

Annexes

Costs and Performance of EU Retail Investment Products 2023



Table of Contents

| 1. | Data sources and limitations | 3 |
|----|---------------------------------|------|
| 2. | Statistical methods | 8 |
| 3. | Statistics | . 14 |
| | 3.1. Market environment | . 14 |
| | 3.2. UCITS | . 16 |
| | 3.3. Retail AIFs | . 43 |
| | 3.4. Structured Retail Products | . 45 |
| | | |

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 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 methodology, the funds are retained in the sample if information on gross 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

requirements¹ and are based on what the firm, or 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.² 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 2019/1160³ 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 2020⁴ 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

Commission Delegated Regulation (EU) 2015/565, Annex 2.

Articles 10 and 11, Commission Regulation (EU) No 583/2010.

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

cross-border distribution of collective investment undertakings.

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 ESMA third annual statistical report published in April 2021, page 69.

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 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".⁵

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. In order to have a representative and stable sample (compared with last year) of the universe of ESG UCITS funds, this report relies 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).

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:

This annex reports on:

- 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 (± 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, rG, represents the gross performance of the portfolio, in which the fund is invested in and ongoing costs are proxied by the TER. Both rG and TER are obtained directly from the data provider. Performance net of TER, rN, 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 π 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.

Regressions on the UCITS sample

In order to statistically validate our findings on cost, we perform a regression analysis at the share class level on the overall UCITS sample between 2017 and 2021. We do not find material differences from the analysis reported in the 4th edition of this report.⁶

We keep only data for the final quarter of each year and estimate the following equation using ordinary least squares (OLS) with time and characteristics dummies:

 $TER_{i,y} = \alpha_0 + \beta_1 \text{ Year}_y + \beta_2 \text{ Investor}_i + \beta_3 \text{ Mgm}t_i + \beta_4 \text{ Asset}_i + \beta_5 \text{ Domicile}_i + \beta_6 \text{ Age}_{i,y} + \beta_7 \text{ Log(Net assets)}_{i,y} + \beta_8 \text{ Performance}_{i,y-1} + \beta_9 \text{ AMC}_i + \epsilon_{i,y}^7$

- A declining trend in TER since 2017.
- Lower costs for institutional funds and passive funds (ETFs and non-ETFs)
- A negative and significant relation between the net assets and the TER, which is also in line with the finding that larger funds tend to have lower costs than small funds.
- A positive, yet very small, and significant relation between the fund's age and the TER.
- On average, lower costs for funds domiciled in the Netherlands compared with the other major domiciles considered.

ASR-CP-S.1
Regression analysis of the TER
Cost differences even after adding controls
OLS with and without FE per Management Cos
Dependent variable TER

| | Panel a: no FE | Panel b: with FE |
|----------------------------------|----------------|------------------|
| Year | (-) *** | (-) *** |
| Institutional | - 0.614 *** | - 0.638 *** |
| ETFs | - 1.116 *** | - 1.014 *** |
| Passive non-ETFs | - 0.619 *** | - 0.519 *** |
| Equity | 0.451 *** | 0.449 *** |
| Mixed | 0.481 *** | 0.421*** |
| Domicile (base: NL) | (+) *** | (+) *** |
| Age | 0.013 *** | 0.012 *** |
| Size | - 0.030 *** | - 0.026 *** |
| Gross performance _{N-1} | 0.003 *** | 0.003 *** |
| Obs. | 227.843 | 223.571 |

Note: Year is a dummy for each year between 2018 and 2021, reported compared with 2017. Institutional is a dummy taking the value of 1 if the share class is institutional and 0 if it is retail. ETFs is a dummy taking the value of 1 if the fund is an ETF; the base category is active funds. Passive non-ETFs is a dummy taking the value of 1 if the fund is passively managed but is not an ETF; the base category is active funds. 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. Domicile is a dummy for each EU domicile; reported is the relation with respect to the Netherlands. The domiciles considered are those referred to in the main analysis. 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. Gross performance $_{N-1}$ is the share class performance during the previous year. FE = fixed effects. Significance levels are reported: 0.01 (***), 0.05 (**), 0.1 (*).

Source: Morningstar Direct, Refinitiv Lipper ESMA

We also perform a series of quarterly regressions on 2021 data to validate the different results regarding ESG funds. To start, the following

The regression's results show:

ESMA, April 2022, <u>fourth annual statistical report</u>, page 51.

⁷ TER_{i,y} is the total expense ratio per share class at the end of each year, Year_y is the time dummy, Investors_i is a dummy indicating the type of investors authorised to invest in the share class, Mgmt_i is a dummy distinguishing active funds; passive non-ETFs and ETFs, Asset_i is a dummy indicating the funds'

underlying assets (equities, bonds or mixed), $Domicile_i$ is a dummy indicating the domicile of the fund, $Age_{i,y}$ is the age of the share class, $Log(Net\ assets)_{i,y}$ is the logarithm of the share class value at the end of each year, $Performance_{i,y-1}$ is the share class gross performance for the previous year and AMC_i is a dummy identifying the asset management company.

equation was estimated using OLS with robust standard errors:

 $TER_{i,q} = \alpha_0 + \beta_1 Domicile_i + \beta_2 Mgmt_i + \beta_3 Asset_i + \beta_4 ESG_i + \beta_5 Age_{l,q} + \beta_6 Log(Net Assets)_{l,q} + \beta_7 AMC_i + \varepsilon_{i,q}$

ASR-CP-S.2

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

OLS with robust errors
Dependent variable TER

| | 1Q21 | 2Q21 | 3Q21 | 4Q21 |
|---------|-----------|-----------|-----------|-----------|
| Passive | -0.768*** | -0.744*** | -0.747*** | -0.736*** |
| Bond | -0.513*** | -0.498*** | -0.493*** | -0.489*** |
| Mixed | -0.052*** | -0.045*** | -0.038*** | -0.033*** |
| ESG | -0.103*** | -0.098*** | -0.085*** | -0.084*** |
| Age | 0.018*** | 0.018*** | 0.018*** | 0.018*** |
| Size | -0.025*** | -0.025*** | -0.025*** | -0.025*** |
| Obs. | 40,713 | 43,483 | 44,528 | 46,223 |
| Adi R2 | 0.442 | 0.429 | 0.426 | 0.426 |

Note: Passive is a dummy taking the value of 1 if the fund is passively managed. Bond (Mixed) is a dummy taking the value of 1 if a fund belongs to the bond (mixed) asset class, the base class is the equity 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 (ASR-CP-S.2) show that ESG funds are less costly compared to their non ESG peers across the four quarters even after controlling for the age and the size of the funds.

ASR-CP-S.3

Regression analysis for SFDR disclosures Art.9 funds have lower TER

OLS with robust errors Dependent variable TER

| | 1Q21 | 2Q21 | 3Q21 | 4Q21 |
|---------|-----------|-----------|-----------|-----------|
| Passive | -0.780*** | -0.755*** | -0.754*** | -0.742*** |
| Bond | -0.511*** | -0.495*** | -0.490*** | -0.487*** |
| Mixed | -0.056*** | -0.048*** | -0.040*** | -0.034*** |
| Art. 9 | -0.057*** | -0.068*** | -0.060*** | -0.060*** |
| Art. 6 | 0.032*** | 0.025*** | 0.016** | 0.015** |
| Age | 0.018*** | 0.018*** | 0.018*** | 0.019*** |
| Size | -0.025*** | -0.025*** | -0.054*** | -0.025*** |
| Obs. | 40,408 | 43,154 | 44,200 | 45,893 |
| Adj R2 | 0.439 | 0.426 | 0.424 | 0.424 |

Note: Passive is a dummy taking the value of 1 if the fund is passively managed. Bond (Mixed) is a dummy taking the value of 1 if a fund belongs to the bond (mixed) asset class, the base class is the equity 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

The second regression replaces the ESG dummy by the disclosure regime under SFDR. The results (ASR-CP-S.3) show that on aggregate funds disclosing under SFDR Article 9 have lower total expense ratio compared to 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.

ASR-CP-S.4

Regression analysis of the TER for equity funds Low significance for funds created as ESG

> OLS with robust errors Dependent variable TER

| | 1Q21 | 2Q21 | 3Q21 | 4Q21 |
|--------------------|-----------|-----------|-----------|-----------|
| Passive | -0.939*** | -0.937*** | -0.950*** | -0.915*** |
| Created ESG | 0.044 | 0.058* | 0.079** | 0.056* |
| Non-ESG | 0.059* | 0.082*** | 0.084*** | 0.075*** |
| Age | -0.007 | 0.023 | 0.033*** | 0.019* |
| Size | -0.024*** | -0.023*** | -0.023*** | -0.022*** |
| Obs. | 4,564 | 5,151 | 5,693 | 6,282 |
| Adj R ² | 0.489 | 0.475 | 0.466 | 0.456 |

Note: Passive is a dummy taking the value of 1 if the fund is passively managed. Created ESG is a dummy taking the value of 1 if a fund was created as ESG, Non-ESG is a dummy taking the value of 1 if a fund is non-ESG, the reference is the funds converted to ESG. 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

ASR-CP-S.5

Regression analysis of the TER for bond funds No significant difference for funds created as ESG

OLS with robust errors Dependent variable TER

| | 1Q21 | 2Q21 | 3Q21 | 4Q21 |
|--------------------|-----------|-----------|-----------|-----------|
| Passive | -0.939*** | -0.937*** | -0.950*** | -0.915*** |
| Created ESG | 0.044 | 0.058* | 0.079** | 0.056* |
| Non-ESG | 0.059* | 0.082*** | 0.084*** | 0.075*** |
| Age | -0.007 | 0.023 | 0.033*** | 0.019* |
| Size | -0.024*** | -0.023*** | -0.023*** | -0.022*** |
| Obs. | 4,564 | 5,151 | 5,693 | 6,282 |
| Adi R ² | 0.489 | 0.475 | 0.466 | 0.456 |

Note: Passive is a dummy taking the value of 1 if the fund is passively managed. Created ESG is a dummy taking the value of 1 if a fund was created as ESG, Non-ESG is a dummy taking the value of 1 if a fund is non-ESG, the reference is the funds converted to ESG. 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 the funds that were converted to ESG with the funds that were created as ESG. The results (ASR-CP-S.4, ASR-CP-S.5 and ASR-CP-S.6) show that on aggregate mixed funds created as ESG were more expensive than mixed funds converted to ESG. For equity and bond funds the difference of total expense ratio between funds created as ESG and funds converted to ESG is not significant or has a low level of significance.

ASR-CP-S.6 Regression analysis of the TER for mixed funds Funds created as ESG are more expensive OLS with robust error

Dependent variable TER

| | 1Q21 | 2Q21 | 3Q21 | 4Q21 |
|--------------------|-----------|-----------|-----------|-----------|
| Passive | -0.405*** | -0.429*** | -0.458*** | -0.399*** |
| Created ESG | 0.115* | 0.210*** | 0.235*** | 0.214* |
| Non-ESG | 0.137** | 0.136** | 0.159*** | 0.141** |
| Age | -0.049** | -0.042** | -0.019 | 0.009 |
| Size | -0.005 | -0.023*** | -0.024*** | -0.025*** |
| Obs. | 2,651 | 2,993 | 3,166 | 3,383 |
| Adj R ² | 0.390 | 0.351 | 0.339 | 0.347 |

Note: Passive is a dummy taking the value of 1 if the fund is passively managed. Created ESG is a dummy taking the value of 1 if a fund was created as ESG, Non-ESG is a dummy taking the value of 1 if a fund is non-ESG, the reference is the funds converted to ESG. 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

Finally, we assess the difference of gross performance between ESG and non-ESG funds. The following equation was then estimated using OLS with robust standard errors:

Gross performance_{i,q} = α_0 + β 1 Domicile_i + β_2 Mg mt_i + β_3 Asset_i + β_4 ESG_i + β_5 Age_{l,q}+ β_6 Log(Net Assets)_{l,q} + β_7 AMC_i + $\epsilon_{i,q}$

ASR-CP-S.7 Regression analysis of the gross performance ESG funds outperform

OLS with robust error Dependent variable Gross Performance

| | 1Q21 | 2Q21 | 3Q21 | 4Q21 |
|---------|-----------|-----------|-----------|-----------|
| Passive | -2.482*** | -0.766*** | 0.596*** | 1.250*** |
| Bond | -34.99*** | -26.90*** | -22.22*** | -17.28*** |
| Mixed | -23.65*** | -16.02*** | -13.24*** | -9.171*** |
| ESG | 0.256 | 0.504*** | -0.169 | 0.831*** |
| Age | -0.019* | 0.009 | 0.028*** | 0.007 |
| Size | -0.184*** | -0.147*** | -0.120*** | -0.008 |
| Obs. | 40,712 | 43,481 | 44,526 | 46,221 |
| Adj. R2 | 0.614 | 0.645 | 0.598 | 0.444 |

Note: Passive is a dummy taking the value of 1 if the fund is passively managed. Bond (Mixed) is a dummy taking the value of 1 if a fund belongs to the bond (mixed) asset class, the base class is the equity 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 (ASR-CP-S.7) show that ESG funds outperformed non-ESG peers during the second and fourth quarter of 2021. During the first and third quarters the difference of gross performance between ESG funds and non-ESG funds is not statistically significant.

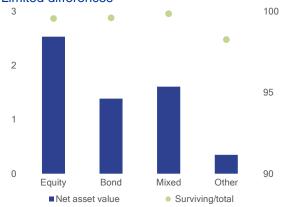
UCITS robustness checks

Surviving and non-surviving funds

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 non-surviving funds.

Focusing only on retail investors at the end of 2021, the overall sample of funds, surviving and non-surviving, stood at EUR 5.8tn, less than 0.5% higher than the sample focusing only on surviving funds (ASR-CP.S.8). 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, 99% of surviving and non-surviving funds. This is a significant increase compared with last year's analysis, in which surviving funds were 95% of surviving and non-surviving funds. It probably reflects the ongoing recovery from the COVID-19 pandemic impact.

ASR-CP-S.8 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, 4Q21, EUR tn. Ratio only surviving funds over total funds by asset class on right-hand axis. Sources: Refinitiv Lipper, ESMA.

However, this does not affect results in terms of performance and costs that remained at the same levels as in the main analysis across time horizons and asset classes. As an example, focusing on equity, ASR-CP-S.9 shows that net annual performance for the ten-year horizon was 9.3% both for the surviving sample and 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 0.1 pps.

ASR-CP-S.9 Equity UCITS surviving and non-surviving performance Results in line with main analysis



Note: EU27 UCITS bond fund shares gross annual performance, surviving and non-surviving funds, retail investors, classified as net performance, ongoing costs (TER), subscription (FL) and redemption fees (BL), aggregated by time horizon, %. Reporting period from 1Q12 to 4Q21 Sources: Refinitiv Lipper, ESMA.

Balanced and unbalanced panels

The long horizon that the report needs to cover, 2012-2021, 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 2012-2021. 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.

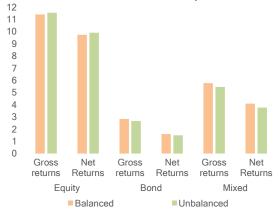
ASR-CP-S.10 Number of funds per asset class 5Y horizon Number of UCITS reduces by more than 60%



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% (ASR-CP-S.10). ⁸ For equity and mixed funds, the unbalanced sample reports, on average, between 4,000 and 4,200 funds more than the balanced sample. In the case of bonds this difference was about 2,500 funds.

ASR-CP-S.11 Performance per asset class 5Y horizon Performance similar across samples



Note: EU27 UCITS gross and net performances for the largest retail asset classes, balanced and unbalanced samples. 5Y horizon, %.

In terms of gross and net performances, when we considered the two different samples, the difference was negligible for equity funds, and limited for bonds and mixed funds (ASR-CP-S.11).

focused are equity, bond and mixed funds. Moreover, the reduced size of the sample for alternative and money market UCITS, especially at longer time horizons, does not provide noteworthy results.

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

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 13% on average. In terms of gross performances, deviations were also negligible. More significant differences are observable for net performance, which is often higher in the case of the balanced panel. This may stem from the fact that new funds are cheaper than older ones.

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 2021. The definition of gross returns stems from the European Commission delegated regulation ⁹ 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.¹⁰

The focus is on those funds with 100% retail investment. For 2021, this was around EUR 650bn or 80% 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 2021.
- Funds for which data on gross and net performances, and NAV were not jointly available.
- Those funds reporting monthly gross performance outside the range ± 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 2021 did not exceed the range identified above.

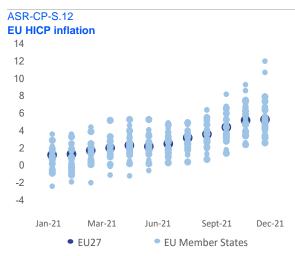
Gommission Delegated Regulation 231/2013 supplementing Directive2011/61/EU (reporting obligations of NCAs are reported in Article 24 of the Directive). The details on the reporting templates can also

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

¹⁰ In our sample NAV and AuM do not significantly differ.

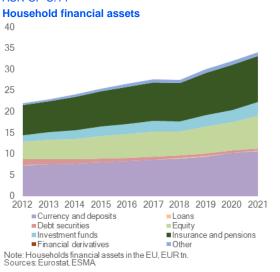
Statistics

Market environment

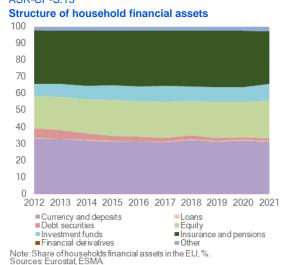


Note: EU27 HICP monthly inflation dispersion, %. Sources: Eurostat, ESMA.

ASR-CP-S.14

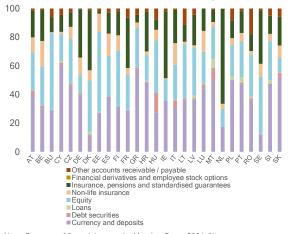


ASR-CP-S.13

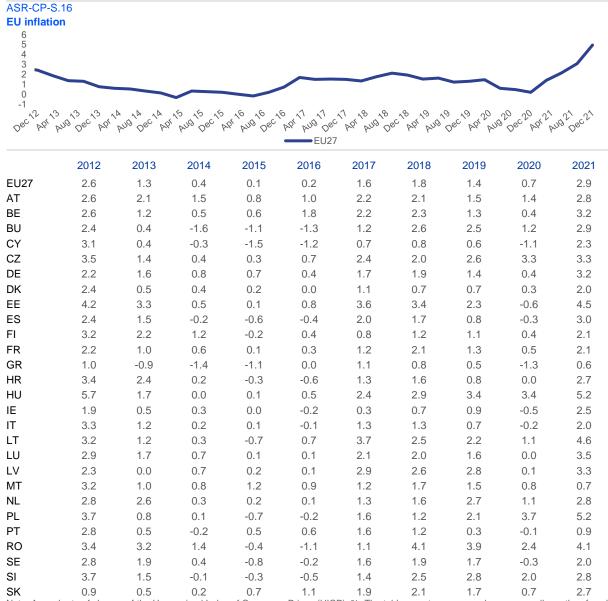


ASR-CP-S.15

Structure of household financial assets by fund domicile



Note: Structure of financial assets by Member State, 2021, %. Sources: Eurostat, ESMA.

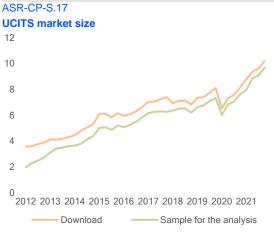


Note: Annual rate of change of the Harmonised Index of Consumer Prices (HICP), %. The table reports average values across all months of each year.

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 fees are available. Sources: Refinitiv Lipper, ESMA.

ASR-CP-S.19

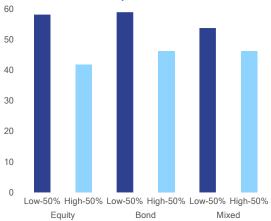
UCITS retail market size by asset class



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

ASR-CP-S.21

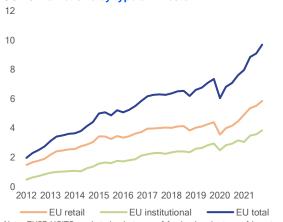
Fund assets share in top-bottom-25% TER



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

ASR-CP-S.18

UCITS market size by type of investor



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

ASR-CP-S.20

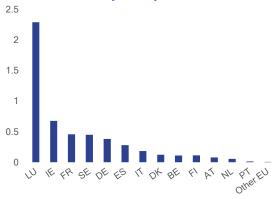
UCITS retail market by asset size - 2021



0 500 1,000 1,500 2,000 2,500 Note: EU27 UCITS universe, in terms of fund value by asset class, retail investors, 2021, EUR bn.
Sources: Refinitiv Lipper, ESMA.

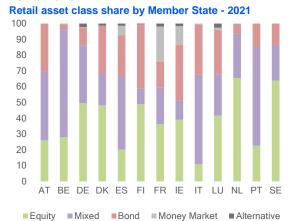
ASR-CP-S.22

UCITS retail market by country - 2021



Note: EU27 UCITS universe in terms of fund value, retail investors, 2021. All observations for which information on fund value, fund performance, netflows, subscription and redemption fees available, EUR tn. Other EU27 includes: BG, CY, CZ, EE, GR, HR, HU, LT, LV, MT, PL, SI, SK, RO. Sources: Refinitiv Lipper, ESMA.

ASR-CP-S.23



Note: EU27 UCITS share of asset classes over total national fund value per domicile, retail, 2021, %. Other EU27 not reported. Sources: Refinitiv Lipper, ESMA.

ASR-CP-S.25

Cross-border net assets by domicile

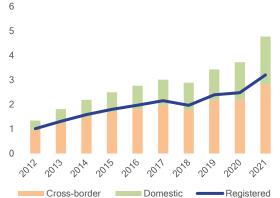


Note: EU27 UCITS cross-border fund, AuM. Cross-border UCITS are funds available for sale in at least three countries including their domicile, retail investors. Reported are selected domiciles presenting the largest number of cross-border funds in the EU27. Registered for sale refer to those UCITS that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

Sources: Morningstar Direct, Refinitiv Lipper, ESMA

ASR-CP-S.27

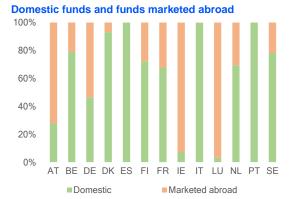
UCITS assets: cross border marketing by 3 countries



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.

ASR-CP-S.24



Note: EU27 UCITS share of net asset value, by destination (domestic and marketed abroad) per member state, 2021. 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.

ASR-CP-S.26

Cross-border number of funds by domicile

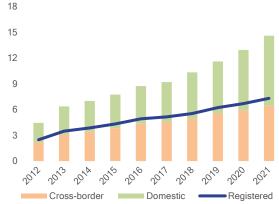


Note: Number of cross-border EU-domiciled UCITS, defined as UCITS available for sale in at least three countries including their domicile, retail investors. Reported are selected domiciles presenting the largest number of cross-border funds in the EU, thousands. Registered for sale refer to those UCITS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

Sources: Morningstar Direct, Refinitiv Lipper, ESMA.

ASR-CP-S.28

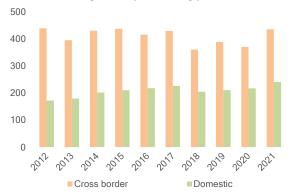
UCITS fund number: cross border marketing by 3 countries



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.

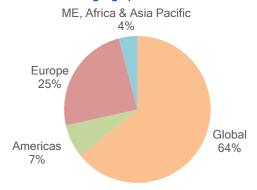
ASR-CP-S.29 EU UCITS average size by marketing profile



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.

ASR-CP-S.31

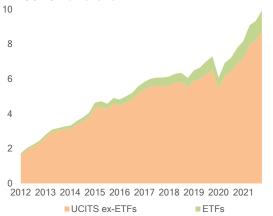
Fund investment geographical focus



Note: EU27 UCITS share of total net asset value by geographical investment focus, 2021, retail investors %. Sources: Morningstar Direct, Refinitiv Lipper, ESMA

ASR-CP-S.33

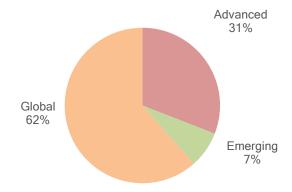
ETF UCITS market size



Note: EU27 UCITS market size in terms of fund value, distinguishing between UCITS excluding ETFs and UCITS ETFs,EUR tn. Sources: Refinitiv Lipper, ESMA

ASR-CP-S.30

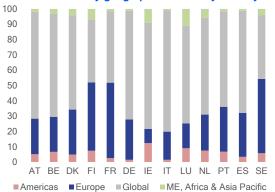
Fund investment by economic development focus



Note: EU27 UCITS share of total net asset value by investment focus based on the economic development of a country, 2021, % Sources: Morningstar Direct, Refinitiv Lipper, ESMA

ASR-CP-S.32

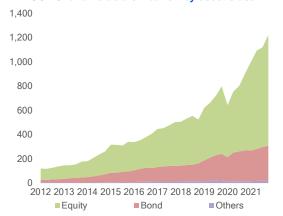
Fund investment by geographical focus by country



Note: EU27 UCITS share of total net assets across EU Member States by geographical investment focus for retail investors, 2021, %. 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.

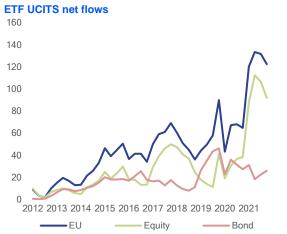
ASR-CP-S.34

ETF UCITS fund value distribution by asset class



Note: Fund value evolution of EU27 UCITS ETFs over time by asset class, in EUR bn. Sources: Refinitiv Lipper, ESMA

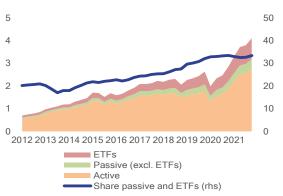
ASR-CP-S.35



Note: EU27 UCITS ETF annual net flows, EUR bn. Sources: Refinitiv Lipper, ESMA

ASR-CP-S.37

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 fees are available, EUR tn. Share of passive and ETFs in %, right-hand size. Sources: Refinitiv Lipper, ESMA.

ASR-CP-S.39

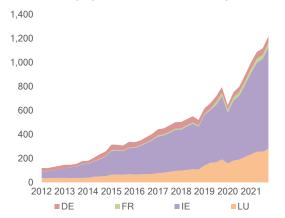
UCITS equity active and passive fund net flows



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

ASR-CP-S.36

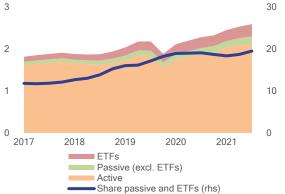
ETF UCITS equity fund value distribution by domicile



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.

ASR-CP-S.38

UCITS bond active and passive fund size



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 fees are available, EUR tn. Share of passive and ETFs in %, right-hand size. Sources: Refinitiv Lipper, ESMA.

ASR-CP-S.40

UCITS bond active and passive fund net flows



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.

ASR-CP-S.41 UCITS equity active and passive fund cumulated flows 9,000 8,000 7,000 6,000 5,000 4,000 3,000 2,000 1,000

Note:: EU27 equity UCITS by management type, active passive, and ETFs. Cumulative netflows, 2012 = 100. Sources: Refinitiv Lipper, ESMA.

ASR-CP-S.42 **UCITS** bond active and passive fund cumulated flows 1,400 1,200 1,000 800 600 400 200 0 -200 2019 2020 2021 2017 2018 Active Passive excl.ETFs -ETFs

Note:: EU27 bond UCITS by management type, active passive and ETFs. Cumulative netflows, 2017 = 100 Sources: Refinitiv Lipper, ESMA.

ASR-CP-S.43

-1,000

UCITS market share of domiciles by asset class retail investors

2012 2013 2014 2015 2016 2017 2018 2019 2020 2021

Passive (excl. ETFs)

| o or ro market | | | | | | | | |
|-----------------|-----------|------------|-----------|-----------|------------|----------|-----|------|
| | AT | BE | DE | DK | ES | FI | FR | ΙE |
| Equity | 0.8 | 1.2 | 7.5 | 2.4 | 2.2 | 2.2 | 6.6 | 10.5 |
| Mixed | 2.2 | 4.7 | 8.7 | 1.5 | 8.3 | 0.7 | 6.6 | 5.0 |
| Bond | 1.8 | 0.3 | 3.1 | 2.8 | 5.1 | 3.3 | 5.4 | 17.4 |
| | | | | | | | | |
| | | | | | | | | |
| | IT | LU | NL | PT | SE | Other EU | | |
| Equity | IT 0.8 | LU 37.8 | NL 1.4 | PT 0.1 | SE 11.4 | Other EU | | |
| Equity Mixed | | _ | | | _ | | | |
| | 0.8 | 37.8 | 1.4 | 0.1 | 11.4 | - | | |

—ETFs

Note: Share of national fund value over the total EU27 per domicile, retail investors, by asset class, 2021, %. If share less than 0.1% not reported.

Sources: Refinitiv Lipper, ESMA.

Performance and costs

ASR-CP-S.44

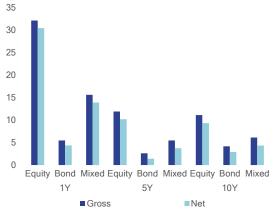
UCITS annual gross performance retail investors



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.

ASR-CP-S.46

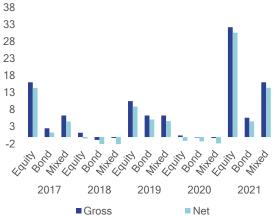
UCITS gross and net performance by investment horizon



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

ASR-CP-S.48

UCITS year-on-year gross and net performance

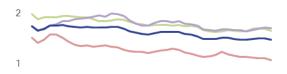


Note: EU27 UCITS annual gross and net performance, by asset class, retail investors, 1Y investment horizon, %. Sources: Refinitiv Lipper, ESMA.

ASR-CP-S.45

UCITS fund costs - retail investors

3



⁰ 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021

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

ASR-CP-S.47

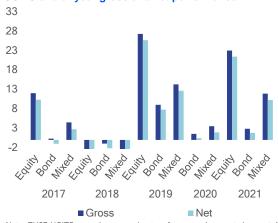
UCITS costs by investment horizon

1 Squity Bond Mixed Equity Bon

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

ASR-CP-S.49

UCITS end of-year gross and net performance



Note: EU27 UCITS annual gross and net performance, by asset class, retail investors, end of year, %. Sources: Refinitiv Lipper, ESMA.

ASR-CP-S.50 **UCITS** year-on-year costs 2 1.5 1 0.5 0 Edited (diff) 2017 2018 2019 2020 2021 FL ■ TER BL

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

Sources: Refinitiv Lipper, ESMA.

ASR-CP-S.52

Costs by largest and smallest funds



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

ASR-CP-S.54

UCITS total costs by marketing profile



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

ASR-CP-S.51 **UCITS** end of-year costs 2 1.5 1 0.5 0 Bond Edited Boug Mited 2017 2020 2018 2019 2021 FL TER BL

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

Sources: Refinitiv Lipper, ESMA.

ASR-CP-S.53

UCITS performance by marketing profile



■ Gross ■ Net

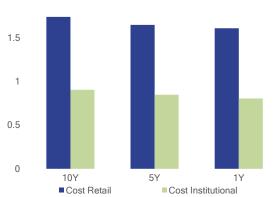
Note: EU UCITS annual gross and net performance, by marketing country and asset class, %.

Sources: Refinitiv Lipper, ESMA.

Costs by type of investor

ASR-CP-S.55

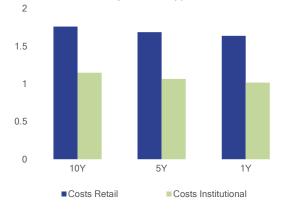
Equity UCITS costs by investor type



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

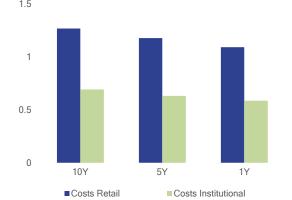
ASR-CP-S.57

Mixed UCITS costs by investor type



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

ASR-CP-S.56 Bond UCITS costs by investor type



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

Performance and costs by risk class

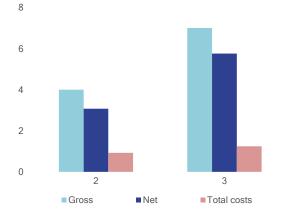
ASR-CP-S.58

UCITS value of assets by SRRI class 1,600 1,400 1,200 1,000 800 600 400 200 0 1 2 3 4 5 6 7

Note: EU27 UCITS SRRI distribution in terms of asset value by asset type, retail investors, 2021, EUR thousands. Sources: Refinitiv Lipper, ESMA.

ASR-CP-S.60

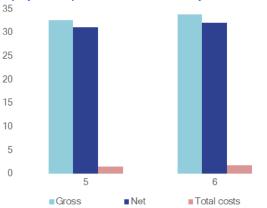
Bond UCITS performance by SRRI class



Note: EU27 UCITS equity fund shares annual gross and net returns, and total costs, retail investors, by SRRI risk class, 2021, %. Sources: Refinitiv Lipper, ESMA.

ASR-CP-S.59

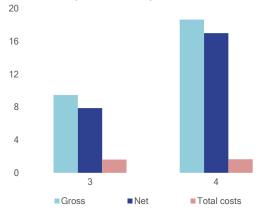
Equity UCITS performance and costs by SRRI class



Note: EU27 UCITS equity fund shares annual gross and net returns, and tota costs, retail investors, by SRRI risk class, 2021, %. Sources: Refinitiv Lipper, ESMA.

ASR-CP-S.61

Mixed UCITS performance by SRRI class



Note: EU27 UCITS equity fund shares annual gross and net returns, and total costs, retail investors, by SRRI risk class, 2021, %. Sources: Refinitiv Lipper, ESMA.

Performance and costs by management type







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

ASR-CP-S.64

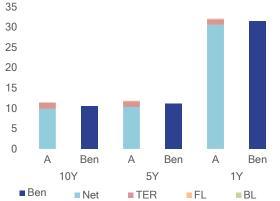
Equity UCITS performance active, passive and ETFs



Note: EU27 equity UCITS gross annual performance, classified as net performance, ongoing costs (TER), subscription (FL) and redemption (BL) fees, by management type, active (A), passive (P) and ETFs, by time horizon,

ASR-CP-S.66

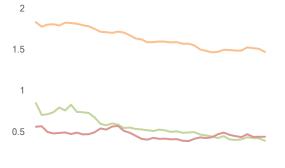
Active equity UCITS and prospectus benchmarks



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

ASR-CP-S.63

UCITS fund total costs by management type

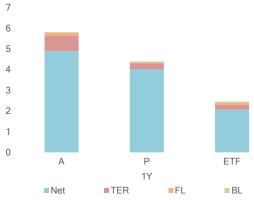


Note: EU27 UCITS equity, active passive and ETFs, evolution of total costs calculated as ongoing costs, subscription and redemption fees, %. Retail and institutional investors.

Sources: Refinitiv Lipper, ESMA.

ASR-CP-S.65

Bond UCITS performance active, passive and ETFs

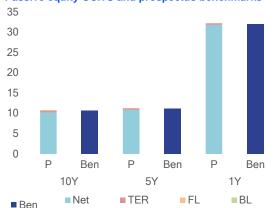


Note: EU27 bond UCITS gross annual performance, classified as net performance, ongoing costs (TER), subscription (FL) and redemption (BL) fees, by management type, active (A), passive (P) and ETFs, by time horizon, in %.

Sources: Refinitiv Lipper, ESMA.

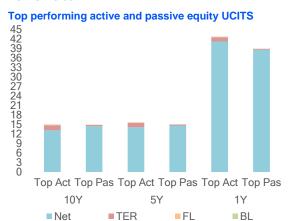
ASR-CP-S.67

Passive equity UCITS and prospectus benchmarks



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

ASR-CP-S.68



ASR-CP-S.70

Bottom performing active and passive equity UCITS

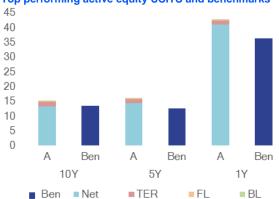


Note: EU27 UCITS equity funds annual gross performance for the bottom-25% performing active and passive funds, classified as net performance, ongoing costs (TER), subscription (FL) and redemption (BL) fees, and time horizon, in our control of the performance o

Sources: Refinitiv Lipper, ESMA.

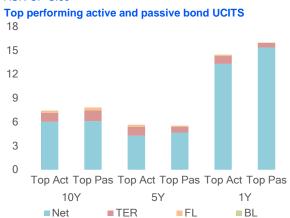
ASR-CP-S.72

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) fees, by time horizon, %. Sources: Refinitiv Lipper, ESMA.

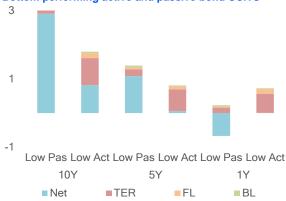
ASR-CP-S.69



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) fees, and time horizon, in %.

ASR-CP-S.71

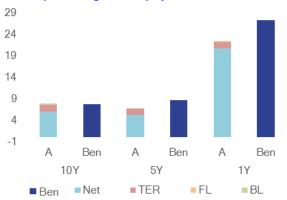
Bottom performing active and passive bond UCITS



Sources: Refinitiv Lipper, ESMA.

ASR-CP-S.73

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) fees, by time horizon, %.

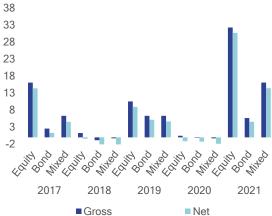
Performance and costs including inflation

ASR-CP-S.74 UCITS gross and net real performance 35 30 25 20 15 10 5 Lidiel 80rd nixed Lidiel 80rd nixed Lidiel 80rd nixed 1Y 5Y 10Y Gross Net

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

ASR-CP-S.76

UCITS year-on-year gross and net performance



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

ASR-CP-S.75

UCITS costs and impact of inflation



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

ASR-CP-S.77

UCITS end of-year costs



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

Sources: Refinitiv Lipper, ESMA.

Performance and costs by fund domicile

ASR-CP-S.78 Equity UCITS by fund domicile - 10Y 12 9 6 3 0 ΕU AT ΒE DE ES FR ΙE IT LU NL

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

FL

■TER

ASR-CP-S.80

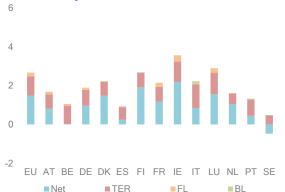
Equity UCITS by fund domicile - 1Y



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

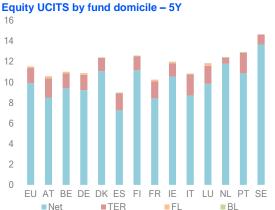
ASR-CP-S.82

Bond UCITS by fund domicile - 5Y



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

ASR-CP-S.79

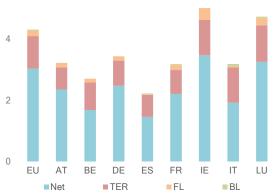


Note: EU27 UCITS equity funds gross annual performance, classified as net performance, ongoing costs (TER), subscription (FL) and redemption fees (BL), retail investors, by domicile, 5Y horizon, %. Other EU27 countries not

Sources: Refinitiv Lipper, ESMA.

ASR-CP-S.81

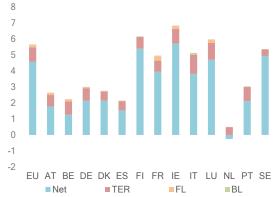
Bond UCITS by fund domicile - 10Y



Note: EU27 UCITS bond funds gross annual performance, classified as net performance, ongoing costs (TER), subscription (FL) and redemption fees (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.

ASR-CP-S.83

Bond UCITS by fund domicile - 1Y



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

Sources: Refinitiv Lipper, ESMA.

ASR-CP-S.84 Mixed UCITS by fund domicile - 10Y 8 6 2

Note: EU27 UCITS mixed funds gross annual performance, classified as net performance, ongoing costs (TER), subscription (FL) and redemption fees (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.

■TER

FI FR

FL

ΙE

LU NL

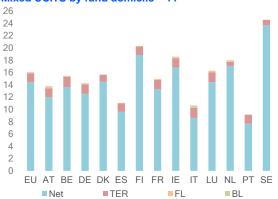
ASR-CP-S.86

■Net

0

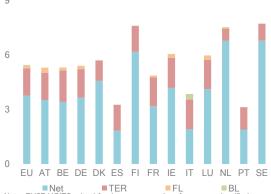
Mixed UCITS by fund domicile - 1Y

EU AT BE DE DK ES



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

ASR-CP-S.85 Mixed UCITS by fund domicile - 5Y



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

Sources: Refinitiv Lipper, ESMA.

Performance costs and inflation by fund domicile

ASR-CP-S.87

Equity UCITS by fund domicile - 10Y

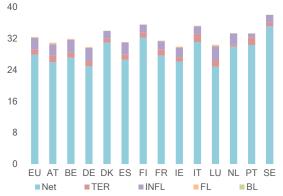
16



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

ASR-CP-S.89

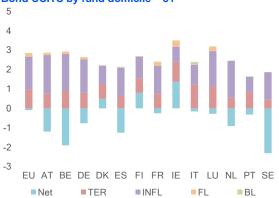
Equity UCITS by fund domicile - 1Y



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

ASR-CP-S.91

Bond UCITS by fund domicile - 5Y



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

Sources: Refinitiv Lipper, ESMA.

ASR-CP-S.88

Equity UCITS by fund domicile - 5Y

16

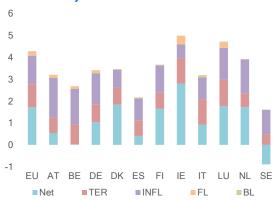


Note: EU27 UCITS equity funds gross annual performance, classified as ne performance, ongoing costs (TER), inflation (INFL), subscription (FL) an redemption fees (BL), retail investors, by domicile, 5Y horizon, %. Other EU2 countries not reported.

Sources: Refinitiv Lipper, ESMA.

ASR-CP-S.90

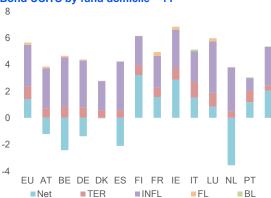
Bond UCITS by fund domicile - 10Y



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

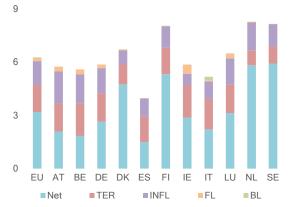
ASR-CP-S.92

Bond UCITS by fund domicile - 1Y



Note: EU27 UCITS bond funds gross annual performance, classified as ne performance, ongoing costs (TER), subscription (FL), redemption fees (Bl and inflation (INFL), retail investors, by domicile, 1Y horizon %. Other EU2 countries not reported as data not available. Sources: Refinitiv Lipper, ESMA.

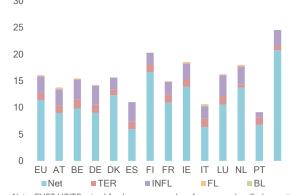
ASR-CP-S.93 Mixed UCITS by fund domicile - 10Y



Note: EU27 UCITS mixed funds ongoing costs (TER), subscription (FL), redemption fees (BL) and inflation (INFL), retail investors, by domicile, 10Y horizon %, PT and Other EU27 countries not reported. Sources: Refinitiv Lipper, ESMA.

ASR-CP-S.95

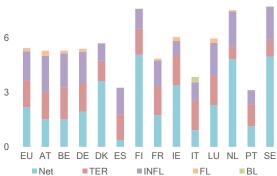
Mixed UCITS by fund domicile - 1Y



Note: EU27 UCITS mixed funds gross annual performance, classified as net performance, ongoing costs (TER), subscription (FL), redemption fees (BL) and inflation (INFL), retail investors, by domicile, 1Y horizon %. Other EU27 countries not reported.

Sources: Refinitiv Lipper, ESMA.

ASR-CP-S.94 Mixed UCITS by fund domicile - 5Y



Net TER INFL BL
Note: EU27 UCITS mixed funds gross annual performance, classified as not performance, ongoing costs (TER), subscription (FL), redemption fees (BI and inflation (INFL), retail investors, by domicile, 5Y horizon, %. Other EU2 countries not reported.
Sources: Refinitiv Lipper, ESMA.

EU UCITS cost dispersion across fund domiciles

ASR-CP-S.96

Equity UCITS cost dispersion, retail investors 2.5 2 1.5 1 0.5

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

5Y

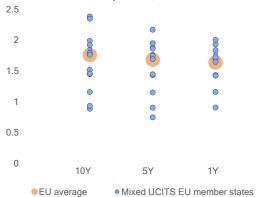
1Y

ASR-CP-S.98

0

Mixed UCITS cost dispersion, retail investors

10Y



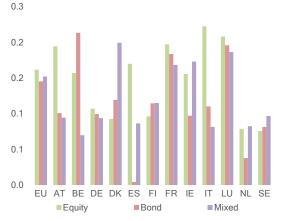
● EU average ● Mixed UCITS EU member states

Note: EU27 UCITS mixed fund, total costs computed as the sum of ongoing costs (TER), subscription and redemption fees, 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.

ASR-CP-S.100

Transaction fees by asset class



Note: Transaction fees by EU27 country and asset class, retail investors, 2021, %. Portugal and Other EU27 not included. Sources: Morningstar Direct, Refinitiv Lipper, ESMA.

ASR-CP-S.97

Bond UCITS cost dispersion, retail investors

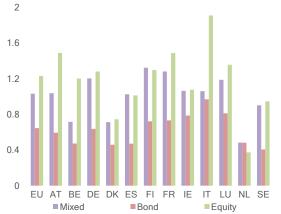
Note: EU27 UCITS bond fund, total costs computed as the sum of ongoing costs (TER), subscription and redemption fees, retail investors, %. Data not available for DK, PT, SE at 10Y. Other EU27 countries not reported. Sources: Refinitiv Lipper, ESMA.

Bond UCITS EU member states

ASR-CP-S.99

EUaverage

Management fees by asset class



Note: Management fees by EU27 country and asset class, retail investors, 2021, %. Other EU27 not included. Sources: Refinitiv Lipper, ESMA.

Performance and costs by investor domicile

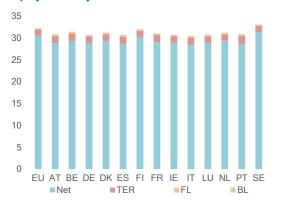
ASR-CP-S.101 Equity UCITS by investor domicile - 10Y 10 8 6 4 2 0 EU AT BE DE DK ES FI FR IE IT LU NL PT SE ■TER FL

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

Sources: Refinitiv Lipper, ESMA.

ASR-CP-S.103

Equity UCITS by investor domicile - 1Y



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

ASR-CP-S 105

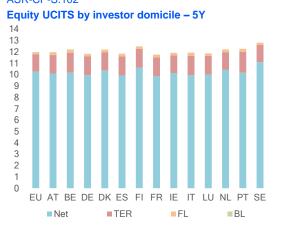
4

Bond UCITS by investor domicile - 5Y



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

ASR-CP-S.102



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

Sources: Refinitiv Lipper, ESMA.

ASR-CP-S.104

Bond UCITS by investor domicile - 10Y

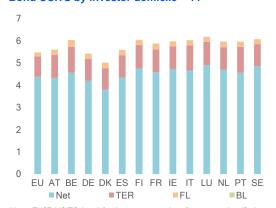


Note: EU27 UCITS bond funds gross annual performance, classified as net performance, ongoing costs (TER), subscription (FL) and redemption fees (BL), retail investors, by marketed country, 10Y horizon %. Other EU27 countries not reported.

Sources: Refinitiv Lipper, ESMA.

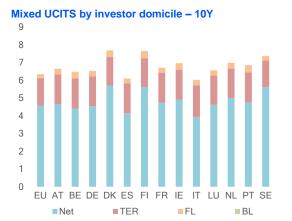
ASR-CP-S.106

Bond UCITS by investor domicile - 1Y



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

ASR-CP-S.107

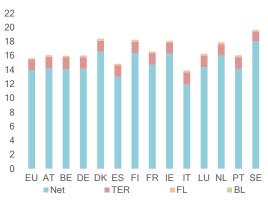


Note: EU27 UCITS mixed funds gross annual performance, classified as net performance, ongoing costs (TER), subscription (FL) and redemption fees (BL), retail investors, by marketed country, 10Y horizon %. Other EU27 countries not reported.

Sources: Refinitiv Lipper, ESMA.

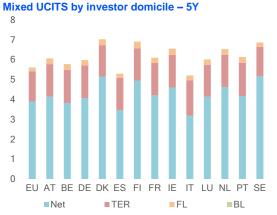
ASR-CP-S.109

Mixed UCITS by investor domicile - 1Y



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

ASR-CP-S.108



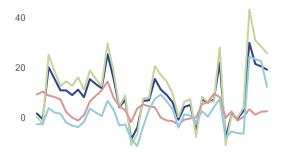
Note: EU27 UCITS mixed funds gross annual performance, classified as ne performance, ongoing costs (TER), subscription (FL) and redemption fees (BL), retail investors, by marketed country, 5Y horizon %. Other EU27 countries not reported. Sources: Refinitiv Lipper, ESMA.

ETF UCITS performance and costs

ASR-CP-S.110

Gross performance over time

EU average —



⁻²⁰ 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021

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

—Equity —

Bond —

ASR-CP-S.112

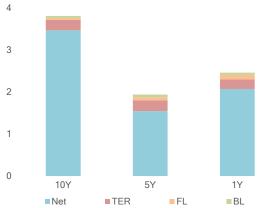
ETF Equity UCITS performance by time horizon



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

ASR-CP-S.114

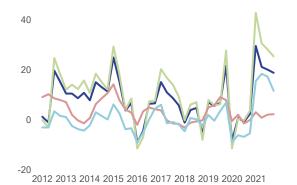
Bond ETF UCITS performance by time horizon



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

ASR-CP-S.111

Net performance over time



EU average Equity Bond Other

Note: EU UCITS ETFs universe, net annual performance by asset class, %

Other includes Mixed, Alternative and Money Market strategies.

Sources: Refinitiv Lipper, ESMA

ASR-CP-S.113

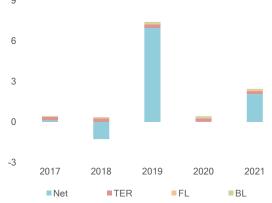
ETF Equity UCITS performance year-on-year



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

ASR-CP-S.115

Bond ETF UCITS performance year-on-year



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

ASR-CP-S.116

Equity ETF UCITS performance by domicile



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

Sources: Refinitiv Lipper, ESMA.

ASR-CP-S.117

Equity ETF UCITS costs by domicile



Note: EU27 UCITS ETFs equity funds total costs, classified as, ongoing costs (TER), subscription (FL) and redemption (BL) fees, by domicile and time horizon, in %. The rest of EU27 countries not reported as domiciles not significant.

Sources: Refinitiv Lipper, ESMA.

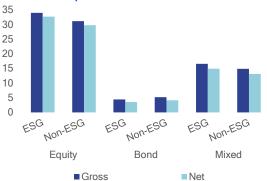
ESG UCITS performance and costs

ASR-CP-S.118 **ESG UCITS market size** 1,000 18% 800 17% 600 16% 400 15% 200 0 14% Q1 Q2 Q3 Q4 Equity Bond Mixed Share of ESG funds

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.

ASR-CP-S.120

Gross and net performance of ESG and non-ESG funds

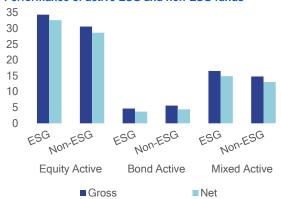


Note: EU27 UCITS fund shares gross and net annual performance in 2021 by asset and ESG or non-ESG fund type, one year investment horizon, retail investors in %

Sources: Refinitiv Lipper, Morningstar Direct, ESMA

ASR-CP-S.122

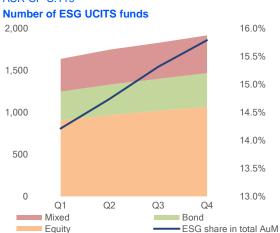
Performance of active ESG and non-ESG funds



Note: EU27 UCITS actively managed fund shares gross and net annual performance in 2021 by asset and ESG or non-ESG fund type, one year investment horizon, retail investors, in %.

Sources: Refinitiv Lipper, Morningstar Direct, ESMA.

ASR-CP-S.119



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

ASR-CP-S.121

Total costs of ESG and non-ESG funds



Note: EU UCITS annual total costs in 2021, classified as ongoing costs (TER), subscription (FL) and redemption (BL) fees, by asset and ESG or non-ESG fund type, one year investment horizon, retail investors, %. Sources: Refinitiv Lipper, Morningstar Direct, ESMA.

ASR-CP-S.123

Total costs of active ESG and non-ESG funds



Note: EU27 UCITS actively managed fund shares annual total costs in 2021, classified as ongoing costs (TER), subscription (FL) and redemption (BL) fees, by asset and ESG or non-ESG fund type, one year investment horizon, retail investors, %.

Sources: Refinitiv Lipper, Morningstar Direct, ESMA.

ASR-CP-S.124

Performance of passive equity ESG and non-ESG funds 35 30 25 20 15 10 5 0 Eguity Passive Equity ETFs

Note: EU27 UCITS passively managed (excluding ETFs) and ETFs equity fund shares gross and net annual performance in 2021 by asset and ESG or non-ESG fund type, one year investment horizon, retail investors, in %. Sources: Refinitiv Lipper, Morningstar Direct, ESMA.

■ Net

■ Gross

ASR-CP-S.125

Total costs of passive equity ESG and non-ESG funds



Note: EU27 UCITS passively managed (excluding ETFs) and ETFs equity fund shares annual total costs in 2021, classified as ongoing costs (TER), subscription (FL) and redemption (BL) fees, by asset and ESG or non-ESG fund type, one year investment horizon, retail investors, %. Sources: Refinitiv Lipper, Morningstar Direct, ESMA.

Gross and net performance by asset class and domicile

ASR-CP-S.126

| Equity LICITS - groce and not | performance and costs by co | untry for different investment horizons |
|-------------------------------|------------------------------|---|
| Equity Oction gross and net | periorinance and costs by co | unitry for unferent investment nonzons |

| | , | | 401/ | | | | | | | |
|----|-------|-------|------|------|------|-------|-------|---------|------|------|
| | 0 | N1=4 | 10Y | - | DI | 0 | NI-4 | 5Y | | DI |
| | Gross | Net | TER | FL | BL | Gross | Net | TER | FL | BL |
| AT | 9.97 | 7.85 | 1.92 | 0.19 | 0.00 | 10.58 | 8.50 | 1.86 | 0.22 | 0.00 |
| BE | 11.28 | 9.64 | 1.49 | 0.14 | | 11.01 | 9.41 | 1.43 | 0.17 | |
| DE | 11.49 | 9.85 | 1.49 | 0.14 | 0.00 | 10.87 | 9.22 | 1.49 | 0.15 | 0.00 |
| DK | 12.43 | 11.00 | 1.41 | 0.02 | 0.02 | 12.41 | 11.07 | 1.30 | 0.02 | 0.02 |
| ES | 9.04 | 7.15 | 1.81 | 0.00 | 0.07 | 8.99 | 7.25 | 1.67 | 0.00 | 0.07 |
| FI | 11.67 | 10.16 | 1.49 | 0.02 | 0.05 | 12.59 | 11.16 | 1.38 | 0.02 | 0.04 |
| FR | 10.17 | 8.29 | 1.73 | 0.13 | 0.02 | 10.25 | 8.42 | 1.66 | 0.16 | 0.02 |
| ΙE | 11.12 | 9.59 | 1.36 | 0.14 | 0.03 | 12.00 | 10.56 | 1.27 | 0.13 | 0.03 |
| IT | 10.04 | 7.90 | 2.09 | 0.03 | 0.01 | 10.84 | 8.71 | 2.06 | 0.05 | 0.02 |
| LU | 10.74 | 8.65 | 1.81 | 0.24 | 0.03 | 11.85 | 9.85 | 1.73 | 0.24 | 0.03 |
| NL | 11.87 | 10.99 | 0.83 | 0.00 | 0.04 | 12.44 | 11.80 | 0.57 | 0.00 | 0.07 |
| PT | | | | | | 12.94 | 10.85 | 2.00 | 0.00 | 0.08 |
| SE | 13.15 | 12.08 | 1.06 | 0.01 | 0.00 | 14.64 | 13.66 | 0.97 | 0.01 | 0.00 |
| EU | 11.11 | 9.31 | 1.61 | 0.16 | 0.03 | 11.89 | 10.18 | 1.52 | 0.16 | 0.03 |
| | | | 1Y | | | | | | | |
| | Gross | Net | TER | FL | BL | | | | | |
| AT | 31.11 | 28.93 | 1.81 | 0.36 | 0.00 | | | | | |
| BE | 32.41 | 30.82 | 1.36 | 0.24 | | | | | | |
| DE | 30.09 | 28.42 | 1.50 | 0.17 | 0.00 | | | | | |
| DK | 34.15 | 33.10 | 1.02 | 0.01 | 0.02 | | | | | |
| ES | 31.71 | 30.24 | 1.43 | 0.00 | 0.04 | | | | | |
| FI | 35.65 | 34.34 | 1.26 | 0.01 | 0.03 | | | | | |
| FR | 31.75 | 29.97 | 1.63 | 0.13 | 0.01 | | | | | |
| ΙE | 30.39 | 28.99 | 1.19 | 0.18 | 0.03 | | | | | |
| IT | 35.56 | 33.41 | 2.05 | 0.07 | 0.04 | | | | | |
| LU | 30.79 | 28.70 | 1.69 | 0.38 | 0.02 | | | | | |
| NL | 33.80 | 33.19 | 0.55 | 0.01 | 0.06 | | | | | |
| PT | 33.29 | 31.24 | 1.98 | 0.00 | 0.07 | | | | | |
| SE | 38.88 | 37.98 | 0.90 | 0.00 | 0.00 | | | | | |
| EU | 32.13 | 30.44 | 1.44 | 0.22 | 0.02 | | | | | |
| | 52.10 | | | 0.22 | 0.02 | | | (=1) | | |

Note: EU27 UCITS equity fund shares' annual gross and net performances, ongoing costs (TER), subscription (FL) and redemption (BL) fees, by time horizon and country, %. For BE, BL not considered. PT at 10Y and Other EU countries not reported. This table includes updated figures compared to the initial publication.

Sources: Refinitiv Lipper, ESMA.

ASR-CP-S.127

| Cross Not TED EL DI Cross Not TED E | |
|---|---------|
| Gross Net TER FL BL Gross Net TER F | L BL |
| AT 3.22 2.35 0.72 0.14 0.00 1.67 0.81 0.75 0. | 12 0.00 |
| BE 2.70 1.68 0.90 0.12 0.00 1.06 0.02 0.92 0. | 11 0.00 |
| DE 3.43 2.47 0.82 0.13 0.00 1.89 0.97 0.81 0. | 11 0.00 |
| DK 3.46 2.65 0.77 0.02 0.02 2.23 1.47 0.72 0. | 0.03 |
| ES 2.22 1.46 0.72 0.03 0.02 0.94 0.24 0.65 0. | 0.03 |
| FI 3.64 2.88 0.72 0.01 0.02 2.69 1.91 0.75 0. | 0.02 |
| FR 3.18 2.20 0.78 0.16 0.03 2.15 1.18 0.75 0. | 19 0.02 |
| IE 5.02 3.47 1.16 0.38 0.02 3.56 2.19 1.04 0. | 31 0.02 |
| IT 3.19 1.92 1.16 0.04 0.07 2.22 0.84 1.22 0. | 0.12 |
| LU 4.73 3.25 1.20 0.24 0.04 2.90 1.56 1.10 0. | 21 0.03 |
| NL 3.95 3.33 0.62 0.00 0.00 1.60 1.05 0.55 0. | 0.00 |
| PT 1.33 0.44 0.85 0. | 0.04 |
| SE 0.87 0.38 0.49 0.00 0.00 -0.01 -0.48 0.47 0. | 0.00 |
| | 17 0.03 |
| 1Y | |
| Gross Net TER FL BL | |
| AT 2.63 1.78 0.72 0.14 0.00 | |
| BE 2.23 1.27 0.83 0.13 | |
| DE 3.00 2.13 0.79 0.07 0.00 | |
| DK 2.76 2.15 0.58 0.01 0.02 | |
| ES 2.15 1.53 0.59 0.03 0.01 | |
| FI 6.16 5.39 0.75 0.01 0.01 | |
| FR 4.95 3.95 0.71 0.26 0.04 | |
| IE 6.84 5.71 0.92 0.21 0.01 | |
| IT 5.13 3.82 1.19 0.01 0.11 | |
| LU 5.98 4.70 1.05 0.20 0.03 | |
| NL 0.23 -0.25 0.48 0.00 0.00 | |
| PT 3.04 2.11 0.88 0.00 0.05 | |
| SE 5.35 4.94 0.41 0.00 0.00 | |
| EU 5.48 4.38 0.92 0.16 0.03 | (D1) (|

Note: EU27 UCITS bond fund shares' annual gross and net performances, ongoing costs (TER), subscription (FL) and redemption (BL) fees, by time horizon and country, %. For BE, BL not considered. PT not reported at 10Y. Other EU countries not reported. This table includes updated figures compared to the initial publication.

Sources: Refinitiv Lipper, ESMA.

ASR-CP-S.128

Mixed UCITS - gross and net performance and costs by country for different investment horizons

| mixed | 3.0. | oo ama mot j | 501101111a110 | o ana ooon | by country | y ioi amoroi | | | • | |
|-------|---------------|--------------|---------------|------------|------------|--------------|-------|-------|-------|--------|
| | | | 10Y | | | | | 5Y | | |
| | Gross | Net | TER | FL | BL | Gross | Net | TER | FL | BL |
| AT | 5.74 | 3.89 | 1.59 | 0.27 | 0.00 | 5.30 | 3.52 | 1.50 | 0.27 | 0.00 |
| BE | 5.59 | 3.48 | 1.83 | 0.29 | | 5.31 | 3.42 | 1.74 | 0.15 | |
| DE | 5.86 | 4.06 | 1.60 | 0.20 | 0.00 | 5.40 | 3.66 | 1.58 | 0.17 | 0.00 |
| DK | 6.72 | 5.56 | 1.11 | 0.04 | 0.01 | 5.73 | 4.58 | 1.12 | 0.03 | 0.01 |
| ES | 3.96 | 2.51 | 1.44 | 0.01 | 0.00 | 3.27 | 1.84 | 1.41 | 0.02 | 0.00 |
| FI | 8.06 | 6.54 | 1.49 | 0.02 | 0.01 | 7.62 | 6.18 | 1.43 | 0.01 | 0.01 |
| FR | 5.67 | 3.91 | 1.64 | 0.12 | 0.00 | 4.87 | 3.18 | 1.58 | 0.11 | 0.01 |
| IE | 5.87 | 3.52 | 1.83 | 0.50 | 0.02 | 6.07 | 4.19 | 1.65 | 0.20 | 0.03 |
| IT | 5.17 | 3.18 | 1.73 | 0.06 | 0.19 | 3.86 | 1.91 | 1.64 | 0.04 | 0.27 |
| LU | 6.50 | 4.58 | 1.63 | 0.27 | 0.02 | 5.99 | 4.12 | 1.61 | 0.23 | 0.02 |
| NL | 8.28 | 7.39 | 0.84 | 0.03 | 0.01 | 7.54 | 6.79 | 0.68 | 0.06 | 0.01 |
| PT | | | | | | 3.13 | 1.90 | 1.23 | 0.00 | 0.00 |
| SE | 8.15 | 7.19 | 0.96 | 0.00 | 0.00 | 7.73 | 6.79 | 0.94 | 0.00 | 0.00 |
| EU | 6.13 | 4.33 | 1.57 | 0.19 | 0.04 | 5.48 | 3.74 | 1.53 | 0.15 | 0.05 |
| | | | 1Y | | | | | | | |
| | Gross | Net | TER | FL | BL | | | | | |
| AT | 13.76 | 11.99 | 1.43 | 0.34 | 0.00 | | | | | |
| BE | 15.46 | 13.62 | 1.67 | 0.17 | | | | | | |
| DE | 14.23 | 12.53 | 1.53 | 0.16 | 0.00 | | | | | |
| DK | 15.67 | 14.51 | 1.12 | 0.02 | 0.02 | | | | | |
| ES | 11.04 | 9.61 | 1.40 | 0.03 | 0.00 | | | | | |
| FI | 20.28 | 18.85 | 1.41 | 0.01 | 0.00 | | | | | |
| FR | 14.94 | 13.29 | 1.53 | 0.11 | 0.01 | | | | | |
| IE | 18.56 | 16.84 | 1.44 | 0.25 | 0.03 | | | | | |
| IT | 10.63 | 8.62 | 1.65 | 0.03 | 0.33 | | | | | |
| LU | 16.29 | 14.45 | 1.59 | 0.23 | 0.02 | | | | | |
| NL | 17.98 | 17.08 | 0.63 | 0.28 | 0.00 | | | | | |
| PT | 9.14 | 7.68 | 1.46 | 0.00 | 0.00 | | | | | |
| SE | 24.57 | 23.67 | 0.90 | 0.00 | 0.00 | | | | | |
| EU | 15.60 | 13.90 | 1.50 | 0.16 | 0.05 | | | | | |
| AL C | LIOZ LIOITO : | 16 1 1 | | | , | | (TED) | /=! \ | 1 1 2 | (DI) (|

Note: EU27 UCITS mixed fund shares' annual gross and net performances, ongoing costs (TER), subscription (FL) and redemption (BL) fees, by time horizon and country, %. For BE, BL not considered. PT at 10Y. Other EU countries not reported. This table includes updated figures compared to the initial publication.

Sources: Refinitiv Lipper, ESMA.

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

ASR-CP-S.129

Equity UCITS - gross and net real performance and costs by country for different investment horizons

| - | , | | 10 | Υ | | | | | 5` | Υ | | |
|----|-------|-------|------|------|------|------|-------|-------|-------------|------|------|------|
| | Gross | Net | TER | INFL | FL | BL | Gross | Net | TER | INFL | FL | BL |
| AT | 9.98 | 6.07 | 1.92 | 1.79 | 0.19 | 0.00 | 10.59 | 6.53 | 1.86 | 2.00 | 0.22 | 0.00 |
| BE | 11.29 | 8.00 | 1.49 | 1.62 | 0.14 | | 11.02 | 7.54 | 1.43 | 1.89 | 0.17 | |
| DE | 11.50 | 8.45 | 1.49 | 1.42 | 0.14 | 0.00 | 10.87 | 7.55 | 1.49 | 1.72 | 0.15 | 0.00 |
| DK | 12.47 | 10.21 | 1.41 | 0.83 | 0.02 | 0.02 | 12.43 | 10.15 | 1.30 | 0.96 | 0.02 | 0.02 |
| ES | 9.05 | 6.17 | 1.81 | 1.00 | 0.00 | 0.07 | 9.01 | 5.87 | 1.67 | 1.44 | 0.00 | 0.07 |
| FI | 11.73 | 8.94 | 1.49 | 1.24 | 0.02 | 0.05 | 12.61 | 10.07 | 1.38 | 1.12 | 0.02 | 0.04 |
| FR | 10.18 | 7.16 | 1.73 | 1.14 | 0.13 | 0.02 | 10.27 | 7.00 | 1.66 | 1.44 | 0.16 | 0.02 |
| ΙE | 11.13 | 8.94 | 1.36 | 0.63 | 0.14 | 0.03 | 12.01 | 9.76 | 1.27 | 0.77 | 0.13 | 0.03 |
| IT | 10.05 | 6.94 | 2.09 | 0.99 | 0.03 | 0.01 | 10.86 | 7.78 | 2.06 | 1.01 | 0.05 | 0.02 |
| LU | 10.75 | 7.21 | 1.81 | 1.47 | 0.24 | 0.03 | 11.86 | 8.06 | 1.73 | 1.85 | 0.24 | 0.03 |
| NL | 11.87 | 9.44 | 0.83 | 1.56 | 0.00 | 0.04 | 12.45 | 9.89 | 0.57 | 1.91 | 0.00 | 0.07 |
| PT | | | | 0.80 | | | 12.95 | 10.11 | 2.00 | 0.77 | 0.00 | 0.08 |
| SE | 13.16 | 10.82 | 1.06 | 1.12 | 0.01 | 0.00 | 14.65 | 11.84 | 0.97 | 1.40 | 0.01 | 0.00 |
| EU | 11.12 | 8.05 | 1.61 | 1.30 | 0.16 | 0.03 | 11.90 | 8.62 | 1.52 | 1.67 | 0.16 | 0.03 |
| | | | 1 | - | | | | | | | | |
| | Gross | Net | TER | INFL | FL | BL | | | | | | |
| ΑT | 31.11 | 25.92 | 1.81 | 2.77 | 0.36 | 0.00 | | | | | | |
| BE | 32.42 | 27.07 | 1.36 | 3.23 | 0.24 | 0.00 | | | | | | |
| DE | 30.09 | 24.87 | 1.50 | 3.23 | 0.17 | 0.00 | | | | | | |
| DK | 34.15 | 30.89 | 1.02 | 1.95 | 0.01 | 0.02 | | | | | | |
| ES | 31.72 | 26.53 | 1.43 | 3.01 | 0.00 | 0.04 | | | | | | |
| FI | 35.65 | 32.15 | 1.26 | 2.08 | 0.01 | 0.03 | | | | | | |
| FR | 31.75 | 27.57 | 1.63 | 2.08 | 0.13 | 0.01 | | | | | | |
| ΙE | 30.39 | 26.03 | 1.19 | 2.45 | 0.18 | 0.03 | | | | | | |
| IT | 35.56 | 31.08 | 2.05 | 1.96 | 0.07 | 0.04 | | | | | | |
| LU | 30.80 | 24.79 | 1.69 | 3.47 | 0.38 | 0.02 | | | | | | |
| NL | 33.80 | 29.86 | 0.55 | 2.83 | 0.01 | 0.06 | | | | | | |
| PT | 33.29 | 30.30 | 1.98 | 0.94 | 0.00 | 0.07 | | | | | | |
| SE | 38.88 | 35.05 | 0.90 | 2.04 | 0.00 | 0.00 | | | | | | |
| EU | 32.13 | 27.09 | 1.44 | 2.91 | 0.22 | 0.02 | | | ED) . (1 .) | (1) | | |

Note: EU27 UCITS equity fund shares' annual gross and net performances, ongoing costs (TER), inflation (INFL), subscription (FL) and redemption (BL) fees, by time horizon and country, %. For BE, BL not considered. PT at 10Y and Other EU countries not reported. This table includes updated figures compared to the initial publication. Sources: Refinitiv Lipper, ESMA.

ASR-CP-S.130

Bond UCITS - gross and net real performances and costs by country for different investment horizons

| | | | 10 | Υ | | | | | Ę | 5Y | | |
|----|-------|-------|------|------|------|------|-------|-------|------------|---------|------|------|
| | Gross | Net | TER | INFL | FL | BL | Gross | Net | TER | INFL | FL | BL |
| AT | 3.22 | 0.55 | 0.72 | 1.79 | 0.14 | 0.00 | 1.67 | -1.20 | 0.75 | 2.00 | 0.12 | 0.00 |
| BE | 2.70 | 0.04 | 0.90 | 1.62 | 0.12 | | 1.06 | -1.90 | 0.92 | 1.89 | 0.11 | |
| DE | 3.43 | 1.04 | 0.82 | 1.42 | 0.13 | 0.00 | 1.89 | -0.77 | 0.81 | 1.72 | 0.11 | 0.00 |
| DK | 3.46 | 1.84 | 0.77 | 0.83 | 0.02 | 0.02 | 2.23 | 0.51 | 0.72 | 0.96 | 0.01 | 0.03 |
| ES | 2.22 | 0.41 | 0.72 | 1.00 | 0.03 | 0.02 | 0.94 | -1.26 | 0.65 | 1.44 | 0.02 | 0.03 |
| FI | 3.64 | 1.67 | 0.72 | 1.24 | 0.01 | 0.02 | 2.69 | 0.80 | 0.75 | 1.12 | 0.01 | 0.02 |
| FR | 3.18 | 1.06 | 0.78 | 1.14 | 0.16 | 0.03 | 2.15 | -0.26 | 0.75 | 1.44 | 0.19 | 0.02 |
| ΙE | 5.02 | 2.81 | 1.16 | 0.63 | 0.38 | 0.02 | 3.57 | 1.37 | 1.04 | 0.77 | 0.31 | 0.02 |
| IT | 3.19 | 0.94 | 1.16 | 0.99 | 0.04 | 0.07 | 2.22 | -0.16 | 1.22 | 1.01 | 0.03 | 0.12 |
| LU | 4.73 | 1.78 | 1.20 | 1.47 | 0.24 | 0.04 | 2.90 | -0.28 | 1.10 | 1.85 | 0.21 | 0.03 |
| NL | 3.95 | 1.74 | 0.62 | 1.56 | 0.00 | 0.00 | 1.60 | -0.92 | 0.55 | 1.91 | 0.00 | 0.00 |
| PT | | | | 0.80 | | | 1.33 | -0.33 | 0.85 | 0.77 | 0.00 | 0.04 |
| SE | 0.87 | -0.89 | 0.49 | 1.12 | 0.00 | 0.00 | -0.01 | -2.31 | 0.47 | 1.40 | 0.00 | 0.00 |
| EU | 4.16 | 1.60 | 1.05 | 1.30 | 0.20 | 0.03 | 2.61 | -0.15 | 0.99 | 1.67 | 0.17 | 0.03 |
| | _ | | 1 | - | | | | | | | | |
| | Gross | Net | TER | INFL | FL | BL | | | | | | |
| AT | 2.63 | -1.21 | 0.72 | 2.77 | 0.14 | 0.00 | | | | | | |
| BE | 2.23 | -2.43 | 0.83 | 3.23 | 0.13 | 0.00 | | | | | | |
| DE | 3.00 | -1.38 | 0.79 | 3.23 | 0.07 | 0.00 | | | | | | |
| DK | 2.76 | -0.03 | 0.58 | 1.95 | 0.01 | 0.02 | | | | | | |
| ES | 2.15 | -2.10 | 0.59 | 3.01 | 0.03 | 0.01 | | | | | | |
| FI | 6.16 | 3.22 | 0.75 | 2.08 | 0.01 | 0.01 | | | | | | |
| FR | 4.95 | 1.57 | 0.71 | 2.08 | 0.26 | 0.04 | | | | | | |
| IE | 6.84 | 2.86 | 0.92 | 2.45 | 0.21 | 0.01 | | | | | | |
| IT | 5.13 | 1.52 | 1.19 | 1.96 | 0.01 | 0.11 | | | | | | |
| LU | 5.98 | 0.84 | 1.05 | 3.47 | 0.20 | 0.03 | | | | | | |
| NL | 0.23 | -3.55 | 0.48 | 2.83 | 0.00 | 0.00 | | | | | | |
| PT | 3.04 | 1.18 | 0.88 | 0.94 | 0.00 | 0.05 | | | | | | |
| SE | 5.35 | 2.04 | 0.41 | 2.04 | 0.00 | 0.00 | | | | | | |
| EU | 5.48 | 1.05 | 2.91 | 0.92 | 0.16 | 0.03 | | . (= | -D/ : 0 :: | (1) (5) | | (=1) |

Note: EU27 UCITS bond fund shares' annual gross and net performances, ongoing costs (TER), inflation (INFL), subscription (FL) and redemption (BL) fees, by time horizon and country, %. For BE, BL not considered. PT not reported at 10Y. Other EU countries not reported. This table includes updated figures compared to the initial publication.

Sources: Refinitiv Lipper, ESMA.

ASR-CP-S.131

Mixed UCITS - gross and net real performance and costs by country for different investment horizons

| Tex Section Section | BL 0.00 0.00 0.01 0.00 0.01 |
|---|--|
| AT 5.74 2.09 1.59 1.79 0.27 0.00 5.30 1.53 1.50 2.00 0.27 BE 5.59 1.84 1.83 1.62 0.29 5.32 1.53 1.74 1.89 0.15 DE 5.86 2.65 1.60 1.42 0.20 0.00 5.41 1.95 1.58 1.72 0.17 DK 6.72 4.75 1.11 0.83 0.04 0.01 5.73 3.63 1.12 0.96 0.03 ES 3.96 1.49 1.44 1.00 0.01 0.00 3.27 0.38 1.41 1.44 0.02 FI 8.06 5.32 1.49 1.24 0.02 0.01 7.63 5.08 1.43 1.12 0.01 FR 5.68 2.78 1.64 1.14 0.12 0.00 4.88 1.75 1.58 1.44 0.11 IE 5.87 2.88 1.83 0.63 0.50 0.02 6.07 3.39 1.65 0.77 0.20 IT 5.17 2.21 1.73 0.99 0.06 0.19 3.86 0.92 1.64 1.01 0.04 LU 6.50 3.13 1.63 1.47 0.27 0.02 5.99 2.31 1.61 1.85 0.23 NL 8.28 5.82 0.84 1.56 0.03 0.01 7.54 4.85 0.68 1.91 0.06 PT 0.80 3.15 1.57 1.30 0.19 0.04 5.48 2.14 1.53 1.67 0.15 EU 6.13 3.05 1.57 1.30 0.19 0.04 5.48 2.14 1.53 1.67 0.15 | 0.00 0.00 0.01 0.00 0.01 |
| BE 5.59 1.84 1.83 1.62 0.29 5.32 1.53 1.74 1.89 0.15 DE 5.86 2.65 1.60 1.42 0.20 0.00 5.41 1.95 1.58 1.72 0.17 DK 6.72 4.75 1.11 0.83 0.04 0.01 5.73 3.63 1.12 0.96 0.03 ES 3.96 1.49 1.44 1.00 0.01 0.00 3.27 0.38 1.41 1.44 0.02 FI 8.06 5.32 1.49 1.24 0.02 0.01 7.63 5.08 1.43 1.12 0.01 FR 5.68 2.78 1.64 1.14 0.12 0.00 4.88 1.75 1.58 1.44 0.11 IE 5.87 2.88 1.83 0.63 0.50 0.02 6.07 3.39 1.65 0.77 0.20 IT 5.17 2.21 1.73 0.99 0.06 0.19 3.86 0.92 1.64 1.01 0.04 LU 6.50 3.13 1.63 1.47 0.27 0.02 5.99 2.31 1.61 1.85 0.23 NL 8.28 5.82 0.84 1.56 0.03 0.01 7.54 4.85 0.68 1.91 0.06 PT 0.80 3.13 1.13 1.23 0.77 0.00 SE 8.15 5.92 0.96 1.12 0.00 0.00 7.74 4.98 0.94 1.40 0.00 EU 6.13 3.05 1.57 1.30 0.19 0.04 5.48 2.14 1.53 1.67 0.15 | 0.00 0.01 0.00 0.01 |
| DE 5.86 2.65 1.60 1.42 0.20 0.00 5.41 1.95 1.58 1.72 0.17 DK 6.72 4.75 1.11 0.83 0.04 0.01 5.73 3.63 1.12 0.96 0.03 ES 3.96 1.49 1.44 1.00 0.01 0.00 3.27 0.38 1.41 1.44 0.02 FI 8.06 5.32 1.49 1.24 0.02 0.01 7.63 5.08 1.43 1.12 0.01 FR 5.68 2.78 1.64 1.14 0.12 0.00 4.88 1.75 1.58 1.44 0.11 IE 5.87 2.88 1.83 0.63 0.50 0.02 6.07 3.39 1.65 0.77 0.20 IT 5.17 2.21 1.73 0.99 0.06 0.19 3.86 0.92 1.64 1.01 0.04 LU 6.50 3.13 1.63 1.47 0.27 0.02 5.99 2.31 1.61 1.85 0.23 NL 8.28 5.82 0.84 1.56 0.03 0.01 7.54 4.85 0.68 1.91 0.06 PT 0.80 3.13 1.13 1.23 0.77 0.00 SE 8.15 5.92 0.96 1.12 0.00 0.00 7.74 4.98 0.94 1.40 0.00 EU 6.13 3.05 1.57 1.30 0.19 0.04 5.48 2.14 1.53 1.67 0.15 Gross Net TER INFL FL BL | 0.01 0.00 0.01 |
| DK 6.72 4.75 1.11 0.83 0.04 0.01 5.73 3.63 1.12 0.96 0.03 ES 3.96 1.49 1.44 1.00 0.01 0.00 3.27 0.38 1.41 1.44 0.02 FI 8.06 5.32 1.49 1.24 0.02 0.01 7.63 5.08 1.43 1.12 0.01 FR 5.68 2.78 1.64 1.14 0.12 0.00 4.88 1.75 1.58 1.44 0.11 IE 5.87 2.88 1.83 0.63 0.50 0.02 6.07 3.39 1.65 0.77 0.20 IT 5.17 2.21 1.73 0.99 0.06 0.19 3.86 0.92 1.64 1.01 0.04 LU 6.50 3.13 1.63 1.47 0.27 0.02 5.99 2.31 1.61 1.85 0.23 NL 8.28 5.82 | 0.01 0.00 0.01 |
| ES 3.96 1.49 1.44 1.00 0.01 0.00 3.27 0.38 1.41 1.44 0.02 FI 8.06 5.32 1.49 1.24 0.02 0.01 7.63 5.08 1.43 1.12 0.01 FR 5.68 2.78 1.64 1.14 0.12 0.00 4.88 1.75 1.58 1.44 0.11 IE 5.87 2.88 1.83 0.63 0.50 0.02 6.07 3.39 1.65 0.77 0.20 IT 5.17 2.21 1.73 0.99 0.06 0.19 3.86 0.92 1.64 1.01 0.04 LU 6.50 3.13 1.63 1.47 0.27 0.02 5.99 2.31 1.61 1.85 0.23 NL 8.28 5.82 0.84 1.56 0.03 0.01 7.54 4.85 0.68 1.91 0.06 PT 0.80 3.13 1.13 1.23 0.77 0.00 SE 8.15 5.92 0.96 1.12 0.00 0.00 7.74 4.98 0.94 1.40 0.00 EU 6.13 3.05 1.57 1.30 0.19 0.04 5.48 2.14 1.53 1.67 0.15 TY | 0.00 0.01 |
| FI 8.06 5.32 1.49 1.24 0.02 0.01 7.63 5.08 1.43 1.12 0.01 FR 5.68 2.78 1.64 1.14 0.12 0.00 4.88 1.75 1.58 1.44 0.11 IE 5.87 2.88 1.83 0.63 0.50 0.02 6.07 3.39 1.65 0.77 0.20 IT 5.17 2.21 1.73 0.99 0.06 0.19 3.86 0.92 1.64 1.01 0.04 LU 6.50 3.13 1.63 1.47 0.27 0.02 5.99 2.31 1.61 1.85 0.23 NL 8.28 5.82 0.84 1.56 0.03 0.01 7.54 4.85 0.68 1.91 0.06 PT 0.80 3.13 1.13 1.23 0.77 0.00 SE 8.15 5.92 0.96 1.12 0.00 0.00 7.74 4.98 0.94 1.40 0.00 EU 6.13 3.05 1.57 1.30 0.19 0.04 5.48 2.14 1.53 1.67 0.15 TY | 0.01 |
| FR 5.68 2.78 1.64 1.14 0.12 0.00 4.88 1.75 1.58 1.44 0.11 IE 5.87 2.88 1.83 0.63 0.50 0.02 6.07 3.39 1.65 0.77 0.20 IT 5.17 2.21 1.73 0.99 0.06 0.19 3.86 0.92 1.64 1.01 0.04 LU 6.50 3.13 1.63 1.47 0.27 0.02 5.99 2.31 1.61 1.85 0.23 NL 8.28 5.82 0.84 1.56 0.03 0.01 7.54 4.85 0.68 1.91 0.06 PT 0 0.80 3.13 1.13 1.23 0.77 0.00 SE 8.15 5.92 0.96 1.12 0.00 0.00 7.74 4.98 0.94 1.40 0.00 EU 6.13 3.05 1.57 1.30 0.19 0.04 5.48 2.14 1.53 1.67 0.15 Gross Net TER INFL FL BL | |
| E 5.87 2.88 1.83 0.63 0.50 0.02 6.07 3.39 1.65 0.77 0.20 IT 5.17 2.21 1.73 0.99 0.06 0.19 3.86 0.92 1.64 1.01 0.04 LU 6.50 3.13 1.63 1.47 0.27 0.02 5.99 2.31 1.61 1.85 0.23 NL 8.28 5.82 0.84 1.56 0.03 0.01 7.54 4.85 0.68 1.91 0.06 PT 0.80 3.13 1.13 1.23 0.77 0.00 SE 8.15 5.92 0.96 1.12 0.00 0.00 7.74 4.98 0.94 1.40 0.00 EU 6.13 3.05 1.57 1.30 0.19 0.04 5.48 2.14 1.53 1.67 0.15 Gross Net TER INFL FL BL | |
| T | 0.01 |
| LU 6.50 3.13 1.63 1.47 0.27 0.02 5.99 2.31 1.61 1.85 0.23 NL 8.28 5.82 0.84 1.56 0.03 0.01 7.54 4.85 0.68 1.91 0.06 PT 0.80 3.13 1.13 1.23 0.77 0.00 SE 8.15 5.92 0.96 1.12 0.00 0.00 7.74 4.98 0.94 1.40 0.00 EU 6.13 3.05 1.57 1.30 0.19 0.04 5.48 2.14 1.53 1.67 0.15 TY Gross Net TER INFL FL BL | 0.03 |
| NL 8.28 5.82 0.84 1.56 0.03 0.01 7.54 4.85 0.68 1.91 0.06 PT 0.80 0.80 0.00 7.74 4.98 0.94 1.40 0.00 EU 6.13 3.05 1.57 1.30 0.19 0.04 5.48 2.14 1.53 1.67 0.15 TY Gross Net TER INFL FL BL | 0.27 |
| PT 0.80 3.13 1.13 1.23 0.77 0.00 SE 8.15 5.92 0.96 1.12 0.00 0.00 7.74 4.98 0.94 1.40 0.00 EU 6.13 3.05 1.57 1.30 0.19 0.04 5.48 2.14 1.53 1.67 0.15 Gross Net TER INFL FL BL | 0.02 |
| SE 8.15 5.92 0.96 1.12 0.00 0.00 7.74 4.98 0.94 1.40 0.00 EU 6.13 3.05 1.57 1.30 0.19 0.04 5.48 2.14 1.53 1.67 0.15 1Y Gross Net TER INFL FL BL | 0.01 |
| EU 6.13 3.05 1.57 1.30 0.19 0.04 5.48 2.14 1.53 1.67 0.15 1Y Gross Net TER INFL FL BL | 0.00 |
| 1Y Gross Net TER INFL FL BL | 0.00 |
| Gross Net TER INFL FL BL | 0.05 |
| | |
| AT 13.76 8.99 1.43 2.77 0.34 0.00 | |
| | |
| BE 15.46 9.81 1.76 3.23 0.17 | |
| DE 14.23 9.01 1.53 3.23 0.16 0.00 | |
| DK 15.67 12.32 1.12 1.95 0.02 0.02 | |
| ES 11.04 5.96 1.40 3.01 0.03 0.00 | |
| FI 20.28 16.68 1.41 2.08 0.01 0.00 | |
| FR 14.94 10.91 1.53 2.08 0.11 0.01 | |
| IE 18.56 13.95 1.44 2.45 0.25 0.03 | |
| IT 10.63 6.33 1.65 1.96 0.03 0.33 | |
| LU 16.29 10.58 1.59 3.47 0.23 0.02 | |
| NL 17.99 13.77 0.63 2.83 0.28 0.00 | |
| PT 9.14 6.75 1.46 0.94 0.00 0.00 | |
| SE 24.57 20.77 0.90 2.04 0.00 0.00 | |
| EU 15.60 10.55 1.50 2.91 0.16 0.05 Note: FLI27 LICITS mixed fund shares' annual gross and net performances anguing costs (TER) inflation (INEL) subscription | |

Note: EU27 UCITS mixed fund shares' annual gross and net performances, ongoing costs (TER), inflation (INFL), subscription (FL) and redemption (BL) fees, by time horizon and country, %. For BE, BL not considered. PT at 10Y. Other EU countries not reported. This table includes updated figures compared to the initial publication.

Sources: Refinitiv Lipper, ESMA.

Fund domicile and marketing country

ASR-CP-S.132

| Number | of | funds | hv | country | <i>j</i> - | domicile | and | sold-in |
|--------|----|-------|----|---------|------------|----------|-----|---------|
| | | | | | | | | |

| Sold-in Domicile | AT | BE | DK | FI | FR | DE | IE | П | LU | NL | PT | ES | SE | Other EU |
|---------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------|
| AT | 633 | | | 1 | 4 | 344 | | 9 | 0 | 0 | | 8 | 0 | 55 |
| BE | 51 | 403 | | | 60 | 51 | 0 | 13 | 64 | 20 | | 16 | 3 | 50 |
| DK | 3 | | 456 | 5 | 10 | 20 | | | 17 | 17 | | 17 | 25 | 0 |
| FI | 8 | | 8 | 280 | 10 | 12 | | 10 | 4 | 0 | 4 | 11 | 90 | 10 |
| FR | 83 | 122 | 2 | 6 | 2,062 | 160 | 13 | 185 | 182 | 62 | 34 | 165 | 24 | 16 |
| DE | 286 | 2 | 1 | | 29 | 1,118 | 14 | 19 | 38 | 10 | 3 | 31 | 1 | 3 |
| IE | 618 | 387 | 430 | 538 | 672 | 805 | 1,252 | 686 | 645 | 554 | 241 | 720 | 614 | 78 |
| π | | | | | | | | 747 | | | | | | |
| LU | 3,133 | 2,408 | 1,506 | 2,145 | 3,185 | 4,134 | 1,324 | 3,377 | 6,436 | 2,280 | 1,727 | 3,278 | 2,435 | 1,506 |
| NL | 8 | 10 | | | 2 | 10 | 0 | | 16 | 110 | 0 | 2 | 2 | 0 |
| PT | | | | | | | | | | | 79 | | | |
| ES | | | | | | 0 | | | | | | 1,104 | | |
| SE | | 0 | 11 | 69 | 3 | 0 | | | 4 | 0 | 0 | 1 | 401 | 2 |

Note: EU27 UCITS number of funds by country of domicile (rows) and marketed country (columns), 2021. Please note that a fund appearing as marketed in a country will also appear in the domicile.

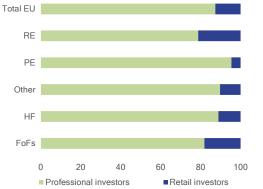
Sources: Refinitiv Lipper, ESMA.

Retail AIFs

Market Overview

ASR-CP-S.133

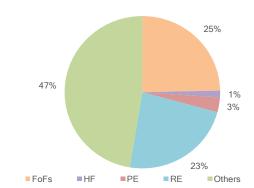
AIFs NAV by type of client



Note: Clients of EEA30 AIFs managed and/or marketed by authorised AIFMs and sub-threshold managers registered only in national jurisdictions, end of 2021, in % of NAV.

ASR-CP-S.135

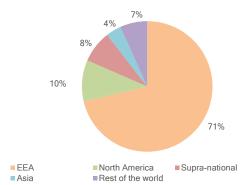
Retail AIFs, NAV by type of fund



Note:NAV of retail EEA30 AIFs type at the end of 2021 reported under AIFM Directive, in % Sources:National Competent Authority, ESMA

ASR-CP-S.137

Retail AIFs, NAV by regional investment focus

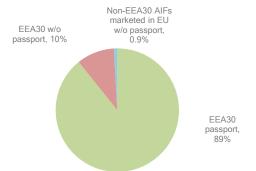


Note: NAV of EEA30 AIFs by regional investment focus, retail clients, end of 2020, in %. Reported according to the AIFMD. AIFs managed by authorised and registered AIFMs.

Sources: National Competent Authorities, ESMA.

ASR-CP-S.134

Retail AIFs, AIFMD passport



Note: NAV of retail AIFs by manager's access to AIFMD passport, end 2021, %. 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

ASR-CP-S.136

Retail AIFs, NAV by type of strategy

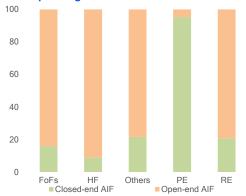


Note: Share of NAV by investment strategy, end of 2021 retail clients, reported under AIFMD, in %. FI = Fixed Income; CRE = Commercial Real Estate; RRE; Residential Real; Estate. Data for EEA30.

Sources National Competent Authorities, ESMA

ASR-CP-S.138

Redemption rights to retail investors



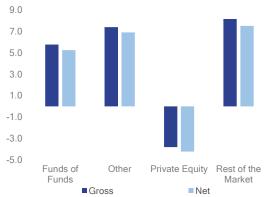
Note: NAV of EEA30 AIF by redemption rights offered to retail clients, end 2020, %, reporting according to AIFMD. AIFs managed by authorised and registered AIFMS.

Sources: National Competent Authorities, ESMA.

Retail AIFs performance

ASR-CP-S.139

Retail AIFs gross and net performance



Note: EEA30 AIFs annualised monthly gross and performance by fund type, %, 2021. Reported according to AIFMD. Rest of the market includes Hedge Funds, Real Estate and None.

Sources: National Competent Authorities, ESMA.

Structured Retail Products

Market Overview

ASR-CP-S.140

Note: Outstanding amounts of SRP in EU, EUR bn. Number of products in millions.

Number of products (rhs)

millions. Sources: StructuredRetailProducts.com, ESMA

Outstanding amounts •

ASR-CP-S.142

100

Volume of products sold by capital protection

50

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

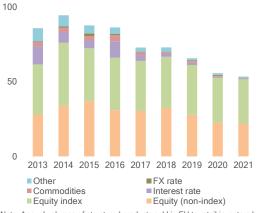
2013 2014 2015 2016 2017 2018 2019 2020 2021

>90% <100%

ASR-CP-S.144

Volume of products sold by underlying asset

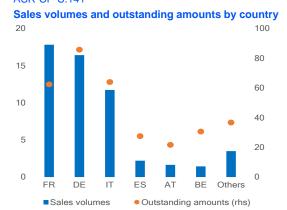
■>0% <=90%



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

Sources: StructuredRetailProducts.com, ESMA.

ASR-CP-S.141



Note: Sales volumes, EUR mn, and outstanding amounts, EUR bn, of structured retail products in 2021 for top 6 EU countries by sales volumes, EUR bn. "Others"=EU countries not otherwise listed. Sources: StructuredRetailProducts.com, ESMA.

ASR-CP-S.143

Volume of products sold by term

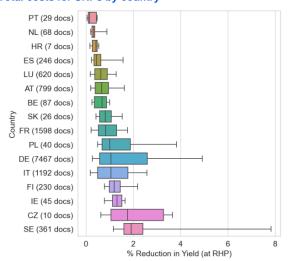


Note: Annual volumes of structured products sold to retail investors in EU by investment term, EUR bn.
Sources: StructuredRetailProducts.com, ESMA

Costs and performance

ASR-CP-S.145

Total costs for SRPs by country

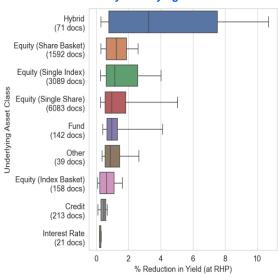


Note: Each bar displays the range in percentage total cost (RIY) over the recommended holding period, across SRPs in the data sample, grouped by country. Countries indicate locations of sale (one product can be sold in multiple countries). The vertical line in each box shows the median percentage cost.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

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

ASR-CP-S.147

Total costs for SRPs by underlying assets

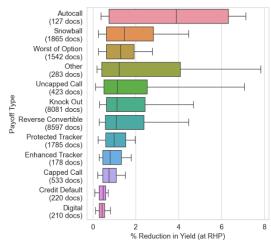


Note: Each bar displays the range in percent total cost (RIY) over the recommended holding period, across SRPs in the data sample, grouped by underlying asset types. Box edges are the 25th and 75th percentiles, and additional lines ('whiskers') represent the 10th and 90th percentiles for that underlying 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.

 $Sources: ESMA, \ Structure dretail products. com, \ financial\ entities'\ websites.$

ASR-CP-S.146

Total costs for SRPs by payoff type

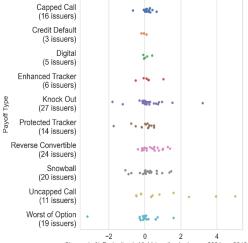


Note: Each bar displays the range in percent total cost (RIY) over the recommended holding period, across SRPs in the data sample, grouped by payoff type. The vertical line in each box shows the median percent cost. Box edges are the 25th and 75th percentiles, and additional lines ('whiskers') represent the 10th and 90th percentiles for that payoff type. 'Other' comprises all SRPs containing payoff types that have 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.

ASR-CP-S.148

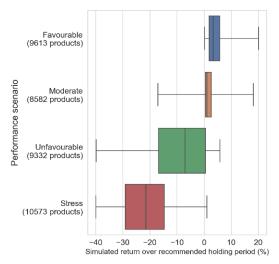
Change in total costs in 2021 from 2018-2020



Change in % Reduction in Yield (median by issuer, 2021 vs. 2018-20)

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.

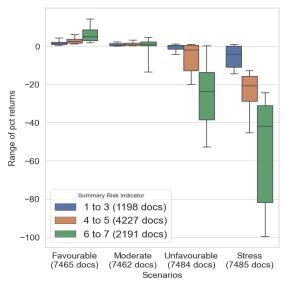
ASR-CP-S.149 Simulated returns across scenarios



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

ASR-CP-S.151

SRI simulated returns

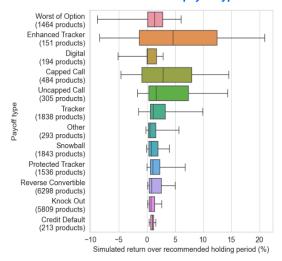


Note: The boxes and vertical lines indicate the range of returns (at the recommended holding period) across SRPs grouped by the SRI (the number of products in each sample varies slightly as information for some scenarios could not be retrieved from some documents). The SRI aggregates the estimated Credit 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.

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

ASR-CP-S.150

Moderate scenario returns across payoff types



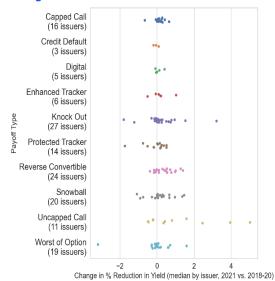
Note: The chart presents the range in annual returns under the moderate scenario over a product's recommended holding period for SRPs grouped by payoff type. The vertical line in each box shows, within each payoff type, the median moderate scenario returns (after costs) at the recommended holding period.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

SRPs containing payoff types that have 150 or fewer observations in the data Sources: ESMA, Structuredretailproducts.com, financial entities' websites.

ASR-CP-S.152

sample.

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.

