

How Do ESG Funds Perform?

The year 2022 was tough, but medium- and long-term performance holds up.

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Executive Summary

In this report, we measure the performance of environmental, social, and governance-focused funds versus traditional peers in 17 Morningstar Categories. This report spans nearly 8,000 funds domiciled in Europe, including over 2,000 ESG open-end and exchange-traded funds.

We compare average returns among the ESG and traditional fund cohorts in 2022 and over the past three, five, and 10 years. We evaluate ESG funds against a composite of traditional funds in each category and measure the odds of picking a winner. We also analyze the performance of ESG funds using other tools, including the Morningstar star rating and Morningstar Medalist rating.

Key Takeaways

- Average returns and success rates across our sample suggest there is no performance trade-off associated with ESG funds over the medium and long term. In fact, over three, five, and 10 years, the average ESG fund beat its average traditional peer.
- Over the short term, as evidenced in 2022, ESG funds may lag traditional funds, mainly because of structural biases. Last year, only four out of 10 ESG funds in our sample outperformed their traditional counterparts.
- ► The odds of picking a winning ESG fund with high excess returns relative to traditional peers increases as the holding period extends.
- ► While ESG funds exhibit much higher survivorship rates than traditional funds over multiple time horizons, the odds of picking a winning and surviving ESG fund going forward will likely drop, partly because of the recent proliferation of ESG funds.
- ► Lower-cost ESG funds have greater odds of success.
- ► A similar proportion of ESG funds (36%) and traditional funds (35%) carry 4 or 5 stars, but significantly more ESG funds (38%) than traditional funds (32%) are awarded Gold, Silver, and Bronze ratings. This means our analysts have stronger conviction in the ability of ESG funds to outperform.

Introduction

Despite the mainstreaming of ESG integration in investments and increased popularity of ESG funds as measured by flows, assets, and new launches, concerns about a potential performance trade-off persist. A growing body of research shows that the consideration of material ESG factors has a positive effect on investment performance, but other research also shows that there isn't a clear link between firms' ESG attributes and performance. This study builds on this work and provides an update to the analysis of European ESG funds done in 2020.

This study examines the performance of ESG funds in 17 European Morningstar Categories, including 12 most popular, over the past one, three, five, and 10 years through December 2022. The selected categories were determined based on the availability of ESG funds with 10-year returns. The 12 most popular categories are the largest in terms of both assets in and number of ESG funds.

We define ESG funds as funds that claim to focus on sustainability; impact; or environmental, social, and governance factors.² The ESG funds group does not contain funds that employ only limited exclusionary screens without a broader emphasis on ESG, nor does it contain the growing number of funds that now formally integrate ESG factors in a nondeterminative way in their security selection.

This study is built upon the same methodology as the Morningstar Active/Passive Barometer.³ We compare average returns, success rates, and survivorship rates for ESG funds versus traditional funds in each category. To calculate success rates, we use a composite of traditional fund returns and count the number of ESG fund returns that rank higher than this composite. In all our calculations, we account for repurposed ESG funds.⁴

¹ Global Sustainable Fund Flows: Q1 2023 in Review, SFDR Article 8 and Article 9 Funds: Q1 2023 in Review

² ESG funds are tagged in Morningstar Direct as "Sustainable Investment -Overall." Our universe of sustainable funds is based on intentionality rather than holdings. To identify intentionality, we relied on a combination of fund names (a strong indicator of intentionality) and information found in fund documents. To be tagged as "Sustainable Investment," a fund's documents should contain enough details to leave no doubt that ESG concerns figure prominently in the security selection and portfolio construction process.

³ Morningstar European Active/Passive Barometer

⁴ Repurposed funds are traditional funds that changed investment objectives during the surveyed periods to make ESG their primary focus. We account for these funds from the date they repurposed. We also account for funds that were available for purchase at the beginning of the surveyed periods and subsequently closed.

Success Rates Were Negative in 2022 and Worse for Bond Funds

The year 2022 was tough for investors, with inflationary pressures, rising interest rates, recession fears, and the energy crisis affecting almost all asset classes. The Morningstar Global Markets Index lost almost 18%, while the Morningstar Global Corporate Bond Index fell by 17.3%.

ESG funds were not immune to last year's challenging environment. While they proved resilient in terms of flows, attracting over USD 157 billion of net new money globally, their returns suffered, and in many categories, more than traditional funds.⁵

In 2022, a minority (41%) of ESG funds in our sample outperformed their average traditional peer. And out of the 12 most popular Morningstar Categories, only two exhibited above 50% success rates.

Exhibit 1 ESG Funds' Annual Success Rates by Morningstar Category (%)

Category	2022	2021	2020	2019	2018	2017
Global Large-Cap Blend Equity	45	67	61	64	71	50
Eurozone Large-Cap Equity	37	50	65	62	64	10
EUR Diversified Bond	32	30	59	52	75	44
Europe Large-Cap Blend Equity	46	62	48	68	62	54
EUR Cautious Allocation - Global	28	57	57	57	69	51
EUR Corporate Bond	21	26	60	61	61	53
US Large-Cap Blend Equity	39	78	63	66	76	61
France Equity	43	42	33	51	53	56
Global Emerging Markets Equity	62	43	65	38	66	62
Global Large-Cap Growth Equity	64	65	46	58	49	30
EUR Government Bond	42	38	63	65	63	58
Global Bond	24	49	70	44	73	32
Weighted Average	41	55	58	60	67	45
Japan Large-Cap Equity	35	49	46	45	78	32
Asia ex-Japan Equity	54	30	39	40	48	62
Global Large-Cap Value Equity	14	69	69	73	38	63
Europe Large-Cap Growth Equity	46	41	79	54	56	48
UK Large-Cap Equity	25	18	53	56	75	53

Source: Morningstar Direct. Morningstar Research. Data as of December 2022. Based on 2,052 ESG funds and 5,911 traditional funds from the 17 categories shown above.

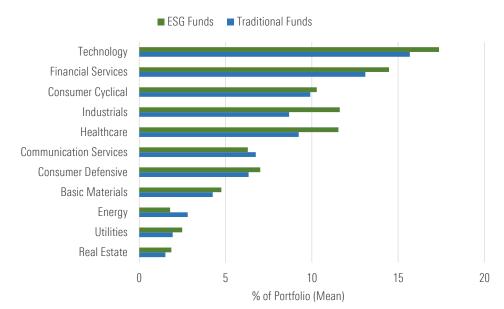
ESG Funds Suffer From Sector Biases

The poor performance for ESG funds in 2022 can be mainly attributed to sector biases. Relative to traditional funds, many ESG funds have a structural underweighting to the energy sector, which was the best-performing unit of the Morningstar Global Markets Index last year, gaining a remarkable 34%.

On the other hand, as shown in the exhibit below, ESG funds tend to be overweight in technology, industrials, and healthcare relative to traditional funds. In 2022, technology was among the worst-performing sectors in the Morningstar Global Markets Index, losing 32.2%, while industrials and

healthcare had negative 13% and negative 8.3% returns, respectively. The opposite was true in 2020, when the tech sector gained 48% compared with energy's 27% loss. Such reversal in 2020 was also seen in healthcare (17.2%) and industrials (11.1%).

Exhibit 2 Sectoral Exposure of ESG Funds vs. Traditional Funds



Source: Morningstar Direct. Morningstar Research. Data as of December 2022. Based on 1,388 ESG funds and 3,478 traditional funds from the most populated 12 categories. Each sectoral exposure is weighted by the respective numbers of ESG funds and transitional funds in individual categories.

ESG Bond Funds Suffer From Longer Duration

As seen in Exhibit 1, ESG bond funds were among the worst performers last year, with the lowest success rate (21%) registered by ESG funds in the EUR Corporate Bond category.

This poor performance can be almost entirely explained by the rising interest-rate environment. ESG bond funds typically have longer duration because they tend to have a structural overweight to investment-grade bonds, which typically carry lower yields and longer duration. The most attractive investment-grade bonds are similar to high-quality government bonds (which also tend to have above-average durations). In an inflationary environment like the one seen in 2022, strategies with longer durations have more sensitivity to interest-rate changes and thus tend to post larger losses.

The exhibit below shows that ESG funds in the four most popular Morningstar Fixed Income Categories have higher duration than traditional funds.

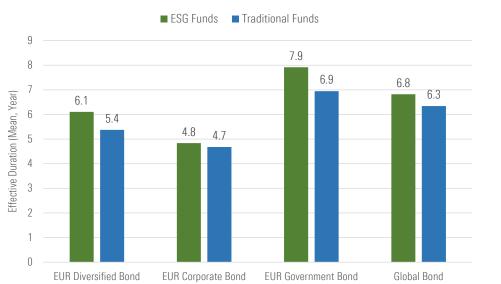


Exhibit 3 Effective Duration of ESG Funds vs. Traditional Funds

Source: Morningstar Direct. Morningstar Research. Data as of December 2022. Based on 131 ESG funds and 598 traditional funds from the four categories shown above.

For the EUR Diversified Bond category, the largest ESG bond-fund category in our sample, the effective duration for ESG funds averages 6.1 years, compared with 5.4 years for their non-ESG peers in the category.

ESG Funds Perform Better Over Longer Time Horizons

While the 2022 market environment proved more challenging for ESG funds than traditional funds, one year of underperformance didn't erase medium- and long-term outperformance. Morningstar defines "long term" as periods lasting at least five years.

Over the trailing three-, five-, and 10-year periods, an investor would have been better off with an ESG fund over most conventional peers, as Exhibit 4 shows. For example, over the trailing five-year period through 2022, the weighted-average success rate for an ESG fund in the most popular categories rose to 56%, suggesting over half of the ESG funds beat their average traditional non-ESG peers.

Exhibit 4 ESG Funds' Success Rates by Morningstar Category by Q4 2022 (%)

Category	1 Year	3 Years	5 Years	10 Years
Global Large-Cap Blend Equity	45	67	68	68
Eurozone Large-Cap Equity	37	56	60	58
EUR Diversified Bond	32	31	23	46
Europe Large-Cap Blend Equity	46	59	58	55
EUR Cautious Allocation - Global	28	42	54	57
EUR Corporate Bond	21	28	50	63
US Large-Cap Blend Equity	39	67	66	65
France Equity	43	30	36	45
Global Emerging Markets Equity	62	60	58	63
Global Large-Cap Growth Equity	64	65	52	51
EUR Government Bond	42	42	69	75
Global Bond	24	48	53	57
Weighted Average	41	53	56	58
Japan Large-Cap Equity	35	33	46	42
Asia ex-Japan Equity	54	50	59	56
Global Large-Cap Value Equity	14	69	50	44
Europe Large-Cap Growth Equity	46	54	56	56
UK Large-Cap Equity	25	18	13	40

Source: Morningstar Direct. Morningstar Research. Data as of December 2022. Based on 2,052 ESG funds and 5,911 traditional funds from the 17 categories shown above.

The odds of picking a winning ESG fund over the past 10 years were greatest in the Global Large-Cap Blend Equity and EUR Government Bond categories. Close to seven out of 10 live ESG funds in the former delivered higher returns than their average surviving conventional counterpart, whereas such likelihood reached 75% for the ESG funds in the EUR Government Bond category.

But the same can't be said about Japan and UK large-cap ESG funds, which have had relatively low odds of success. UK investors were the worst off. Only four ESG UK large-cap funds out of 10 selected 10 years ago, and still available today, beat the average surviving traditional peer.⁶

Over the 10-year period ended Dec. 31, 2022, close to 60% of surviving ESG funds across the 12 categories are considered to have beaten their average surviving traditional peer.

Looking at more recent figures (Exhibit 5), with the expectation of easing inflation and slower interestrate hikes, ESG funds in some equity categories showed improved success rates toward the end of the first quarter of 2023. Yet, success rates for ESG bond funds remained low, as sustainability-conscious investors tend to focus on a long-term horizon and are more likely to be subject to longer duration and greater interest-rate risks. Overall, ESG funds are likely at a disadvantage because of the more restrictive issuer-selection methods and smaller investment universe.

⁶ By the end of 2022, the three-year survivorship rates for ESG and traditional funds in the UK large-cap category are 18% and 86%, respectively.

Exhibit 5 ESG Funds' Success Rates by Morningstar Category by Q1 2023 (%)

Category	1 Year	3 Years	5 Years	10 Years
Global Large-Cap Blend Equity	51	56	62	69
Eurozone Large-Cap Equity	51	50	63	60
EUR Diversified Bond	33	30	29	48
Europe Large-Cap Blend Equity	58	58	62	59
EUR Cautious Allocation - Global	42	37	54	60
EUR Corporate Bond	24	34	50	60
US Large-Cap Blend Equity	54	70	65	65
France Equity	60	37	44	41
Global Emerging Markets Equity	37	39	57	63
Global Large-Cap Growth Equity	57	60	55	50
EUR Government Bond	45	42	55	67
Global Bond	22	27	53	64
Weighted Average	47	48	56	59
Asia ex-Japan Equity	50	36	52	67
Global Large-Cap Value Equity	13	23	53	56
Japan Large-Cap Equity	16	8	46	39
Europe Large-Cap Growth Equity	48	50	48	69
UK Large-Cap Equity	27	6	12	40

Source: Morningstar Direct, Manager Research. Data as of March 2023. Based on 2,052 ESG funds and 5,911 traditional funds from the 17 categories shown above.

ESG Funds' Survivorship Rates Are High

ESG funds have consistently exhibited higher survivorship rates than traditional funds over the past 10 years (Exhibit 6). This means that fewer ESG funds have closed, in relative terms. Of ESG funds available to investors five years ago, 90% have survived, compared with less than three quarters (74%) of traditional funds. Over 10 years, the survivorship gap is even larger (91% versus 50%).

Exhibit 6 Survivorship Rates' Comparison Between ESG and Traditional Funds by Morningstar Category

	1 Year				3 Year			
	ESC	G Funds	Traditional Funds		ESG Funds		Traditional Funds	
Category	Number	Survivorship Rate (%)	Number	Survivorship Rate (%)	Number	Survivorship Rate (%)	Number	Survivorship Rate (%)
Global Large-Cap Blend Equity	537	100	1279	99	379	94	1294	89
Eurozone Large-Cap Equity	195	99	284	99	191	91	316	87
EUR Diversified Bond	144	99	378	99	132	95	420	84
Europe Large-Cap Blend Equity	239	100	436	99	189	97	507	84
EUR Cautious Allocation - Global	180	99	890	99	156	94	887	86
EUR Corporate Bond	155	99	264	98	130	93	278	88
US Large-Cap Blend Equity	142	99	392	100	109	91	401	87
France Equity	48	100	75	100	46	91	78	91
Global Emerging Markets Equity	130	99	524	99	101	91	533	88
Global Large-Cap Growth Equity	120	99	335	99	99	98	280	95
EUR Government Bond	33	100	230	100	31	90	262	84
Global Bond	51	98	239	99	44	86	236	86
Weighted Average		99		99		94		87
Asia ex-Japan Equity	28	96	158	99	25	88	170	86
Global Large-Cap Value Equity	23	100	117	100	13	100	119	84
Japan Large-Cap Equity	51	98	228	98	37	95	250	87
Europe Large-Cap Growth Equity	27	100	69	99	28	96	56	89
UK Large-Cap Equity	26	100	179	99	17	88	193	87
		5 Year						
		5 Y	ear			10 Y	'ear	
			ear	onal Funds	ESC		'ear	onal Funds
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Source: Morningstar Direct, Manager Research. Data as of December 2022. Based on 2,052 ESG funds and 5,911 traditional funds from the 17 categories shown above.

Widening survivorship gaps are also observed across all the selected categories. Attrition rates are the highest in the Global Bond category. While only 82% of the ESG global-bond funds survived to the end of

the 10-year period ended Dec. 31, 2022, it stayed well above the 55% odds of survival for their conventional peers.

While ESG funds have experienced much higher survivorship rates than traditional funds over multiple time horizons, we expect the gap between the two groups to shrink mainly due to the proliferation of ESG funds in recent years.

Long-Term Outperformance and Divergent Performance Against Headwinds

Along with the lower success rates seen in 2022, we also found a more dispersed distribution of one-year excess returns of ESG funds across most categories than over the medium (three years) and long (five or 10 years) term, suggesting their divergent performance against the short-term economic adversity.

Taking the Global Large-Cap Blend Equity category as an example, there is a higher proportion of ESG funds delivering positive excess returns over the trailing three, five, and 10 years. The percentage of ESG funds outperforming their traditional peers rose from 51% to 75% as the investment horizon extends from one to 10 years. Moreover, ESG funds with excess returns over 2% made up 45% of the 10-year sample, almost double the 23% seen over the one-year period.

As shown, the distribution of excess returns for ESG funds becomes increasingly left-skewed as the investment horizon extends, indicating that the likelihood and performance benefit for picking an ESG fund tends to be greater than the probability and penalty for finding an underperformer.

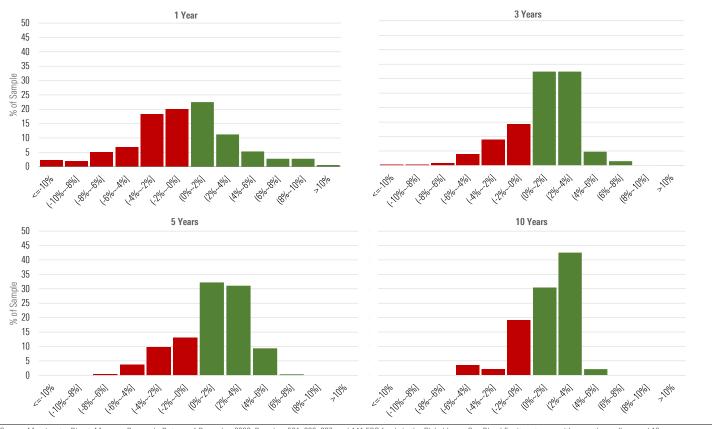


Exhibit 7 Excess Return Distribution for ESG Funds in Global Large-Cap Blend Equity Category

Source: Morningstar Direct, Manager Research. Data as of December 2022. Based on 501, 336, 267, and 141 ESG funds in the Global Large-Cap Blend Equity category with one-, three-, five-, and 10-year excess return data, respectively.

It's worth noting that at the end of the first quarter of 2023, the distribution of one-year excess returns of ESG funds in the Global Large-Cap Blend Equity category featured thinner tails as the percentage of the ESG funds with positive excess returns rose from 45% to 51%. This suggests that more ESG funds outperformed or at least caught up with their non-ESG peers against economic headwinds. Also noteworthy is the smaller percentage of the ESG funds in the far-left tail, showing signs of recovery from last year.

Fees Remain a Crucial Consideration in Times of Turbulence

While a majority of ESG funds across the 12 categories considered here beat their average traditional peers over the past five or 10 years, the level of excess returns varied depending on fees. Like with any other type of investment, fees are a crucial consideration when selecting an ESG fund.

Looking at the five most popular Morningstar categories, the highest average excess returns by ESG funds were mostly found in the lowest fee quartiles (first quartiles), whereas the highest fee quartiles (fourth quartiles), were often associated with the lowest average excess returns. In general, as expected, there is a negative correlation between excess returns and fee levels. EUR Diversified Bond is the only

category where this negative correlation is less evident. Looking at the medium term (one year or three years), this fee-excess-return association largely stays.

This means that investors selecting an ESG fund in the lowest fee quartile five years ago were more likely to capture higher excess return and thus improve the odds of picking a winner.

■ 1st Quartile ■ 2nd Quartile ■ 3rd Quartile ■ 4th Quartile (Lowest Fees) (Highest Fees) 3% 2% 1% **Excess Return** -1% -2% -3% -4% Global Large-Cap Eurozone Large-Cap EUR Diversified **EUR Cautious** Europe Large-Cap Blend Equity Bond Blend Equity Allocation - Global Equity

Exhibit 8 5-Year Excess Return and Fee Quartiles

Source: Morningstar Direct. Morningstar Research. Data as of December 2022. Based on 701 ESG funds with five-year excess return data and fee information available from the five categories.

Using 2022 excess return, we find that the ESG funds in the lowest fee quartiles from the selected categories in general suffer the smallest losses compared with their traditional peers. In the Global Large-Cap Blend category, ESG funds with the lowest fee levels even managed to beat their categorical traditional peers by delivering positive excess returns on average.

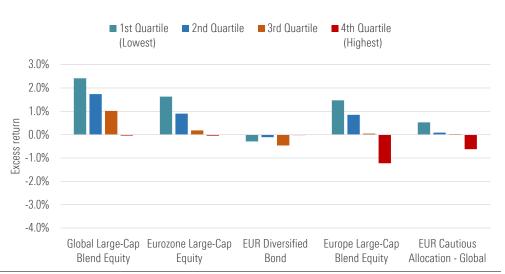


Exhibit 9 2022 Return and Fee Quartiles

Source: Morningstar Direct. Morningstar Research. Data as of December 2022. Based on 1,051 ESG funds with one-year excess return data and fee information available from the five categories.

ESG Funds Have Higher Star Ratings

In this section, we analyze ESG funds through the lens of the Morningstar star rating, which is a backward measure of a fund's risk-adjusted and cost-adjusted return relative to category peers. Our sample here includes only funds with a minimum of a three-year track record, as a fund must have at least 36 continuous months of total returns to receive a star rating.

Over 36% ESG funds in this sample have 4 or 5 stars versus under 35% for traditional funds. Meanwhile, 40% of ESG funds were awarded with 3 stars versus less than 37% for their non-ESG peers. Less than 24% of ESG funds have 2 or 1 stars versus almost 29% for traditional funds.

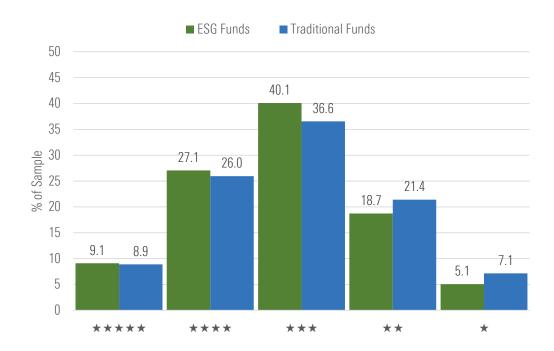


Exhibit 10 Morningstar Star Rating of ESG Funds vs. Traditional Funds

Source: Morningstar Direct, Manager Research. Data as of December 2022. Based on 1,066 ESG funds and 4,916 traditional funds with a Morningstar Rating from the most populated 12 Morningstar categories.

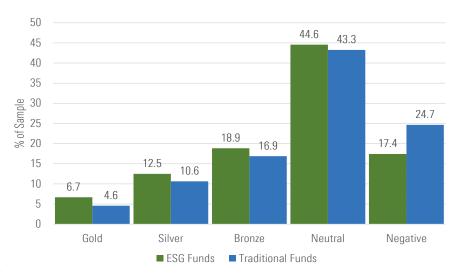
ESG Funds Have Higher Alpha-Generating Capacity

We're now assessing whether ESG funds enjoy higher alpha-generating capacity using the Morningstar Medalist rating. This rating combines both qualitative assessment by analysts and quantitative prediction by algorithms to estimate a fund's net-of-fee alpha.

For actively managed funds, Morningstar ranks funds with positive net alpha over the long term (five or 10 years) relative to a relevant Morningstar Category index. Gold ratings are assigned to the top 15% of vehicles within their Morningstar Category, Silver ratings to the next 35%, and Bronze to the remaining 50%. For passive strategies, Morningstar assigns Gold, Silver, and Bronze ratings to vehicles expected to deliver alpha that exceeds the lesser of the category median net alpha, or zero, over the long term.

Exhibit 10 shows higher percentages of ESG funds awarded with the medals, indicating a greater chance of delivering positive alpha after fees than their traditional peers. About 38% of ESG funds in our sample are medalists, compared with 32% of traditional funds.

Exhibit 11 Morningstar Medalist Rating ESG Funds vs. Traditional Funds



Source: Morningstar Direct, Manager Research. Data as of December 2022. Based on 1,883 ESG funds and 5,188 traditional funds with a Morningstar Rating from the most populated 12 Morningstar categories.

Appendix - Methodology

Data Source

Morningstar's European open-end and exchange-traded funds database.

Universe

The eligible universe of ESG funds includes all ESG open-end mutual funds and ETFs (excluding feeder funds and funds of funds) in seven EEA Fund Morningstar Categories that existed as ESG offerings at the beginning of the relevant periods (including funds that did not survive to the end of the period). To be included, the fund's inception date (or repurposed date for repurposed funds) must precede the start of the period and the obsolete date cannot predate the start of the period. Additionally, to be included, funds must have return figures.

We define ESG funds as funds that, by prospectus, state that they use environmental, social, and governance criteria as a key part of their security selection and portfolio construction process, and/or indicate that they pursue a sustainability-related theme, and/or seek a measurable positive impact alongside financial return. The ESG funds universe does not contain funds that employ only limited exclusionary screens without a broader emphasis on ESG, nor does it contain the growing number of funds that now formally integrate ESG factors in a nondeterminative way in their security selection.⁷

The choice of categories included in the study is subject to the availability of ESG funds with 10-year returns in each category. The seven EEA Fund Morningstar Categories considered also happen to be the largest in terms of both assets in and number of ESG funds.

Survivorship Rate

To calculate survivorship rate, we divide the number of distinct funds (based on unique Fund ID at the beginning of the period) that started and ended up the period in question by the total number of funds that existed at the onset of the period in question (the beginning of the trailing one-, three-, five- and 10-year periods).

Repurposed Funds

Repurposed funds are traditional funds that changed investment objectives to make ESG their primary focus. We account for these funds during the surveyed periods from the date they repurposed, instead of from their inception date.⁸

Success Rate

The success rate indicates what percentage of ESG funds that started the sample period went on to survive and generate a return in excess of the asset-weighted average traditional fund return over the period. It does now consider magnitude of outperformance in defining success—a fund that just barely beat the average traditional alternative counts as much as a fund that significantly outperformed.

⁷ For further reading on the European universe of ESG funds: European Sustainable Funds Landscape 8 For further reading on repurposed funds: Surge in Funds Rebranding as Sustainable

We calculate the asset-weighted average of all the fund's share classes to come up with a single return figure for funds with multiple share classes. We then rank the funds by their composite returns, count the number that rank higher than the equal-weighted average return for the traditional funds in the category, and divide that number by the number of funds at the beginning of the period (using the same number from the denominator of the survivorship calculations).

Fees

For the fee level, we use the representative excluding transaction costs data point in Morningstar Direct. It is an indication of the known recurring costs for the share class as levied by the management group, excluding transactions costs incurred by the fund in trading its holdings. This measure does not include one-off costs, or costs levied by third parties such as investment advisors or platforms. This data is annualised and indicates the fees that would be payable over a year. We then group them into quartiles in each category.

Excess Returns

We measure surviving ESG funds' excess returns relative to the asset-weighted average traditional fund return in each category.

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