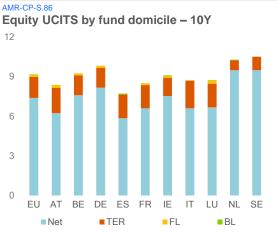
AMR-CP-S.85

## Bottom performing active equity UCITS and benchmarks

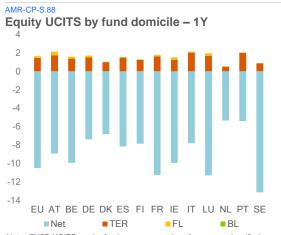


Note: EU27 UCITS equity active (A) and respective benchmarks (Ben) gross annual performance for the bottom-25% performing funds, classified as net performance, ongoing costs (TER), subscription (FL) and redemption (BL) loads, by time horizon, %. Sources: Refinitiv Lipper, ESMA.

### Performance and costs by fund domicile

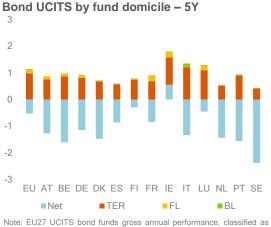


Note: EU27 UCITS equity funds gross annual performance, classified as net performance, ongoing costs (TER), subscription (FL) and redemption loads (BL), retail investors, by domicile, 10Y horizon %. DK, FI, PT and Other EU27 countries not reported as data not available. Sources: Refinitiv Lipper, ESMA.

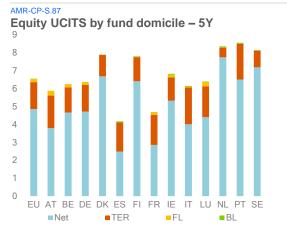


Note: EU27 UCITS equity funds gross annual performance, classified as net performance, ongoing costs (TER), subscription (FL) and redemption loads (BL), retail investors, by domicile, 1Y horizon %. Other EU27 countries not reported as data not available. Sources: Refinitiv Lipper, ESMA.

### AMR-CP-S.90



Note: EU27 UCITS bond funds gross annual performance, classified as net performance, ongoing costs (TER), subscription (FL) and redemption loads (BL), retail investors, by domicile, 5Y horizon, %. Other EU27 countries not reported. Sources: Refinitiv Lipper, ESMA.



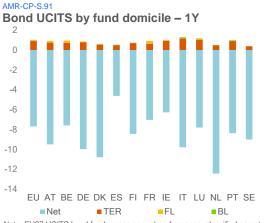
Note: EU27 UCITS equity funds gross annual performance, classified as net performance, ongoing costs (TER), subscription (FL) and redemption loads (BL), retail investors, by domicile, 5Y horizon, %. Other EU27 countries not reported. Sources: Refinitiv Lipper, ESMA.



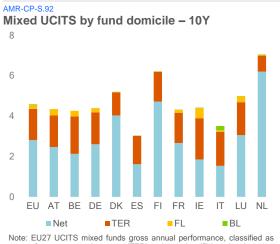
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Note: EU27 UCITS bond funds gross annual performance, classified as net performance, ongoing costs (TER), subscription (FL) and redemption loads (BL), retail investors, by domicile, 10Y horizon %. DK, FI, NL, PT, SE and Other EU27 countries not reported as data not available. Sources: Refinitiv Lipperiv Lipper, ESMA.

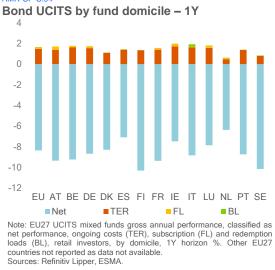


Note: EU27 UCITS bond funds gross annual performance, classified as net performance, ongoing costs (TER), subscription (FL) and redemption loads (BL), retail investors, by domicile, 1Y horizon %. Other EU27 countries not reported as data not available. Sources: Refinitiv Lipper, ESMA.

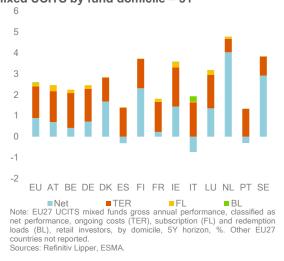


Note: EU27 UCITS mixed funds gross annual performance, classified as net performance, ongoing costs (TER), subscription (FL) and redemption loads (BL), retail investors, by domicile, 10Y horizon %. DK, FI, NL, PT, SE and Other EU27 countries not reported as data not available. Sources: Refinitiv Lipper, ESMA.

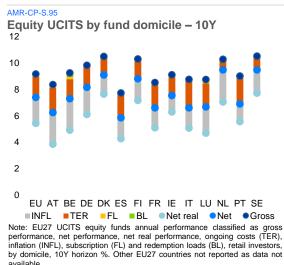
AMR-CP-S.94



AMR-CP-S.93 Mixed UCITS by fund domicile – 5Y



### Performance, costs and inflation by fund domicile



available. Sources: Refinitiv Lipper, Eurostat, ESMA

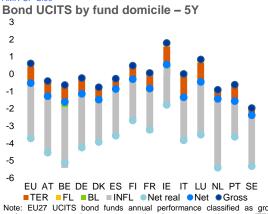


AMR-CP-S.97 Equity UCITS by fund domicile - 1Y 0 -5 -10 -15 -20 -25

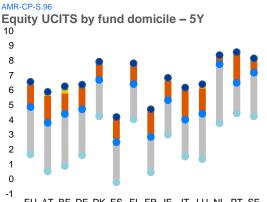
EU AT BE DE DK ES FI FR IE IT LU NL PT SE ■TER ■FL ■BL ■INFL ●Net real ●Net ●Gross Note: EU27 UCITS equity funds annual performance classified as gross performance, net performance, net real performance, ongoing costs (TER), inflation (INFL), subscription (FL) and redemption loads (BL), retail investors, by domicile, 1Y horizon %. Other EU27 countries not reported as data not available

Sources: Refinitiv Lipper, Eurostat, ESMA.

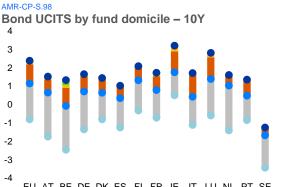
AMR-CP-S.99



TER FL BL INFL Net real Net Gross Note: EU27 UCITS bond 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, 5Y horizon %. Other EU27 countries not reported as data not available. Sources: Refinitiv Lipper, Eurostat, ESMA

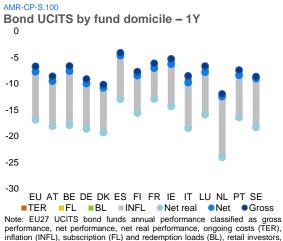


EU AT BE DE DK ES FI FR IE IT LU NL PT SE ■INFL ■TER ■FL ■BL ●Net real ●Net ●Gross Note: EU27 UCITS equity funds annual performance classified as gross performance, net performance, net real performance, ongoing costs (TER), inflation (INFL), subscription (FL) and redemption loads (BL), retail investors, by domicile, 5Y horizon %. Other EU27 countries not reported as data not available



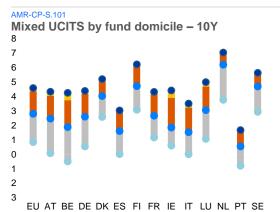
-4 EU AT BE DE DK ES FI FR IE IT LU NL PT SE BL FL TER INFL Net real Net Gross Note: EU27 UCITS bond funds annual performance classified as gross performance, net performance, net real performance, ongoing costs (TER), inflation (INFL), subscription (FL) and redemption loads (BL), retail investors, by domicile, 10Y horizon %. Other EU27 countries not reported as data not available available

Sources: Refinitiv Lipper, Eurostat, ESMA

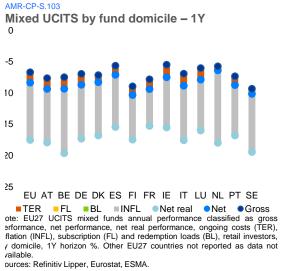


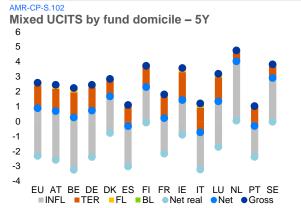
performance, net performance, net real performance, ongoing costs (TER), inflation (INFL), subscription (FL) and redemption loads (BL), retail investors, by domicile, 1Y horizon %. Other EU27 countries not reported as data not available

Sources: Refinitiv Lipper, Eurostat, ESMA.



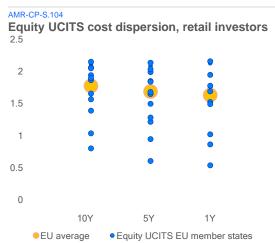
■INFL ■TER ■FL ■BL ●Net real ●Net ●Gross ote: EU27 UCITS mixed funds annual performance classified as gross erformance, net performance, net real performance, ongoing costs (TER), flation (INFL), subscription (FL) and redemption loads (BL), retail investors, y domicile, 10Y horizon %. Other EU27 countries not reported as data not vailable. ources: Refinitiv Lipper, Eurostat, ESMA





Note: EU27 UCITS mixed 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, 5Y horizon %. Other EU27 countries not reported as data not available. Sources: Refinitiv Lipper, Eurostat, ESMA.

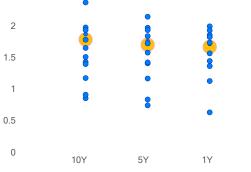
## EU UCITS cost dispersion across fund domiciles



Note: EU27 UCITS equity fund, total costs computed as the sum of ongoing costs (TER), subscription and redemption loads, retail investors, %. Data not available for DK, FI, and PT at 10Y. Other EU27 countries not reported. Sources: Refinitiv Lipper, ESMA.

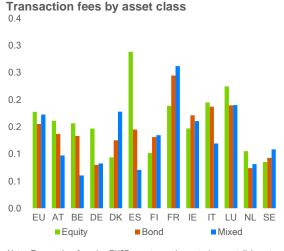
#### AMR-CP-S.106





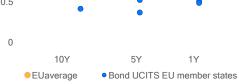
• Mixed UCITS EU member states Note: EU27 UCITS mixed fund, total costs computed as the sum of ongoing costs (TER), subscription and redemption loads, retail investors, %. Data not available for PT, SE at 10Y. Data not available for PT at 5Y. Other EU27 countries not reported. Sources: Refinitiv Lipper, ESMA.

AMR-CP-S.108



Note: Transaction fees by EU27 country and asset class, retail investors, 2022, %. Portugal and Other EU27 not included. Sources: Morningstar Direct, Refinitiv Lipper, ESMA.

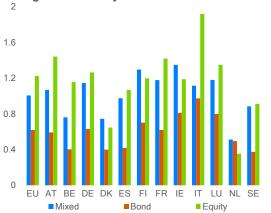
AMR-CP-S.105 Bond UCITS cost dispersion, retail investors 2 1.5 1 0.5



Note: EU27 UCITS bond fund, total costs computed as the sum of ongoing costs (TER), subscription and redemption loads, retail investors, %. Data not available for DK, PT, SE at 10Y. Other EU27 countries not reported. Sources: Refinitiv Lipper, ESMA.

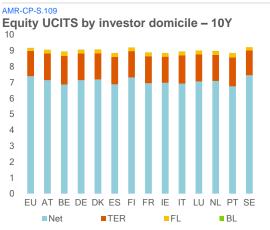
AMR-CP-S.107

Management fees by asset class



Note: Management fees by EU27 country and asset class, retail investors, 2022, %. Other EU27 not included. Sources: Refinitiv Lipper, ESMA.

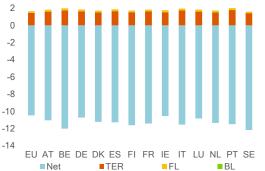
## Performance and costs by investor domicile



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

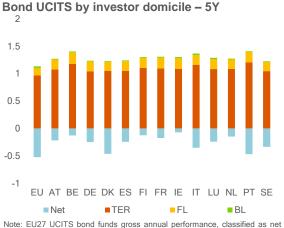
AMR-CP-S.111

Equity UCITS by investor domicile – 1Y 4



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

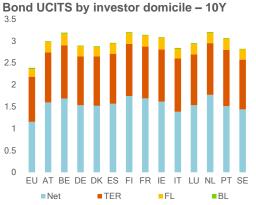
AMR-CP-S.113



Note: EU27 UCITS bond funds gross annual performance, classified as net performance, ongoing costs (TER), subscription (FL) and redemption loads (BL), retail investors, by marketed country, 5Y horizon %. Other EU27 countries not reported. Sources: Refinitiv Lipper, ESMA.

AMR-CP-S.110 Equity UCITS by investor domicile - 5Y 8 7 6 5 4 3 2 1 0 EU AT BE DE DK ES FI FR ΙE LU NL PT SE IT TER FL Net BL

Note: EU27 UCITS equity funds gross annual performance, classified as net performance, ongoing costs (TER), subscription (FL) and redemption loads (BL), retail investors, by marketed country, 5Y horizon %. Other EU27 countries not reported. Sources: Refinitiv Lipper, ESMA.



Note: EU27 UCITS bond funds gross annual performance, classified as net performance, ongoing costs (TER), subscription (FL) and redemption loads (BL), retail investors, by marketed country, 10Y horizon %. Other EU27 countries are constructed as the construction of t countries not reported. Sources: Refinitiv Lipper, ESMA.

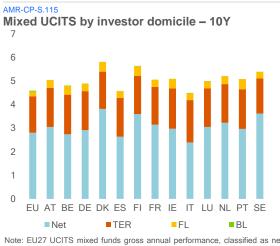
## AMR-CP-S.114

AMR-CP-S.112

Bond UCITS by investor domicile - 1Y



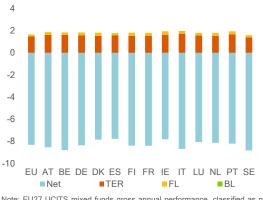
Note: EU27 UCITS mixed funds gross annual performance, classified as net performance, ongoing costs (TER), subscription (FL) and redemption loads (BL), retail investors, by marketed country, 1Y horizon %. Other EU27 countries not reported. Sources: Refinitiv Lipper, ESMA



Note: EU27 UCITS mixed funds gross annual performance, classified as net performance, ongoing costs (TER), subscription (FL) and redemption loads (BL), retail investors, by marketed country, 10Y horizon %. Other EU27 countries not reported. Sources: Refinitiv Lipper, ESMA.

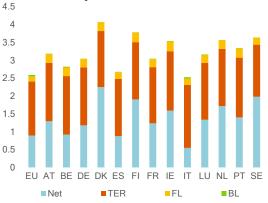
AMR-CP-S.117

Bond UCITS by investor domicile - 1Y



Note: EU27 UCITS mixed funds gross annual performance, classified as net performance, ongoing costs (TER), subscription (FL) and redemption loads (BL), retail investors, by marketed country, 1Y horizon %. Other EU27 countries not reported. Sources: Refinitiv Lipper, ESMA.

AMR-CP-S.116 Mixed UCITS by investor domicile – 5Y

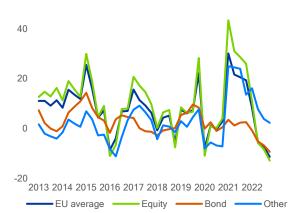


Note: EU27 UCITS mixed funds gross annual performance, classified as net performance, ongoing costs (TER), subscription (FL) and redemption loads (BL), retail investors, by marketed country, 5Y horizon %. Other EU27 countries not reported. Sources: Refinitiv Lipper, ESMA.

## ETF UCITS performance and costs

#### AMR-CP-S.118

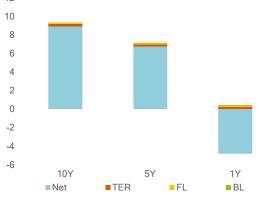
Gross performance over time



Note: EU UCITS ETFs universe, gross annual performance by asset, %. Other includes Mixed, Alternative and Money Market strategies. Sources: Refinitiv Lipper, ESMA

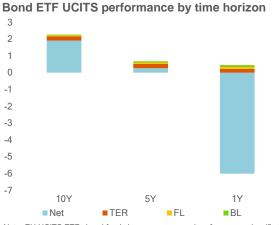
### AMR-CP-S.120





Note: EU UCITS ETFs equity fund shares gross annual performance, classified as net performance, ongoing costs, subscription (FL) and redemption (BL) loads, aggregated by time horizon, in %. Sources: Refinitiv Lipper, ESMA

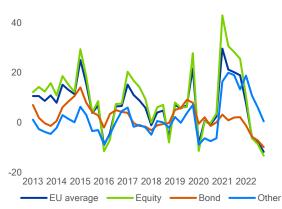
AMR-CP-S.122



Note: EU UCITS ETFs bond fund shares gross annual performance, classified as net performance, ongoing costs, subscription (FL) and redemption (BL) loads, aggregated by time horizon, in %. Sources: Refinitiv Lipper, ESMA

## AMR-CP-S.119

Net performance over time



Note: EU UCITS ETFs universe, net annual performance by asset class, % Other includes Mixed, Alternative and Money Market strategies. Sources: Refinitiv Lipper, ESMA

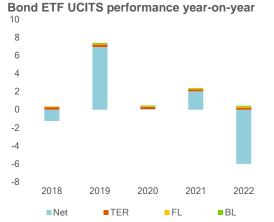
#### AMR-CP-S.121

# Equity ETF UCITS performance year-on-year 35

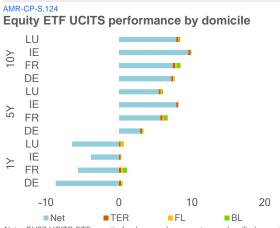


Note: EU27 UCITS ETF equity fund shares gross annual performance, retail investors, classified as net performance, orgoing costs (TER), subscription (FL) and redemption loads (BL), 1Y investment horizon, %. Sources: Refinitiv Lipper, ESMA.

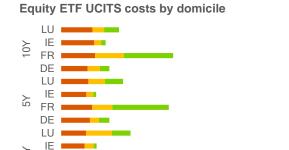
AMR-CP-S.123



Note: EU27 UCITS ETF bond fund shares gross annual performance, retail investors, classified as net performance, ongoing costs (TER), subscription (FL) and redemption loads (BL), 1Y investment horizon, %. Sources: Refinitiv Lipper, ESMA.



Note: EU27 UCITS ETFs equity funds annual gross returns, classified as net returns, ongoing costs (TER), subscription (FL) and redemption (BL) loads, by domicile and time horizon, in %. The rest of EU27 countries not reported as domiciles not significant. Sources: Refinitiv Lipper, ESMA.



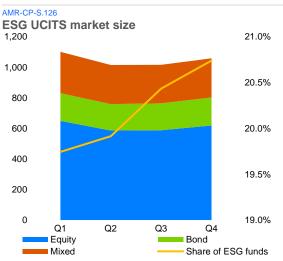
DE 0 2 1 FL TER BL Note: EU27 UCITS ETFs equity funds total costs, classified as, ongoing costs (TER), subscription (FL) and redemption (BL) loads, by domicile and time horizon, in %. The rest of EU27 countries not reported as domiciles not significant. Sources: Refinitiv Lipper, ESMA.

AMR-CP-S.125

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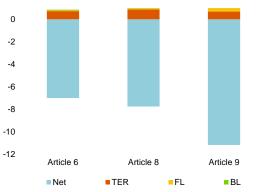
## ESG UCITS performance and costs



Note: EU 27 UCITS retail ESG equity, bond and mixed fund AuM in 2021, EUR bn. Share of ESG funds in total AuM of retail funds (rhs), in %. Sources: Morningstar, Refinitiv Lipper, ESMA.

#### AMR-CP-S.128



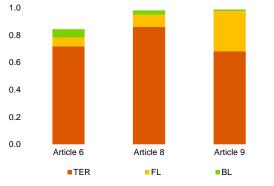


Note: Gross annual performance in 2022 of EU bond UCITS for retail investors categorized as SFDR Article 8, Article 9 or Article 6 products and classified as net performance, ongoing costs (TER), subscription (FL) and redemption loads (BL), %. Equity UCITS ETFs are included.

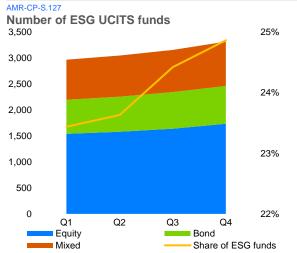
Sources: Morningstar Direct, Refinitiv Lipper, ESMA

AMR-CP-S.130

Total costs of SFDR Art.6-8-9 bond funds 1.2



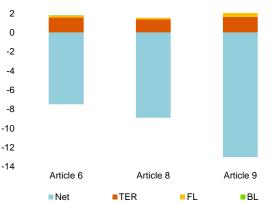
Note: Total costs in 2022 of EU bond UCITS for retail investors categorized as SFDR Article 8, Article 9 or Article 6 and classified as ongoing costs (TER), subscription (FL) and redemption loads (BL), %. Sources: Morningstar Direct, Refinitiv Lipper, ESMA.



Note: Number of EU27 UCITS retail ESG equity, bond and mixed funds in 2021. Share of ESG funds in total number of retail funds (rhs), in %. Sources: Morningstar, Refinitiv Lipper, ESMA

#### AMR-CP-S.129



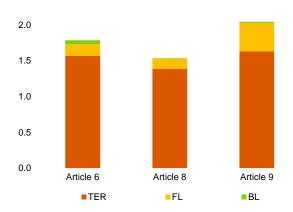


Note: Gross annual performance in 2022 of EU mixed UCITS for retail investors categorized as SFDR Article 8, Article 9 or Article 6 products and classified as net performance, ongoing costs (TER), subscription (FL) and redemption loads (BL), %. Equity UCITS ETFs are included.

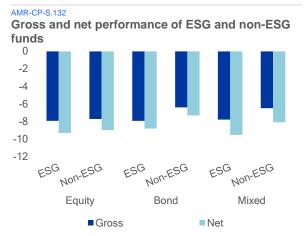
Sources: Morningstar Direct, Refinitiv Lipper, ESMA.

## AMR-CP-S.131

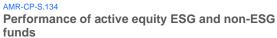
Total costs of SFDR Art.6-8-9 mixed funds 2.5

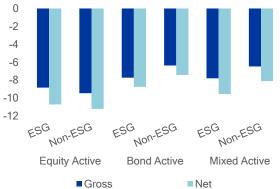


Note: Total costs in 2022 of EU mixed UCITS for retail investors categorized as SFDR Article 8, Article 9 or Article 6 products and classified as ongoing costs (TER), subscription (FL) and redemption loadss (BL), %. Sources: Morningstar Direct, Refinitiv Lipper, ESMA.



Note: EU27 UCITS fund shares gross and net annual performance in 2022 by asset and ESG or non-ESG fund type, one year investment horizon, retail investors, in % Sources: Refinitiv Lipper, Morningstar, ESMA

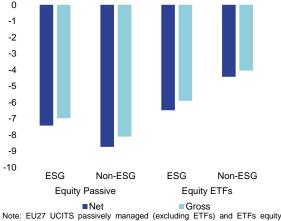




Note: EU27 UCITS actively managed fund shares gross and net annual performance in 2022 by asset and ESG or non-ESG fund type, one year investment horizon, retail investors, in %. Sources: Refinitiv Lipper, Morningstar, ESMA.

### AMR-CP-S.136

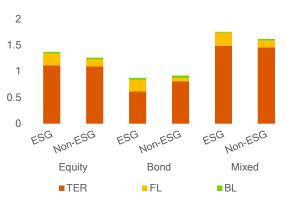
Performance of passive equity ESG and non-ESG funds



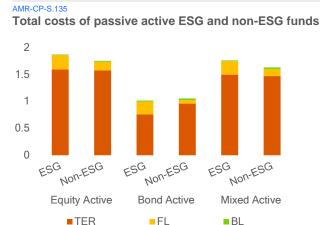
fund shares gross and net annual performance by ESG or non-ESG fund type, one year investment horizon, retail investors, in %. Sources: Refinitiv Lipper, Morningstar, ESMA.

AMR-CP-S.133

Total costs of ESG and non-ESG funds



Note: EU UCITS annual total costs in 2022, classified as ongoing costs (TER), subscription (FL) and redemption (BL) loads, by asset and ESG or non-ESG fund type one year investment horizon, retail investors, %. Sources: Refinitiv Lipper, Morningstar, ESMA.

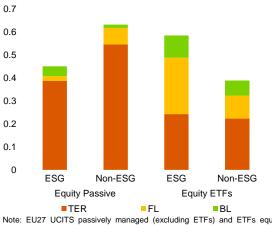


Note: EU27 UCITS actively managed fund shares annual total costs in 2022 classified as ongoing costs (TER), subscription (FL) and redemption (BL) load, by asset and ESG or non-ESG active fund type. One year investment horizon, retail investors, 9

Sources: Refinitiv Lipper, Morningstar, ESMA.

#### AMR-CP-S.137

Costs of passive equity ESG and non-ESG funds



Note: EU27 UCITS passively managed (excluding ETFs) and ETFs equity fund shares annual total costs by ESG or non-ESG fund type, one year investment horizon, retail investors, in %. Sources: Refinitiv Lipper, Morningstar, ESMA.

## Gross and net performance by asset class and domicile

	Gross	Net	10Y TER	FL	BL	Gross	Net	5Y TER	FL	BL
AT	8.36	6.24	1.90	0.22	0.00	5.87	3.79	1.82	0.26	0.00
BE	9.24	7.60	1.49	0.16		6.24	4.66	1.40	0.18	
DE	9.82	8.16	1.51	0.15	0.00	6.36	4.71	1.50	0.15	0.0
DK	10.50	9.10	1.36	0.02	0.02	7.90	6.69	1.18	0.02	0.0
ES	7.72	5.85	1.79	0.00	0.07	4.17	2.49	1.61	0.00	0.0
FI	10.31	8.81	1.43	0.02	0.04	7.80	6.41	1.34	0.02	0.0
FR	8.50	6.61	1.75	0.13	0.02	4.69	2.85	1.67	0.15	0.0
IE	9.11	7.54	1.38	0.15	0.03	6.82	5.32	1.30	0.15	0.0
IT	8.75	6.60	2.09	0.04	0.02	6.14	4.01	2.04	0.06	0.0
LU	8.74	6.68	1.79	0.25	0.03	6.39	4.40	1.72	0.25	0.0
NL	10.29	9.48	0.75	0.00	0.05	8.35	7.74	0.53	0.00	0.0
PT	9.01	6.90	2.02	0.00	0.08	8.55	6.50	2.00	0.00	0.0
SE	10.52	9.48	1.03	0.01	0.00	8.13	7.18	0.94	0.01	0.0
EU	9.17	7.39	1.59	0.16	0.02	6.55	4.86	1.50	0.16	0.0
			1Y							
	Gross	Net	TER	FL	BL					
AT	-6.80	-8.93	1.74	0.39	0.00					
BE	-8.36	-9.94	1.38	0.20						
DE	-5.69	-7.38	1.50	0.19	0.00					
DK	-5.81	-6.83	0.99	0.01	0.01					
ES	-6.63	-8.15	1.44	0.00	0.09					
FI	-6.58	-7.86	1.24	0.01	0.03					
FR	-9.47	-11.25	1.63	0.13	0.02					
IE	-8.46	-9.95	1.25	0.19	0.05					
IT	-5.64	-7.80	2.02	0.11	0.03					
LU	-9.34	-11.29	1.69	0.24	0.01					
NL	-4.81	-5.35	0.49	0.01	0.04					
PT	-3.36	-5.39	2.02	0.00	0.01					
SE	-12.28	-13.14	0.86	0.00	0.00					
EU	-8.86	-10.49	1.44	0.17	0.02					

Note: EU27 UCITS equity fund shares' annual gross and net performances, ongoing costs (TER), subscription (FL) and redemption (BL) loads, by time horizon and country, %. For BE, BL not considered. Other EU countries not reported. Sources: Refinitiv Lipper, ESMA.

AMR-CP-S.139

## Bond UCITS – gross and net performance and costs by country for different investment horizons

			10Y				5Y									
	Gross	Net	TER	FL	BL	Gross	Net	TER	FL	BL						
AT	1.53	0.65	0.73	0.15	0.00	-0.41	-1.27	0.74	0.12	0.00						
BE	1.34	0.31	0.91	0.12		-0.63	-1.60	0.86	0.11							
DE	1.66	0.71	0.81	0.13	0.00	-0.23	-1.14	0.80	0.11	0.00						
DK	1.45	0.65	0.75	0.02	0.04	-0.76	-1.47	0.67	0.01	0.03						
ES	1.03	0.35	0.64	0.02	0.01	-0.27	-0.86	0.56	0.01	0.02						
FI	2.10	1.32	0.72	0.03	0.02	0.49	-0.30	0.74	0.02	0.02						
FR	1.73	0.80	0.73	0.18	0.03	0.06	-0.84	0.68	0.19	0.03						
IE	3.21	1.76	1.14	0.30	0.01	1.80	0.55	1.03	0.21	0.02						
IT	1.72	0.43	1.18	0.04	0.07	0.01	-1.34	1.21	0.02	0.12						
LU	2.82	1.40	1.17	0.22	0.03	0.84	-0.45	1.09	0.17	0.03						
NL	1.62	1.04	0.58	0.00	0.00	-0.91	-1.44	0.52	0.00	0.00						
PT	1.36	0.49	0.83	0.00	0.04	-0.62	-1.56	0.89	0.00	0.05						
SE	-1.25	-1.67	0.42	0.00	0.00	-1.96	-2.37	0.41	0.00	0.00						
EU	2.39	1.15	1.03	0.17	0.03	0.61	-0.52	0.97	0.14	0.03						
			1Y													
	Gross	Net	TER	FL	BL											
AT	-8.60	-9.50	0.74	0.16	0.00											
BE	-6.63	-7.59	0.73	0.22												
DE	-9.13	-9.98	0.78	0.06	0.00											
DK	-10.20	-10.79	0.55	0.01	0.03											
ES	-4.11	-4.61	0.49	0.01	0.01											
FI	-7.72	-8.44	0.70	0.01	0.01											
FR	-6.13	-7.04	0.64	0.24	0.03											
IE	-5.27	-6.27	0.92	0.07	0.01											
IT	-8.51	-9.79	1.15	0.00	0.13											
LU	-6.63	-7.80	1.04	0.10	0.04											
NL	-11.96	-12.44	0.48	0.00	0.00											
PT	-7.40	-8.37	0.90	0.00	0.08											
SE	-8.66	-9.02	0.37	0.00	0.00											
EU	-6.70	-7.71	0.90	0.08	0.03											

EU -6.70 -7.71 0.90 0.08 0.03 Note: EU27 UCITS bond fund shares' annual gross and net performances, ongoing costs (TER), subscription (FL) and redemption (BL) loads, by time horizon and country, %. For BE, BL not considered. Other EU countries not reported. Sources: Refinitiv Lipper, ESMA.

	Gross	Net	10Y TER	FL	BL	Gross	Net	5Y TER	FL	BL
AT	4.34	2.47	1.57	0.30	0.00	2.45	0.70	1.47	0.28	0.0
BE	4.26	2.13	1.85	0.28		2.24	0.41	1.67	0.16	
DE	4.39	2.61	1.57	0.20	0.00	2.44	0.72	1.56	0.16	0.0
DK	5.20	4.03	1.14	0.03	0.01	2.84	1.68	1.14	0.02	0.0
ES	3.04	1.61	1.41	0.01	0.01	1.10	-0.31	1.38	0.02	0.0
FI	6.23	4.72	1.47	0.02	0.01	3.73	2.31	1.40	0.01	0.0
FR	4.32	2.67	1.49	0.15	0.01	1.80	0.23	1.43	0.13	0.0
IE	4.42	1.85	2.04	0.50	0.02	3.57	1.43	1.87	0.24	0.0
IT	3.51	1.53	1.69	0.07	0.22	1.20	-0.73	1.64	0.04	0.2
LU	4.99	3.06	1.63	0.29	0.02	3.18	1.35	1.60	0.21	0.0
NL	7.05	6.20	0.79	0.05	0.01	4.77	4.02	0.64	0.09	0.0
PT	1.67	0.54	1.12	0.00	0.01	1.02	-0.31	1.32	0.00	0.0
SE	5.64	4.70	0.93	0.00	0.00	3.82	2.92	0.91	0.00	0.0
EU	4.59	2.81	1.55	0.20	0.04	2.59	0.89	1.51	0.15	0.0
			1Y							
	Gross	Net	TER	FL	BL					
AT	-7.63	-9.34	1.40	0.31	0.00					
BE	-7.48	-9.25	1.62	0.15						
DE	-6.95	-8.69	1.56	0.17	0.00					
DK	-7.16	-8.29	1.10	0.02	0.01					
ES	-5.65	-7.09	1.40	0.02	0.02					
FI	-8.95	-10.31	1.35	0.01	0.00					
FR	-7.81	-9.37	1.41	0.14	0.01					
IE	-5.48	-7.47	1.73	0.23	0.02					
IT	-6.92	-8.84	1.62	0.05	0.25					
LU	-6.04	-7.86	1.58	0.22	0.02					
NL	-5.74	-6.37	0.49	0.14	0.00					
PT	-7.34	-8.74	1.39	0.00	0.01					
SE	-9.32	-10.15	0.83	0.00	0.00					
EU	-6.69 J27 UCITS I	-8.36	1.48	0.15	0.04					

Note: EU27 UCITS mixed fund shares' annual gross and net performances, ongoing costs (TER), subscription (FL) and redemption (BL) loads, by time horizon and country, %. For BE, BL not considered. Other EU countries not reported. Sources: Refinitiv Lipper, ESMA.

## Gross and net performance by asset class and domicile, including inflation

	Gross	Net real	10 TER	INFL	FL	BL	Gross	Net real	5Y TER	INFL	FL	BL
AT	8.37	3.84	1.90	2.40	0.22	0.00	5.89	0.52	1.82	3.27	0.26	0.00
BE	9.25	4.91	1.49	2.39	0.16	0.00	6.26	0.88	1.40	3.51	0.18	0.00
DE	9.83	6.10	1.51	2.06	0.15	0.00	6.37	1.61	1.50	3.10	0.15	0.00
DK	10.51	7.65	1.36	1.44	0.02	0.02	7.92	4.23	1.18	2.45	0.02	0.02
ES	7.73	4.26	1.79	1.59	0.00	0.07	4.19	-0.21	1.61	2.70	0.00	0.0
FI	10.32	7.17	1.43	1.64	0.02	0.04	7.82	4.03	1.34	2.38	0.02	0.04
FR	8.52	5.10	1.75	1.51	0.13	0.02	4.71	0.47	1.67	2.39	0.15	0.0
IE	9.12	6.29	1.38	1.25	0.15	0.03	6.83	2.99	1.30	2.33	0.15	0.04
IT	8.77	5.07	2.09	1.53	0.04	0.02	6.17	1.52	2.04	2.49	0.06	0.03
LU	8.75	4.69	1.79	1.99	0.25	0.03	6.40	1.35	1.72	3.05	0.25	0.02
NL	10.28	7.05	0.75	2.44	0.00	0.05	8.35	3.77	0.53	3.97	0.00	0.0
PT	9.02	5.57	2.02	1.33	0.00	0.08	8.57	4.43	2.00	2.07	0.00	0.0
SE	10.52	7.72	1.03	1.77	0.01	0.00	8.14	4.24	0.94	2.94	0.01	0.0
EU	9.17	5.43	1.59	1.96	0.16	0.02	6.56	1.66	1.50	3.19	0.16	0.02
			1	Y								
	Gross	Net real	TER	INFL	FL	BL						
AT	-6.79	-17.52	1.74	8.59	0.39	0.00						
BE	-8.35	-20.40	1.38	10.32	0.20							
DE	-5.69	-16.02	1.50	8.63	0.19	0.00						
DK	-5.80	-15.34	0.99	8.52	0.01	0.01						
ES	-6.62	-16.49	1.44	8.34	0.00	0.09						
FI	-6.57	-15.02	1.24	7.16	0.01	0.03						
FR	-9.46	-17.15	1.63	5.90	0.13	0.02						
IE	-8.45	-18.00	1.25	8.05	0.19	0.05						
IT	-5.64	-16.52	2.02	8.72	0.11	0.03						
LU	-9.34	-19.43	1.69	8.14	0.24	0.01						
NL	-4.81	-16.97	0.49	11.62	0.01	0.04						
PT	-3.35	-13.47	2.02	8.08	0.00	0.01						
SE	-12.27	-22.44	0.86	9.30	0.00	0.00						
EU	-8.86	-19.65	1.44	9.16	0.17	0.02						

Note: EU27 UCITS equity fund shares' annual gross and net performances, ongoing costs (TER), inflation (INFL), subscription (FL) and redemption (BL) loads, by time horizon and country, %. For BE, BL not considered. Other EU countries not reported. Sources: Refinitiv Lipper, ESMA. AMR-CP-S.142

Bond UCITS – gross and net real p	performance and costs b	by country for different i	nvestment horizons
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			1	0Ŷ						5Y		
	Gross	Net real	TER	INFL	FL	BL	Gross	Net real	TER	INFL	FL	BL
AT	1.53	-1.74	0.73	2.40	0.15	0.00	-0.41	-2.00	0.74	3.27	0.12	0.00
BE	1.34	-2.46	0.91	2.39	0.12		-0.63	-1.90	0.86	3.51	0.11	
DE	1.66	-1.35	0.81	2.06	0.13	0.00	-0.23	-1.96	0.80	3.10	0.11	0.00
DK	1.45	-0.80	0.75	1.44	0.02	0.04	-0.76	-0.98	0.67	2.45	0.01	0.03
ES	1.03	-1.24	0.64	1.59	0.02	0.01	-0.27	-1.84	0.56	2.70	0.01	0.02
FI	2.10	-0.32	0.72	1.64	0.03	0.02	0.49	-2.08	0.74	2.38	0.02	0.02
FR	1.73	-0.71	0.73	1.51	0.18	0.03	0.06	-1.55	0.68	2.39	0.19	0.03
IE	3.21	0.51	1.14	1.25	0.30	0.01	1.80	-2.87	1.03	2.33	0.21	0.02
IT	1.72	-1.10	1.18	1.53	0.04	0.07	0.01	-1.15	1.21	2.49	0.02	0.12
LU	2.82	-0.59	1.17	1.99	0.22	0.03	0.84	-2.60	1.09	3.05	0.17	0.03
NL	1.62	-1.40	0.58	2.44	0.00	0.00	-0.91	-2.54	0.52	3.97	0.00	0.00
PT	1.36	-0.85	0.83	1.33	0.00	0.04	-0.62	-0.51	0.89	2.07	0.00	0.05
SE	-1.25	-3.43	0.42	1.77	0.00	0.00	-1.96	-0.57	0.41	2.94	0.00	0.00
EU	2.39	-0.80	1.03	1.96	0.17	0.03	0.61	-2.67	0.97	3.19	0.14	0.03
				1Y								
	Gross	Net real	TER	INFL	FL	BL						
AT	-8.60	-18.09	0.74	8.59	0.16	0.00						
BE	-6.63	-17.90	0.73	10.32	0.22	0.00						
DE	-9.13	-18.61	0.78	8.63	0.06	0.00						
DK	-10.20	-19.31	0.55	8.52	0.00	0.03						
ES	-4.11	-12.96	0.49	8.34	0.01	0.01						
FI	-7.72	-15.60	0.70	7.16	0.01	0.01						
FR	-6.13	-12.94	0.64	5.90	0.24	0.03						
IE	-5.27	-14.32	0.92	8.05	0.07	0.01						
IT	-8.50	-18.51	1.15	8.72	0.00	0.13						
LU	-6.63	-15.94	1.04	8.14	0.10	0.04						
NL	-11.96	-24.06	0.48	11.62	0.00	0.00						
PT	-7.40	-16.45	0.90	8.08	0.00	0.08						
SE	-8.65	-18.32	0.37	9.30	0.00	0.00						
EU	-6.70	-16.87	0.90	9.16	0.08	0.03						

Note: EU27 UCITS bond fund shares' annual gross and net performances, ongoing costs (TER), inflation (INFL), subscription (FL) and redemption (BL) loads, by time horizon and country, %. For BE, BL not considered. Other EU countries not reported. Sources: Refinitiv Lipper, ESMA.

AMR-CP-S.	143											
Mixed L	JCITS -	gross and	d net rea	al perfor	mance a	nd costs	by cour	ntry for di	fferent	investme	ent horiz	ons
	10Y	-		-			2	5Y				
	Gross	Net real	TER	INFL	FL	BL	Gross	Net real	TER	INFL	FL	BL
AT	4.34	0.07	1.57	2.40	0.30	0.00	2.46	-2.57	1.47	3.27	0.28	0.00
BE	4.26	-0.26	1.85	2.39	0.28		2.24	-3.10	1.67	3.51	0.16	
DE	4.39	0.54	1.57	2.06	0.20	0.00	2.45	-2.38	1.56	3.10	0.16	0.00
DK	5.20	2.59	1.14	1.44	0.03	0.01	2.84	-0.78	1.14	2.45	0.02	0.01
ES	3.04	0.02	1.41	1.59	0.01	0.01	1.10	-3.01	1.38	2.70	0.02	0.01
FI	6.23	3.08	1.47	1.64	0.02	0.01	3.73	-0.08	1.40	2.38	0.01	0.01
FR	4.32	1.16	1.49	1.51	0.15	0.01	1.81	-2.16	1.43	2.39	0.13	0.01
IE	4.42	0.61	2.04	1.25	0.50	0.02	3.58	-0.89	1.87	2.33	0.24	0.03
IT	3.51	0.01	1.69	1.53	0.07	0.22	1.20	-3.22	1.64	2.49	0.04	0.25
LU	4.99	1.07	1.63	1.99	0.29	0.02	3.19	-1.70	1.60	3.05	0.21	0.02
NL	7.05	3.77	0.79	2.44	0.05	0.01	4.76	0.05	0.64	3.97	0.09	0.01
PT	1.67	-0.79	1.12	1.33	0.00	0.01	1.03	-2.38	1.32	2.07	0.00	0.00
SE	5.64	2.94	0.93	1.77	0.00	0.00	3.83	-0.03	0.91	2.94	0.00	0.00
EU	4.59	0.85	1.55	1.96	0.20	0.04	2.59	-2.30	1.51	3.19	0.15	0.04
	1Y											
	Gross	Net real	TER	INFL	FL	BL						
AT	-7.63	-17.93	1.40	8.59	0.31	0.00						
BE	-7.47	-19.64	1.62	10.32	0.15							
DE	-6.95	-17.32	1.56	8.63	0.17	0.00						
DK	-7.16	-16.80	1.10	8.52	0.02	0.01						
ES	-5.65	-15.43	1.40	8.34	0.02	0.02						
FI	-8.95	-17.47	1.35	7.16	0.01	0.00						
FR	-7.80	-15.27	1.41	5.90	0.14	0.01						
IE	-5.48	-15.52	1.73	8.05	0.23	0.02						
IT	-6.92	-17.56	1.62	8.72	0.05	0.25						
LU	-6.04	-16.00	1.58	8.14	0.22	0.02						
NL	-5.74	-17.99	0.49	11.62	0.14	0.00						
PT	-7.34	-16.81	1.39	8.08	0.00	0.01						
SE	-9.31	-19.45	0.83	9.30	0.00	0.00						
EU	-6.69	-17.52	1.48	9.16	0.15	0.04						
Note: ELI		mixed fun	d shares'	annual an	ase and no	at norform	ances on	noina coste	(TER) ir	flation (IN	FL) subs	printion (FL

Note: EU27 UCITS mixed fund shares' annual gross and net performances, ongoing costs (TER), inflation (INFL), subscription (FL) and redemption (BL) loads, by time horizon and country, %. For BE, BL not considered. Other EU countries not reported. Sources: Refinitiv Lipper, ESMA.

# Fund domicile and marketing country

## AMR-CP-S.144

## Number of funds by country: domicile and sold-in

Sold-in Domicile	AT	BE	DK	FI	FR	DE	IE	п	LU	NL	PT	ES	SE	Other EU
AT	642			1	6	344		9	1	0		8	0	59
BE	41	391			52	41	1	14	57	23	0	16	4	40
DK	3		457	6	8	11			9	9		9	19	
FI	12		8	297	12	16		13	6	0	5	15	111	2
FR	83	139	2	6	1,996	164	16	185	194	70	36	167	23	17
DE	294	4	5	6	32	1,195	18	24	57	17	11	45	4	5
IE	590	388	407	507	640	777	1,246	660	620	522	255	686	592	92
п								714						
LU	3,168	2,411	1,576	2,172	3,243	4,174	1,309	3,512	6,544	2,394	1,849	3,396	2,460	1,448
NL	11	10			2	12			23	113		2	2	0
PT											123			
ES		0				0			0		0	1,124		
SE	0	1	8	78	4	0			5	0	1	2	439	4

#### Other EU

Note: EU27 UCITS number of funds by country of domicile (rows) and marketed country (columns), 2022. Please note that a fund appearing as marketed in a country will also appear in the Sources: Refinitiv Lipper, ESMA.

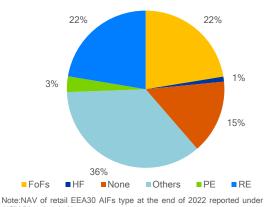
# **Retail AIFs**



Note: Clients of EEA30 AIFs managed and/or marketed by authorised AIFMs and sub-threshold managers registered only in national jurisdictions, end of 2022, in % of NAV. Sources:National Competent Authorities, ESMA

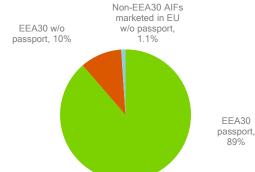
AMR-CP-S.147



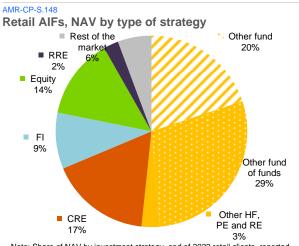


AIFM Directive, in % Sources:National Competent Authority, ESMA

## AMR-CP-S.146 Retail AIFs, AIFMD passport



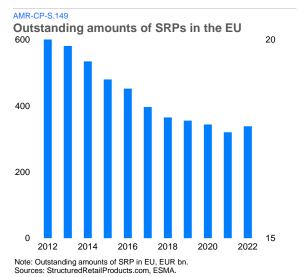
Note: NAV of retail AIFs by manager's access to AIFMD passport, end 2022, %. Authorised EEA30 AIFMs can access AIFMD passport or market non-EEA30 AIFs to retail investors w/o passport, sub-threshold managers are registered only in national jurisdictions w/o passporting rights. Sources: National Competent Authorities, ESMA



Note: Share of NAV by investment strategy, end of 2022 retail clients, reported under AIFMD, in %. FI = Fixed Income; CRE = Commercial Real Estate; RRE; Residential Real; Estate. Data for EEA30. Sources National Competent Authorities, ESMA

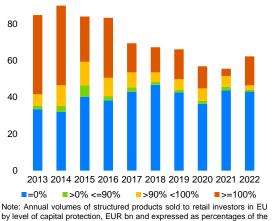
# **Structured Retail Products**

## Market Overview



AMR-CP-S.151

Volume of products sold by capital protection 100

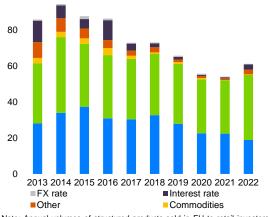


total in selected cases.

Sources: StructuredRetailProducts.com, ESMA.

AMR-CP-S.153

100

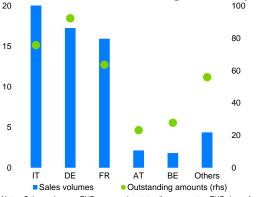


Volume of products sold by underlying asset

Note: Annual volumes of structured products sold in EU to retail investors by asset class, EUR bn. Sources: StructuredRetailProducts.com, ESMA.

#### AMR-CP-S.150

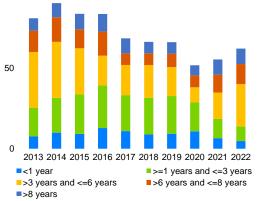
Sales volumes and outstanding amounts by country



Note: Sales volumes, EUR mn, and outstanding amounts, EUR bn, of structured retail products in 2022 for top 5 EU countries by sales volumes, EUR bn. "Others"=EU countries not otherwise listed. Sources: StructuredRetailProducts.com, ESMA.

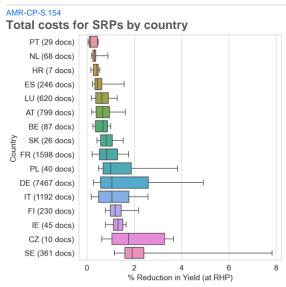
## AMR-CP-S.152

Volume of products sold by term



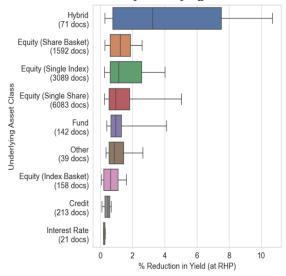
Note: Annual volumes of structured products sold to retail investors in EU by investment term, EUR bn and expressed as percentages of total. Sources: StructuredRetailProducts.com, ESMA.

### Costs and performance



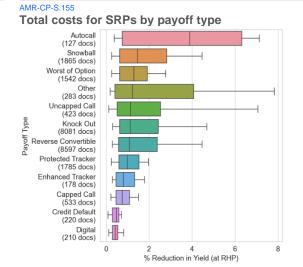
Note: Each bar displays the range in percentage total cost (RIY) over the recommended holding period, across SRPs in the data sample, grouped by country. Countries indicate locations of sale (one product can be sold in multiple countries). The vertical line in each box shows the median percentage cost. 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.

#### AMR-CP-S.156 Total costs for SRPs by underlying assets



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 twenty or fewer observations in the data sample, such as ETF, FX rates, and commodities.

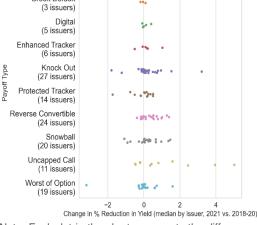
Sources: ESMA, Structuredretailproducts.com, financial entities' websites.



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 one hundred or fewer observations in the data sample. Note that one product can appear under multiple payoff types.

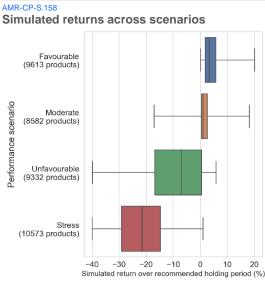
Sources: ESMA, Structuredretailproducts.com, financial entities' websites.

AMR-CP-S.157 Change in total costs in 2021 from 2018-2020 Capped Call (16 issuers) Credit Default (3 issuers)



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 2021 and the same figure for SRPs issued between 2018 and 2020, 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 2018-20 are shown. Payoff types with less than three issuers are not shown. Note that one product can appear under multiple payoff types.

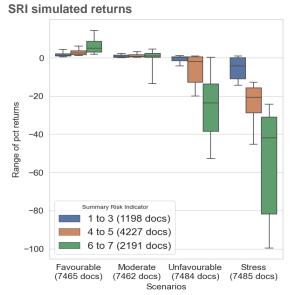
Sources: ESMA, Structuredretailproducts.com, financial entities' websites.



Note: The chart shows the range in annual returns for SRPs in each performance scenario, over a product's recommended holding period (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.

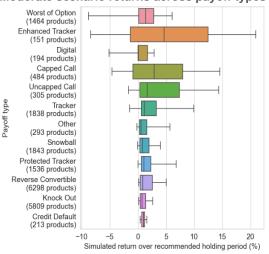
Sources: ESMA, Structuredretailproducts.com, financial entities' websites.

#### AMR-CP-S.160



Note: The boxes and vertical lines indicate the range of returns (at the recommended holding period) across SRPs grouped by the SRI (the number of products in each sample varies slightly as information for some scenarios could not be retrieved from some documents). The SRI aggregates the estimated Credit Risk (default risk) and Market Risk (adverse market price risk) associated with the SRP. The necessary simulations and formulae used to produce the SRI are set out in the PRIIPs KIDs Regulation. The SRI ranges from 1 (lowest risk) to 7 (highest risk). The horizontal line in each box shows the median KID simulated return rate for that specific performance scenario and SRI grouping. Box edges are the 25th and 75th percentile simulated returns across the group, and additional lines ('whiskers') represent the 10th and 90th percentiles for that same group.

AMR-CP-S.159 Moderate scenario returns across payoff types

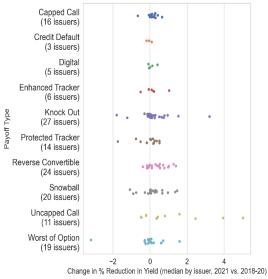


Note: The chart presents the range in annual returns under the moderate scenario over a product's recommended holding period for SRPs grouped by payoff type. The vertical line in each box shows, within each payoff type, the median moderate scenario returns (after costs) at the recommended holding period. Box edges are the 25th and 75th percentiles, and additional lines ('whiskers') represent the 10th and 90th percentiles for that payoff types. 'Other' comprises all SRPs containing payoff types that have 150 or fewer observations in the data sample.

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

#### AMR-CP-S.161

Change in simulated returns in 2021 from 2018-2020



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 2021 and the same figure for SRPs issued between 2018 and 2020, 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 2018-20 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.

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