
Morningstar's European Active/Passive Barometer

Year-End 2023

Morningstar Manager Research Services, EMEA
March 14, 2024

Monika Calay
Director
Passive Strategies Research
monika.calay@morningstar.com

Jose Garcia-Zarate
Associate Director
Passive Strategies Research
jose.garciazarate@morningstar.com

Dimitar Boyadzhiev
Senior Analyst
Passive Strategies Research
dimitar.boyadzhiev@morningstar.com

Important Disclosure

The conduct of Morningstar's analysts is governed by Code of Ethics/Code of Conduct Policy, Personal Security Trading Policy (or an equivalent of), and Investment Research Policy. For information regarding conflicts of interest, please visit:
<https://shareholders.morningstar.com>

Executive Summary

The Morningstar Active/Passive Barometer is a semiannual report that measures the performance of active funds against passive peers in their respective European, Asian, and African Morningstar Categories.

The Active/Passive Barometer uses unique ways to measure active managers' success:

- ▶ It evaluates active funds against a composite of actual passive funds—not versus a costless index. In this way, the benchmark reflects the actual, net-of-fee performance of the passive funds available to investors.
- ▶ It assesses active funds based on their beginning-of-period category classification to better simulate the funds an investor would have chosen at the time.
- ▶ It considers how the average unit of currency invested in various types of active funds has fared versus the average unit of currency in passive funds.

The Active/Passive Barometer is also comprehensive, spanning over 26,600 unique active and passive Europe-domiciled funds that account for approximately EUR 6.9 trillion in assets, or about half of the total European fund market.

All told, the Active/Passive Barometer is a useful tool that can help investors calibrate the odds of succeeding with active funds in different areas based on recent trends and longer-term history.

We include historical active funds' success rates in our analysis. This provides a valuable insight into how active managers have navigated market events in the past and how this affected their short- and long-term performance.

Key Takeaways

- ▶ In 2023, global equities experienced a resurgence. Despite persisting inflationary pressures and ongoing monetary policy tightening raising the risk of an economic slowdown, most developed equity markets closed the period with double-digit growth rates, making up for the ground lost in 2022. Meanwhile, emerging markets lagged, with China's long-awaited reopening of its economy failing to ignite its economic engine growth as vigorously as predicted.
- ▶ The active managers' weighted success rate¹ over one year for the 38 equity categories examined stood at 31.2% as of December 2023. Over a decade, the success rate for active equity

¹ The fund-weighted success rates for the Morningstar Category peer groups are calculated based on the number of active funds within each category.

managers was notably low, hovering around 17%. Generally, active managers tend to achieve higher success rates within mid-cap and small-cap equity categories compared with those focusing on large-cap stocks. Additionally, active funds are more likely to succeed in equity categories where the average passive counterpart exhibits a structural bias toward a particular economic sector or is concentrated on a few individual names.

- ▶ 2023 has been described as the year when bonds made a strong comeback. Yields hovered around levels not seen since the global financial crisis of 2008, while market participants closely scrutinized the messages from central banks to confirm the peak of the tightening cycle and gauge the change toward a looser stance. Active bond managers continued to extract value with duration plays, while passive peers covering the full maturity spectrum remained at a disadvantage, particularly so in the first half of the year.
- ▶ In 2023, the one-year success rate for active bond managers across the 20 categories analyzed was 49.8%. Notably, half of these categories witnessed one-year success rates of 50% or higher. However, over the long term, the advantages of lower fees associated with passive funds become evident. Only 23% of active bond managers were able to both survive and outperform their passive counterparts over the 10-year period ended in December 2023.
- ▶ The likelihood of a fund's survival is linked closely to its success rate. The primary reason most active funds falter is their short life span, often attributed to subpar performance. This typically stems from a combination of poor stock selection and the compounded impact of higher fees compared with cheaper passive alternatives.

Equity

- ▶ The US equity market reached all-time highs in 2023, led by the rally in the tech sector driven by a surge in artificial intelligence. Ultra-cheap passive strategies, particularly those that were market-cap-weighted, performed strongly given their significant exposure to big tech firms. But some stock-pickers also found an open avenue to improve their performance. In the US large-cap blend Morningstar Category, 41.9% of active equity funds outperformed their passive competitors in the year to the end of December 2023. However, over a decade, the case for passives for this market exposure is overwhelming, with only 6.3% of active funds beating the passive alternative.
- ▶ In 2023, European equity markets outperformed expectations, diverging from the predicted economic downturn because of high inflation and stringent monetary policies. Italy, Spain, Germany, the Netherlands, and France led the performance, buoyed by solid economic growth, inflation rates lower than expected, and a supportive equity market environment. Despite this, a disparity was noted, especially in Germany, where the economy receded but stock markets thrived, driven by investor optimism for future rate cuts and economic improvements. Nonetheless, eurocentric active managers in the eurozone large-cap category struggled, with only 23.9% beating their passive counterparts by the end of December 2023 and a 10-year success rate at a mere 11.1%.
- ▶ The UK equity market ranked among the poorest performers in Europe, affected by a combination of external and domestic challenges, particularly the effect of increasing interest rates on

household finances, which constrained growth. Notably, within the UK large-cap category, 63.5% of stock-pickers managed to outperform passive funds over the 12 months ended in December 2023. However, their long-term success rate over a 10-year span was significantly lower, standing at 20.5%.

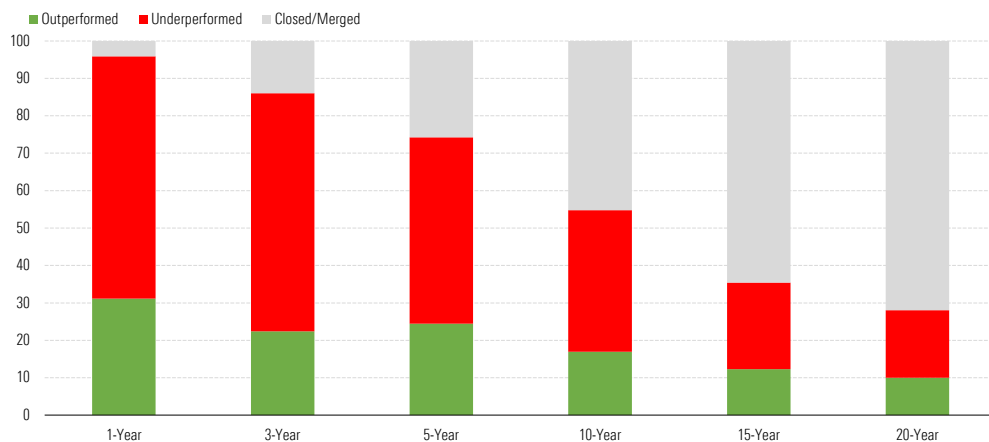
- ▶ Global dividend strategies have been one of the few areas of success for actively managed equity funds. For the period ended December 2023, the one-year success rate for active managers in the global equity income category was 62.2%. Over 10 years, active managers also had a high success rate of 52.3%. Passive funds have underperformed their active counterparts in this category largely because they emphasize value and small-cap stocks. Over the past decade, the market has favored growth and larger companies, which has naturally impacted the performance of passive strategies in this arena.
- ▶ Active managers have also had high short- and long-term success rates in the Indian equity arena. The one-year and 10-year success rates for active managers in the India equity category were 64.3% and 53.5%, respectively. Passive funds in this category tend to have a large- and mega-cap bias, making them an imperfect tool to access the broader Indian equity market. This focus exposes investors to significant single-stock concentration risks and leaves ample room across the market-cap spectrum for active managers to add value.
- ▶ Emerging-markets stocks also charted an upward trajectory, albeit trailing the MSCI World Index. The reopening of China's economy instilled optimism in the early part of the year, but this quickly turned into disappointment as expectations for a sharp rebound failed to materialize. As China became synonymous with underperformance, stock-pickers in the global emerging-markets equity category found an easy way to beat passive alternatives by taking a cautious approach to the country. The one-year success rate for active managers in this category is 46.3%, while the 10-year success rate stands at 27.4%.

Fixed Income

- ▶ Active managers in the EUR government-bond category had a one-year success rate of 35.5% in 2023 and showed similar success rates in the three- and five-year periods to the end of 2023, with these figures reflecting the compounding boost to performance by shortening of duration. The 10-year success rate comes down 19.1%, thus showing that investors seeking a core building block in EUR government bonds for their portfolios have been well served by passive strategies.
- ▶ Credit is an area where active bond managers have more latitude to add value compared with passive peers. In 2023, investment-grade corporates were a sweet spot, and this was duly reflected in the high one-year success rates for EUR and GBP active corporate bond managers at 64.5% and 72.6%, respectively. It is also notable that active managers in the EUR corporate bond category managed a 43.5% success rate in the 10-year period to the end of 2023.
- ▶ A high 62.1% of active managers in the hard-currency emerging-markets bond category beat the passive counterpart in 2023, whereas in the local-currency category, the rate of success was 57.1%. Underweighting China proved a sure bet for active managers to eke out value relative to

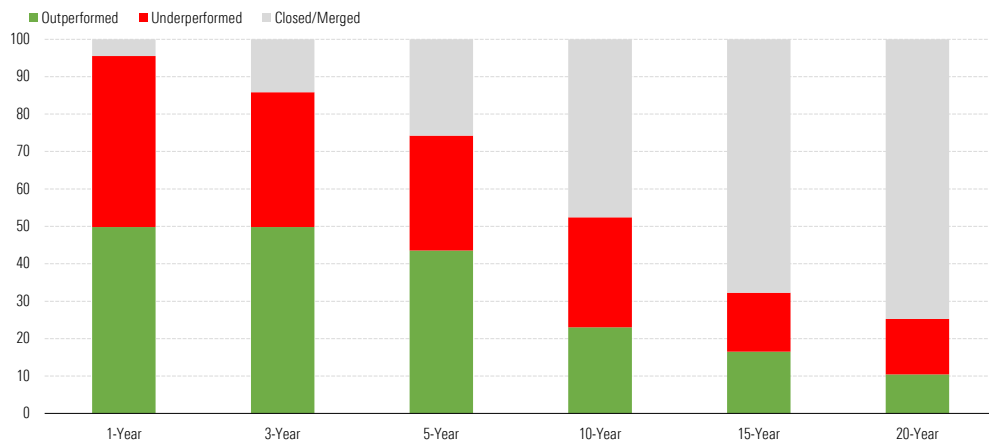
passive strategies in 2023. However, over the long term, active bets on emerging markets are fraught with multiple risks and the chances of surviving and outperforming a passive strategy diminish drastically. The 10-year rate of success for active managers in the hard-currency bond category stood at 26%, while it was just 13.6% for active peers in the local-currency bond category.

Exhibit 1 Active Equity Managers' Year-End Outcomes (%)



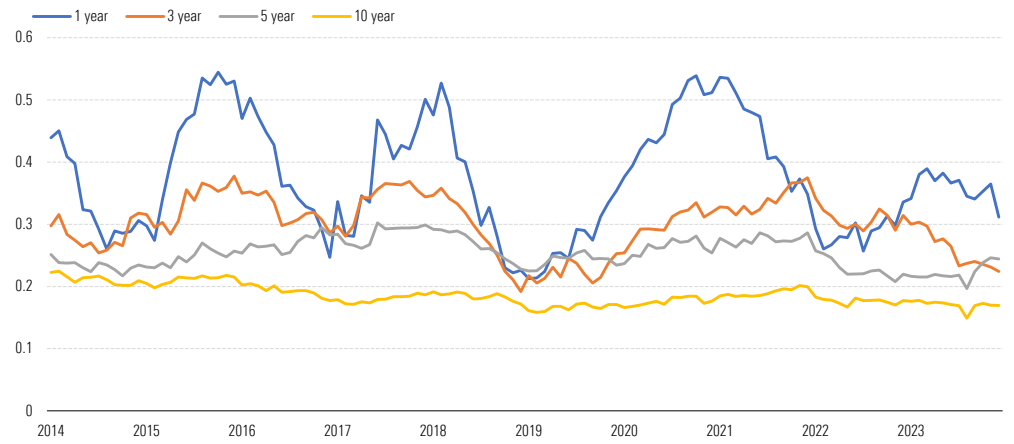
Source: Morningstar Direct. Data as of Dec. 31, 2023.

Exhibit 2 Active Fixed-Income Managers' Year-End Outcomes (%)



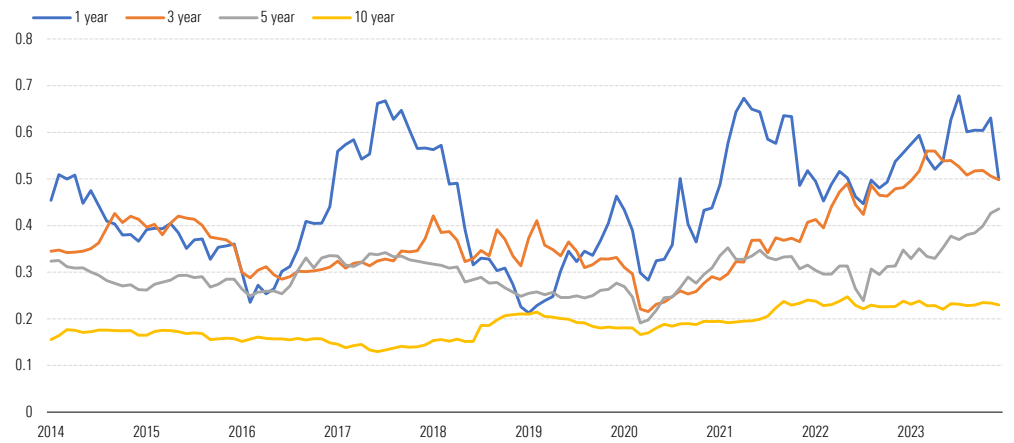
Source: Morningstar Direct. Data as of Dec. 31, 2023.

Exhibit 3 Historical Active Equity Funds' Success Rate (%)



Source: Morningstar Direct. Data as of Dec. 31, 2023.

Exhibit 4 Historical Active Fixed-Income Funds' Success Rate (%)



Source: Morningstar Direct. Data as of Dec. 31, 2023.

Exhibit 5 Active Equity Funds' Success Rate by Category (%)

Category	1-Year	3-Year	5-Year	10-Year	15-Year	20-Year
Asia ex-Japan Equity	21.1	30.3	45.8	29.7	22.8	-
Asia-Pacific Equity	21.5	15.7	13.7	13.0	8.6	-
Asia-Pacific ex-Japan Equity	24.4	17.2	18.5	15.9	8.1	-
Brazil Equity	10.0	0.0	6.7	5.1	12.5	-
China Equity	13.6	25.7	76.7	43.7	36.8	-
Denmark Equity	71.4	19.4	36.1	33.3	39.4	21.2
Europe Equity Income	37.5	22.2	27.2	4.3	20.4	-
Europe ex-UK Equity	26.6	32.3	21.3	21.1	20.3	21.0
Europe Large-Cap Blend Equity	21.9	15.3	15.9	9.1	7.5	8.2
Europe Large-Cap Growth Equity	56.5	29.3	20.5	12.0	16.7	-
Europe Small-Cap Equity	14.6	16.6	35.6	46.9	12.9	-
Eurozone Large-Cap Equity	23.9	20.2	20.7	11.1	12.0	8.4
Eurozone Small-Cap Equity	14.6	12.8	14.5	30.0	19.4	-
Finland Equity	89.5	12.5	45.2	19.5	30.6	32.1
France Equity	5.5	2.6	1.7	3.6	5.7	9.8
Germany Equity	20.3	25.4	17.2	22.0	17.4	22.2
Global Emerging Markets Equity	46.3	28.6	41.2	27.4	23.6	-
Global Equity Income	62.2	30.8	50.8	52.3	-	-
Global Large-Cap Blend Equity	22.4	17.9	13.3	6.2	4.5	3.4
Global Large-Cap Value Equity	27.2	14.4	13.9	5.5	-	-
India Equity	64.3	41.4	34.2	53.5	42.0	-
Italy Equity	14.6	20.4	16.9	14.3	19.8	-
Japan Large-Cap Equity	41.8	37.6	30.1	19.5	10.5	5.8
Latin America Equity	32.6	13.2	16.4	13.8	19.8	-
Nordic Equity	18.5	1.9	10.2	7.8	16.7	13.1
Norway Equity	71.7	43.6	66.7	54.7	45.8	-
Pacific ex-Japan Equity	22.2	30.0	20.0	16.7	20.0	12.5
Spain Equity	6.1	22.9	11.4	23.4	16.5	17.4
Sweden Equity	38.3	33.3	31.9	31.6	20.7	12.5
Switzerland Equity	44.8	19.4	21.9	32.1	22.6	14.7
Switzerland Small/Mid-Cap Equity	47.1	57.8	71.7	53.1	53.3	-
UK Equity Income	53.1	40.0	49.6	49.1	-	-
UK Large-Cap Equity	63.5	19.9	30.1	20.5	20.8	16.9
UK Mid-Cap Equity	26.7	15.4	33.3	23.1	27.3	-
US Large-Cap Blend Equity	41.9	26.2	22.1	6.3	3.4	4.6
US Large-Cap Growth Equity	12.6	4.2	0.0	0.0	0.0	0.0
US Large-Cap Value Equity	36.5	40.7	32.6	16.9	13.5	-
US Small-Cap Equity	46.3	28.1	53.0	20.0	15.4	-

Source: Morningstar Direct. Data as of Dec. 31, 2023.

Exhibit 6 Active Fixed-Income Funds' Success Rate by Category (%)

Category	1-Year	3-Year	5-Year	10-Year	15-Year	20-Year
CHF Bond	46.4	46.5	39.5	21.7	26.0	8.4
EUR Bond - Long Term	25.0	48.0	28.6	15.4	11.8	-
EUR Corporate Bond	64.5	50.1	54.4	43.5	46.7	28.2
EUR Corporate Bond - Short Term	59.3	46.0	42.2	27.7	-	-
EUR Diversified Bond	23.9	62.2	44.7	11.2	8.5	4.7
EUR Government Bond	35.5	34.9	37.6	19.1	12.6	8.7
EUR Government Bond - Short Term	5.9	17.1	27.9	18.5	11.1	-
EUR High Yield Bond	59.5	32.6	39.9	36.2	-	-
EUR Inflation-Linked Bond	9.5	45.5	19.6	11.7	3.1	-
EUR Money Market	86.8	78.3	65.4	40.4	19.5	-
GBP Corporate Bond	72.6	68.8	56.4	18.3	-	-
GBP Government Bond	53.7	16.7	31.3	10.9	13.0	17.2
GBP Inflation-Linked Bond	47.4	15.0	16.0	13.8	13.0	40.0
Global Bond	54.7	43.3	33.2	23.5	19.5	19.1
Global Emerging Markets Bond	62.1	44.0	39.3	26.0	-	-
Global Emerging Markets Bond - Local Currency	57.1	55.0	51.4	13.6	-	-
Global Inflation-Linked Bond	50.0	55.6	40.0	12.5	-	-
USD Corporate Bond	20.9	29.2	29.7	17.9	33.3	7.7
USD Diversified Bond	48.8	49.4	41.8	13.6	10.0	-
USD Government Bond	38.5	53.1	12.5	0.0	9.3	-

Source: Morningstar Direct. Data as of Dec. 31, 2023.

Exhibit 7 Active Property Funds' Success Rate by Category (%)

Category	1-Year	3-Year	5-Year	10-Year	15-Year	20-Year
Property - Indirect Asia	38.5	0.0	18.8	11.8	11.5	-
Property - Indirect Europe	20.0	51.9	49.0	32.7	13.6	9.7
Property - Indirect Global	53.8	26.3	37.1	20.2	3.0	-
Property - Indirect Switzerland	75.0	70.6	52.9	58.8	42.9	-

Source: Morningstar Direct. Data as of Dec. 31, 2023.

Exhibit 8 Active Allocation Funds' Success Rate by Category (%)

Category	1-Year	3-Year	5-Year	10-Year	15-Year	20-Year
EUR Cautious Allocation - Global	44.1	52.9	37.5	3.7	28.3	19.4

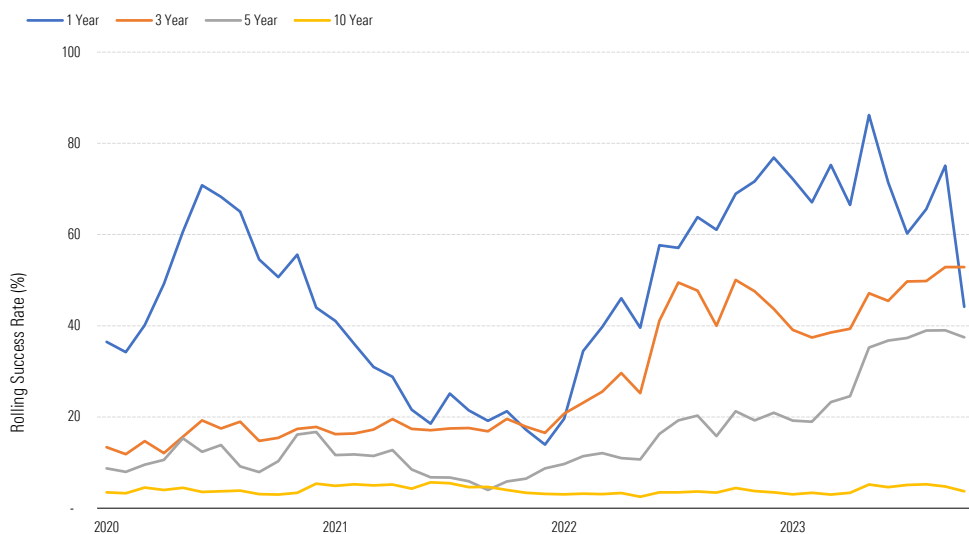
Source: Morningstar Direct. Data as of Dec. 31, 2023.

Exhibit 9 EUR Cautious Allocation — Global

	Active Funds		Passive Funds		Asset-Weighted Performance		Equal-Weighted Performance		Active Success Rate (%)
	# at Beginning of Period	Survivorship Rate (%)	# at Beginning of Period	Survivorship Rate (%)	Active (%)	Passive (%)	Active (%)	Passive (%)	
Trailing Total Return									
1-Year	1,101	96.7	4	75.0	6.7	5.8	6.3	6.7	44.1
3-year	1,076	86.2	4	75.0	0.8	1.6	0.6	1.0	52.9
5-Year	1,038	75.3	4	75.0	1.2	0.8	1.4	1.5	37.5
10-Year	806	56.6	2	50.0	1.2	2.8	1.2	2.9	3.7

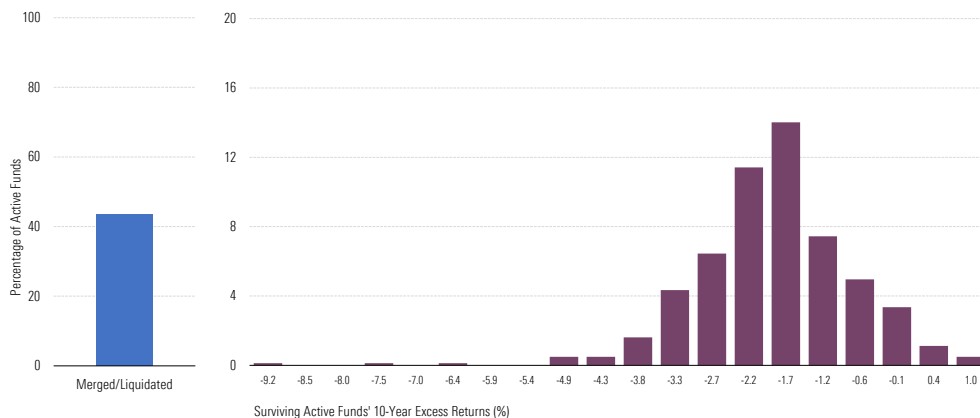
Source: Morningstar Direct. Data as of Dec. 31, 2023.

Exhibit 10 Rolling Success Rates for Surviving Active EUR Cautious Allocation — Global Funds



Source: Morningstar Direct. Data as of Dec. 31, 2023.

Exhibit 11 Mortality and Distribution of 10-Year Annualized Excess Returns for Surviving Active EUR Cautious Allocation — Global Funds



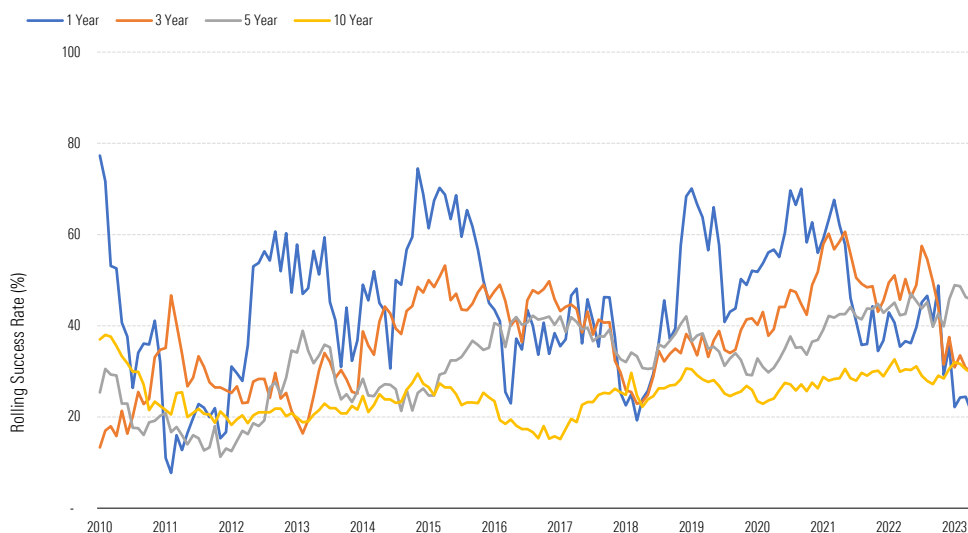
Source: Morningstar Direct. Data as of Dec. 31, 2023.

Exhibit 12 Asia ex-Japan Equity

	Active Funds		Passive Funds		Asset-Weighted Performance		Equal-Weighted Performance		Active Success Rate (%)
	# at Beginning of Period	Survivorship Rate (%)	# at Beginning of Period	Survivorship Rate (%)	Active (%)	Passive (%)	Active (%)	Passive (%)	
Trailing Total Return									
1-Year	175	95.4	18	100.0	1.6	5.1	0.8	4.4	21.1
3-year	175	85.7	17	94.1	- 9.1	- 7.9	- 8.5	- 7.6	30.3
5-Year	190	73.2	18	77.8	3.1	3.2	3.1	2.9	45.8
10-Year	195	53.3	19	63.2	3.5	3.2	3.0	3.2	29.7
15-Year	167	46.1	8	62.5	7.3	6.9	6.8	7.1	22.8

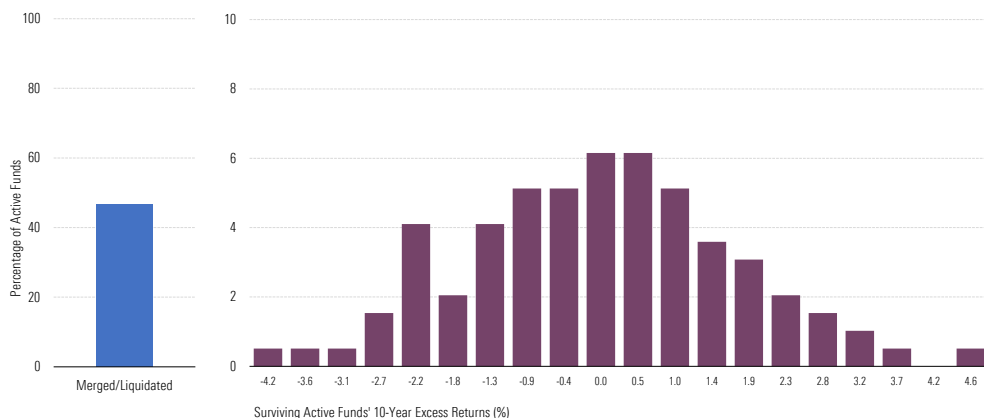
Source: Morningstar Direct. Data as of Dec. 31, 2023.

Exhibit 13 Rolling Success Rates for Surviving Active Asia ex-Japan Equity Funds



Source: Morningstar Direct. Data as of Dec. 31, 2023.

Exhibit 14 Mortality and Distribution of 10-Year Annualized Excess Returns for Surviving Active Asia ex-Japan Equity



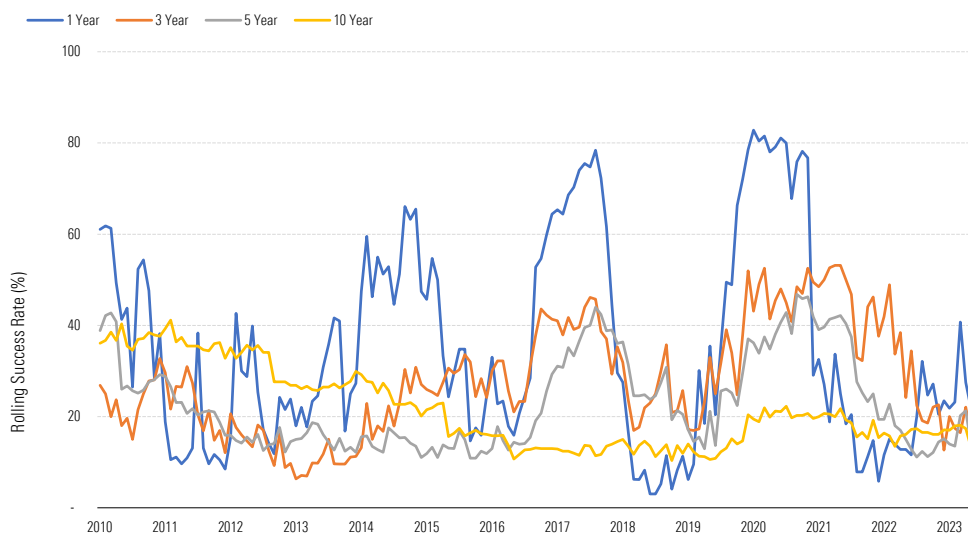
Source: Morningstar Direct. Data as of Dec. 31, 2023.

Exhibit 15 Asia-Pacific Equity

	Active Funds		Passive Funds		Asset-Weighted Performance		Equal-Weighted Performance		Active Success Rate (%)
	# at Beginning of Period	Survivorship Rate (%)	# at Beginning of Period	Survivorship Rate (%)	Active (%)	Passive (%)	Active (%)	Passive (%)	
Trailing Total Return									
1-Year	79	94.9	17	88.2	8.4	14.3	8.8	14.3	21.5
3-year	89	80.9	15	86.7	5.4	0.4	4.4	0.9	15.7
5-Year	95	68.4	16	75.0	4.4	5.3	4.3	5.8	13.7
10-Year	115	45.2	17	58.8	3.1	3.0	2.7	3.9	13.0
15-Year	163	28.8	6	50.0	5.9	6.2	5.1	6.6	8.6

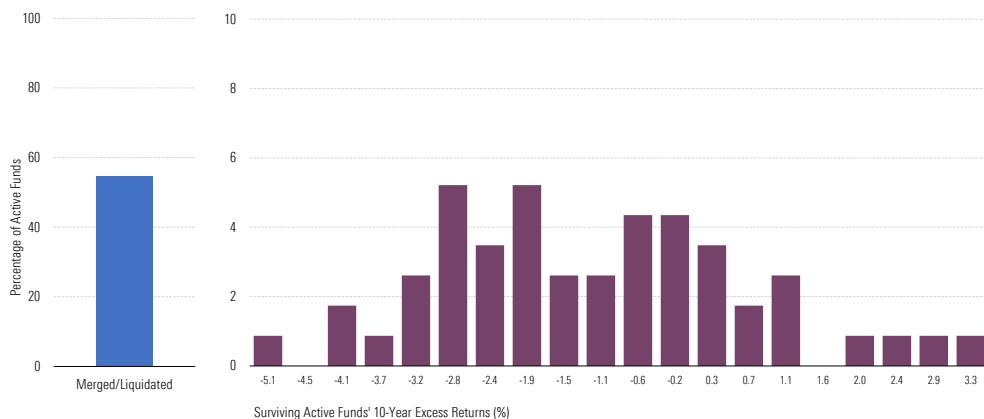
Source: Morningstar Direct. Data as of Dec. 31, 2023.

Exhibit 16 Rolling Success Rates for Surviving Active Asia-Pacific Equity Funds (%)



Source: Morningstar Direct. Data as of Dec. 31, 2023.

Exhibit 17 Mortality and Distribution of 10-Year Annualized Excess Returns for Surviving Active Asia-Pacific Equity (%)



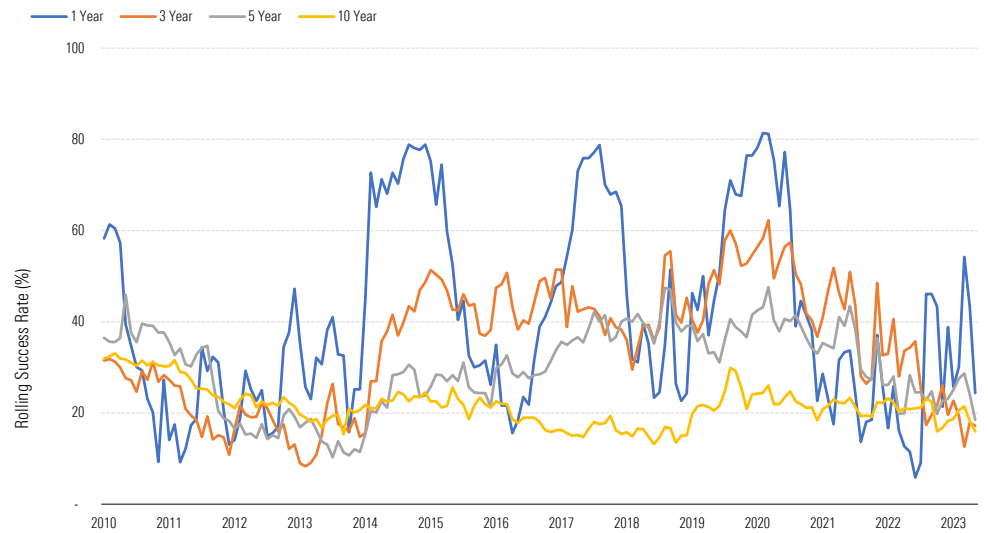
Source: Morningstar Direct. Data as of Dec. 31, 2023.

Exhibit 18 Asia-Pacific ex-Japan Equity

	Active Funds		Passive Funds		Asset-Weighted Performance		Equal-Weighted Performance		Active Success Rate (%)
	# at Beginning of Period	Survivorship Rate (%)	# at Beginning of Period	Survivorship Rate (%)	Active (%)	Passive (%)	Active (%)	Passive (%)	
Trailing Total Return									
1-Year	82	93.9	20	100.0	4.9	10.7	5.0	8.5	24.4
3-year	93	79.6	13	100.0	- 4.5	- 1.3	- 5.1	- 1.9	17.2
5-Year	108	64.8	11	90.9	5.0	6.4	4.5	6.3	18.5
10-Year	138	40.6	16	43.8	4.3	4.2	3.6	4.3	15.9
15-Year	209	22.0	12	50.0	8.2	8.2	7.2	8.5	8.1

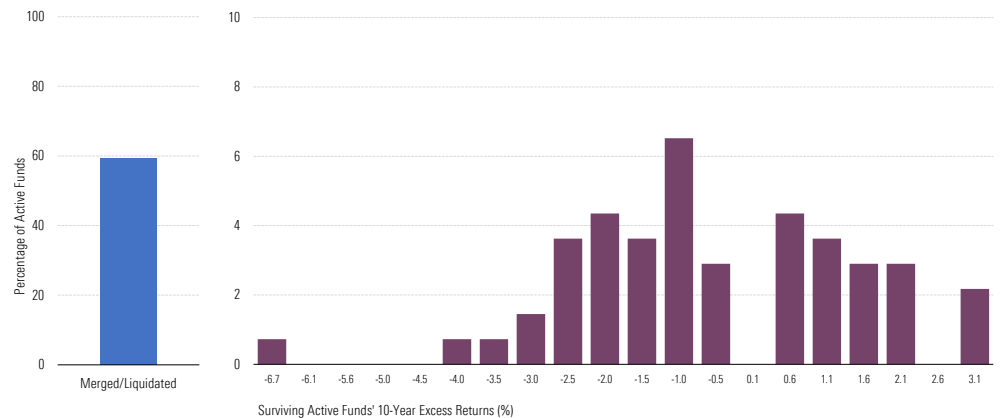
Source: Morningstar Direct. Data as of Dec. 31, 2023.

Exhibit 19 Rolling Success Rates for Surviving Active Asia-Pacific ex-Japan Equity Funds (%)



Source: Morningstar Direct. Data as of Dec. 31, 2023.

Exhibit 20 Mortality and Distribution of 10-Year Annualized Excess Returns for Surviving Active Asia-Pacific ex-Japan Equity Funds (%)



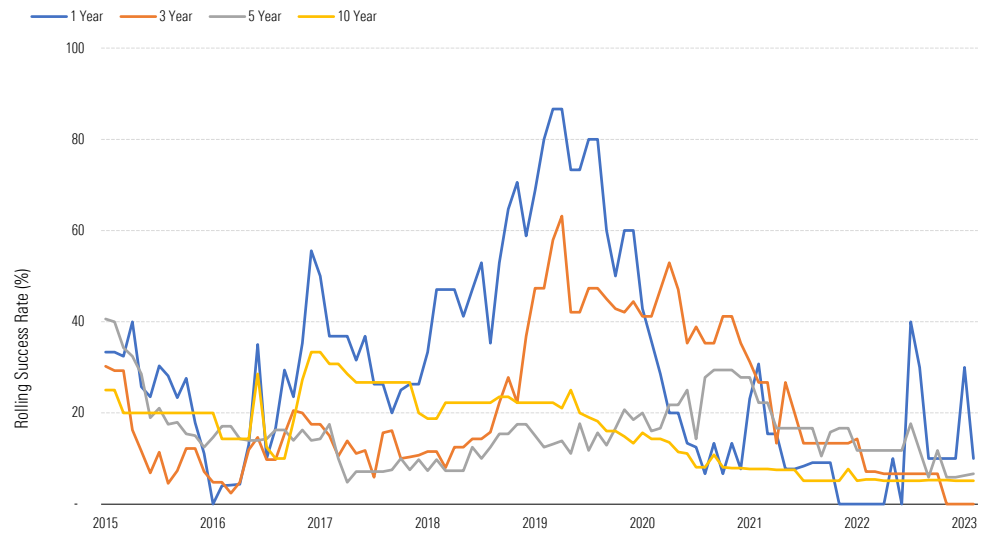
Source: Morningstar Direct. Data as of Dec. 31, 2023.

Exhibit 21 Brazil Equity

	Active Funds		Passive Funds		Asset-Weighted Performance		Equal-Weighted Performance		Active Success Rate (%)
	# at Beginning of Period	Survivorship Rate (%)	# at Beginning of Period	Survivorship Rate (%)	Active (%)	Passive (%)	Active (%)	Passive (%)	
Trailing Total Return									
1-Year	10	100.0	7	100.0	25.2	31.5	24.5	31.7	10.0
3-year	13	76.9	8	87.5	- 0.2	7.0	0.1	6.9	-
5-Year	15	53.3	9	66.7	0.7	4.2	0.5	4.2	6.7
10-Year	39	20.5	12	33.3	- 1.1	1.9	- 0.8	1.9	5.1
15-Year	16	31.3	7	42.9	2.3	3.8	3.2	3.8	12.5

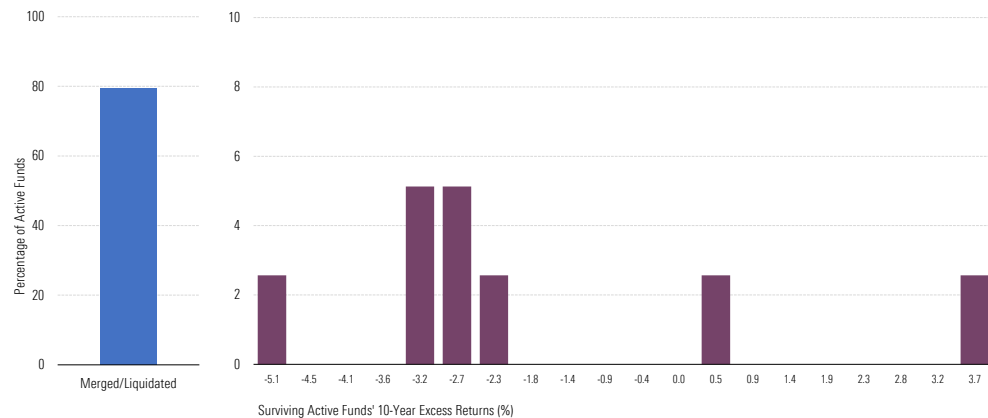
Source: Morningstar Direct. Data as of Dec. 31, 2023.

Exhibit 22 Rolling Success Rates for Surviving Active Brazil Equity Funds (%)



Source: Morningstar Direct. Data as of Dec. 31, 2023.

Exhibit 23 Mortality and Distribution of 10-Year Annualized Excess Returns for Surviving Active Brazil Equity Funds (%)



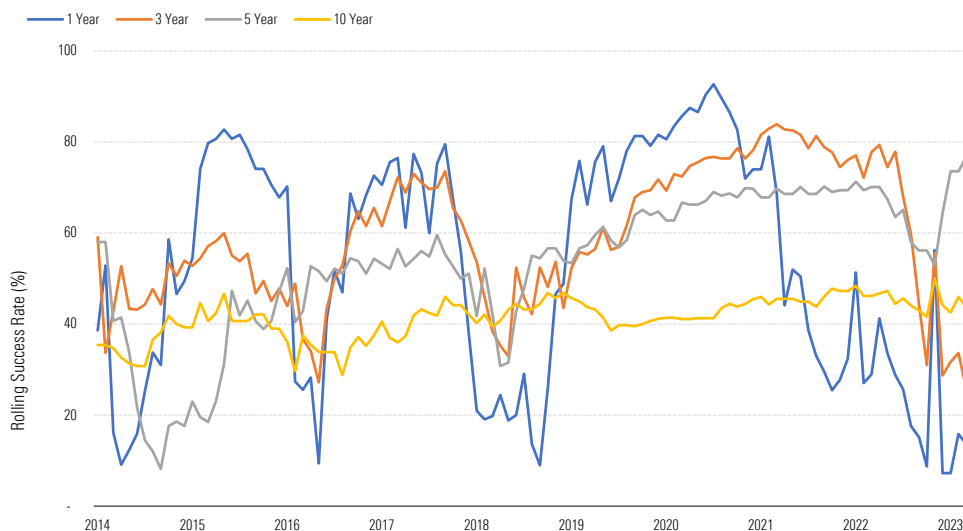
Source: Morningstar Direct. Data as of Dec. 31, 2023.

Exhibit 24 China Equity

	Active Funds		Passive Funds		Asset-Weighted Performance		Equal-Weighted Performance		Active Success Rate (%)
	# at Beginning of Period	Survivorship Rate (%)	# at Beginning of Period	Survivorship Rate (%)	Active (%)	Passive (%)	Active (%)	Passive (%)	
Trailing Total Return									
1-Year	125	96.0	25	96.0	-16.7	-11.9	-16.9	-12.1	13.6
3-year	101	92.1	21	85.7	-19.6	-18.6	-19.0	-17.7	25.7
5-Year	86	82.6	17	76.5	-1.9	-5.1	-1.3	-4.9	76.7
10-Year	87	54.0	17	58.8	0.8	-1.5	0.0	-1.7	43.7
15-Year	76	38.2	8	50.0	4.8	0.4	3.6	1.3	36.8

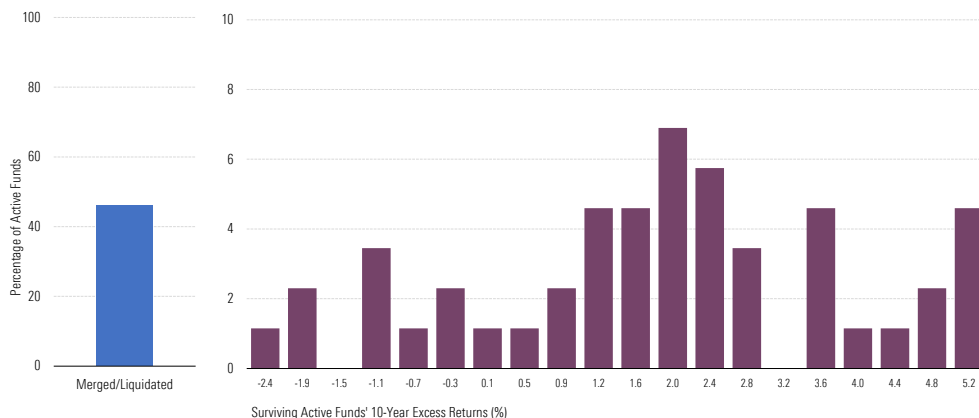
Source: Morningstar Direct. Data as of Dec. 31, 2023.

Exhibit 25 Rolling Success Rates for Surviving Active China Equity Funds (%)



Source: Morningstar Direct. Data as of Dec. 31, 2023.

Exhibit 26 Mortality and Distribution of 10-Year Annualized Excess Returns for Surviving Active China Equity Funds (%)



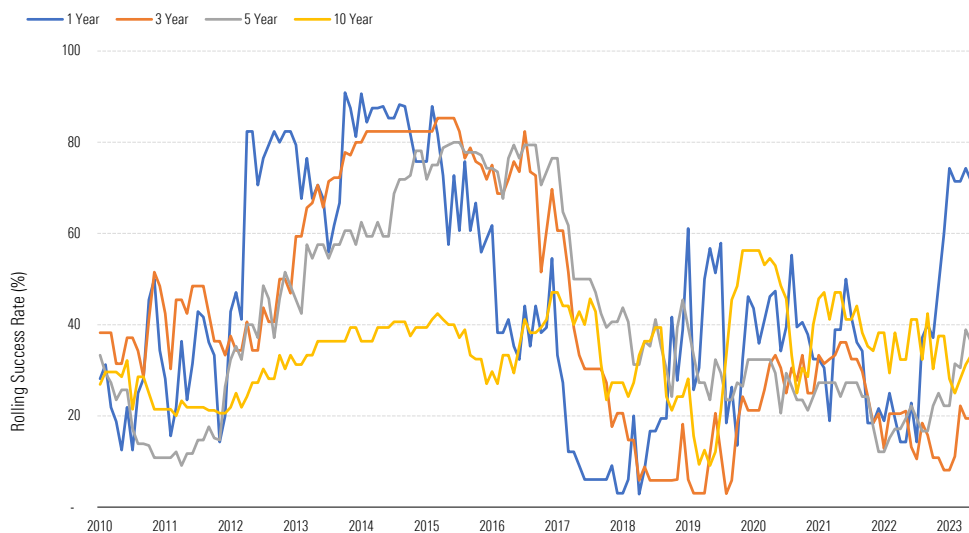
Source: Morningstar Direct. Data as of Dec. 31, 2023.

Exhibit 27 Denmark Equity

	Active Funds		Passive Funds		Asset-Weighted Performance		Equal-Weighted Performance		Active Success Rate (%)
	# at Beginning of Period	Survivorship Rate (%)	# at Beginning of Period	Survivorship Rate (%)	Active (%)	Passive (%)	Active (%)	Passive (%)	
Trailing Total Return									
1-Year	35	100.0	6	100.0	9.1	8.1	8.8	7.7	71.4
3-year	36	88.9	5	100.0	3.3	3.9	2.9	4.5	19.4
5-Year	36	77.8	4	100.0	12.6	13.3	12.1	13.1	36.1
10-Year	33	69.7	4	75.0	11.7	11.4	11.2	11.9	33.3
15-Year	33	54.5	4	50.0	14.6	14.0	14.0	14.1	39.4
20-Year	33	30.3	5	40.0	12.3	11.8	11.6	11.7	21.2

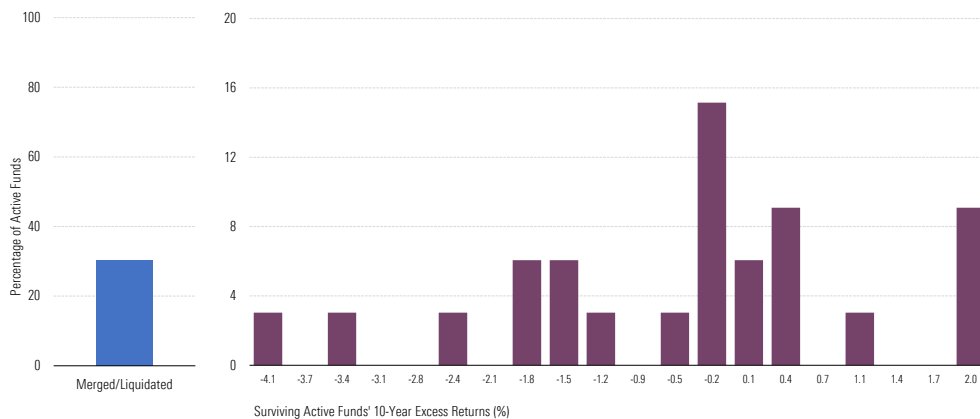
Source: Morningstar Direct. Data as of Dec. 31, 2023.

Exhibit 28 Rolling Success Rates for Surviving Active Denmark Equity Funds (%)



Source: Morningstar Direct. Data as of Dec. 31, 2023.

Exhibit 29 Mortality and Distribution of 10-Year Annualized Excess Returns for Surviving Active Denmark Equity Funds (%)



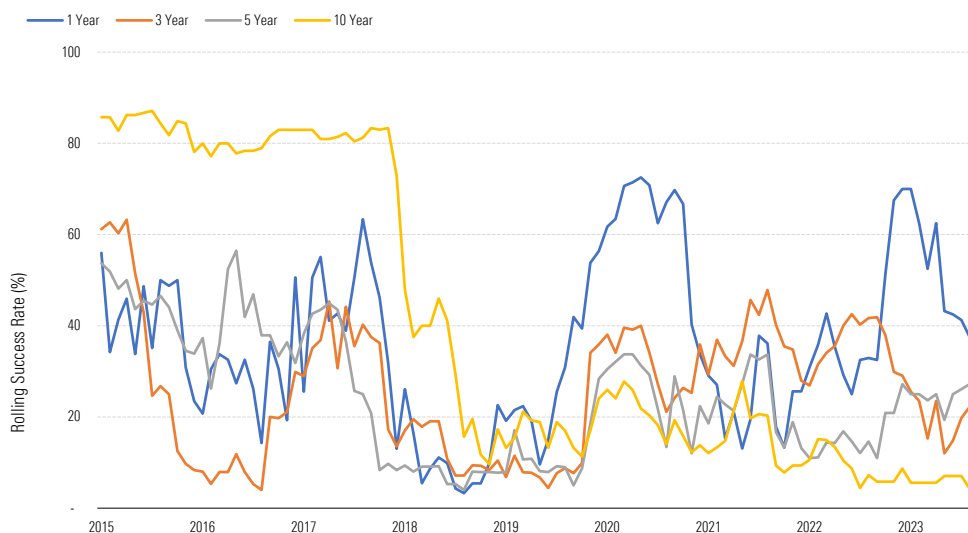
Source: Morningstar Direct. Data as of Dec. 31, 2023.

Exhibit 30 Europe Equity Income

	Active Funds		Passive Funds		Asset-Weighted Performance		Equal-Weighted Performance		Active Success Rate (%)
	# at Beginning of Period	Survivorship Rate (%)	# at Beginning of Period	Survivorship Rate (%)	Active (%)	Passive (%)	Active (%)	Passive (%)	
Trailing Total Return									
1-Year	80	97.5	9	100.0	14.1	14.1	13.7	14.5	37.5
3-year	81	90.1	9	100.0	8.2	9.9	7.8	9.7	22.2
5-Year	92	70.7	9	100.0	6.9	8.4	7.4	8.0	27.2
10-Year	70	67.1	5	60.0	4.1	6.6	4.8	6.5	4.3
15-Year	49	65.3	3	66.7	6.5	7.9	6.9	7.8	20.4

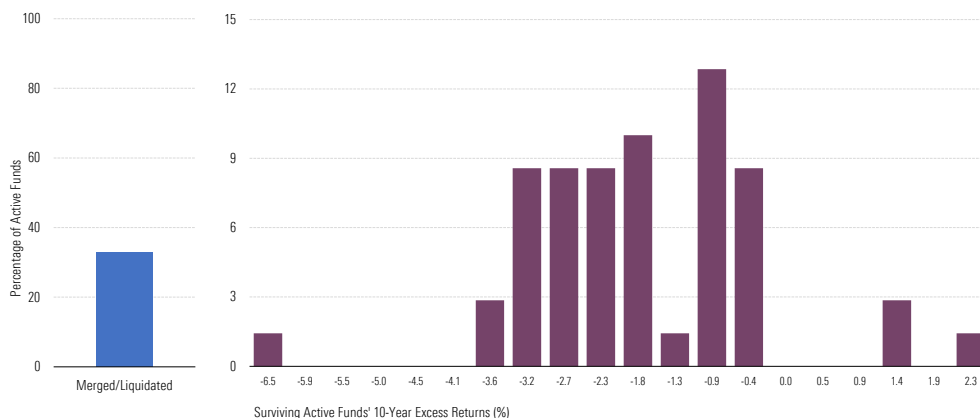
Source: Morningstar Direct. Data as of Dec. 31, 2023.

Exhibit 31 Rolling Success Rates for Surviving Active Europe Equity Income Funds (%)



Source: Morningstar Direct. Data as of Dec. 31, 2023.

Exhibit 32 Mortality and Distribution of 10-Year Annualized Excess Returns for Surviving Active Europe Equity Income Funds (%)



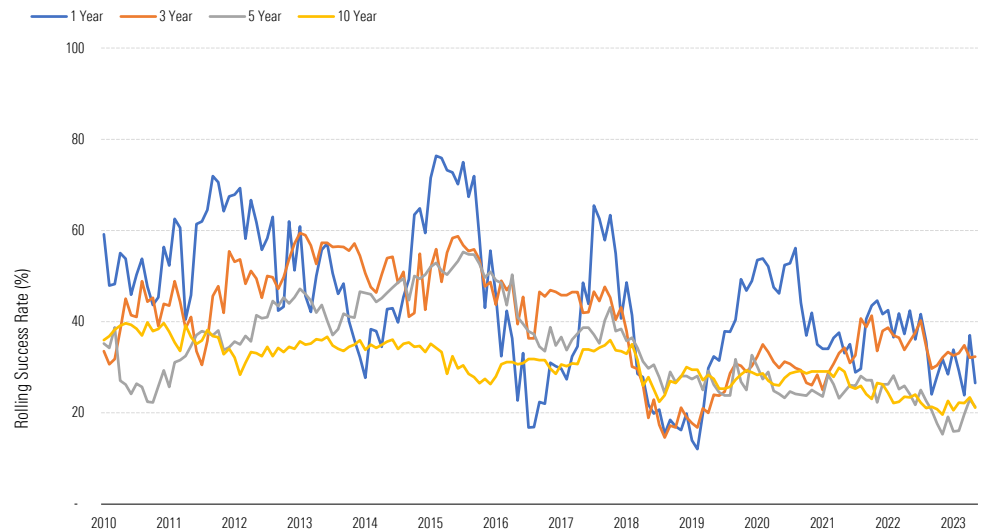
Source: Morningstar Direct. Data as of Dec. 31, 2023.

Exhibit 33 Europe ex-UK Equity

	Active Funds		Passive Funds		Asset-Weighted Performance		Equal-Weighted Performance		Active Success Rate (%)
	# at Beginning of Period	Survivorship Rate (%)	# at Beginning of Period	Survivorship Rate (%)	Active (%)	Passive (%)	Active (%)	Passive (%)	
Trailing Total Return									
1-Year	128	92.2	30	93.3	17.7	17.7	15.9	17.9	26.6
3-year	133	78.9	24	83.3	6.6	8.8	7.5	8.8	32.3
5-Year	136	67.6	22	77.3	10.6	11.0	10.1	11.0	21.3
10-Year	142	51.4	17	52.9	7.5	7.4	6.8	7.4	21.1
15-Year	172	34.9	13	53.8	9.5	9.1	9.0	9.2	20.3
20-Year	138	30.4	5	60.0	7.1	5.8	6.9	6.7	21.0

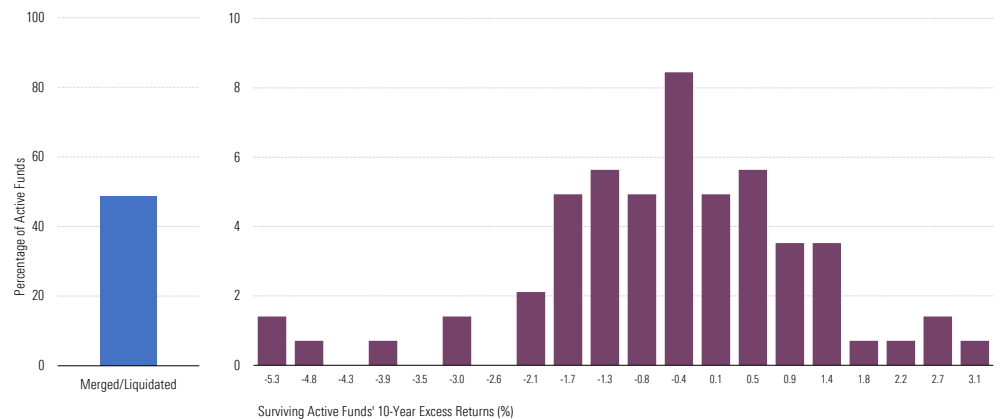
Source: Morningstar Direct. Data as of Dec. 31, 2023.

Exhibit 34 Rolling Success Rates for Surviving Active Europe ex-UK Equity Funds (%)



Source: Morningstar Direct. Data as of Dec. 31, 2023.

Exhibit 35 Mortality and Distribution of 10-Year Annualized Excess Returns for Surviving Active Europe ex-UK Equity Funds (%)



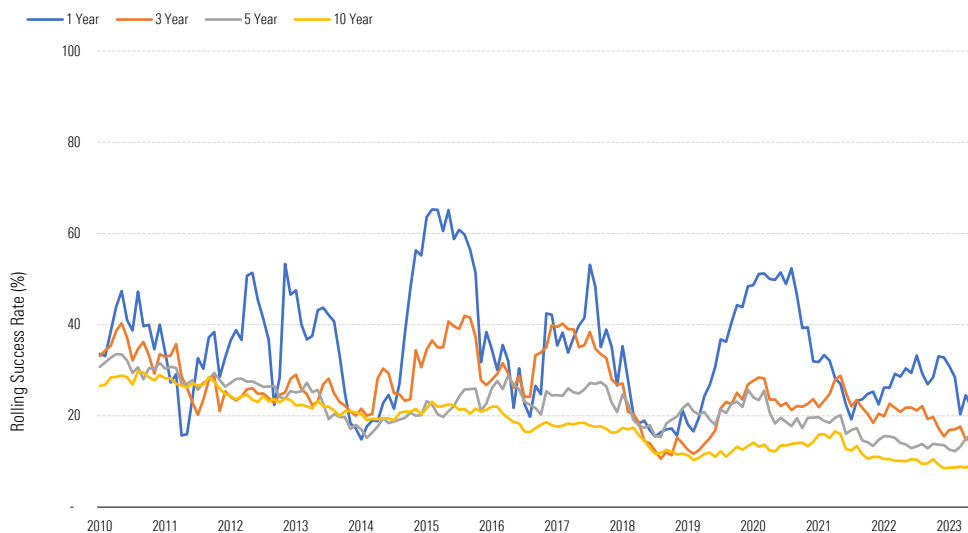
Source: Morningstar Direct. Data as of Dec. 31, 2023.

Exhibit 36 Europe Large-Cap Blend Equity

	Active Funds		Passive Funds		Asset-Weighted Performance		Equal-Weighted Performance		Active Success Rate (%)
	# at Beginning of Period	Survivorship Rate (%)	# at Beginning of Period	Survivorship Rate (%)	Active (%)	Passive (%)	Active (%)	Passive (%)	
Trailing Total Return									
1-Year	534	94.8	145	95.2	14.0	16.5	13.5	16.2	21.9
3-year	531	83.6	136	91.2	7.0	9.2	6.3	9.0	15.3
5-Year	603	69.7	123	81.3	8.4	9.9	8.0	9.9	15.9
10-Year	569	50.6	103	66.0	5.3	6.5	4.9	6.5	9.1
15-Year	751	28.5	65	52.3	7.5	8.7	7.2	8.6	7.5
20-Year	691	25.3	47	44.7	5.0	6.1	4.8	5.8	8.2

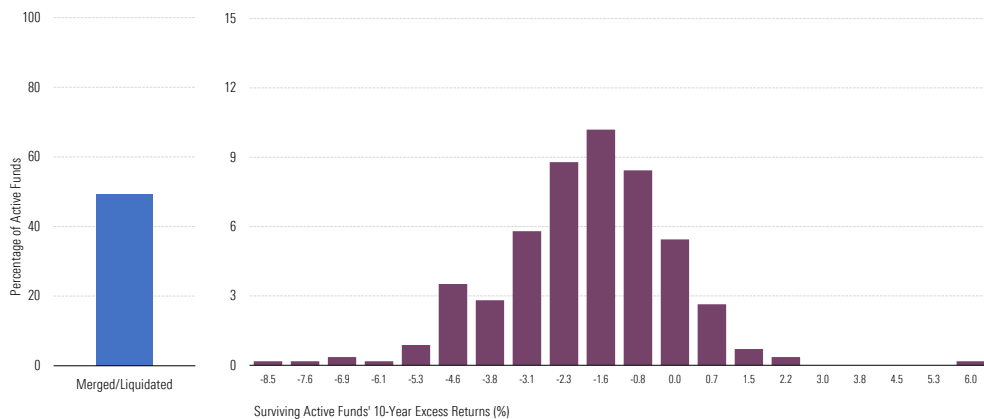
Source: Morningstar Direct. Data as of Dec. 31, 2023.

Exhibit 37 Rolling Success Rates for Surviving Active Europe Large-Cap Blend Equity Funds (%)



Source: Morningstar Direct. Data as of Dec. 31, 2023.

Exhibit 38 Mortality and Distribution of 10-Year Annualized Excess Returns for Surviving Active Europe Large-Cap Blend Equity Funds (%)



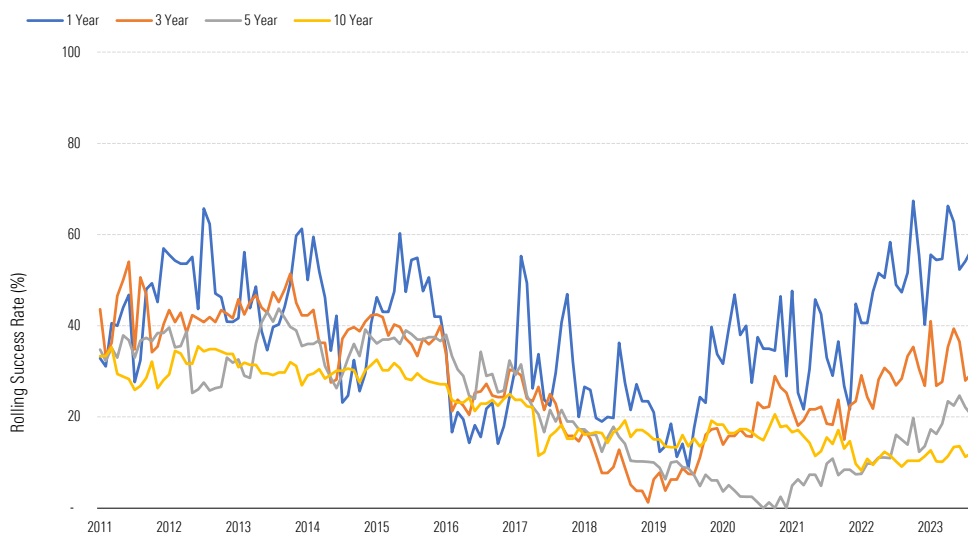
Source: Morningstar Direct. Data as of Dec. 31, 2023.

Exhibit 39 Europe Large-Cap Growth Equity

	Active Funds		Passive Funds		Asset-Weighted Performance		Equal-Weighted Performance		Active Success Rate (%)
	# at Beginning of Period	Survivorship Rate (%)	# at Beginning of Period	Survivorship Rate (%)	Active (%)	Passive (%)	Active (%)	Passive (%)	
Trailing Total Return									
1-Year	85	94.1	6	100.0	17.2	15.0	16.0	14.7	56.5
3-year	92	87.0	5	100.0	4.8	4.5	4.8	5.1	29.3
5-Year	78	79.5	5	80.0	10.4	10.5	9.7	11.6	20.5
10-Year	75	61.3	4	75.0	7.2	6.9	6.3	8.3	12.0
15-Year	78	47.4	3	66.7	9.8	7.6	8.9	9.7	16.7

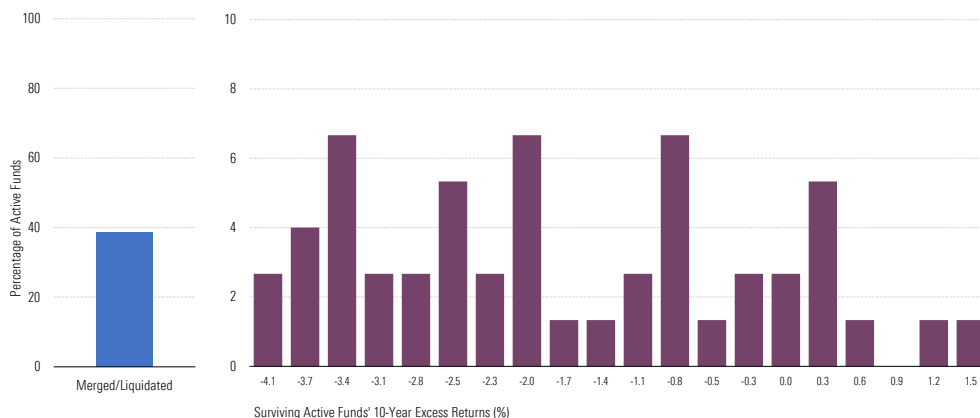
Source: Morningstar Direct. Data as of Dec. 31, 2023.

Exhibit 40 Rolling Success Rates for Surviving Active Europe Large-Cap Growth Equity Funds (%)



Source: Morningstar Direct. Data as of Dec. 31, 2023.

Exhibit 41 Mortality and Distribution of 10-Year Annualized Excess Returns for Surviving Active Europe Large-Cap Growth Equity Funds (%)



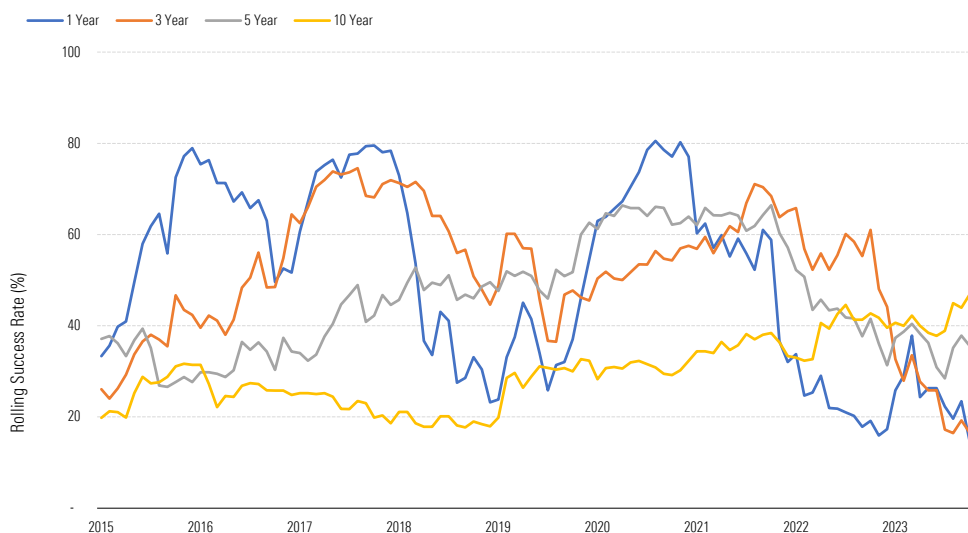
Source: Morningstar Direct. Data as of Dec. 31, 2023.

Exhibit 42 Europe Small-Cap Equity

	Active Funds		Passive Funds		Asset-Weighted Performance		Equal-Weighted Performance		Active Success Rate (%)
	# at Beginning of Period	Survivorship Rate (%)	# at Beginning of Period	Survivorship Rate (%)	Active (%)	Passive (%)	Active (%)	Passive (%)	
Trailing Total Return									
1-Year	157	94.3	7	85.7	7.7	12.7	6.1	12.6	14.6
3-year	151	91.4	7	85.7	- 1.3	3.1	- 0.3	3.7	16.6
5-Year	149	82.6	7	85.7	7.0	8.5	7.5	8.2	35.6
10-Year	96	70.8	9	55.6	6.1	6.6	7.0	6.6	46.9
15-Year	116	41.4	6	66.7	10.9	11.6	10.8	11.8	12.9

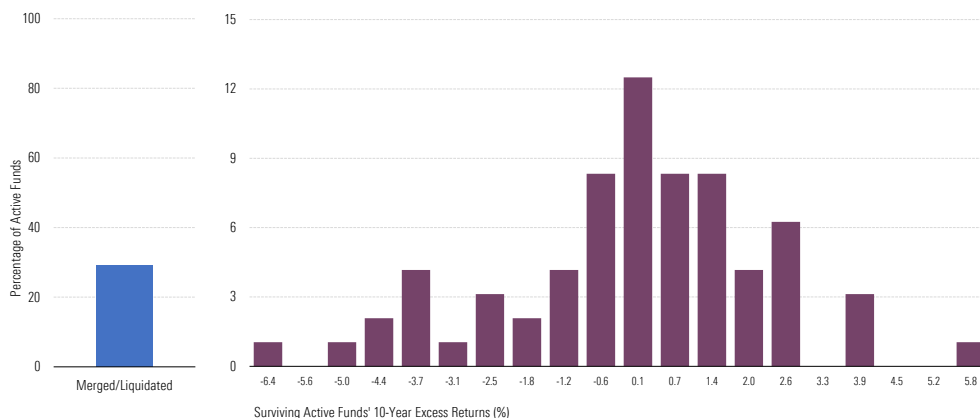
Source: Morningstar Direct. Data as of Dec. 31, 2023.

Exhibit 43 Rolling Success Rates for Surviving Active Europe Small-Cap Equity Funds (%)



Source: Morningstar Direct. Data as of Dec. 31, 2023.

Exhibit 44 Mortality and Distribution of 10-Year Annualized Excess Returns for Surviving Active Europe Small-Cap Equity Funds (%)



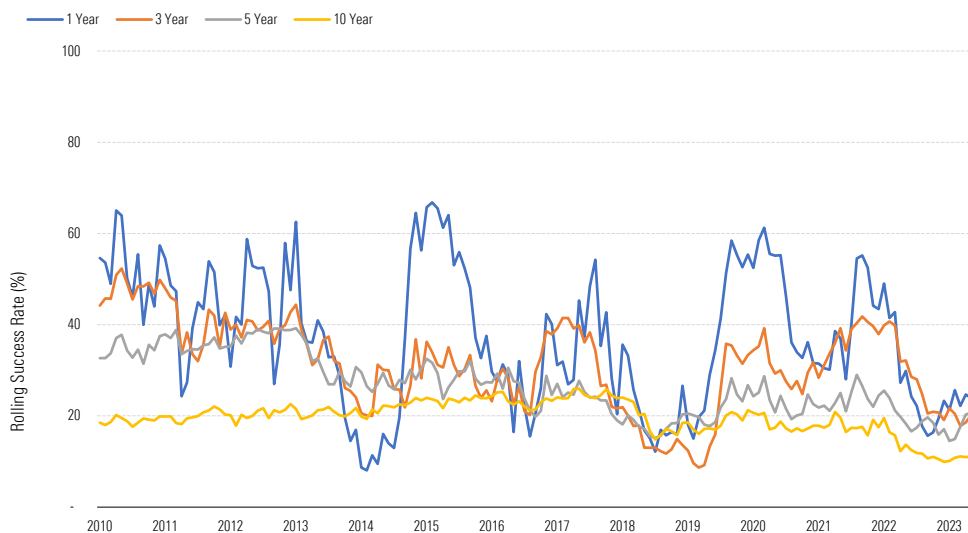
Source: Morningstar Direct. Data as of Dec. 31, 2023.

Exhibit 45 Eurozone Large-Cap Equity

	Active Funds		Passive Funds		Asset-Weighted Performance		Equal-Weighted Performance		Active Success Rate (%)
	# at Beginning of Period	Survivorship Rate (%)	# at Beginning of Period	Survivorship Rate (%)	Active (%)	Passive (%)	Active (%)	Passive (%)	
Trailing Total Return									
1-Year	376	97.9	99	100.0	17.2	19.9	16.4	19.0	23.9
3-year	387	87.1	97	92.8	7.2	9.6	6.8	8.9	20.2
5-Year	401	79.1	102	78.4	9.0	10.3	8.2	9.6	20.7
10-Year	432	59.3	97	60.8	5.6	6.6	5.1	6.3	11.1
15-Year	677	35.0	115	39.1	7.0	7.6	6.6	7.2	12.0
20-Year	725	23.2	84	29.8	4.9	5.7	4.7	5.3	8.4

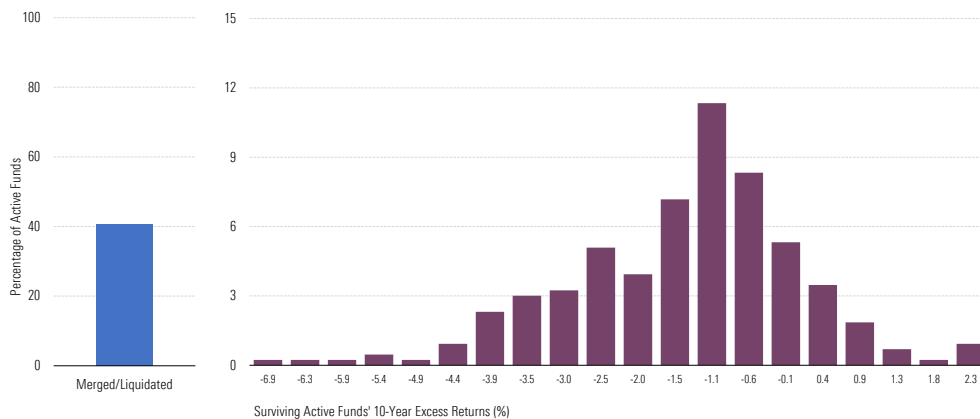
Source: Morningstar Direct. Data as of Dec. 31, 2023.

Exhibit 46 Rolling Success Rates for Surviving Active Eurozone Large-Cap Equity Funds (%)



Source: Morningstar Direct. Data as of Dec. 31, 2023.

Exhibit 47 Mortality and Distribution of 10-Year Annualized Excess Returns for Surviving Active Eurozone Large-Cap Equity Funds (%)



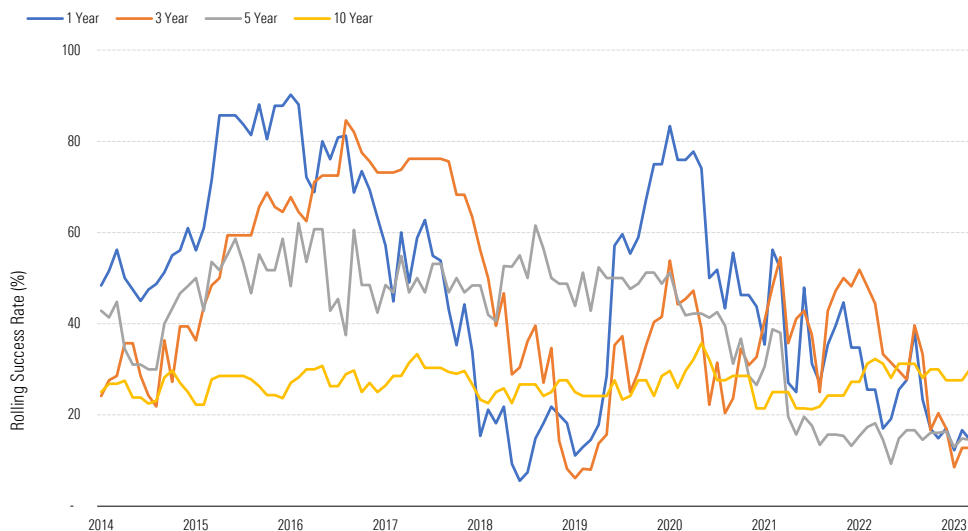
Source: Morningstar Direct. Data as of Dec. 31, 2023.

Exhibit 48 Eurozone Small-Cap Equity

	Active Funds		Passive Funds		Asset-Weighted Performance		Equal-Weighted Performance		Active Success Rate (%)
	# at Beginning of Period	Survivorship Rate (%)	# at Beginning of Period	Survivorship Rate (%)	Active (%)	Passive (%)	Active (%)	Passive (%)	
Trailing Total Return									
1-Year	48	97.9	4	100.0	8.1	14.4	6.6	14.4	14.6
3-year	47	93.6	4	100.0	1.1	5.5	1.3	5.5	12.8
5-Year	55	85.5	4	100.0	6.6	9.7	7.3	9.7	14.5
10-Year	30	66.7	6	66.7	6.2	7.6	6.8	7.8	30.0
15-Year	31	48.4	3	66.7	9.4	10.1	9.8	10.7	19.4

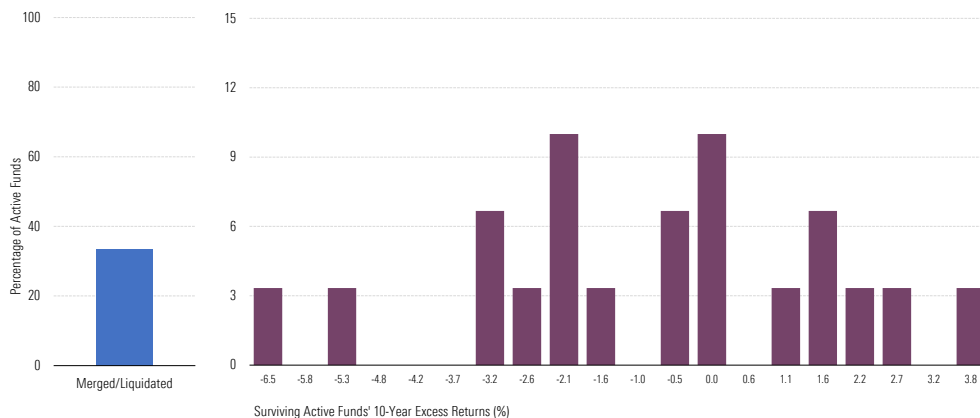
Source: Morningstar Direct. Data as of Dec. 31, 2023.

Exhibit 49 Rolling Success Rates for Surviving Active Eurozone Small-Cap Equity Funds (%)



Source: Morningstar Direct. Data as of Dec. 31, 2023.

Exhibit 50 Mortality and Distribution of 10-Year Annualized Excess Returns for Surviving Active Eurozone Small-Cap Equity Funds (%)



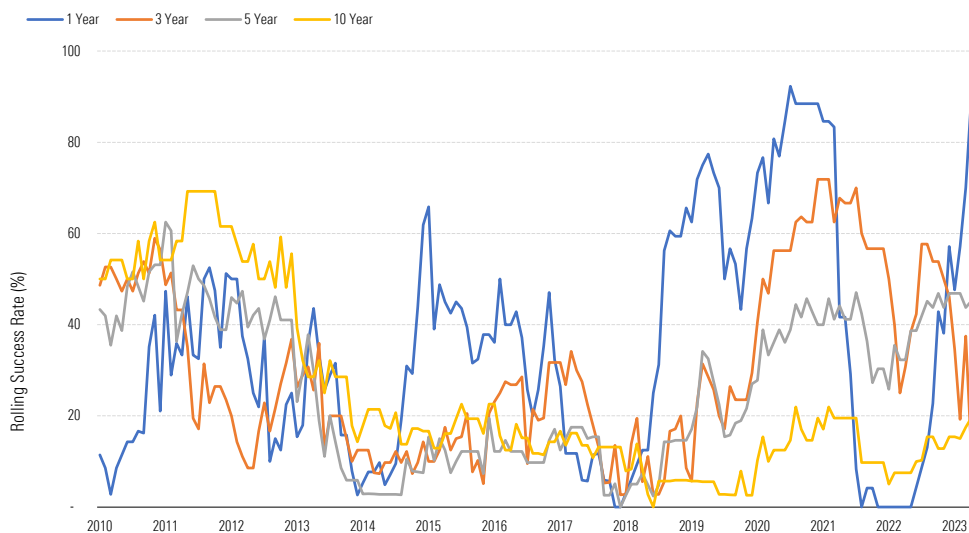
Source: Morningstar Direct. Data as of Dec. 31, 2023.

Exhibit 51 Finland Equity

	Active Funds		Passive Funds		Asset-Weighted Performance		Equal-Weighted Performance		Active Success Rate (%)
	# at Beginning of Period	Survivorship Rate (%)	# at Beginning of Period	Survivorship Rate (%)	Active (%)	Passive (%)	Active (%)	Passive (%)	
Trailing Total Return									
1-Year	19	100.0	6	100.0	1.2	- 1.4	3.0	- 1.1	89.5
3-year	24	75.0	6	100.0	0.6	2.8	- 0.1	2.6	12.5
5-Year	31	58.1	6	100.0	8.8	7.9	9.5	7.8	45.2
10-Year	41	43.9	4	100.0	7.3	8.1	8.0	7.9	19.5
15-Year	36	44.4	4	100.0	10.0	10.1	10.5	10.4	30.6
20-Year	28	46.4	4	75.0	8.7	7.6	8.6	8.2	32.1

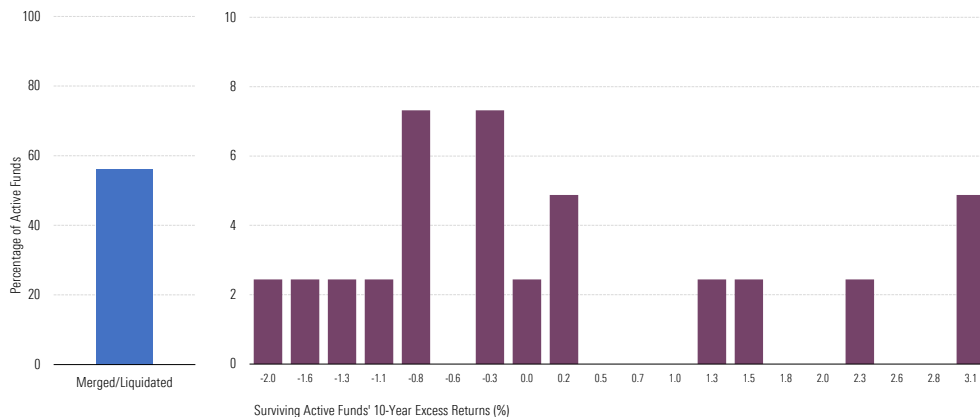
Source: Morningstar Direct. Data as of Dec. 31, 2023.

Exhibit 52 Rolling Success Rates for Surviving Active Finland Equity Funds (%)



Source: Morningstar Direct. Data as of Dec. 31, 2023.

Exhibit 53 Mortality and Distribution of 10-Year Annualized Excess Returns for Surviving Active Finland Equity Funds (%)



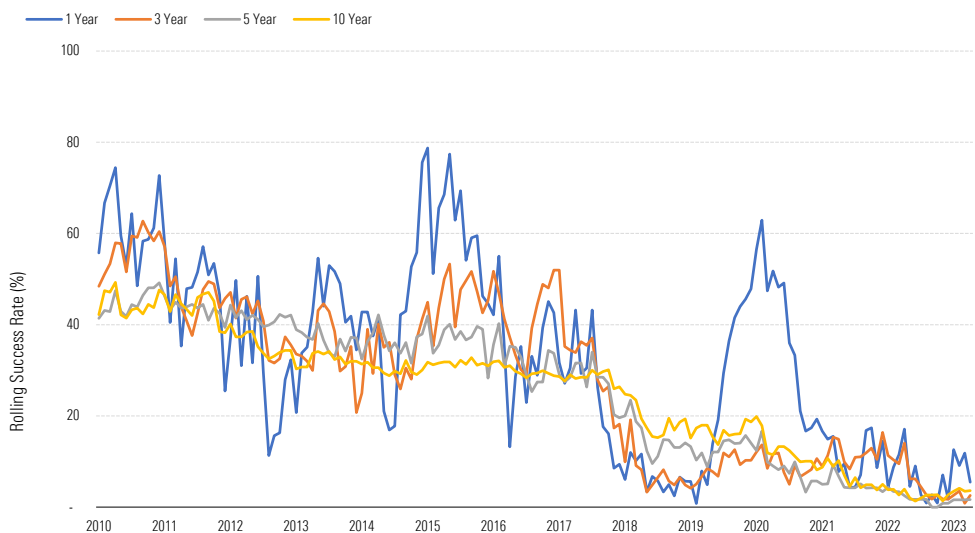
Source: Morningstar Direct. Data as of Dec. 31, 2023.

Exhibit 54 France Equity

	Active Funds		Passive Funds		Asset-Weighted Performance		Equal-Weighted Performance		Active Success Rate (%)
	# at Beginning of Period	Survivorship Rate (%)	# at Beginning of Period	Survivorship Rate (%)	Active (%)	Passive (%)	Active (%)	Passive (%)	
Trailing Total Return									
1-Year	110	94.5	13	84.6	13.8	19.6	13.2	19.3	5.5
3-year	117	82.9	13	84.6	8.3	13.3	7.9	12.7	2.6
5-Year	121	75.2	14	71.4	8.7	12.4	8.5	12.0	1.7
10-Year	138	56.5	22	40.9	6.0	8.5	5.7	8.1	3.6
15-Year	192	33.9	35	22.9	7.2	9.1	7.2	8.5	5.7
20-Year	164	27.4	24	12.5	5.4	6.9	5.4	6.1	9.8

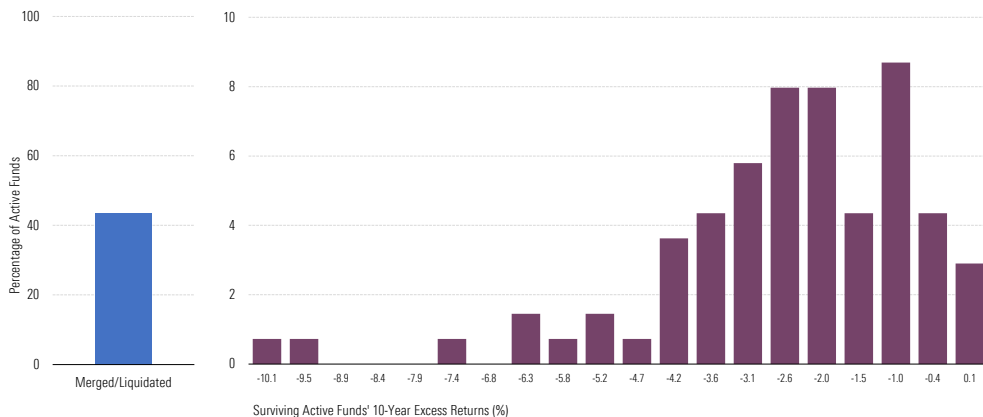
Source: Morningstar Direct. Data as of Dec. 31, 2023.

Exhibit 55 Rolling Success Rates for Surviving Active France Equity Funds (%)



Source: Morningstar Direct. Data as of Dec. 31, 2023.

Exhibit 56 Mortality and Distribution of 10-Year Annualized Excess Returns for Surviving Active France Equity Funds (%)



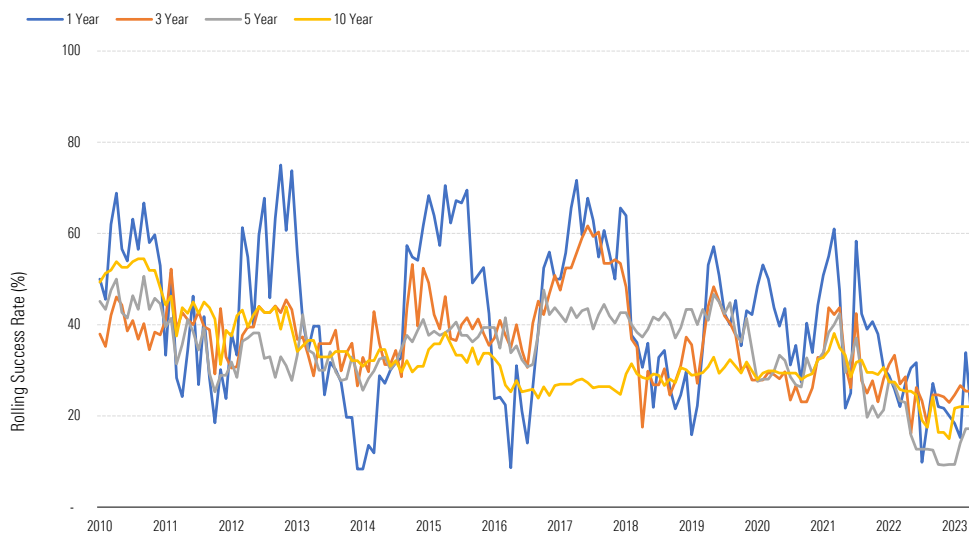
Source: Morningstar Direct. Data as of Dec. 31, 2023.

Exhibit 57 Germany Equity

	Active Funds		Passive Funds		Asset-Weighted Performance		Equal-Weighted Performance		Active Success Rate (%)
	# at Beginning of Period	Survivorship Rate (%)	# at Beginning of Period	Survivorship Rate (%)	Active (%)	Passive (%)	Active (%)	Passive (%)	
Trailing Total Return									
1-Year	59	98.3	28	85.7	14.8	19.3	14.0	18.4	20.3
3-year	59	91.5	29	79.3	1.6	5.8	1.8	4.5	25.4
5-Year	64	78.1	28	67.9	6.5	8.7	5.9	7.7	17.2
10-Year	59	67.8	22	63.6	4.3	5.1	3.7	4.8	22.0
15-Year	86	43.0	17	47.1	8.1	8.1	7.4	8.0	17.4
20-Year	81	42.0	9	22.2	6.4	6.6	6.0	6.4	22.2

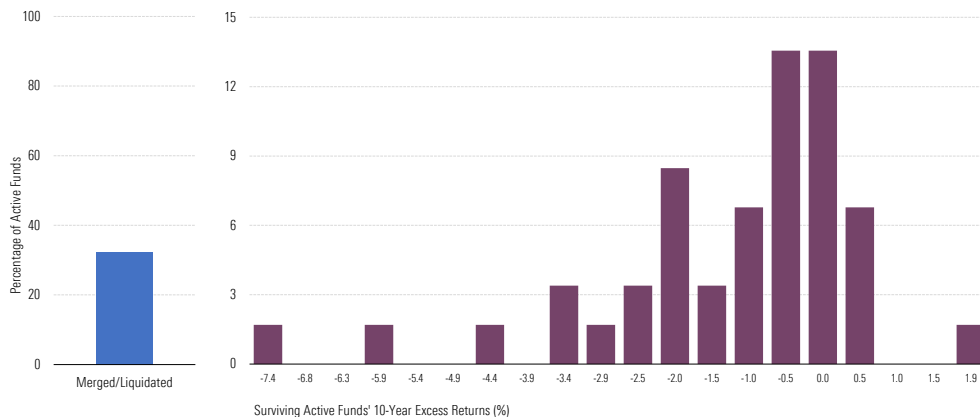
Source: Morningstar Direct. Data as of Dec. 31, 2023.

Exhibit 58 Rolling Success Rates for Surviving Active Germany Equity Funds (%)



Source: Morningstar Direct. Data as of Dec. 31, 2023.

Exhibit 59 Mortality and Distribution of 10-Year Annualized Excess Returns for Surviving Active Germany Equity Funds (%)



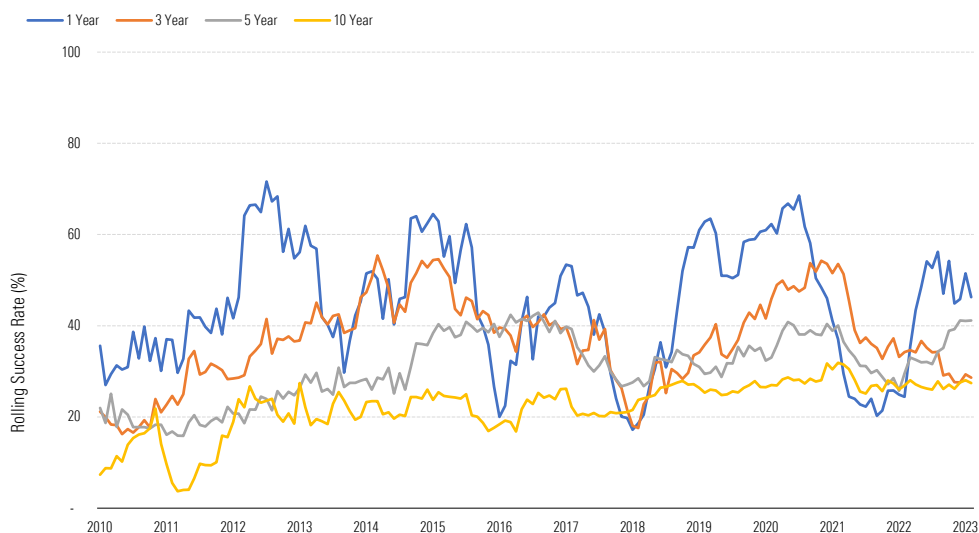
Source: Morningstar Direct. Data as of Dec. 31, 2023.

Exhibit 60 Global Emerging-Markets Equity

	Active Funds		Passive Funds		Asset-Weighted Performance		Equal-Weighted Performance		Active Success Rate (%)
	# at Beginning of Period	Survivorship Rate (%)	# at Beginning of Period	Survivorship Rate (%)	Active (%)	Passive (%)	Active (%)	Passive (%)	
Trailing Total Return									
1-Year	560	95.4	133	95.5	9.7	8.9	10.2	9.5	46.3
3-year	545	86.2	105	89.5	6.8	5.3	5.8	4.6	28.6
5-Year	549	73.2	94	78.7	3.0	3.4	3.2	3.1	41.2
10-Year	532	55.1	66	65.2	1.9	2.3	1.6	1.9	27.4
15-Year	385	46.0	15	73.3	6.0	6.1	5.2	5.7	23.6

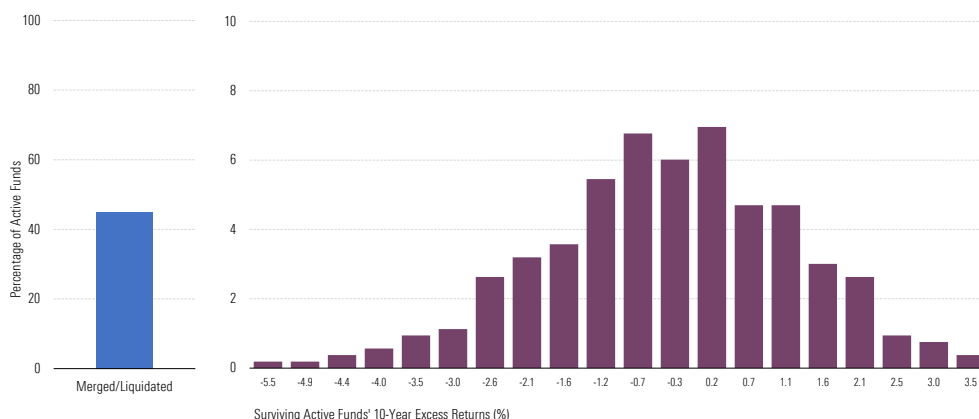
Source: Morningstar Direct. Data as of Dec. 31, 2023.

Exhibit 61 Rolling Success Rates for Surviving Active Global Emerging-Markets Equity Funds (%)



Source: Morningstar Direct. Data as of Dec. 31, 2023.

Exhibit 62 Mortality and Distribution of 10-Year Annualized Excess Returns for Surviving Active Global Emerging-Markets Equity Funds (%)



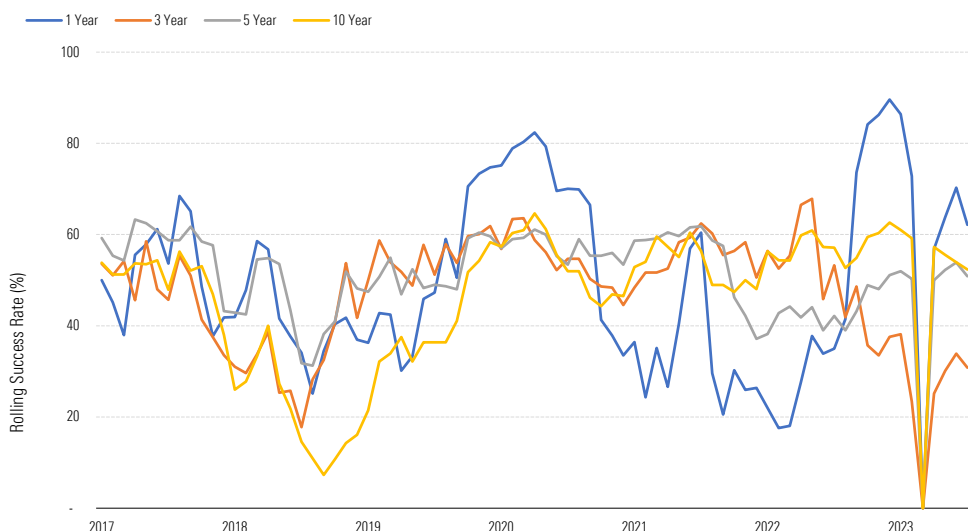
Source: Morningstar Direct. Data as of Dec. 31, 2023.

Exhibit 63 Global Equity Income

	Active Funds		Passive Funds		Asset-Weighted Performance		Equal-Weighted Performance		Active Success Rate (%)
	# at Beginning of Period	Survivorship Rate (%)	# at Beginning of Period	Survivorship Rate (%)	Active (%)	Passive (%)	Active (%)	Passive (%)	
Trailing Total Return									
1-Year	185	96.2	16	100.0	12.2	10.7	14.1	12.1	62.2
3-year	185	87.6	14	100.0	5.3	6.1	5.6	6.5	30.8
5-Year	179	71.5	12	91.7	7.9	7.4	8.6	7.6	50.8
10-Year	128	64.8	5	80.0	4.9	4.3	5.2	4.2	52.3

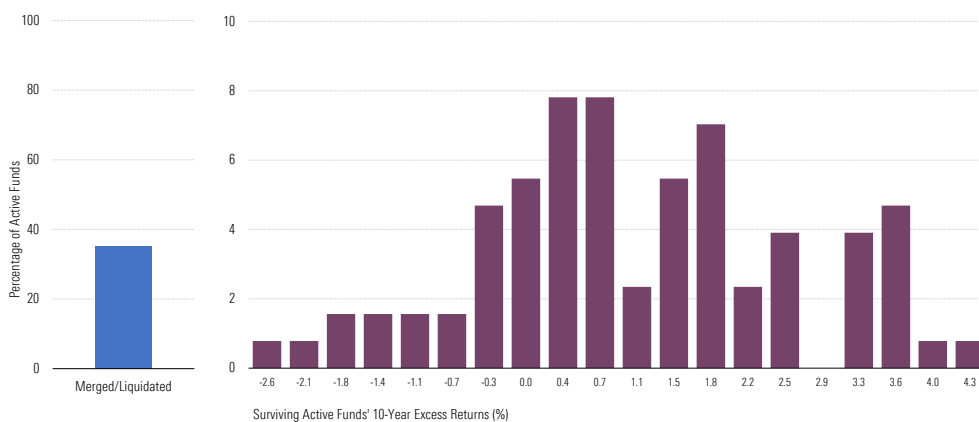
Source: Morningstar Direct. Data as of Dec. 31, 2023.

Exhibit 64 Rolling Success Rates for Surviving Active Global Equity Income Funds (%)



Source: Morningstar Direct. Data as of Dec. 31, 2023.

Exhibit 65 Mortality and Distribution of 10-Year Annualized Excess Returns for Surviving Active Global Equity Income Funds (%)



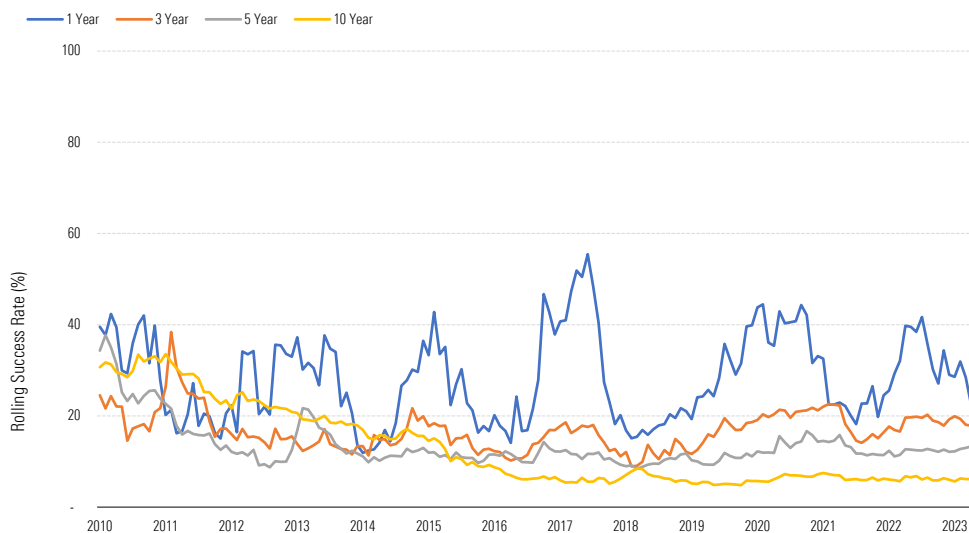
Source: Morningstar Direct. Data as of Dec. 31, 2023.

Exhibit 66 Global Large-Cap Blend Equity

	Active Funds		Passive Funds		Asset-Weighted Performance		Equal-Weighted Performance		Active Success Rate (%)
	# at Beginning of Period	Survivorship Rate (%)	# at Beginning of Period	Survivorship Rate (%)	Active (%)	Passive (%)	Active (%)	Passive (%)	
Trailing Total Return									
1-Year	1,655	96.7	285	97.2	21.1	23.8	18.8	22.8	22.4
3-year	1,462	88.1	234	94.9	5.1	7.1	3.6	6.5	17.9
5-Year	1,585	77.9	198	86.9	10.7	12.4	9.4	12.2	13.3
10-Year	1,381	55.8	118	69.5	7.2	8.4	5.4	8.2	6.2
15-Year	1,671	34.8	60	53.3	8.9	10.5	7.5	10.2	4.5
20-Year	1,377	29.6	35	57.1	6.3	7.6	5.2	7.3	3.4

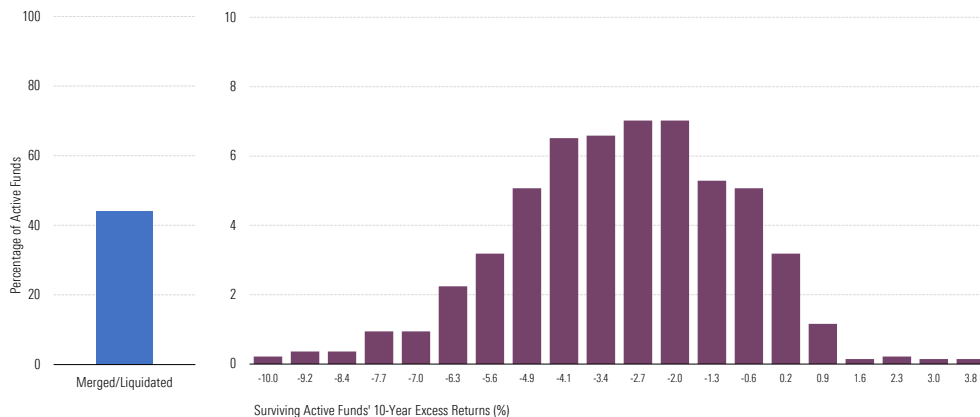
Source: Morningstar Direct. Data as of Dec. 31, 2023.

Exhibit 67 Rolling Success Rates for Surviving Active Global Large-Cap Blend Equity Funds (%)



Source: Morningstar Direct. Data as of Dec. 31, 2023.

Exhibit 68 Mortality and Distribution of 10-Year Annualized Excess Returns for Surviving Active Global Large-Cap Blend Equity Funds (%)



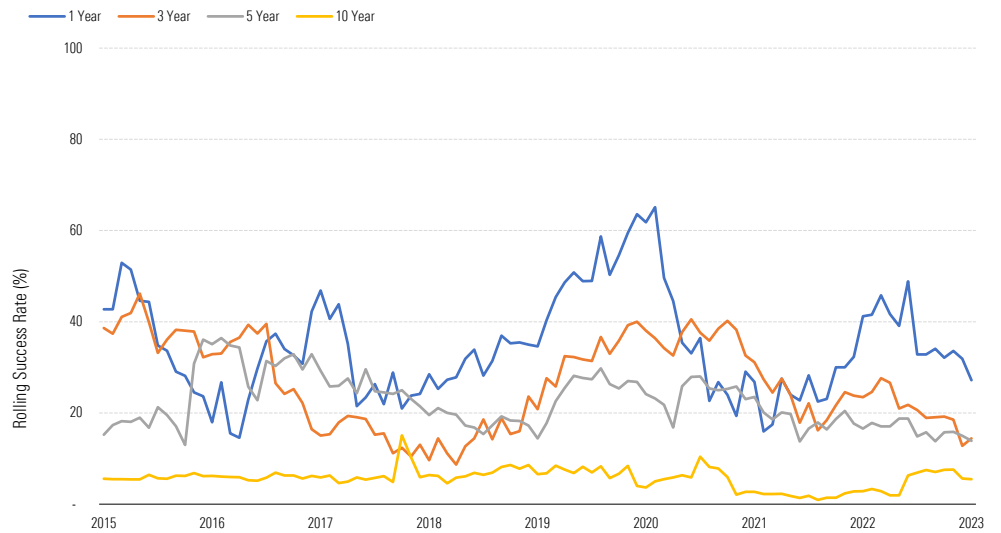
Source: Morningstar Direct. Data as of Dec. 31, 2023.

Exhibit 69 Global Large-Cap Value Equity

	Active Funds		Passive Funds		Asset-Weighted Performance		Equal-Weighted Performance		Active Success Rate (%)
	# at Beginning of Period	Survivorship Rate (%)	# at Beginning of Period	Survivorship Rate (%)	Active (%)	Passive (%)	Active (%)	Passive (%)	
Trailing Total Return									
1-Year	136	94.1	10	100.0	16.4	19.2	15.6	18.7	27.2
3-year	125	86.4	9	88.9	6.1	8.9	6.1	9.1	14.4
5-Year	180	75.6	8	87.5	8.6	11.7	8.7	10.8	13.9
10-Year	201	56.2	8	50.0	5.2	8.5	5.2	7.7	5.5
15-Year	246	35.8	5	80.0	7.6	11.2	7.5	10.1	3.7

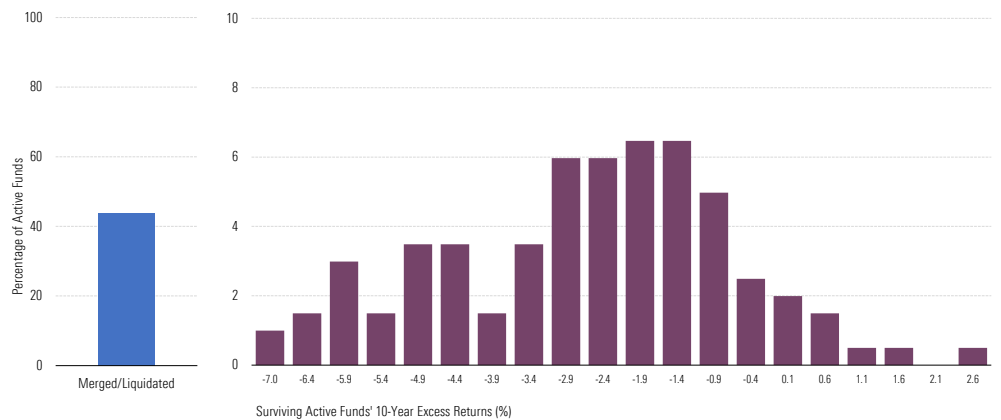
Source: Morningstar Direct. Data as of Dec. 31, 2023.

Exhibit 70 Rolling Success Rates for Surviving Active Global Large-Cap Value Equity Funds (%)



Source: Morningstar Direct. Data as of Dec. 31, 2023.

Exhibit 71 Mortality and Distribution of 10-Year Annualized Excess Returns for Surviving Active Global Large-Cap Value Equity Funds (%)



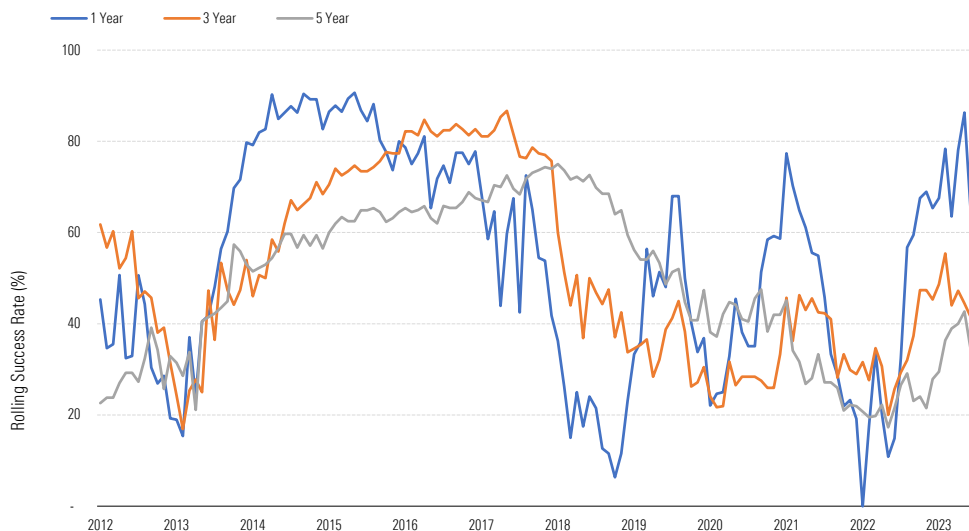
Source: Morningstar Direct. Data as of Dec. 31, 2023.

Exhibit 72 India Equity

	Active Funds		Passive Funds		Asset-Weighted Performance		Equal-Weighted Performance		Active Success Rate (%)
	# at Beginning of Period	Survivorship Rate (%)	# at Beginning of Period	Survivorship Rate (%)	Active (%)	Passive (%)	Active (%)	Passive (%)	
Trailing Total Return									
1-Year	70	97.1	7	100.0	23.3	19.8	22.4	19.7	64.3
3-year	70	90.0	8	87.5	10.8	10.8	10.6	10.7	41.4
5-Year	76	75.0	8	75.0	10.4	10.4	10.2	10.4	34.2
10-Year	71	67.6	7	57.1	10.1	8.4	10.0	8.6	53.5
15-Year	69	53.6	5	40.0	11.0	9.5	10.6	9.5	42.0

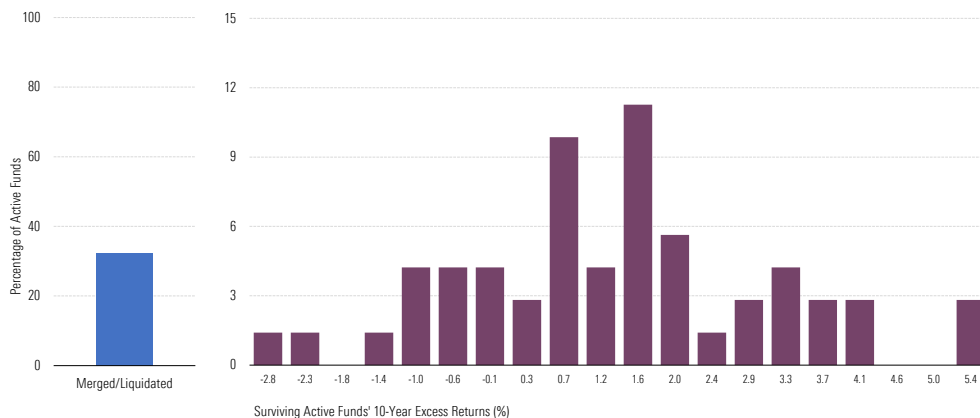
Source: Morningstar Direct. Data as of Dec. 31, 2023.

Exhibit 73 Rolling Success Rates for Surviving Active India Equity Funds (%)



Source: Morningstar Direct. Data as of Dec. 31, 2023.

Exhibit 74 Mortality and Distribution of 10-Year Annualized Excess Returns for Surviving Active India Equity Funds (%)



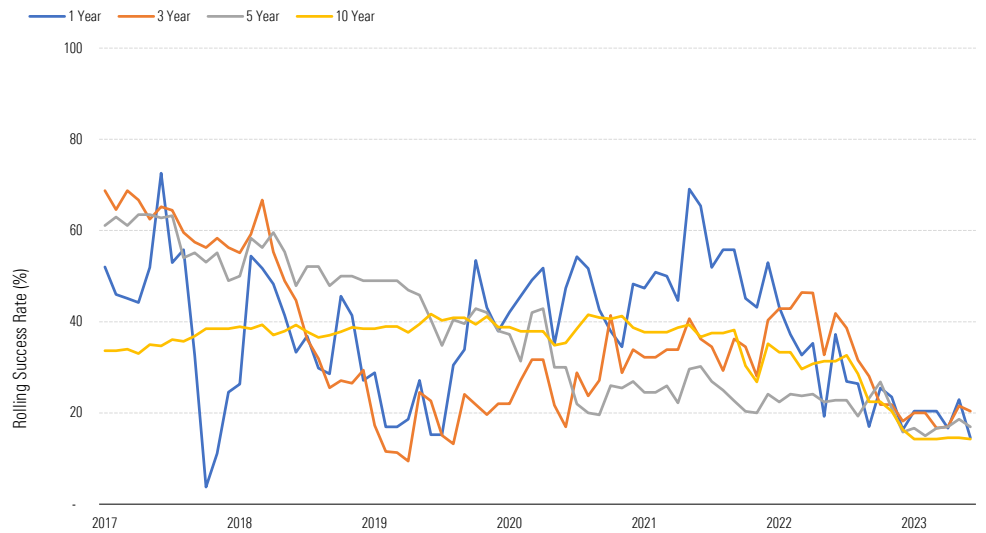
Source: Morningstar Direct. Data as of Dec. 31, 2023.

Exhibit 75 Italy Equity

	Active Funds		Passive Funds		Asset-Weighted Performance		Equal-Weighted Performance		Active Success Rate (%)
	# at Beginning of Period	Survivorship Rate (%)	# at Beginning of Period	Survivorship Rate (%)	Active (%)	Passive (%)	Active (%)	Passive (%)	
Trailing Total Return									
1-Year	48	100.0	10	100.0	21.3	29.9	19.2	29.2	14.6
3-year	49	89.8	10	90.0	10.8	13.7	10.5	13.5	20.4
5-Year	59	71.2	12	75.0	10.3	12.7	10.4	12.6	16.9
10-Year	49	53.1	10	60.0	6.0	7.9	6.4	7.7	14.3
15-Year	81	32.1	7	42.9	6.1	6.2	6.3	6.0	19.8

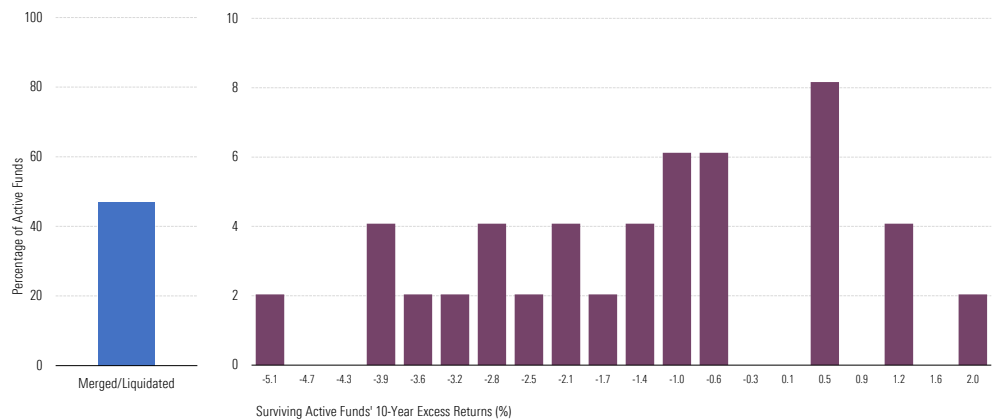
Source: Morningstar Direct. Data as of Dec. 31, 2023.

Exhibit 76 Rolling Success Rates for Surviving Active Italy Equity Funds (%)



Source: Morningstar Direct. Data as of Dec. 31, 2023.

Exhibit 77 Mortality and Distribution of 10-Year Annualized Excess Returns for Surviving Active Italy Equity Funds (%)



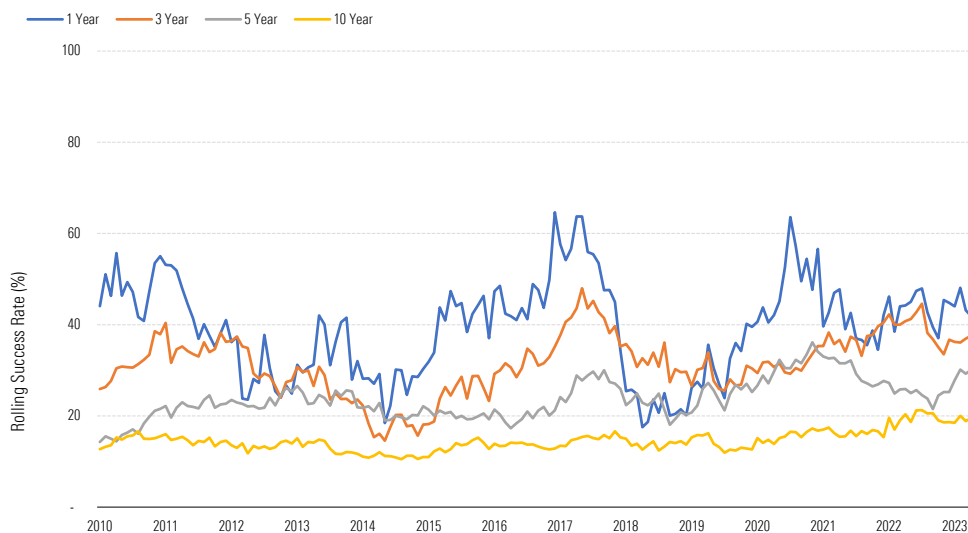
Source: Morningstar Direct. Data as of Dec. 31, 2023.

Exhibit 78 Japan Large-Cap Equity

	Active Funds		Passive Funds		Asset-Weighted Performance		Equal-Weighted Performance		Active Success Rate (%)
	# at Beginning of Period	Survivorship Rate (%)	# at Beginning of Period	Survivorship Rate (%)	Active (%)	Passive (%)	Active (%)	Passive (%)	
Trailing Total Return									
1-Year	184	96.2	96	97.9	24.4	27.5	26.5	27.6	41.8
3-year	197	83.2	85	92.9	9.0	10.9	10.3	11.1	37.6
5-Year	226	69.5	82	84.1	12.0	12.1	11.6	12.1	30.1
10-Year	251	49.0	64	65.6	7.5	7.9	7.2	7.9	19.5
15-Year	440	24.5	58	50.0	8.7	8.8	8.2	8.8	10.5
20-Year	360	21.1	43	41.9	4.6	5.9	4.5	5.4	5.8

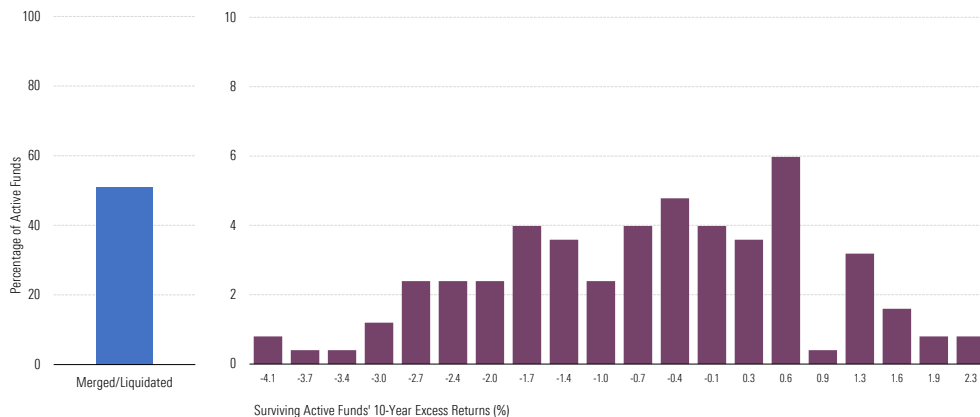
Source: Morningstar Direct. Data as of Dec. 31, 2023.

Exhibit 79 Rolling Success Rates for Surviving Active Japan Large-Cap Equity Funds (%)



Source: Morningstar Direct. Data as of Dec. 31, 2023.

Exhibit 80 Mortality and Distribution of 10-Year Annualized Excess Returns for Surviving Active Japan Large-Cap Equity Funds (%)



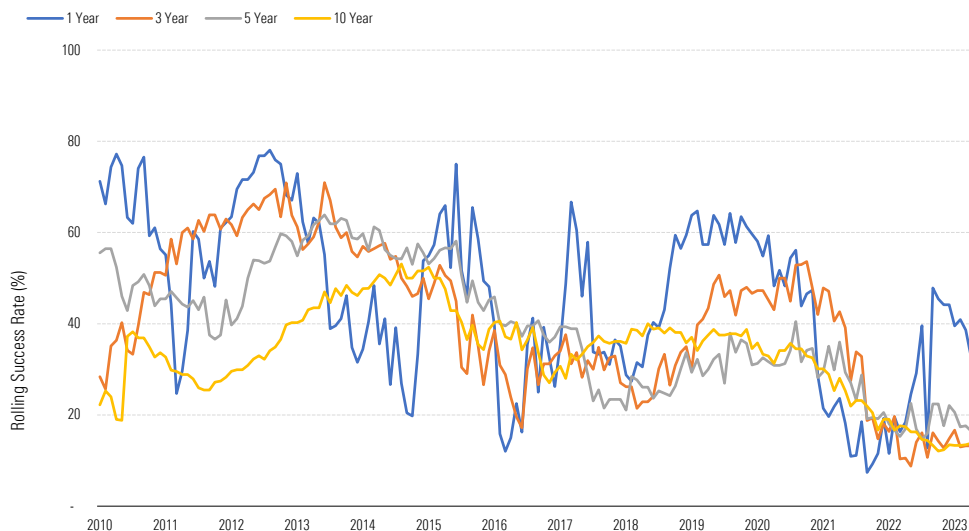
Source: Morningstar Direct. Data as of Dec. 31, 2023.

Exhibit 81 Latin America Equity

	Active Funds		Passive Funds		Asset-Weighted Performance		Equal-Weighted Performance		Active Success Rate (%)
	# at Beginning of Period	Survivorship Rate (%)	# at Beginning of Period	Survivorship Rate (%)	Active (%)	Passive (%)	Active (%)	Passive (%)	
Trailing Total Return									
1-Year	43	93.0	7	71.4	28.5	30.9	29.2	30.4	32.6
3-year	53	71.7	7	71.4	4.5	8.3	4.5	8.1	13.2
5-Year	67	53.7	8	50.0	3.7	4.8	3.4	4.6	16.4
10-Year	87	32.2	14	28.6	0.1	1.1	0.2	1.0	13.8
15-Year	81	24.7	8	25.0	4.2	3.7	4.2	3.6	19.8

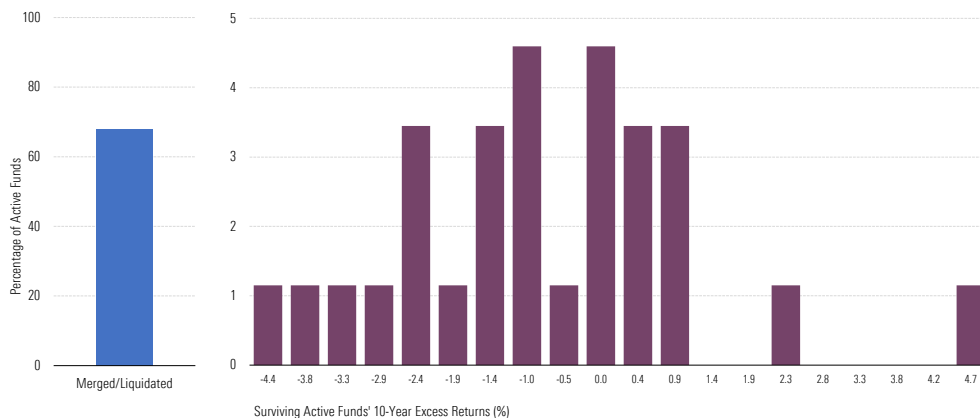
Source: Morningstar Direct. Data as of Dec. 31, 2023.

Exhibit 82 Rolling Success Rates for Surviving Active Latin America Equity Funds (%)



Source: Morningstar Direct. Data as of Dec. 31, 2023.

Exhibit 83 Mortality and Distribution of 10-Year Annualized Excess Returns for Surviving Latin America Equity Funds (%)



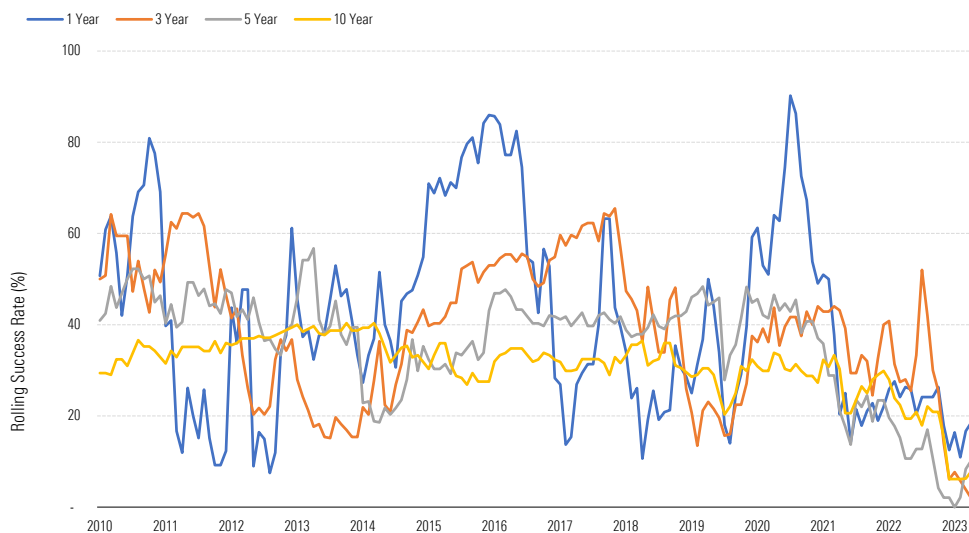
Source: Morningstar Direct. Data as of Dec. 31, 2023.

Exhibit 84 Nordic Equity

	Active Funds		Passive Funds		Asset-Weighted Performance		Equal-Weighted Performance		Active Success Rate (%)
	# at Beginning of Period	Survivorship Rate (%)	# at Beginning of Period	Survivorship Rate (%)	Active (%)	Passive (%)	Active (%)	Passive (%)	
Trailing Total Return									
1-Year	54	96.3	12	100.0	11.2	15.0	9.9	15.1	18.5
3-year	52	90.4	11	100.0	7.3	12.1	6.7	12.1	1.9
5-Year	49	79.6	10	100.0	12.6	14.3	12.6	14.9	10.2
10-Year	64	46.9	11	54.5	10.4	11.9	10.2	11.6	7.8
15-Year	72	40.3	10	40.0	11.5	12.6	12.0	12.0	16.7
20-Year	61	29.5	5	20.0	10.2	10.1	9.8	10.1	13.1

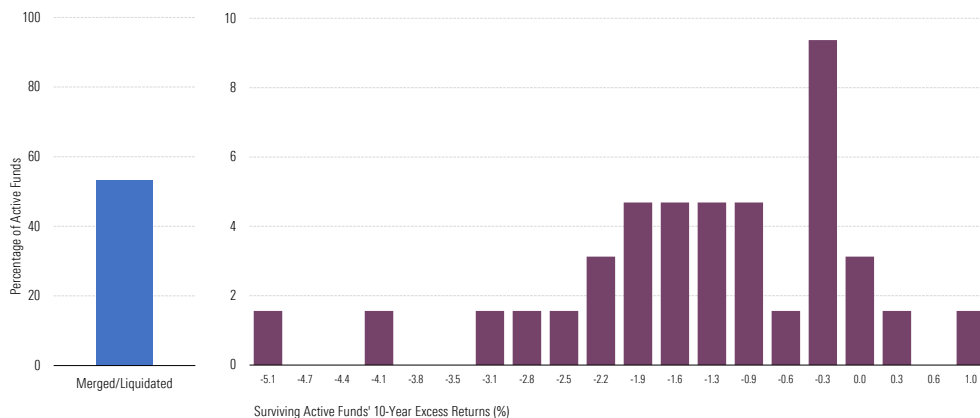
Source: Morningstar Direct. Data as of Dec. 31, 2023.

Exhibit 85 Rolling Success Rates for Surviving Active Nordic Equity Funds (%)



Source: Morningstar Direct. Data as of Dec. 31, 2023.

Exhibit 86 Mortality and Distribution of 10-Year Annualized Excess Returns for Surviving Nordic Equity Funds (%)



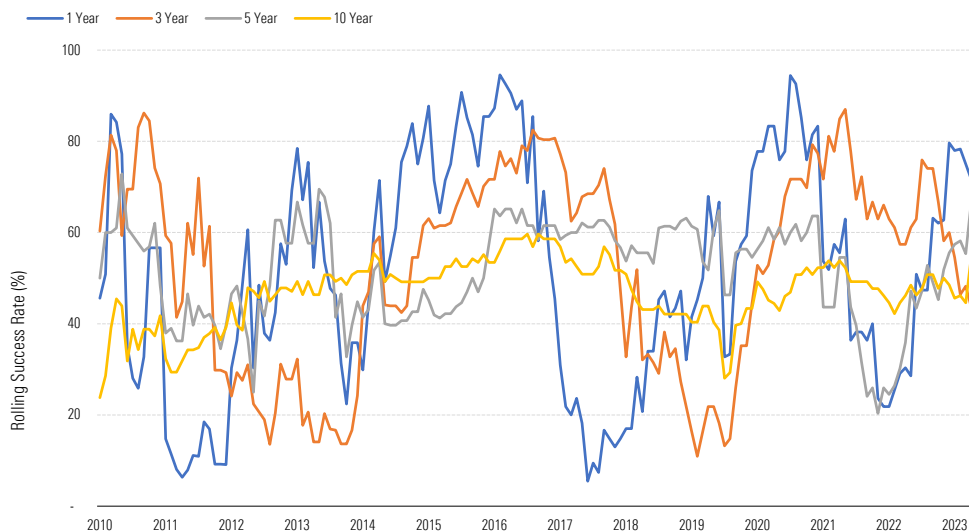
Source: Morningstar Direct. Data as of Dec. 31, 2023.

Exhibit 87 Norway Equity

	Active Funds		Passive Funds		Asset-Weighted Performance		Equal-Weighted Performance		Active Success Rate (%)
	# at Beginning of Period	Survivorship Rate (%)	# at Beginning of Period	Survivorship Rate (%)	Active (%)	Passive (%)	Active (%)	Passive (%)	
Trailing Total Return									
1-Year	60	96.7	8	100.0	12.3	9.5	11.8	9.2	71.7
3-year	55	96.4	10	80.0	8.8	9.9	8.4	8.8	43.6
5-Year	54	90.7	10	80.0	10.5	10.0	10.7	9.0	66.7
10-Year	64	68.8	9	44.4	9.3	8.8	9.6	8.5	54.7
15-Year	59	61.0	8	37.5	12.2	12.2	12.7	12.0	45.8

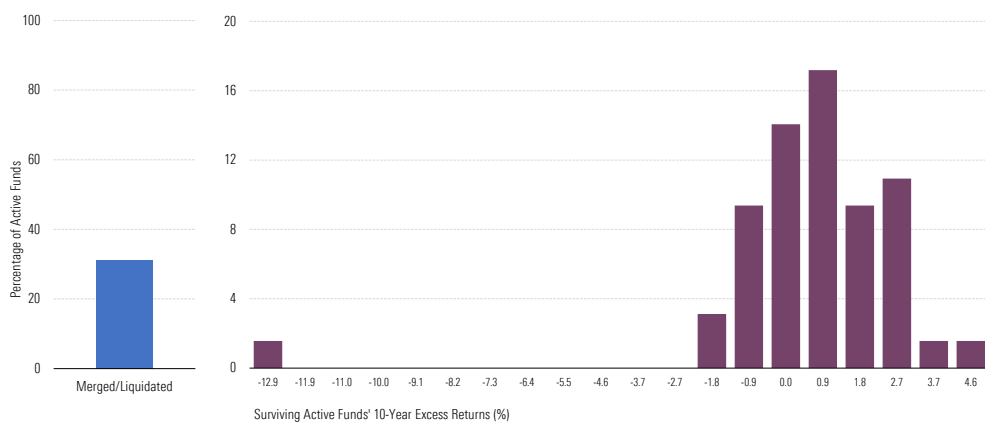
Source: Morningstar Direct. Data as of Dec. 31, 2023.

Exhibit 88 Rolling Success Rates for Surviving Active Norway Equity Funds (%)



Source: Morningstar Direct. Data as of Dec. 31, 2023.

Exhibit 89 Mortality and Distribution of 10-Year Annualized Excess Returns for Surviving Norway Equity Funds (%)



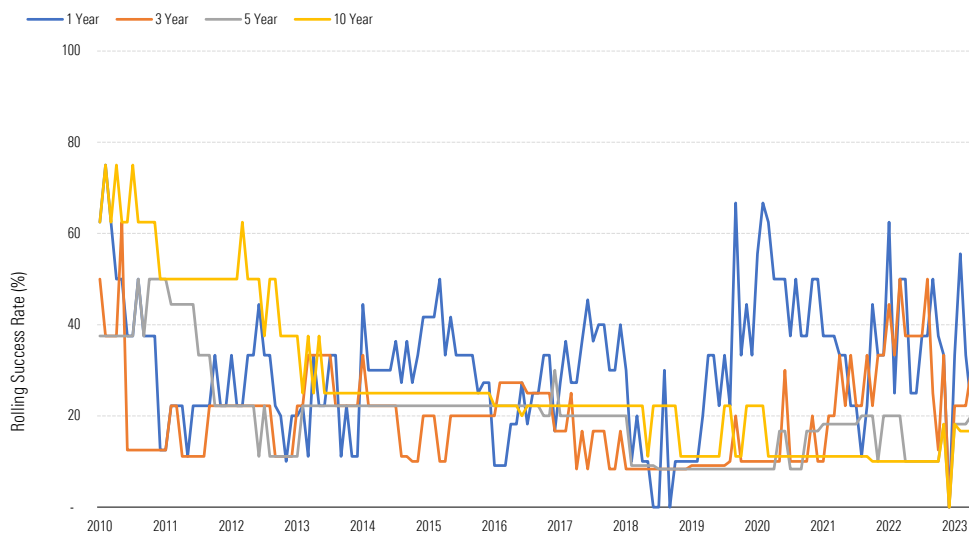
Source: Morningstar Direct. Data as of Dec. 31, 2023.

Exhibit 90 Pacific ex-Japan Equity

	Active Funds		Passive Funds		Asset-Weighted Performance		Equal-Weighted Performance		Active Success Rate (%)
	# at Beginning of Period	Survivorship Rate (%)	# at Beginning of Period	Survivorship Rate (%)	Active (%)	Passive (%)	Active (%)	Passive (%)	
Trailing Total Return									
1-Year	9	100.0	28	96.4	4.8	6.2	3.7	6.1	22.2
3-year	10	90.0	25	96.0	1.1	1.3	0.0	1.2	30.0
5-Year	10	80.0	25	92.0	5.4	5.5	2.4	5.5	20.0
10-Year	12	75.0	18	88.9	3.2	3.8	1.5	3.7	16.7
15-Year	10	80.0	8	87.5	8.1	8.4	7.0	8.3	20.0
20-Year	8	75.0	4	100.0	7.5	7.6	6.4	7.3	12.5

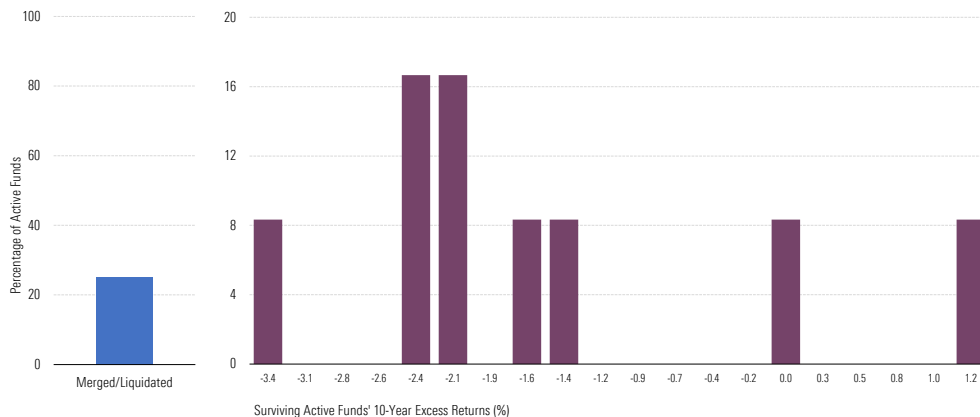
Source: Morningstar Direct. Data as of Dec. 31, 2023.

Exhibit 91 Rolling Success Rates for Surviving Active Pacific ex-Japan Equity Funds (%)



Source: Morningstar Direct. Data as of Dec. 31, 2023.

Exhibit 92 Mortality and Distribution of 10-Year Annualized Excess Returns for Surviving Pacific ex-Japan Equity Funds (%)



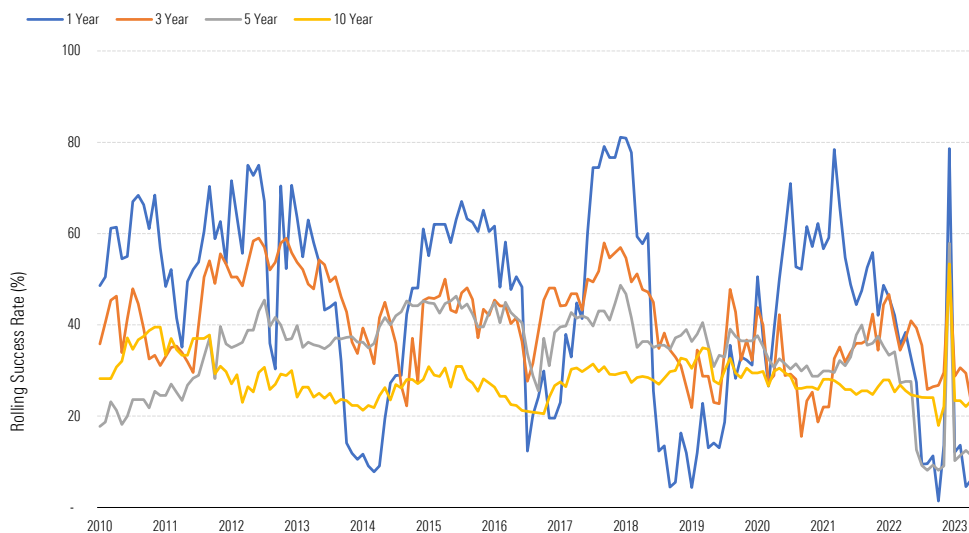
Source: Morningstar Direct. Data as of Dec. 31, 2023.

Exhibit 93 Spain Equity

	Active Funds		Passive Funds		Asset-Weighted Performance		Equal-Weighted Performance		Active Success Rate (%)
	# at Beginning of Period	Survivorship Rate (%)	# at Beginning of Period	Survivorship Rate (%)	Active (%)	Passive (%)	Active (%)	Passive (%)	
Trailing Total Return									
1-Year	66	87.9	11	100.0	20.9	27.2	19.9	25.8	6.1
3-year	83	69.9	12	91.7	9.3	10.9	9.0	10.3	22.9
5-Year	88	61.4	12	91.7	4.8	6.6	4.4	6.3	11.4
10-Year	77	50.6	14	64.3	2.9	3.5	2.3	3.2	23.4
15-Year	115	29.6	23	34.8	4.5	4.3	3.8	4.0	16.5
20-Year	92	28.3	14	35.7	4.1	4.5	3.9	4.1	17.4

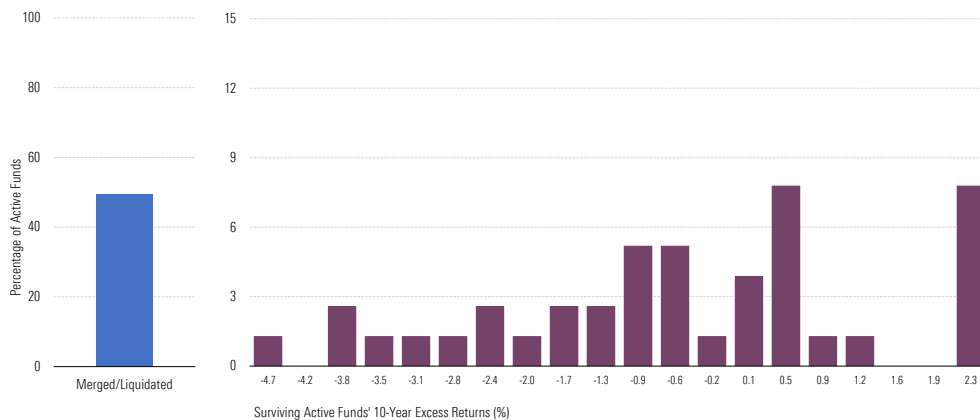
Source: Morningstar Direct. Data as of Dec. 31, 2023.

Exhibit 94 Rolling Success Rates for Surviving Active Spain Equity Funds (%)



Source: Morningstar Direct. Data as of Dec. 31, 2023.

Exhibit 95 Mortality and Distribution of 10-Year Annualized Excess Returns for Surviving Spain Equity Funds (%)



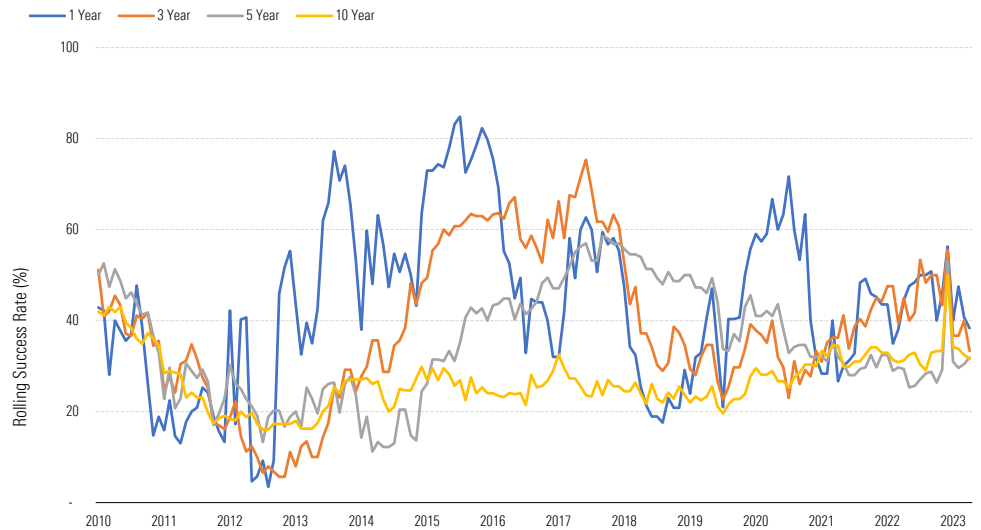
Source: Morningstar Direct. Data as of Dec. 31, 2023.

Exhibit 96 Sweden Equity

	Active Funds		Passive Funds		Asset-Weighted Performance		Equal-Weighted Performance		Active Success Rate (%)
	# at Beginning of Period	Survivorship Rate (%)	# at Beginning of Period	Survivorship Rate (%)	Active (%)	Passive (%)	Active (%)	Passive (%)	
Trailing Total Return									
1-Year	60	98.3	27	100.0	16.4	18.4	15.7	17.8	38.3
3-year	60	88.3	26	100.0	6.3	8.0	6.6	8.2	33.3
5-Year	69	71.0	26	92.3	12.3	13.1	12.6	13.1	31.9
10-Year	76	55.3	28	67.9	9.6	9.8	10.0	9.7	31.6
15-Year	92	30.4	25	60.0	12.7	12.7	12.7	12.7	20.7
20-Year	80	23.8	13	46.2	10.3	9.4	9.8	10.3	12.5

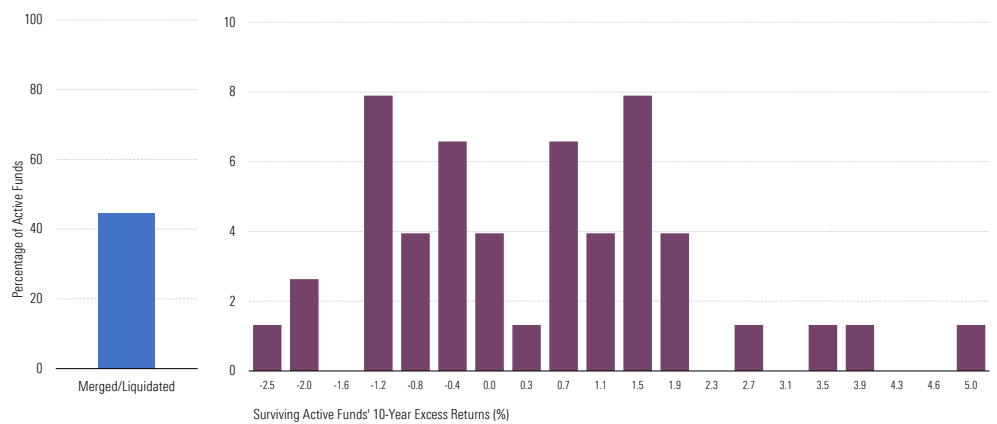
Source: Morningstar Direct. Data as of Dec. 31, 2023.

Exhibit 97 Rolling Success Rates for Surviving Active Sweden Equity Funds (%)



Source: Morningstar Direct. Data as of Dec. 31, 2023.

Exhibit 98 Mortality and Distribution of 10-Year Annualized Excess Returns for Surviving Sweden Equity Funds (%)



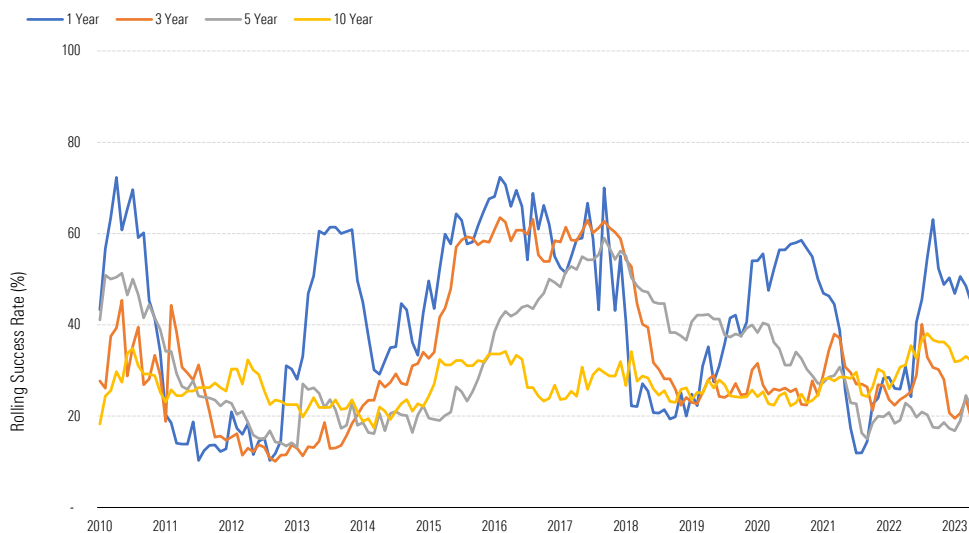
Source: Morningstar Direct. Data as of Dec. 31, 2023.

Exhibit 99 Switzerland Small/Mid-Cap Equity

	Active Funds		Passive Funds		Asset-Weighted Performance		Equal-Weighted Performance		Active Success Rate (%)
	# at Beginning of Period	Survivorship Rate (%)	# at Beginning of Period	Survivorship Rate (%)	Active (%)	Passive (%)	Active (%)	Passive (%)	
Trailing Total Return									
1-Year	174	98.3	56	96.4	6.6	6.5	7.2	7.0	44.8
3-year	165	92.7	48	95.8	2.4	3.3	2.1	3.3	19.4
5-Year	160	82.5	48	93.8	7.7	8.3	7.3	8.3	21.9
10-Year	137	62.8	37	81.1	6.0	6.2	5.5	5.9	32.1
15-Year	124	47.6	34	73.5	7.4	7.9	6.8	7.6	22.6
20-Year	102	36.3	18	66.7	5.7	6.4	5.3	6.0	14.7

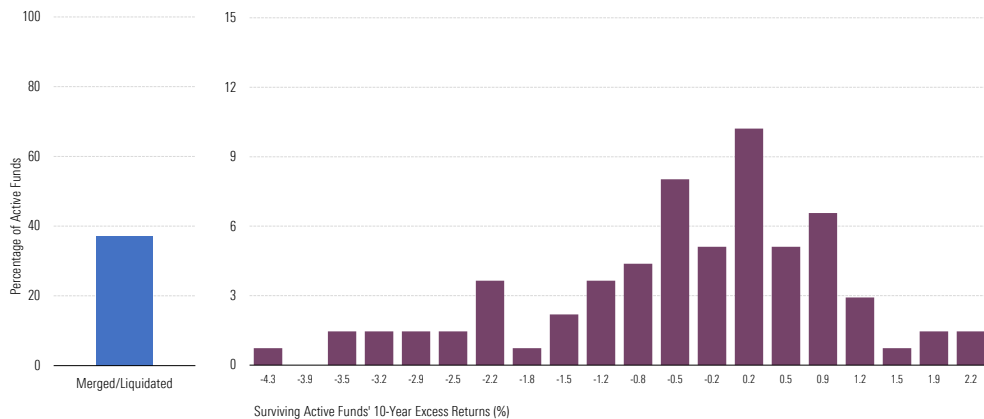
Source: Morningstar Direct. Data as of Dec. 31, 2023.

Exhibit 100 Rolling Success Rates for Surviving Active Switzerland Small/Mid-Cap Equity Funds (%)



Source: Morningstar Direct. Data as of Dec. 31, 2023.

Exhibit 101 Mortality and Distribution of 10-Year Annualized Excess Returns for Surviving Switzerland Small/Mid-Cap Equity Funds (%)



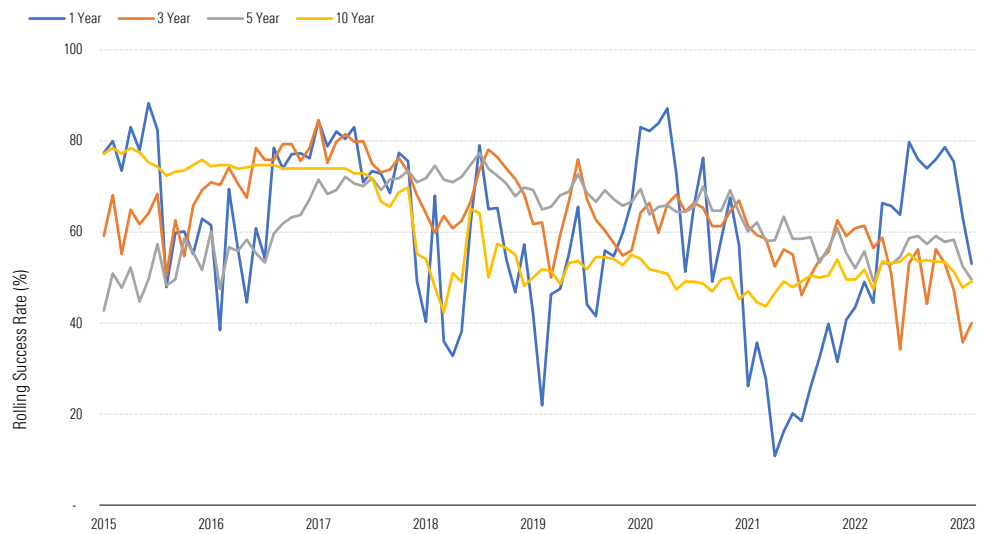
Source: Morningstar Direct. Data as of Dec. 31, 2023.

Exhibit 102 UK Equity Income

	Active Funds		Passive Funds		Asset-Weighted Performance		Equal-Weighted Performance		Active Success Rate (%)
	# at Beginning of Period	Survivorship Rate (%)	# at Beginning of Period	Survivorship Rate (%)	Active (%)	Passive (%)	Active (%)	Passive (%)	
Trailing Total Return									
1-Year	98	91.8	4	100.0	8.0	6.2	7.2	7.3	53.1
3-year	110	76.4	4	100.0	7.5	9.4	7.1	7.4	40.0
5-Year	119	68.9	6	66.7	5.2	5.6	5.4	4.7	49.6
10-Year	116	55.2	4	75.0	4.8	3.5	4.5	3.2	49.1

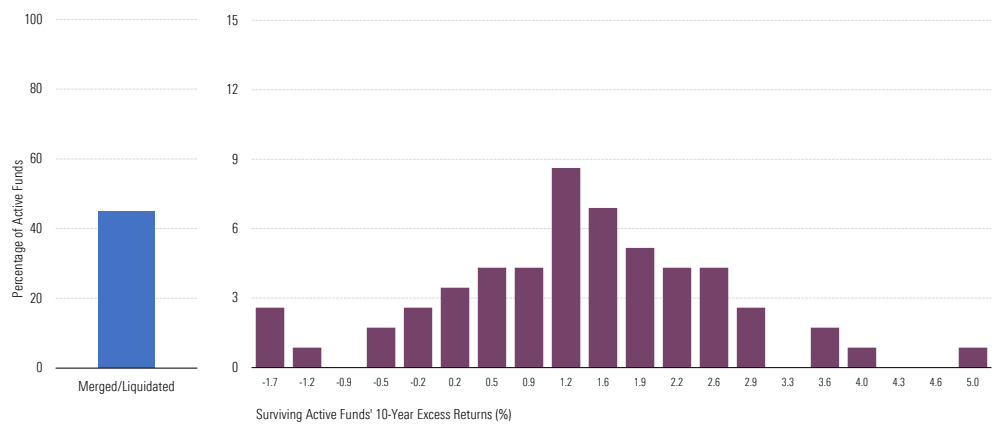
Source: Morningstar Direct. Data as of Dec. 31, 2023.

Exhibit 103 Rolling Success Rates for Surviving Active UK Equity Income Funds (%)



Source: Morningstar Direct. Data as of Dec. 31, 2023.

Exhibit 104 Mortality and Distribution of 10-Year Annualized Excess Returns for Surviving UK Equity Income Funds (%)



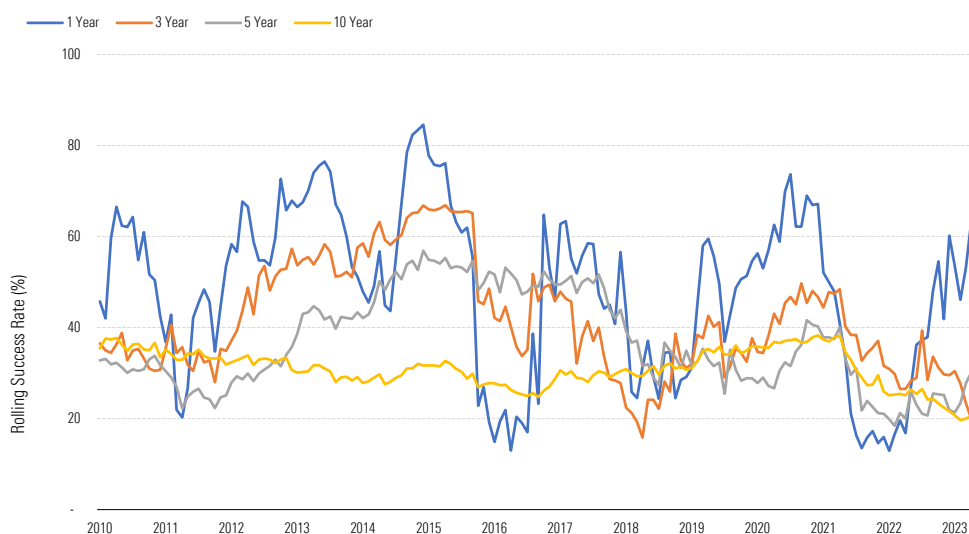
Source: Morningstar Direct. Data as of Dec. 31, 2023.

Exhibit 105 UK Large-Cap Equity

	Active Funds		Passive Funds		Asset-Weighted Performance		Equal-Weighted Performance		Active Success Rate (%)
	# at Beginning of Period	Survivorship Rate (%)	# at Beginning of Period	Survivorship Rate (%)	Active (%)	Passive (%)	Active (%)	Passive (%)	
Trailing Total Return									
1-Year	126	92.1	72	97.2	8.4	7.5	8.4	7.5	63.5
3-year	141	80.1	72	93.1	7.3	8.8	7.0	8.5	19.9
5-Year	156	66.7	75	80.0	6.0	6.5	6.5	6.2	30.1
10-Year	166	50.0	83	61.4	4.5	5.1	4.4	4.9	20.5
15-Year	236	34.3	67	50.7	7.5	7.7	7.9	7.7	20.8
20-Year	266	26.3	53	50.9	6.1	6.4	6.3	6.2	16.9

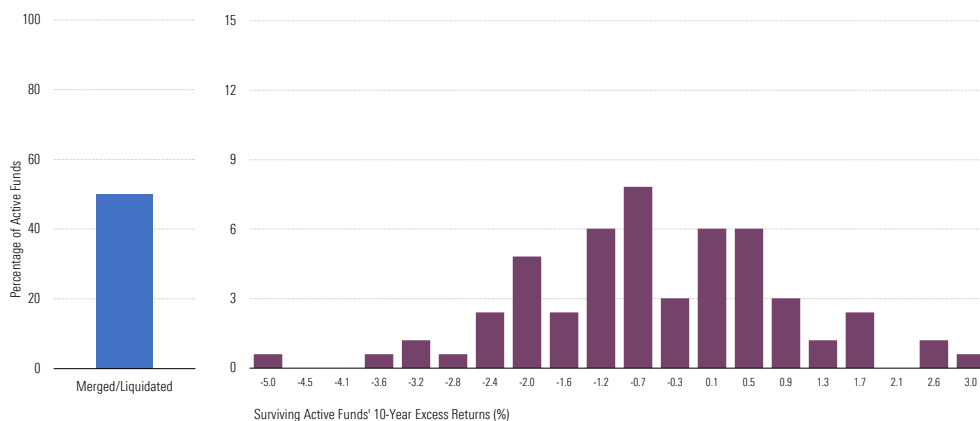
Source: Morningstar Direct. Data as of Dec. 31, 2023.

Exhibit 106 Rolling Success Rates for Surviving Active UK Large-Cap Equity Funds (%)



Source: Morningstar Direct. Data as of Dec. 31, 2023.

Exhibit 107 Mortality and Distribution of 10-Year Annualized Excess Returns for Surviving UK Large-Cap Equity Funds (%)



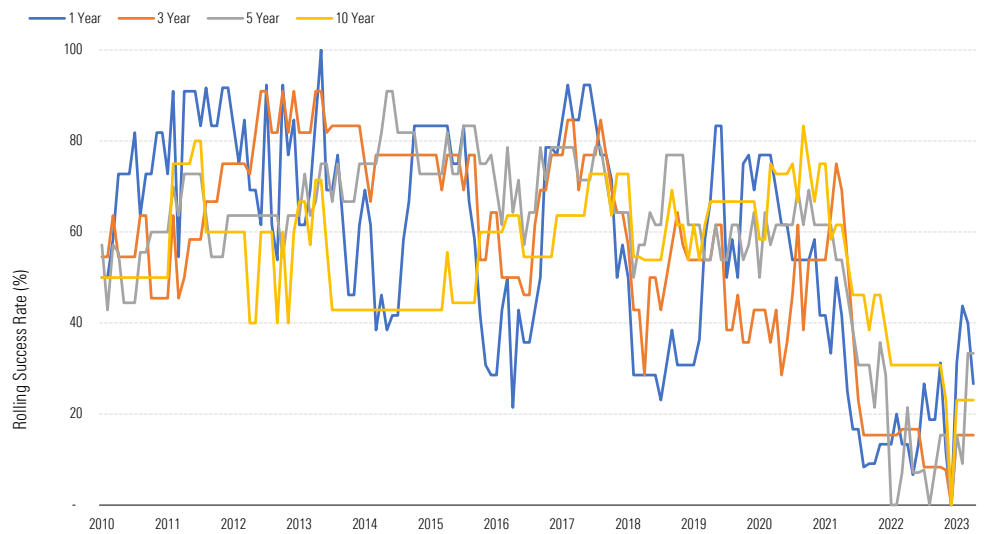
Source: Morningstar Direct. Data as of Dec. 31, 2023.

Exhibit 108 UK Mid-Cap Equity

	Active Funds		Passive Funds		Asset-Weighted Performance		Equal-Weighted Performance		Active Success Rate (%)
	# at Beginning of Period	Survivorship Rate (%)	# at Beginning of Period	Survivorship Rate (%)	Active (%)	Passive (%)	Active (%)	Passive (%)	
Trailing Total Return									
1-Year	15	100.0	10	100.0	5.1	8.0	4.8	8.0	26.7
3-year	13	76.9	9	100.0	5.7	1.2	2.9	0.9	15.4
5-Year	12	75.0	8	100.0	2.0	4.9	3.6	4.8	33.3
10-Year	13	61.5	8	75.0	3.4	4.5	3.8	4.6	23.1
15-Year	11	63.6	4	75.0	9.0	10.3	9.9	10.3	27.3

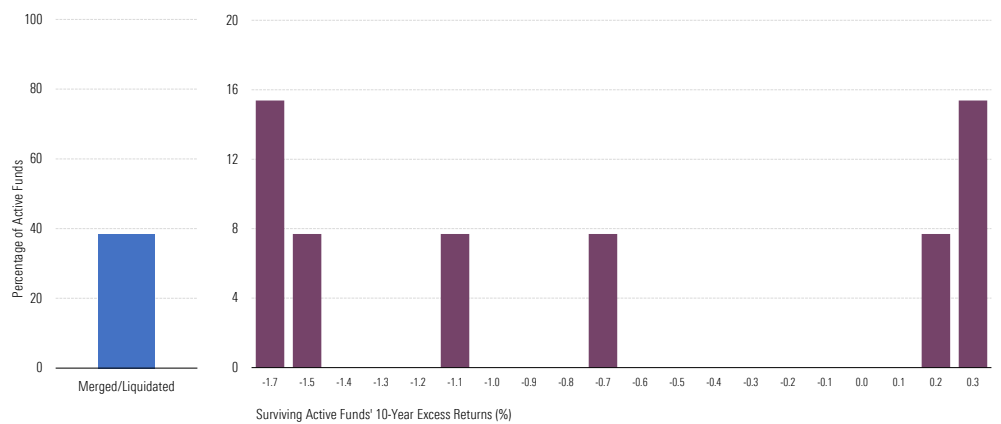
Source: Morningstar Direct. Data as of Dec. 31, 2023.

Exhibit 109 Rolling Success Rates for Surviving Active UK Mid-Cap Equity Funds (%)



Source: Morningstar Direct. Data as of Dec. 31, 2023.

Exhibit 110 Mortality and Distribution of 10-Year Annualized Excess Returns for Surviving UK Mid-Cap Equity Funds (%)



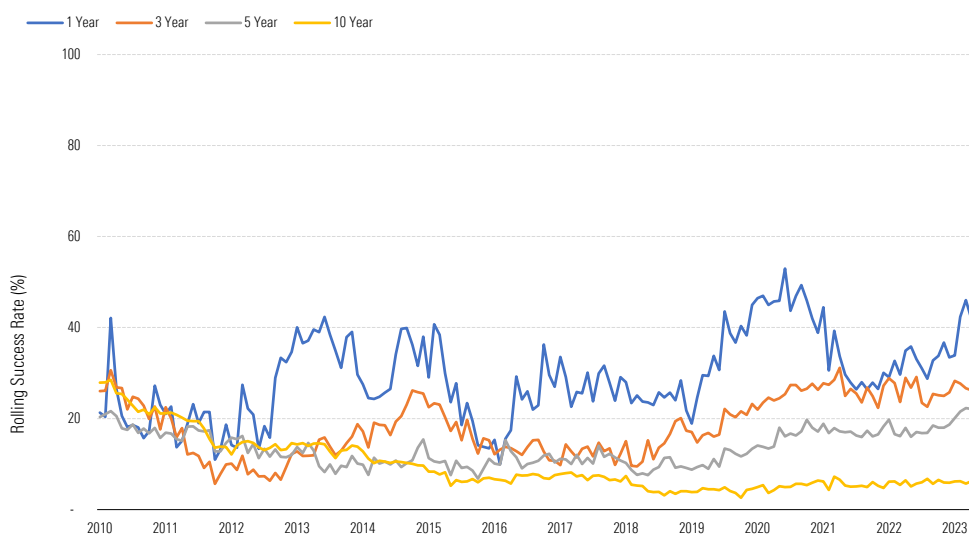
Source: Morningstar Direct. Data as of Dec. 31, 2023.

Exhibit 111 US Large-Cap Blend Equity

	Active Funds		Passive Funds		Asset-Weighted Performance		Equal-Weighted Performance		Active Success Rate (%)
	# at Beginning of Period	Survivorship Rate (%)	# at Beginning of Period	Survivorship Rate (%)	Active (%)	Passive (%)	Active (%)	Passive (%)	
Trailing Total Return									
1-Year	377	95.5	214	96.3	24.6	26.3	23.5	24.9	41.9
3-year	362	83.7	195	89.2	7.3	9.3	7.1	8.8	26.2
5-Year	366	69.1	174	79.3	13.8	15.3	13.1	14.4	22.1
10-Year	352	50.9	135	64.4	9.5	11.5	9.0	10.8	6.3
15-Year	499	30.3	98	46.9	11.6	13.3	10.8	12.7	3.4
20-Year	498	26.1	60	43.3	7.2	9.1	6.6	8.3	4.6

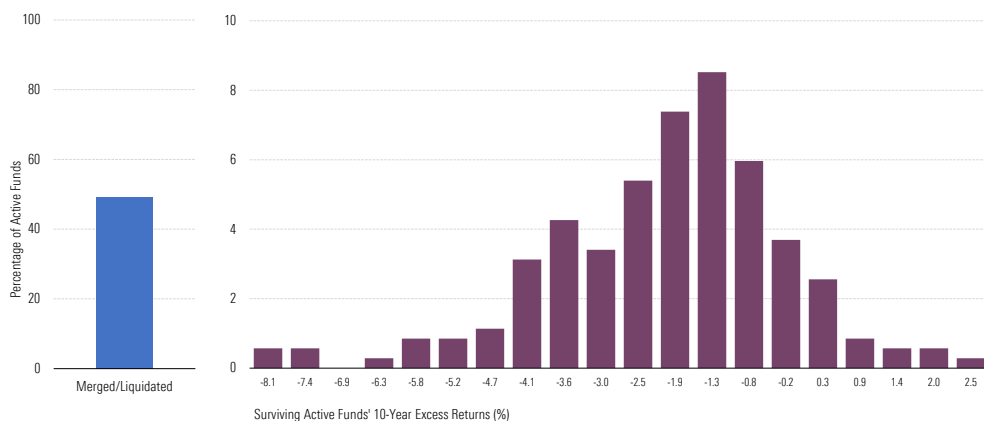
Source: Morningstar Direct. Data as of Dec. 31, 2023.

Exhibit 112 Rolling Success Rates for Surviving Active US Large-Cap Blend Equity Funds (%)



Source: Morningstar Direct. Data as of Dec. 31, 2023.

Exhibit 113 Mortality and Distribution of 10-Year Annualized Excess Returns for US Large-Cap Blend Equity Funds (%)



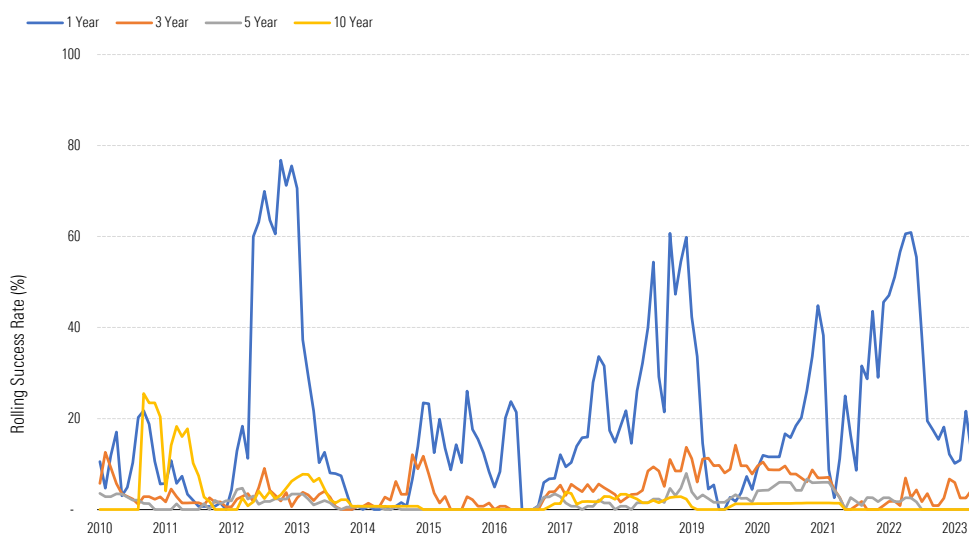
Source: Morningstar Direct. Data as of Dec. 31, 2023.

Exhibit 114 US Large-Cap Growth Equity

	Active Funds		Passive Funds		Asset-Weighted Performance		Equal-Weighted Performance		Active Success Rate (%)
	# at Beginning of Period	Survivorship Rate (%)	# at Beginning of Period	Survivorship Rate (%)	Active (%)	Passive (%)	Active (%)	Passive (%)	
Trailing Total Return									
1-Year	151	96.0	15	100.0	35.8	53.2	33.0	44.8	12.6
3-year	119	86.6	9	100.0	0.2	9.7	3.5	9.3	4.2
5-Year	118	79.7	10	80.0	13.2	22.1	14.2	21.5	-
10-Year	134	56.7	11	54.5	10.3	17.3	10.2	16.8	-
15-Year	200	33.5	13	46.2	12.5	18.4	12.1	17.4	-
20-Year	131	29.0	3	66.7	7.7	11.1	7.8	11.8	-

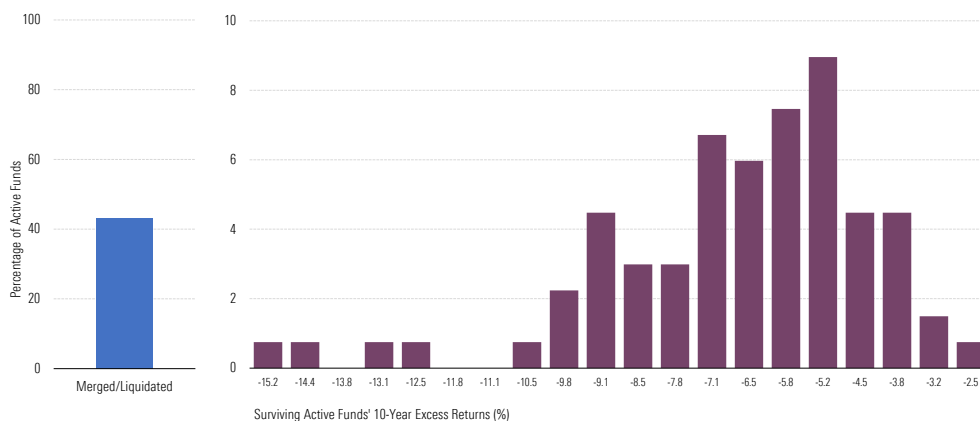
Source: Morningstar Direct. Data as of Dec. 31, 2023.

Exhibit 115 Rolling Success Rates for Surviving Active US Large-Cap Growth Equity Funds (%)



Source: Morningstar Direct. Data as of Dec. 31, 2023.

Exhibit 116 Mortality and Distribution of 10-Year Annualized Excess Returns for US Large-Cap Growth Equity Funds (%)



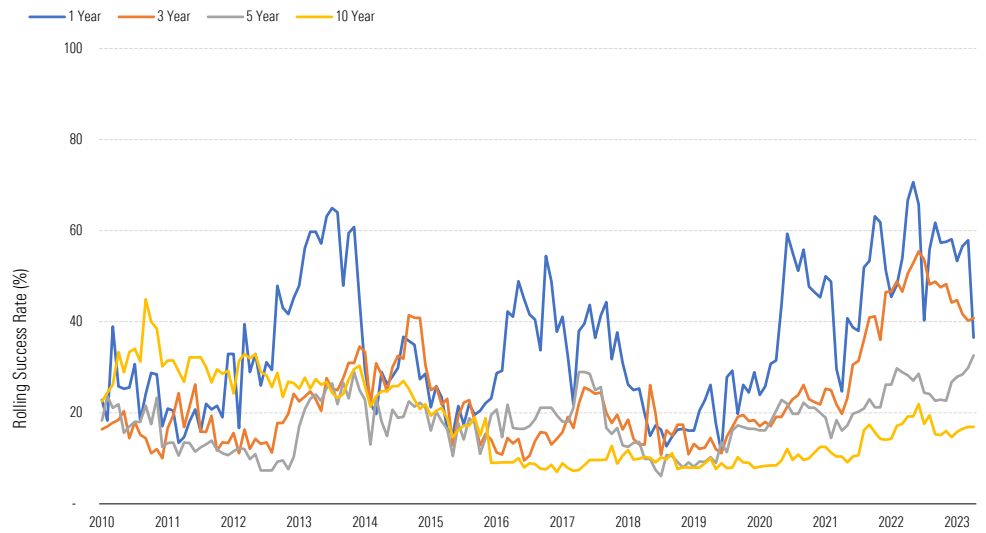
Source: Morningstar Direct. Data as of Dec. 31, 2023.

Exhibit 117 US Large-Cap Value Equity

	Active Funds		Passive Funds		Asset-Weighted Performance		Equal-Weighted Performance		Active Success Rate (%)
	# at Beginning of Period	Survivorship Rate (%)	# at Beginning of Period	Survivorship Rate (%)	Active (%)	Passive (%)	Active (%)	Passive (%)	
Trailing Total Return									
1-Year	74	94.6	9	100.0	10.8	13.2	11.7	12.4	36.5
3-year	81	80.2	11	90.9	9.2	7.7	8.5	8.5	40.7
5-Year	86	67.4	14	71.4	10.7	10.0	10.4	11.0	32.6
10-Year	77	53.2	10	70.0	7.6	8.4	7.6	8.8	16.9
15-Year	96	28.1	7	57.1	10.5	11.1	10.2	11.3	13.5
20-Year	81	30.9	3	100.0	6.5	6.8	6.5	6.8	17.3

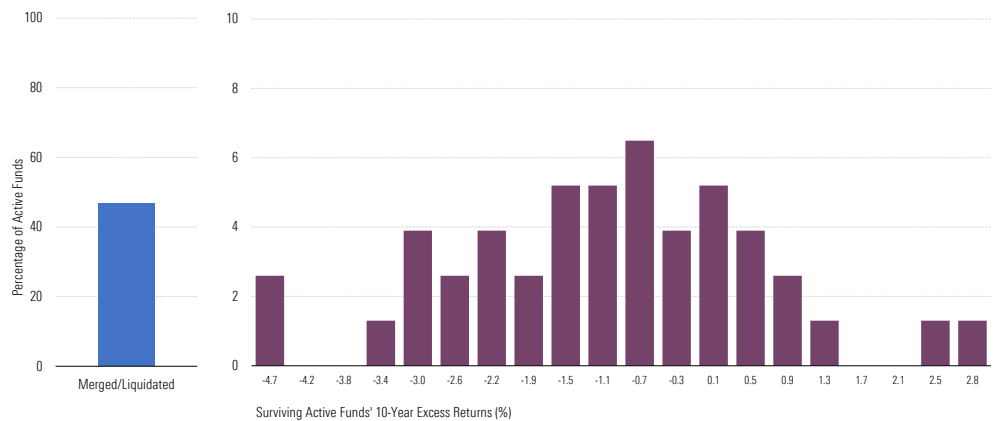
Source: Morningstar Direct. Data as of Dec. 31, 2023.

Exhibit 118 Rolling Success Rates for Surviving Active US Large-Cap Value Equity Funds (%)



Source: Morningstar Direct. Data as of Dec. 31, 2023.

Exhibit 119 Mortality and Distribution of 10-Year Annualized Excess Returns for US Large-Cap Value Equity Funds (%)



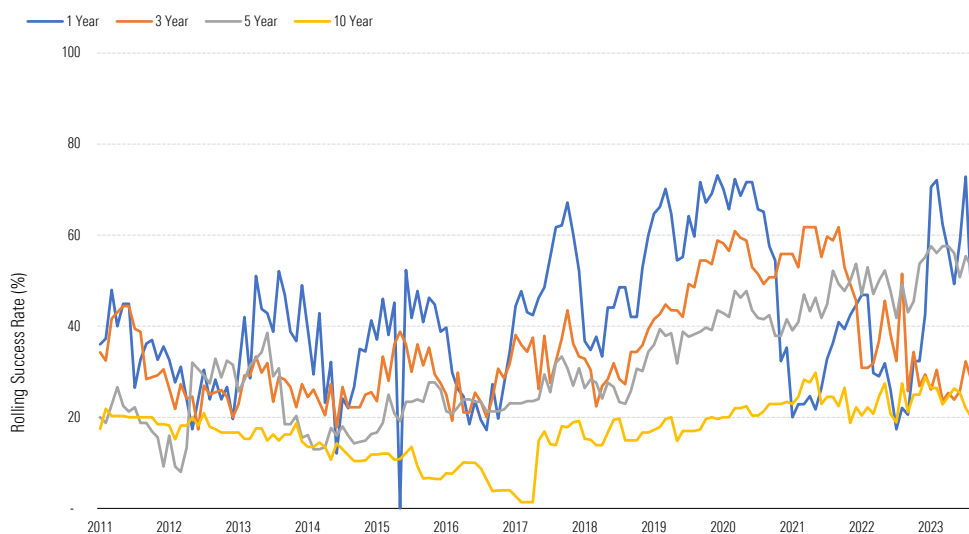
Source: Morningstar Direct. Data as of Dec. 31, 2023.

Exhibit 120 US Small-Cap Equity

	Active Funds		Passive Funds		Asset-Weighted Performance		Equal-Weighted Performance		Active Success Rate (%)
	# at Beginning of Period	Survivorship Rate (%)	# at Beginning of Period	Survivorship Rate (%)	Active (%)	Passive (%)	Active (%)	Passive (%)	
Trailing Total Return									
1-Year	67	98.5	13	92.3	17.3	16.2	17.2	16.9	46.3
3-year	64	92.2	12	91.7	0.5	3.9	1.7	5.1	28.1
5-Year	66	78.8	12	75.0	10.8	10.1	11.2	10.6	53.0
10-Year	60	56.7	8	62.5	7.4	7.8	7.2	7.8	20.0
15-Year	65	35.4	5	60.0	11.3	12.5	11.2	12.0	15.4

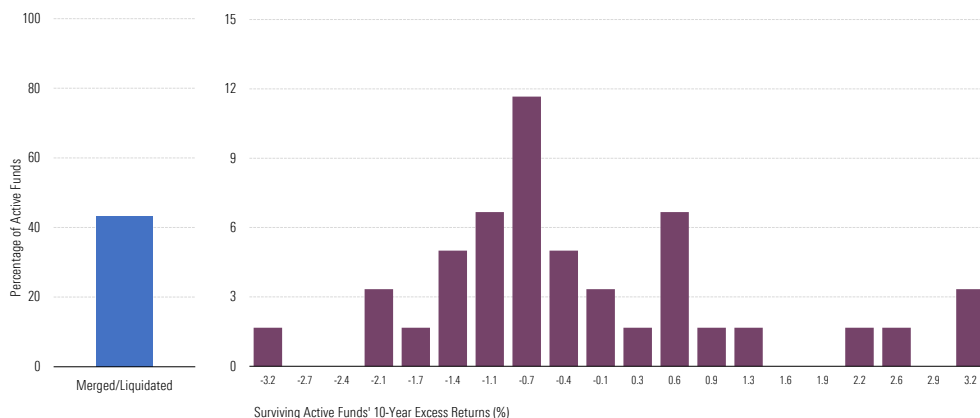
Source: Morningstar Direct. Data as of Dec. 31, 2023.

Exhibit 121 Rolling Success Rates for Surviving Active US Small-Cap Equity Funds (%)



Source: Morningstar Direct. Data as of Dec. 31, 2023.

Exhibit 122 Mortality and Distribution of 10-Year Annualized Excess Returns for US Small-Cap Equity Funds (%)



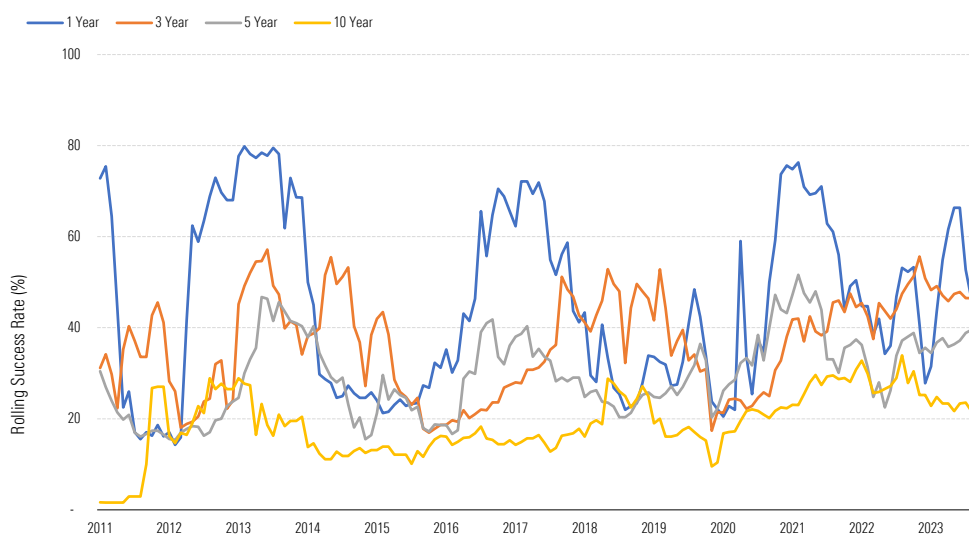
Source: Morningstar Direct. Data as of Dec. 31, 2023.

Exhibit 123 CHF Bond

	Active Funds		Passive Funds		Asset-Weighted Performance		Equal-Weighted Performance		Active Success Rate (%)
	# at Beginning of Period	Survivorship Rate (%)	# at Beginning of Period	Survivorship Rate (%)	Active (%)	Passive (%)	Active (%)	Passive (%)	
Trailing Total Return									
1-Year	110	97.3	42	100.0	7.0	6.8	6.0	6.3	46.4
3-year	114	89.5	34	100.0	- 2.8	- 2.3	- 3.0	- 2.2	46.5
5-Year	124	78.2	36	94.4	- 1.0	- 0.7	- 1.3	- 0.7	39.5
10-Year	120	59.2	34	79.4	0.2	0.6	- 0.1	0.5	21.7
15-Year	123	45.5	18	72.2	1.3	1.4	1.1	1.3	26.0
20-Year	83	31.3	7	71.4	1.2	1.2	0.9	1.4	8.4

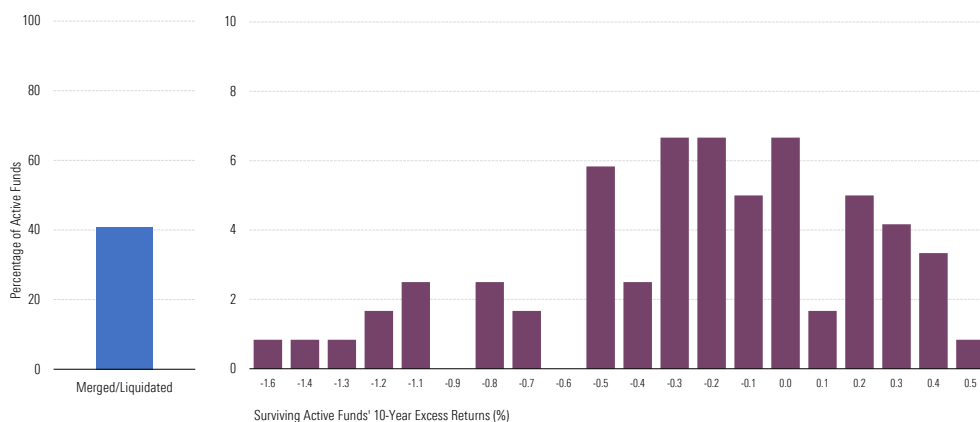
Source: Morningstar Direct. Data as of Dec. 31, 2023.

Exhibit 124 Rolling Success Rates for Surviving Active CHF Bond Funds (%)



Source: Morningstar Direct. Data as of Dec. 31, 2023.

Exhibit 125 Mortality and Distribution of 10-Year Annualized Excess Returns for CHF Bond Funds (%)



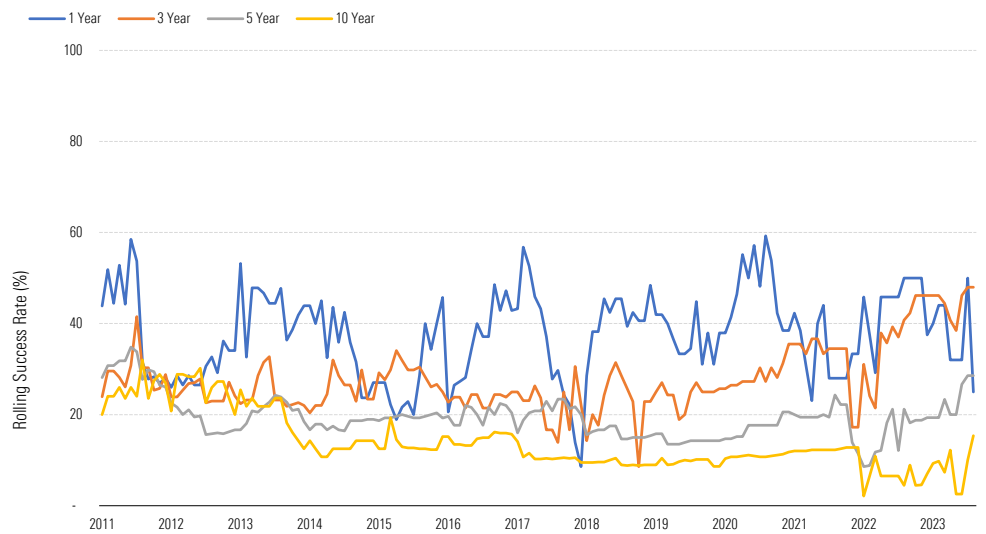
Source: Morningstar Direct. Data as of Dec. 31, 2023.

Exhibit 126 EUR Bond—Long Term

	Active Funds		Passive Funds		Asset-Weighted Performance		Equal-Weighted Performance		Active Success Rate (%)
	# at Beginning of Period	Survivorship Rate (%)	# at Beginning of Period	Survivorship Rate (%)	Active (%)	Passive (%)	Active (%)	Passive (%)	
Trailing Total Return									
1-Year	24	91.7	20	95.0	8.0	9.4	8.6	9.8	25.0
3-year	25	88.0	20	90.0	- 12.1	- 13.6	- 16.6	- 12.5	48.0
5-Year	28	71.4	24	70.8	- 2.9	- 3.6	- 4.9	- 3.0	28.6
10-Year	39	41.0	26	57.7	2.3	2.5	1.7	2.1	15.4
15-Year	68	27.9	15	60.0	3.9	3.0	3.3	2.9	11.8

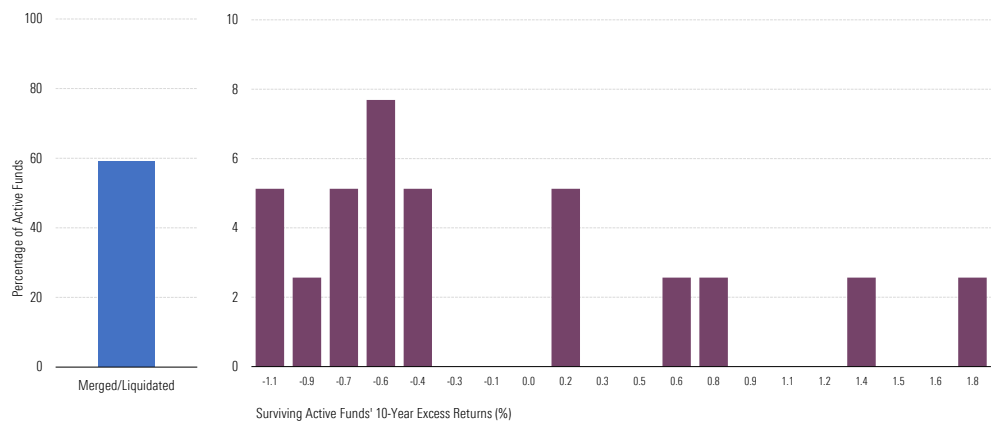
Source: Morningstar Direct. Data as of Dec. 31, 2023.

Exhibit 127 Rolling Success Rates for Surviving Active EUR Bond—Long Term Funds (%)



Source: Morningstar Direct. Data as of Dec. 31, 2023.

Exhibit 128 Mortality and Distribution of 10-Year Annualized Excess Returns for EUR Bond—Long Term Funds (%)



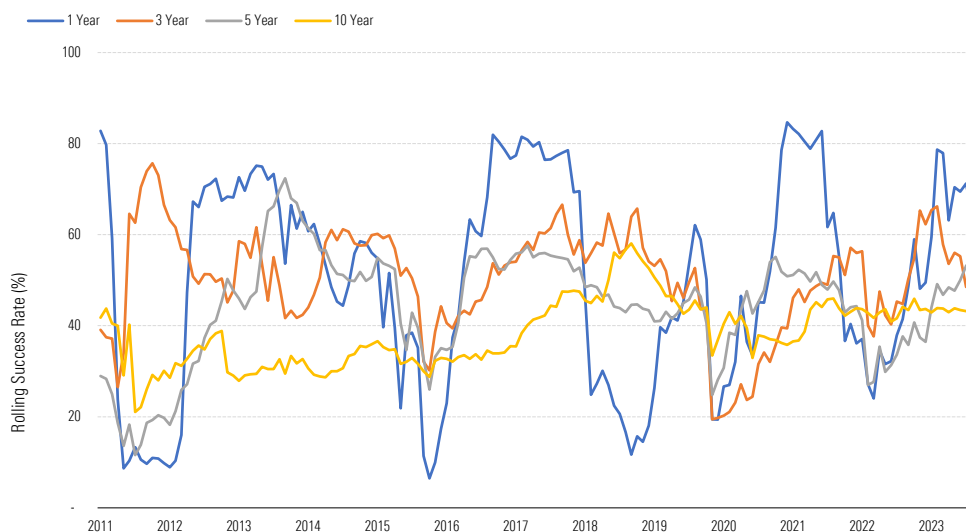
Source: Morningstar Direct. Data as of Dec. 31, 2023.

Exhibit 129 EUR Corporate Bond

	Active Funds		Passive Funds		Asset-Weighted Performance		Equal-Weighted Performance		Active Success Rate (%)
	# at Beginning of Period	Survivorship Rate (%)	# at Beginning of Period	Survivorship Rate (%)	Active (%)	Passive (%)	Active (%)	Passive (%)	
Trailing Total Return									
1-Year	375	95.2	59	84.7	8.3	7.7	7.8	7.5	64.5
3-year	365	87.1	59	72.9	- 2.6	- 2.8	- 2.5	- 2.9	50.1
5-Year	349	77.7	55	67.3	0.2	0.1	0.0	0.3	54.4
10-Year	359	56.3	52	55.8	1.3	1.1	0.9	0.8	43.5
15-Year	212	48.6	10	60.0	3.3	2.3	3.0	1.9	46.7
20-Year	142	45.8	4	75.0	2.3	2.2	2.3	2.3	28.2

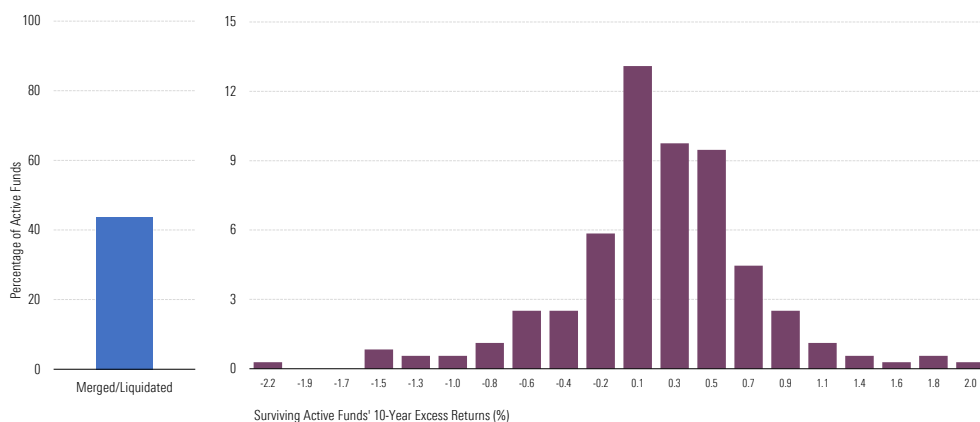
Source: Morningstar Direct. Data as of Dec. 31, 2023.

Exhibit 130 Rolling Success Rates for Surviving Active EUR Corporate Bond Funds (%)



Source: Morningstar Direct. Data as of Dec. 31, 2023.

Exhibit 131 Mortality and Distribution of 10-Year Annualized Excess Returns for EUR Corporate Bond Funds (%)



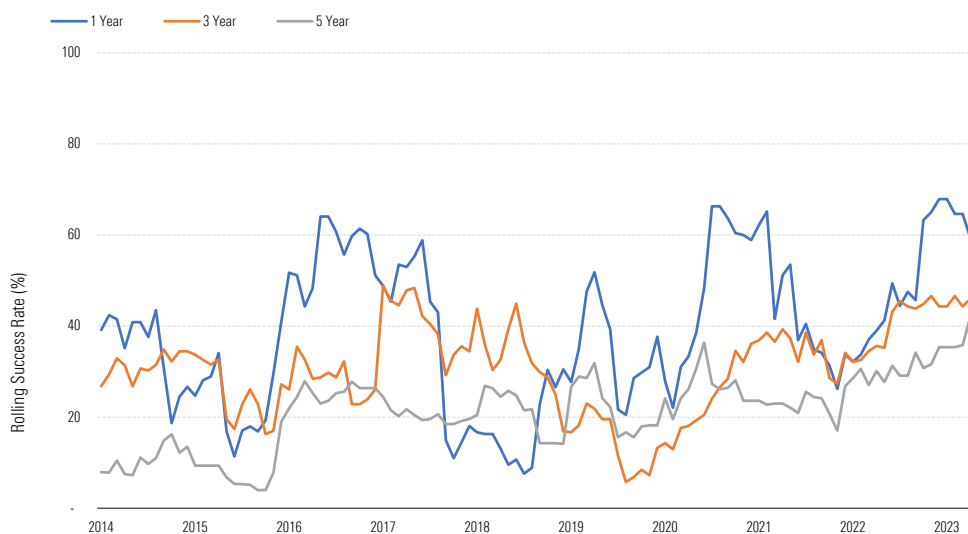
Source: Morningstar Direct. Data as of Dec. 31, 2023.

Exhibit 132 EUR Corporate Bond—Short Term

	Active Funds		Passive Funds		Asset-Weighted Performance		Equal-Weighted Performance		Active Success Rate (%)
	# at Beginning of Period	Survivorship Rate (%)	# at Beginning of Period	Survivorship Rate (%)	Active (%)	Passive (%)	Active (%)	Passive (%)	
Trailing Total Return									
1-Year	81	95.1	13	100.0	4.7	4.9	5.0	4.5	59.3
3-year	87	80.5	10	100.0	0.2	0.4	0.0	0.1	46.0
5-Year	83	72.3	7	100.0	0.6	0.3	0.4	0.3	42.2
10-Year	94	58.5	5	80.0	0.6	0.7	0.4	0.4	27.7

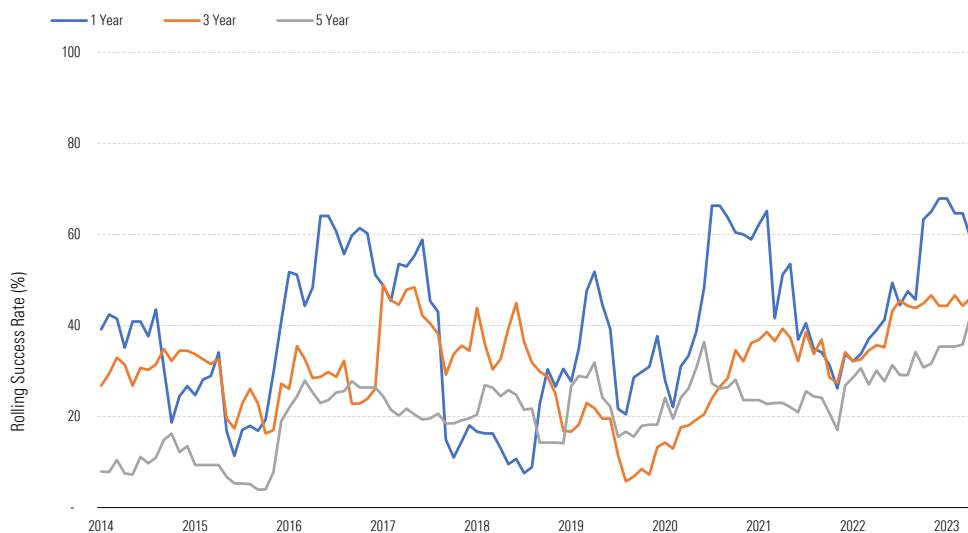
Source: Morningstar Direct. Data as of Dec. 31, 2023.

Exhibit 133 Rolling Success Rates for Surviving Active EUR Corporate Bond—Short-Term Funds (%)



Source: Morningstar Direct. Data as of Dec. 31, 2023.

Exhibit 134 Mortality and Distribution of 10-Year Annualized Excess Returns for EUR Corporate Bond—Short-Term Funds (%)



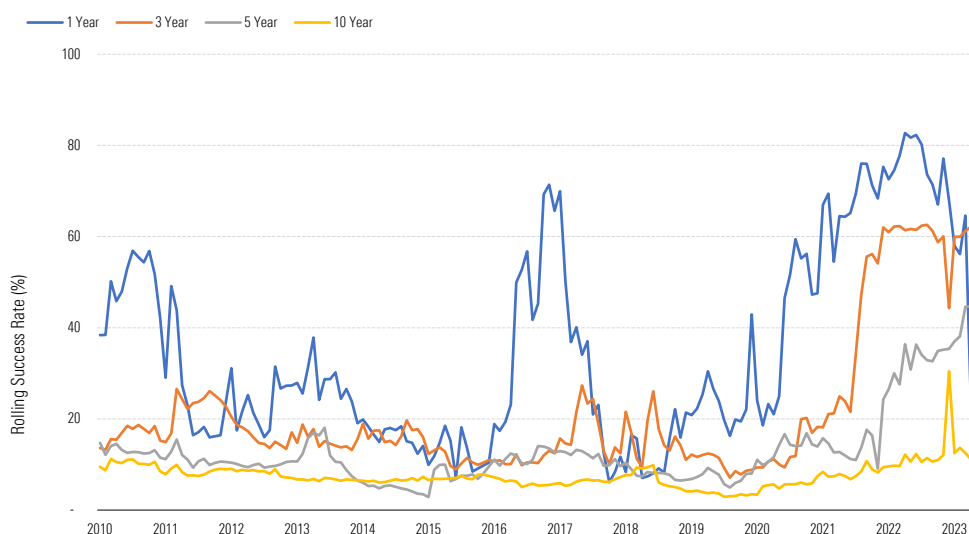
Source: Morningstar Direct. Data as of Dec. 31, 2023.

Exhibit 135 EUR Diversified Bond

	Active Funds		Passive Funds		Asset-Weighted Performance		Equal-Weighted Performance		Active Success Rate (%)
	# at Beginning of Period	Survivorship Rate (%)	# at Beginning of Period	Survivorship Rate (%)	Active (%)	Passive (%)	Active (%)	Passive (%)	
Trailing Total Return									
1-Year	522	97.3	11	90.9	6.7	7.2	6.2	7.3	23.9
3-year	539	87.9	10	80.0	- 3.6	- 4.7	- 3.1	- 4.6	62.2
5-Year	586	76.3	10	70.0	- 0.8	- 1.0	- 0.6	- 0.9	44.7
10-Year	744	52.7	5	80.0	0.6	1.0	0.5	1.0	11.2
15-Year	891	31.3	12	33.3	1.8	2.4	1.7	2.3	8.5
20-Year	928	26.9	11	9.1	2.0	2.6	1.9	2.6	4.7

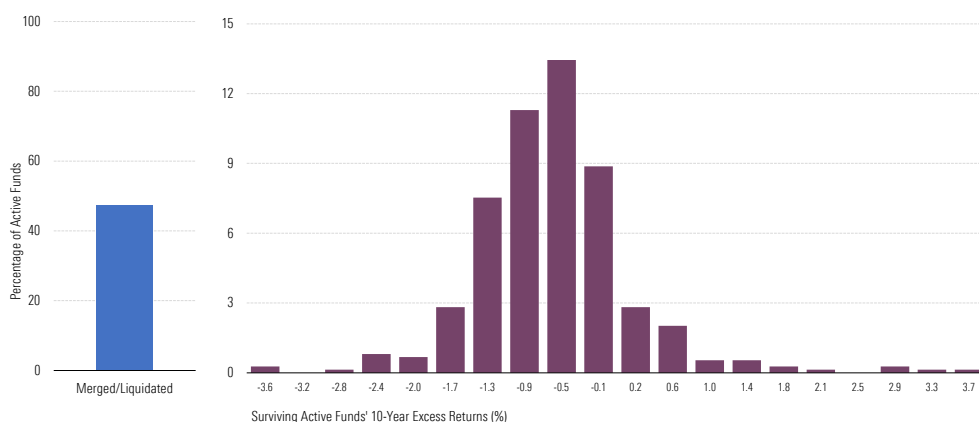
Source: Morningstar Direct. Data as of Dec. 31, 2023.

Exhibit 136 Rolling Success Rates for Surviving Active EUR Diversified Bond Funds (%)



Source: Morningstar Direct. Data as of Dec. 31, 2023.

Exhibit 137 Mortality and Distribution of 10-Year Annualized Excess Returns for EUR Diversified Bond Funds (%)



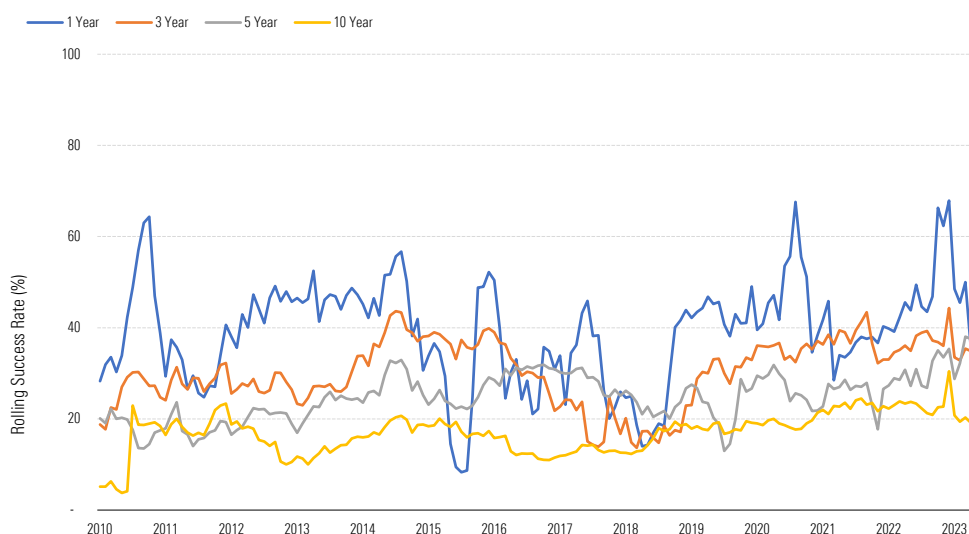
Source: Morningstar Direct. Data as of Dec. 31, 2023.

Exhibit 138 EUR Government Bond

	Active Funds		Passive Funds		Asset-Weighted Performance		Equal-Weighted Performance		Active Success Rate (%)
	# at Beginning of Period	Survivorship Rate (%)	# at Beginning of Period	Survivorship Rate (%)	Active (%)	Passive (%)	Active (%)	Passive (%)	
Trailing Total Return									
1-Year	166	95.2	103	86.4	6.3	6.8	5.9	6.6	35.5
3-year	192	78.1	103	79.6	- 4.1	- 5.0	- 4.4	- 4.9	34.9
5-Year	205	64.9	104	69.2	- 1.0	- 1.2	- 1.3	- 1.4	37.6
10-Year	256	43.0	124	47.6	1.0	0.9	0.5	0.9	19.1
15-Year	301	33.6	41	46.3	1.9	2.0	1.5	2.0	12.6
20-Year	311	22.8	10	60.0	2.2	2.5	1.9	2.3	8.7

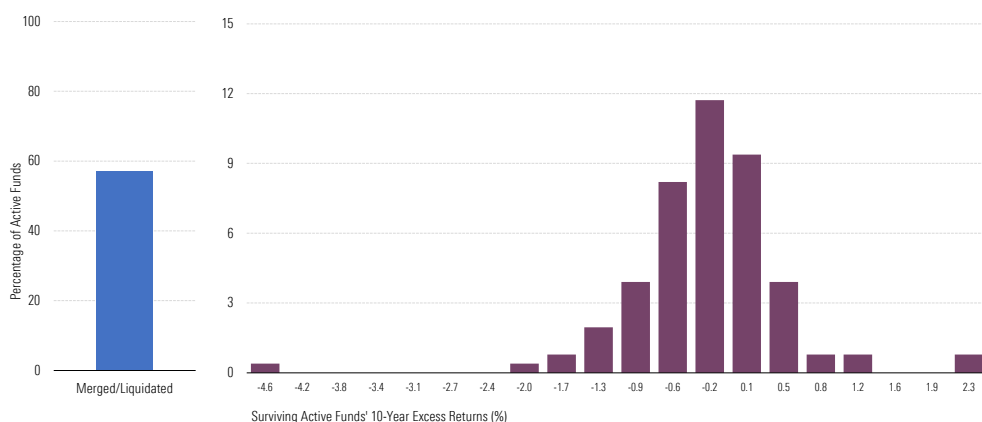
Source: Morningstar Direct. Data as of Dec. 31, 2023.

Exhibit 139 Rolling Success Rates for Surviving Active EUR Government Bond Funds (%)



Source: Morningstar Direct. Data as of Dec. 31, 2023.

Exhibit 140 Mortality and Distribution of 10-Year Annualized Excess Returns for EUR Government Bond Funds (%)



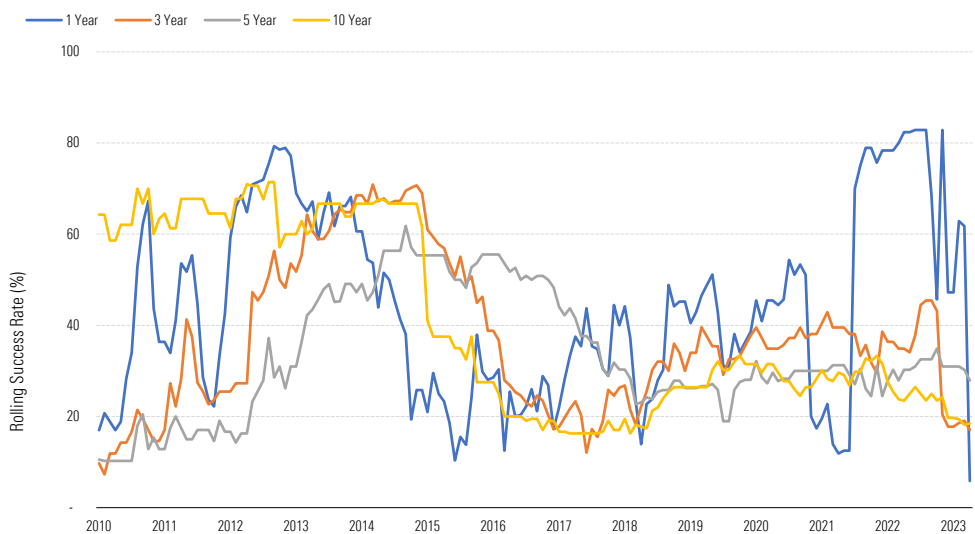
Source: Morningstar Direct. Data as of Dec. 31, 2023.

Exhibit 141 EUR Government Bond—Short Term

	Active Funds		Passive Funds		Asset-Weighted Performance		Equal-Weighted Performance		Active Success Rate (%)
	# at Beginning of Period	Survivorship Rate (%)	# at Beginning of Period	Survivorship Rate (%)	Active (%)	Passive (%)	Active (%)	Passive (%)	
Trailing Total Return									
1-Year	34	97.1	20	95.0	4.8	3.6	3.6	5.2	5.9
3-year	41	78.0	22	77.3	- 4.7	- 0.8	- 1.9	- 0.3	17.1
5-Year	43	67.4	21	71.4	- 1.1	- 0.5	- 0.7	- 0.6	27.9
10-Year	65	43.1	28	46.4	- 0.1	- 0.1	- 0.1	- 0.2	18.5
15-Year	45	31.1	8	62.5	0.5	0.6	0.6	0.6	11.1

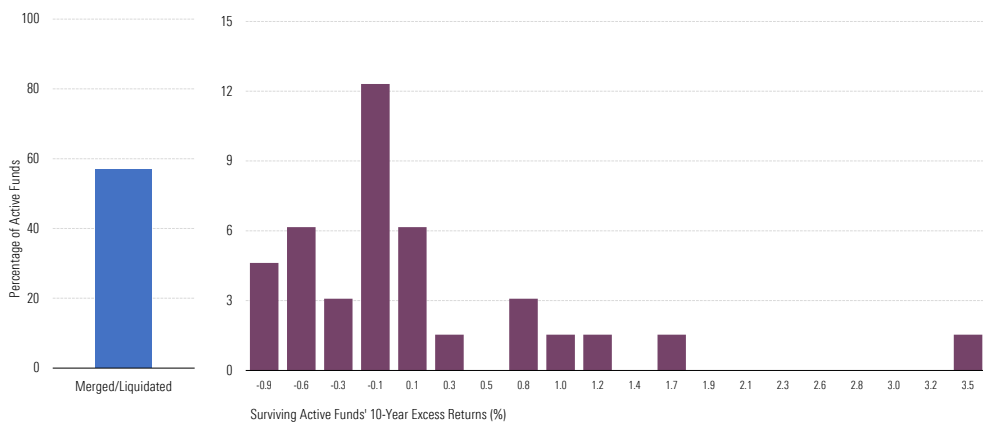
Source: Morningstar Direct. Data as of Dec. 31, 2023.

Exhibit 142 Rolling Success Rates for Surviving Active EUR Government Bond—Short-Term Funds (%)



Source: Morningstar Direct. Data as of Dec. 31, 2023.

Exhibit 143 Mortality and Distribution of 10-Year Annualized Excess Returns for EUR Government Bond—Short-Term Funds (%)



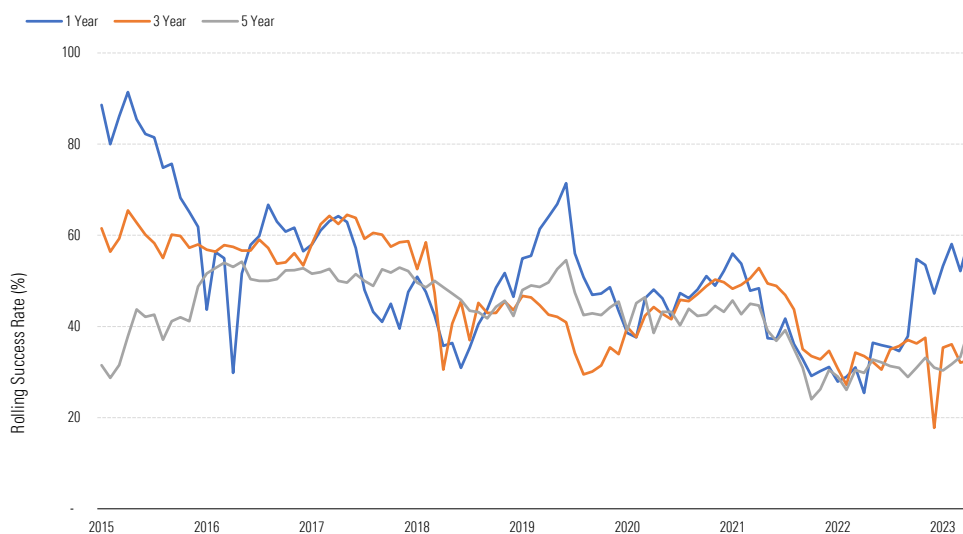
Source: Morningstar Direct. Data as of Dec. 31, 2023.

Exhibit 144 EUR High-Yield Bond

	Active Funds		Passive Funds		Asset-Weighted Performance		Equal-Weighted Performance		Active Success Rate (%)
	# at Beginning of Period	Survivorship Rate (%)	# at Beginning of Period	Survivorship Rate (%)	Active (%)	Passive (%)	Active (%)	Passive (%)	
Trailing Total Return									
1-Year	185	97.8	15	93.3	10.7	11.1	10.4	10.1	59.5
3-year	184	87.5	12	75.0	0.7	0.9	0.6	0.8	32.6
5-Year	173	78.6	11	72.7	2.5	2.7	2.2	2.4	39.9
10-Year	141	70.2	6	66.7	2.6	2.5	2.3	2.4	36.2

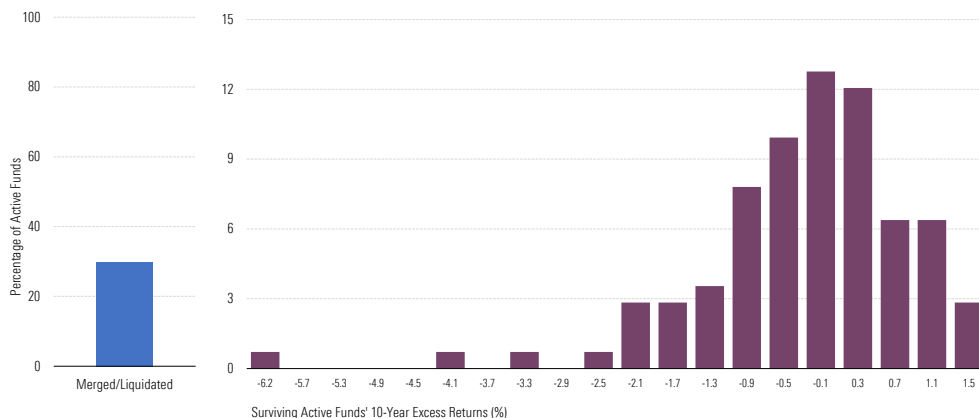
Source: Morningstar Direct. Data as of Dec. 31, 2023.

Exhibit 145 Rolling Success Rates for Surviving Active EUR High-Yield Bond Funds (%)



Source: Morningstar Direct. Data as of Dec. 31, 2023.

Exhibit 146 Mortality and Distribution of 10-Year Annualized Excess Returns for EUR High-Yield Bond Funds (%)



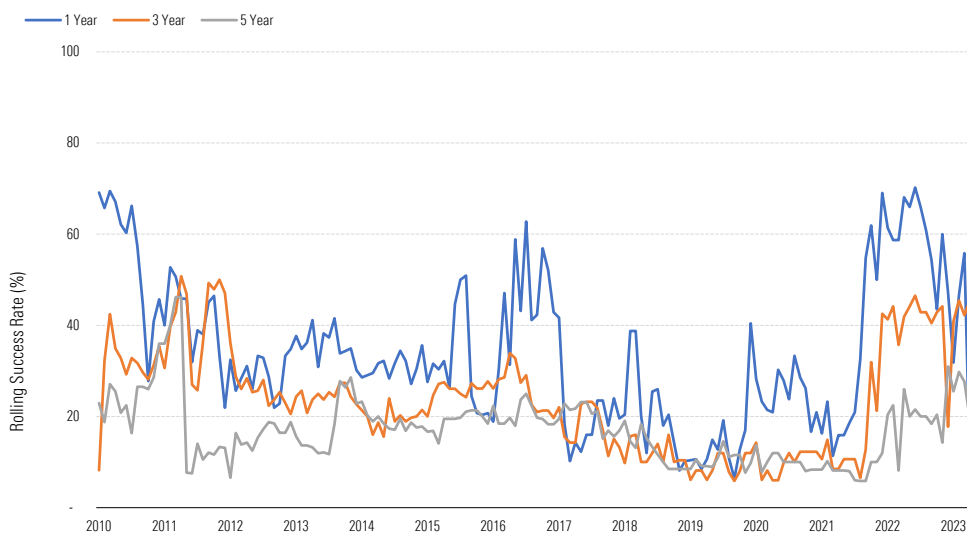
Source: Morningstar Direct. Data as of Dec. 31, 2023.

Exhibit 147 EUR Inflation-Linked Bond

	Active Funds		Passive Funds		Asset-Weighted Performance		Equal-Weighted Performance		Active Success Rate (%)
	# at Beginning of Period	Survivorship Rate (%)	# at Beginning of Period	Survivorship Rate (%)	Active (%)	Passive (%)	Active (%)	Passive (%)	
Trailing Total Return									
1-Year	42	95.2	14	92.9	4.8	5.9	4.2	5.6	9.5
3-year	44	81.8	13	92.3	0.2	0.5	0.7	0.4	45.5
5-Year	46	73.9	15	80.0	1.5	2.2	1.5	2.1	19.6
10-Year	60	50.0	18	50.0	1.5	2.1	1.6	2.1	11.7
15-Year	65	32.3	9	55.6	1.9	2.6	2.1	2.8	3.1

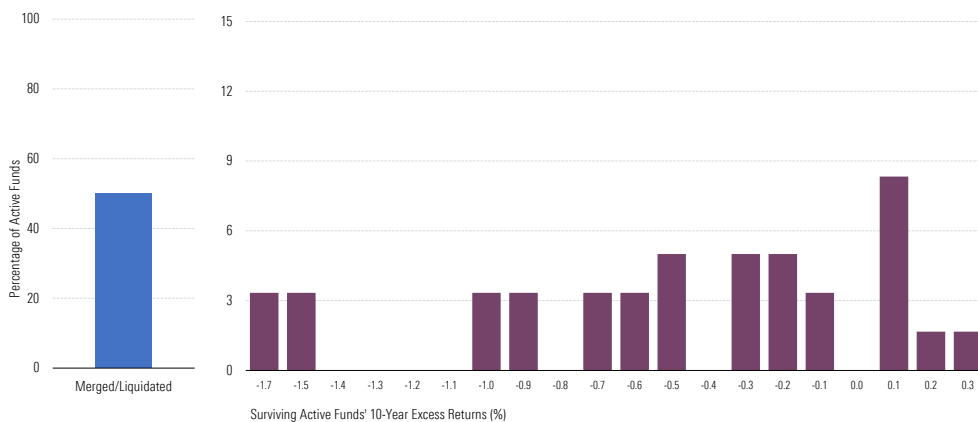
Source: Morningstar Direct. Data as of Dec. 31, 2023.

Exhibit 148 Rolling Success Rates for Surviving Active EUR Inflation-Linked Bond Funds (%)



Source: Morningstar Direct. Data as of Dec. 31, 2023.

Exhibit 149 Mortality and Distribution of 10-Year Annualized Excess Returns for EUR Inflation-Linked Bond Funds (%)



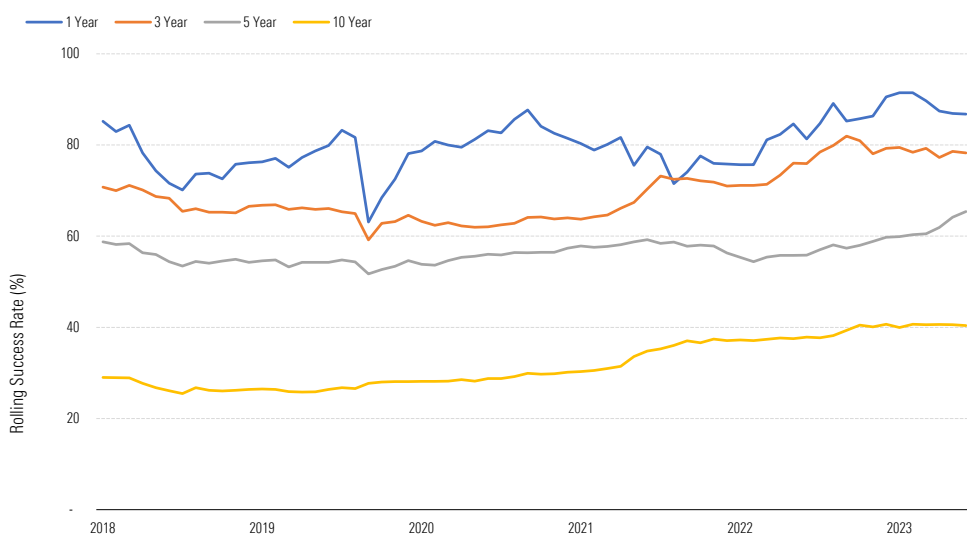
Source: Morningstar Direct. Data as of Dec. 31, 2023.

Exhibit 150 EUR Money Market

	Active Funds		Passive Funds		Asset-Weighted Performance		Equal-Weighted Performance		Active Success Rate (%)
	# at Beginning of Period	Survivorship Rate (%)	# at Beginning of Period	Survivorship Rate (%)	Active (%)	Passive (%)	Active (%)	Passive (%)	
Trailing Total Return									
1-Year	174	95.4	3	100.0	3.3	2.4	3.2	2.6	86.8
3-year	184	88.6	3	100.0	0.9	0.2	0.7	0.3	78.3
5-Year	214	72.4	3	100.0	0.4	- 0.2	0.3	- 0.1	65.4
10-Year	344	43.0	3	100.0	0.2	- 0.4	0.1	- 0.3	40.4
15-Year	769	20.0	7	28.6	0.4	- 0.1	0.3	- 0.0	19.5

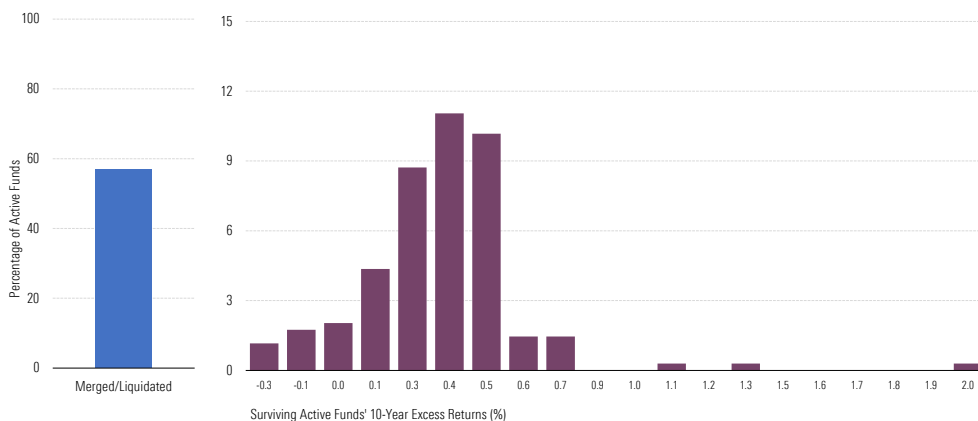
Source: Morningstar Direct. Data as of Dec. 31, 2023.

Exhibit 151 Rolling Success Rates for Surviving Active EUR Money Market Funds (%)



Source: Morningstar Direct. Data as of Dec. 31, 2023.

Exhibit 152 Mortality and Distribution of 10-Year Annualized Excess Returns for EUR Money Market Funds (%)



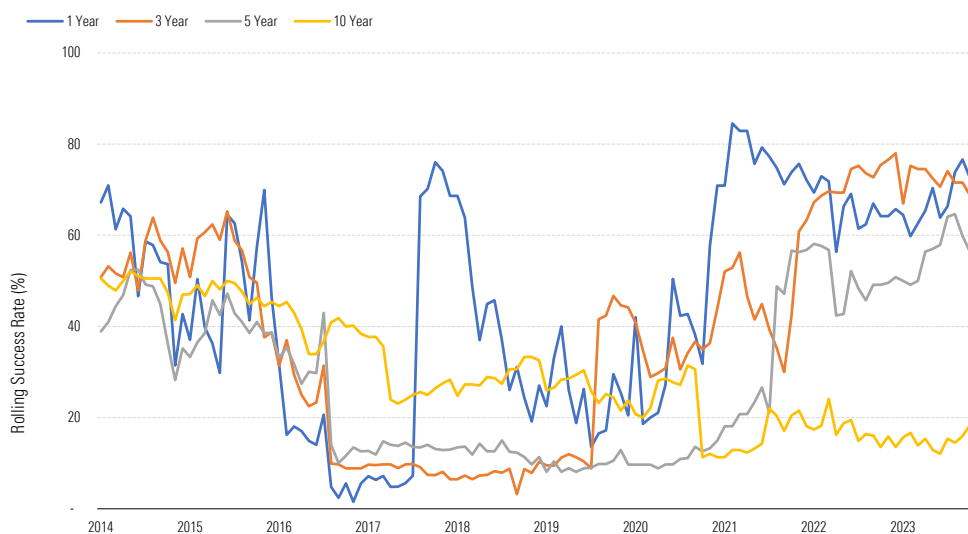
Source: Morningstar Direct. Data as of Dec. 31, 2023.

Exhibit 153 GBP Corporate Bond

	Active Funds		Passive Funds		Asset-Weighted Performance		Equal-Weighted Performance		Active Success Rate (%)
	# at Beginning of Period	Survivorship Rate (%)	# at Beginning of Period	Survivorship Rate (%)	Active (%)	Passive (%)	Active (%)	Passive (%)	
Trailing Total Return									
1-Year	106	97.2	23	100.0	9.8	8.6	9.8	8.9	72.6
3-year	109	90.8	22	100.0	4.1	4.9	4.8	5.2	68.8
5-Year	117	80.3	16	100.0	1.0	0.4	0.7	0.2	56.4
10-Year	120	61.7	14	78.6	2.9	2.8	2.7	3.1	18.3

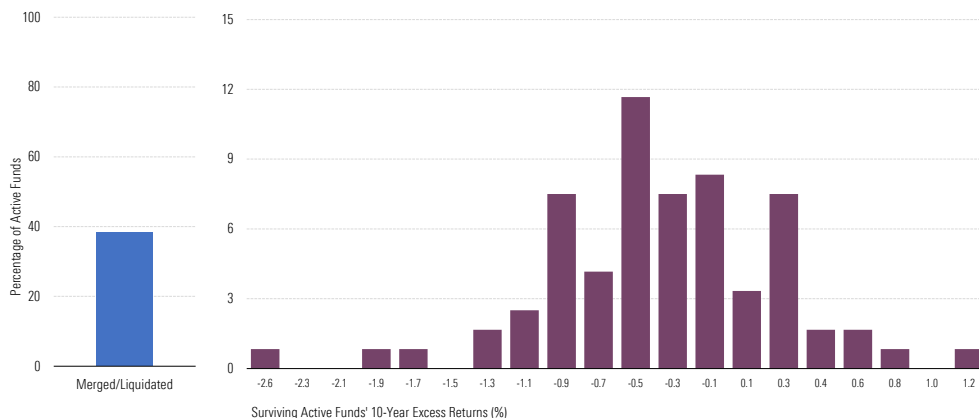
Source: Morningstar Direct. Data as of Dec. 31, 2023.

Exhibit 154 Rolling Success Rates for Surviving Active GBP Corporate Bond Funds (%)



Source: Morningstar Direct. Data as of Dec. 31, 2023.

Exhibit 155 Mortality and Distribution of 10-Year Annualized Excess Returns for GBP Corporate Bond Funds (%)



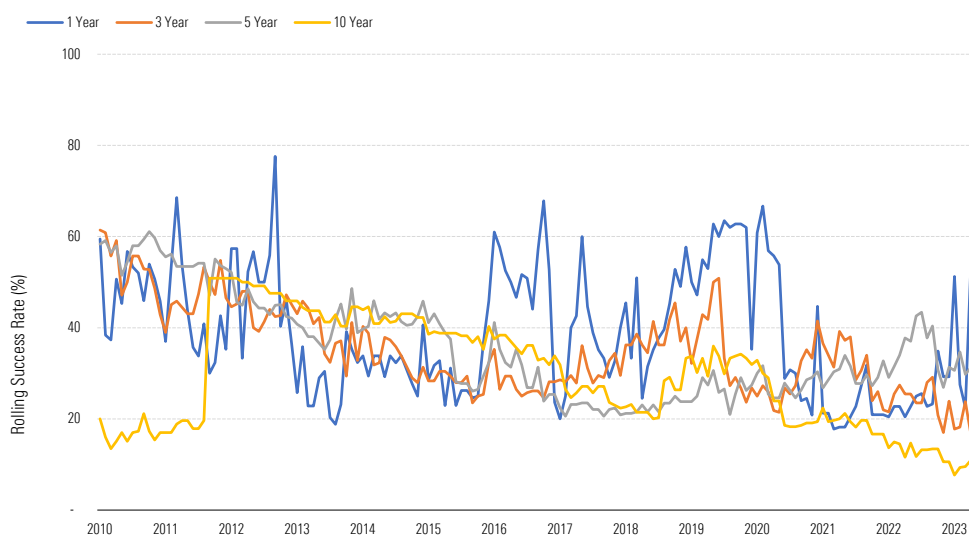
Source: Morningstar Direct. Data as of Dec. 31, 2023.

Exhibit 156 GBP Government Bond

	Active Funds		Passive Funds		Asset-Weighted Performance		Equal-Weighted Performance		Active Success Rate (%)
	# at Beginning of Period	Survivorship Rate (%)	# at Beginning of Period	Survivorship Rate (%)	Active (%)	Passive (%)	Active (%)	Passive (%)	
Trailing Total Return									
1-Year	41	85.4	30	100.0	4.2	4.0	3.7	3.5	53.7
3-year	42	78.6	29	96.6	- 8.5	- 7.8	- 9.5	- 8.5	16.7
5-Year	48	64.6	24	95.8	- 2.4	- 2.3	- 3.0	- 2.9	31.3
10-Year	64	37.5	23	69.6	1.1	0.7	1.0	0.9	10.9
15-Year	69	27.5	12	41.7	1.9	1.9	1.8	1.8	13.0
20-Year	64	21.9	8	25.0	2.7	2.4	2.7	2.4	17.2

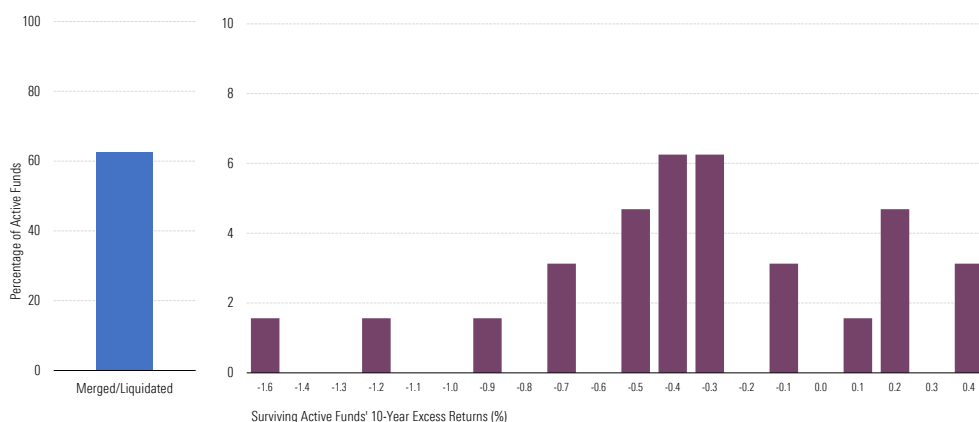
Source: Morningstar Direct. Data as of Dec. 31, 2023.

Exhibit 157 Rolling Success Rates for Surviving Active GBP Government Bond Funds (%)



Source: Morningstar Direct. Data as of Dec. 31, 2023.

Exhibit 158 Mortality and Distribution of 10-Year Annualized Excess Returns for GBP Government Bond Funds (%)



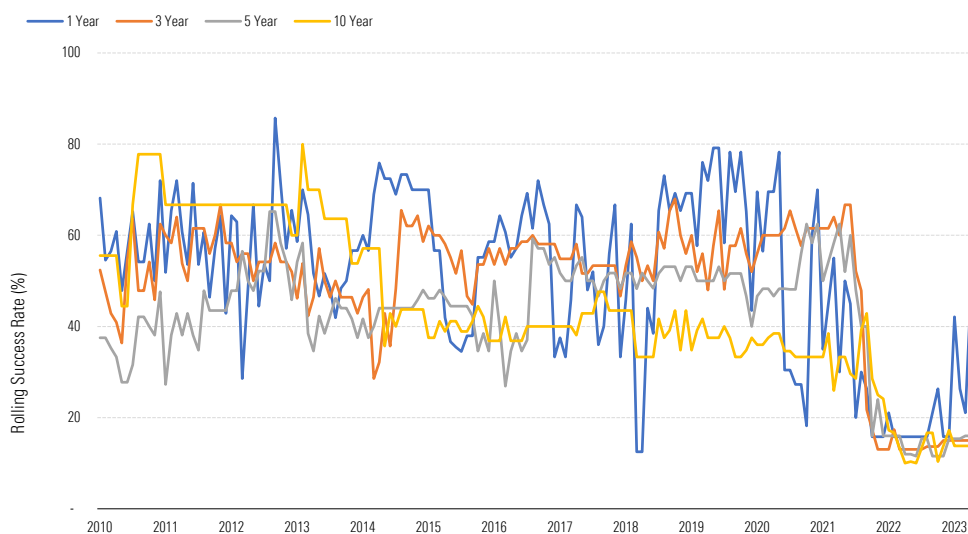
Source: Morningstar Direct. Data as of Dec. 31, 2023.

Exhibit 159 GBP Inflation-Linked Bond

	# at Beginning of Period	Survivorship Rate (%)	# at Beginning of Period	Survivorship Rate (%)	Active (%)	Passive (%)	Active (%)	Passive (%)	Active Success Rate (%)
Trailing Total Return									
1-Year	19	100.0	8	100.0	2.4	0.6	1.0	0.9	47.4
3-year	20	95.0	8	100.0	8.4	12.0	11.4	10.4	15.0
5-Year	25	76.0	10	80.0	2.3	4.2	3.7	3.7	16.0
10-Year	29	55.2	13	53.8	2.5	1.8	1.9	2.1	13.8
15-Year	23	43.5	10	30.0	3.5	3.6	3.5	3.7	13.0
20-Year	10	50.0	3	33.3	3.5	4.4	4.0	4.0	40.0

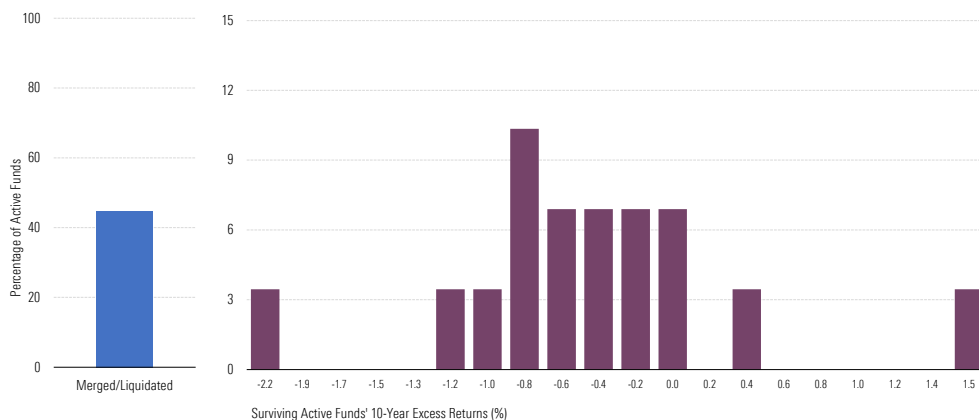
Source: Morningstar Direct. Data as of Dec. 31,

Exhibit 160 Rolling Success Rates for Surviving Active GBP Inflation-Linked Bond Funds (%)



Source: Morningstar Direct. Data as of Dec. 31, 2023.

Exhibit 161 Mortality and Distribution of 10-Year Annualized Excess Returns for GBP Inflation-Linked Bond Funds (%)



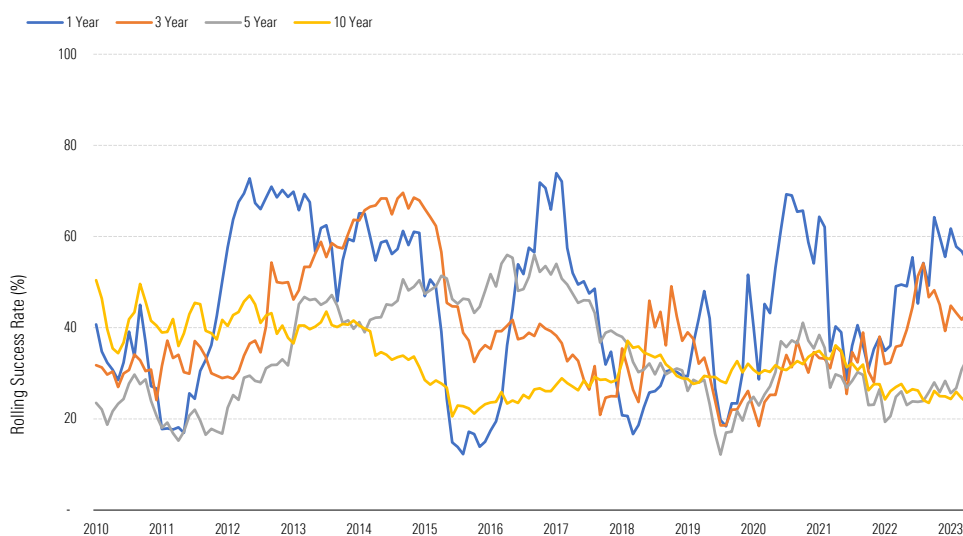
Source: Morningstar Direct. Data as of Dec. 31, 2023.

Exhibit 162 Global Bond

	Active Funds		Passive Funds		Asset-Weighted Performance		Equal-Weighted Performance		Active Success Rate (%)
	# at Beginning of Period	Survivorship Rate (%)	# at Beginning of Period	Survivorship Rate (%)	Active (%)	Passive (%)	Active (%)	Passive (%)	
Trailing Total Return									
1-Year	247	95.1	39	100.0	6.3	5.9	6.5	5.5	54.7
3-year	252	82.1	33	100.0	- 6.0 -	- 5.9 -	- 5.8 -	- 6.2 -	43.3
5-Year	265	67.9	28	92.9	- 1.4 -	- 0.6 -	- 0.9 -	- 0.7 -	33.2
10-Year	268	52.6	25	68.0	- 0.8 -	- 0.0 -	- 0.6 -	- 0.2 -	23.5
15-Year	215	46.0	10	60.0	1.4	1.4	1.0	1.1	19.5
20-Year	162	48.8	5	40.0	2.0	1.9	1.8	1.8	19.1

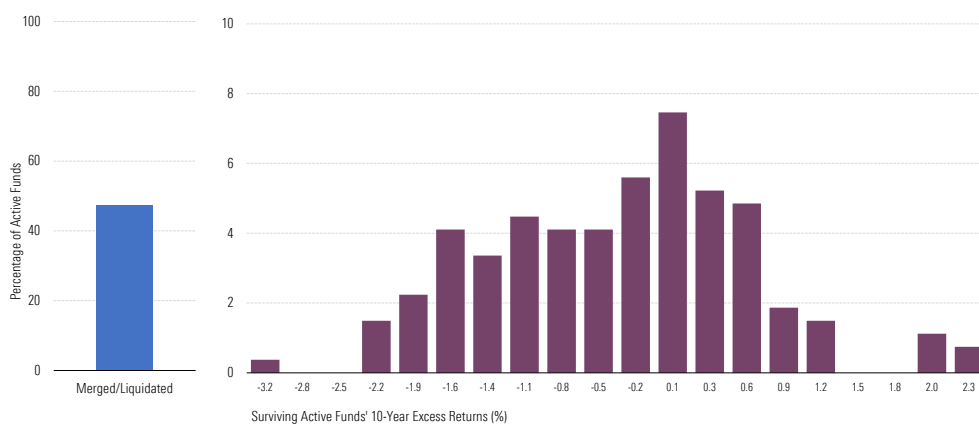
Source: Morningstar Direct. Data as of Dec. 31, 2023.

Exhibit 163 Rolling Success Rates for Surviving Active Global Bond Funds (%)



Source: Morningstar Direct. Data as of Dec. 31, 2023.

Exhibit 164 Mortality and Distribution of 10-Year Annualized Excess Returns for Global Bond Funds (%)



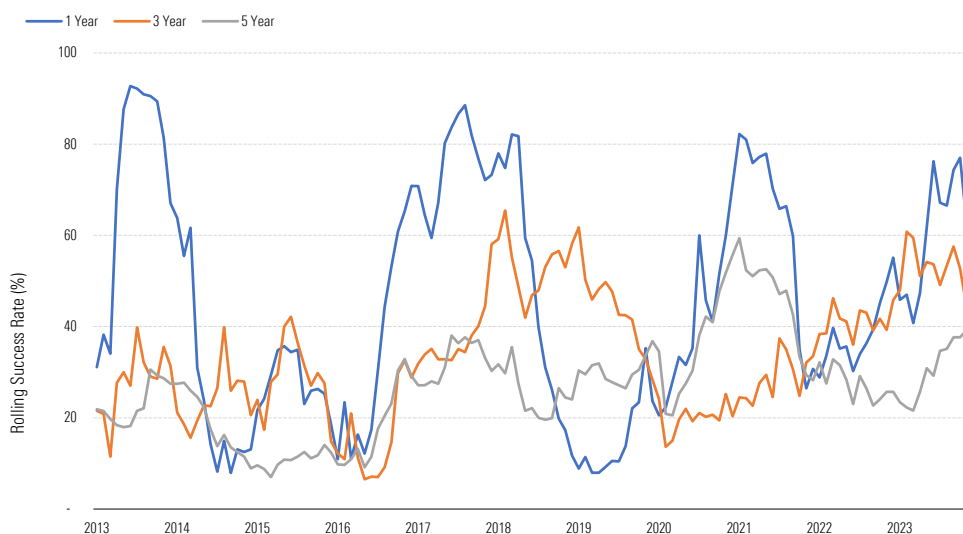
Source: Morningstar Direct. Data as of Dec. 31, 2023.

Exhibit 165 Global Emerging-Markets Bond

	Active Funds		Passive Funds		Asset-Weighted Performance		Equal-Weighted Performance		Active Success Rate (%)
	# at Beginning of Period	Survivorship Rate (%)	# at Beginning of Period	Survivorship Rate (%)	Active (%)	Passive (%)	Active (%)	Passive (%)	
Trailing Total Return									
1-Year	261	95.0	31	100.0	11.6	10.3	11.1	9.8	62.1
3-year	241	88.0	27	96.3	3.4	3.8	3.3	3.5	44.0
5-Year	219	79.5	24	95.8	0.6	1.5	1.3	1.4	39.3
10-Year	177	60.5	10	70.0	1.5	2.9	1.3	2.1	26.0

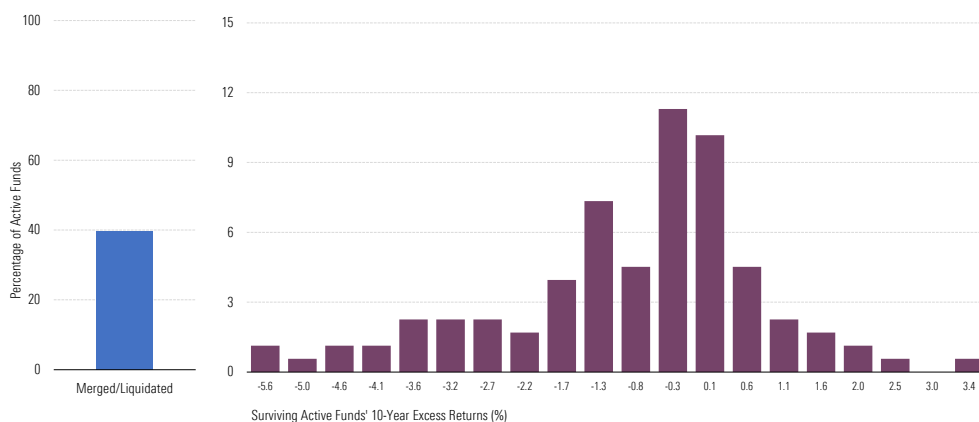
Source: Morningstar Direct. Data as of Dec. 31, 2023.

Exhibit 166 Rolling Success Rates for Surviving Active Global Emerging-Markets Bond Funds (%)



Source: Morningstar Direct. Data as of Dec. 31, 2023.

Exhibit 167 Mortality and Distribution of 10-Year Annualized Excess Returns for Global Emerging-Markets Bond Funds (%)



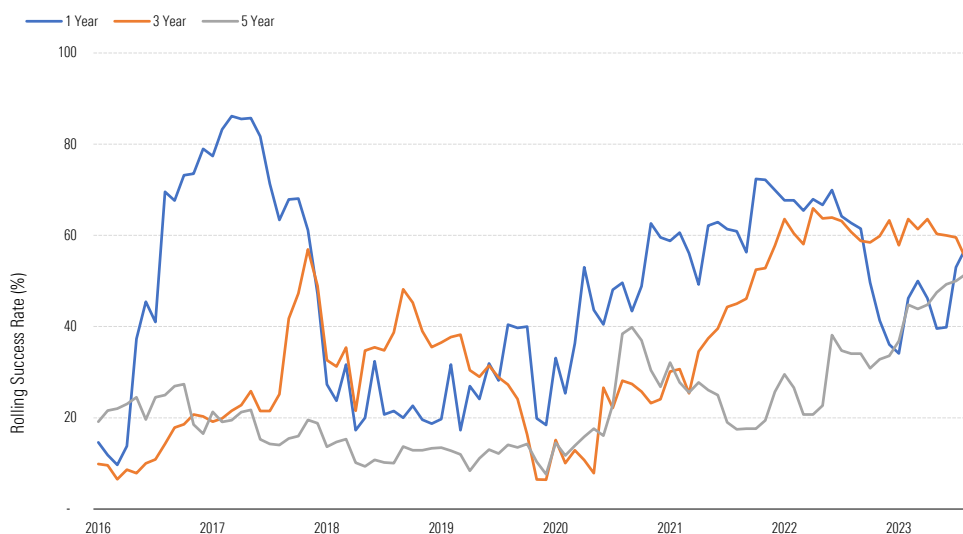
Source: Morningstar Direct. Data as of Dec. 31, 2023.

Exhibit 168 Global Emerging-Markets Bond—Local Currency

	Active Funds		Passive Funds		Asset-Weighted Performance		Equal-Weighted Performance		Active Success Rate (%)
	# at Beginning of Period	Survivorship Rate (%)	# at Beginning of Period	Survivorship Rate (%)	Active (%)	Passive (%)	Active (%)	Passive (%)	
Trailing Total Return									
1-Year	133	93.2	14	100.0	13.7	12.2	12.9	12.6	57.1
3-year	131	86.3	13	100.0	- 1.7	- 3.3	- 2.2	- 2.9	55.0
5-Year	138	75.4	11	90.9	2.0	0.7	1.4	1.0	51.4
10-Year	140	53.6	5	80.0	0.1	- 0.4	- 0.3	0.3	13.6

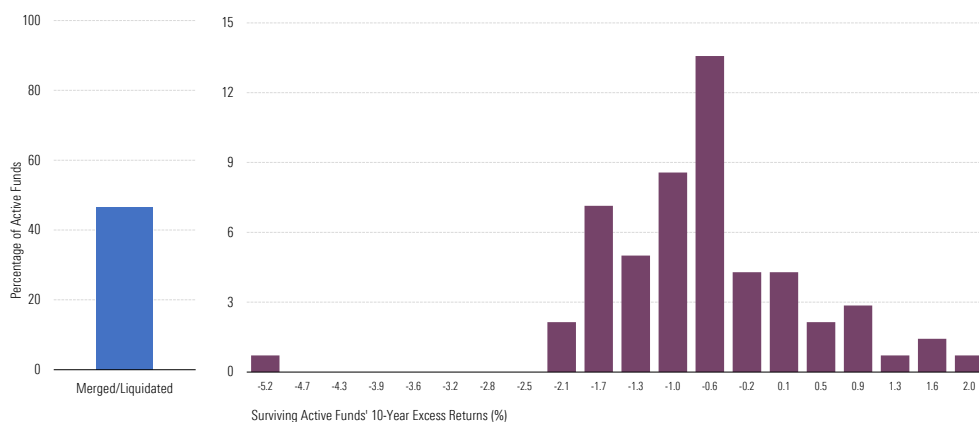
Source: Morningstar Direct. Data as of Dec. 31, 2023.

Exhibit 169 Rolling Success Rates for Surviving Active Global Emerging-Markets Bond—Local Currency Funds (%)



Source: Morningstar Direct. Data as of Dec. 31, 2023.

Exhibit 170 Mortality and Distribution of 10-Year Annualized Excess Returns for Global Emerging-Markets Bond—Local Currency Funds (%)



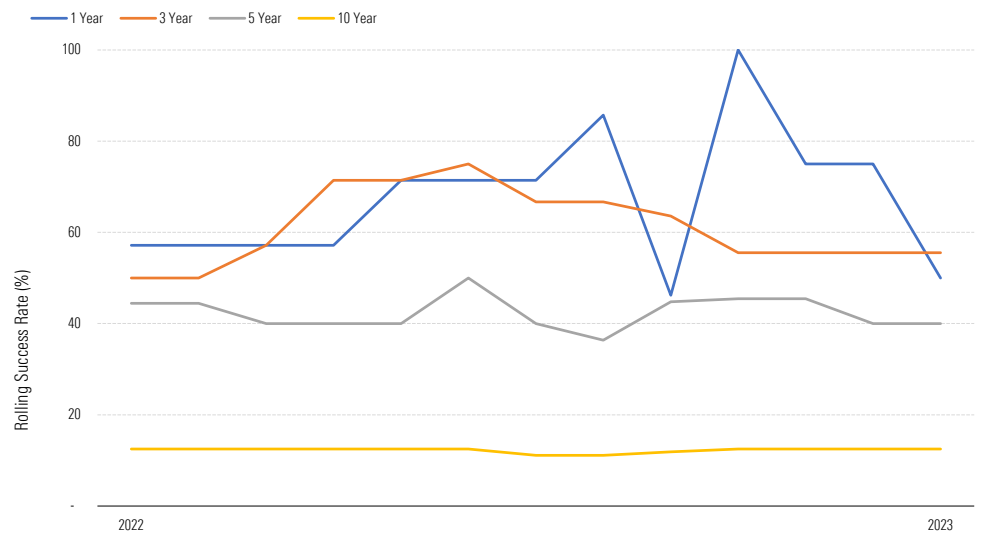
Source: Morningstar Direct. Data as of Dec. 31, 2023.

Exhibit 171 Global Inflation-Linked Bond

	Active Funds		Passive Funds		Asset-Weighted Performance		Equal-Weighted Performance		Active Success Rate (%)
	# at Beginning of Period	Survivorship Rate (%)	# at Beginning of Period	Survivorship Rate (%)	Active (%)	Passive (%)	Active (%)	Passive (%)	
Trailing Total Return									
1-Year	10	90.0	6	100.0	6.2	5.4	5.7	5.5	50.0
3-year	9	88.9	5	100.0	0.0	5.2	2.5	4.5	55.6
5-Year	10	60.0	3	100.0	2.6	0.5	1.3	0.5	40.0
10-Year	8	50.0	4	50.0	0.2	0.9	0.4	0.8	12.5

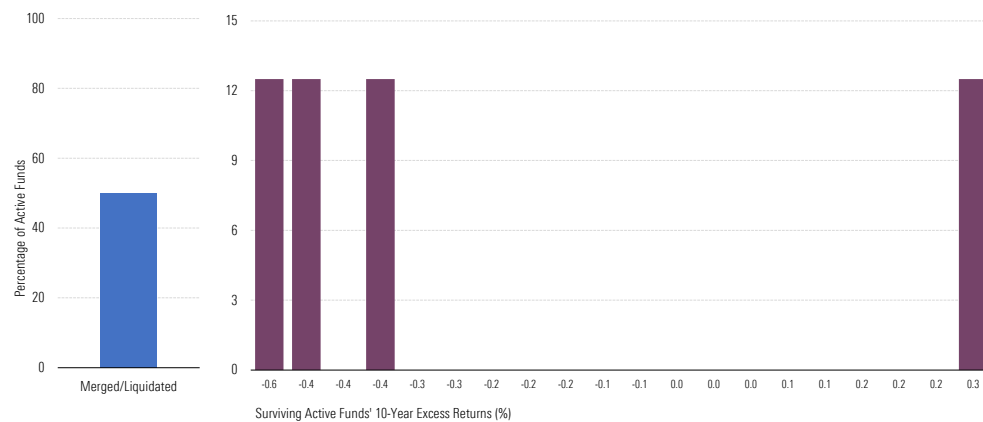
Source: Morningstar Direct. Data as of Dec. 31, 2023.

Exhibit 172 Rolling Success Rates for Surviving Active Global Inflation-Linked Bond Funds (%)



Source: Morningstar Direct. Data as of Dec. 31, 2023.

Exhibit 173 Mortality and Distribution of 10-Year Annualized Excess Returns for Global Inflation-Linked Bond Funds (%)



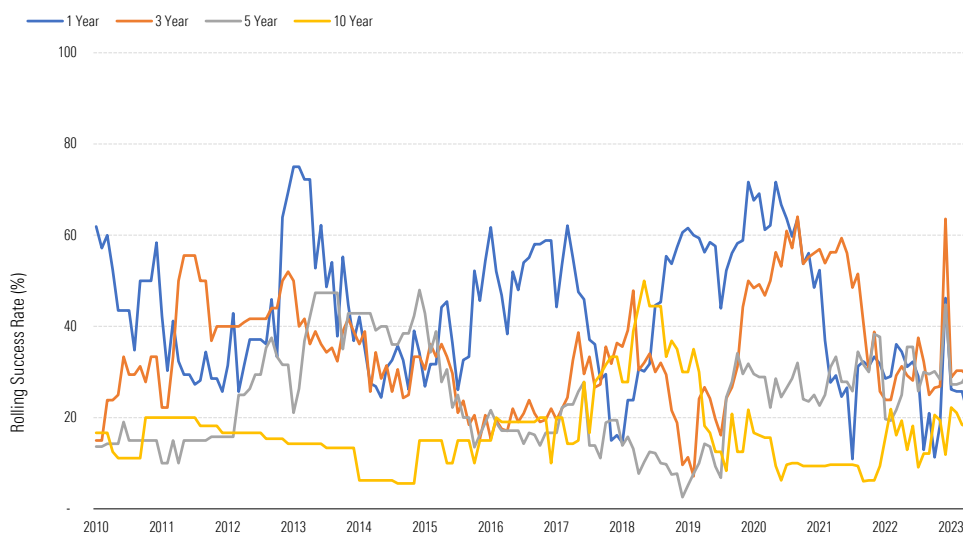
Source: Morningstar Direct. Data as of Dec. 31, 2023.

Exhibit 174 USD Corporate Bond

	Active Funds		Passive Funds		Asset-Weighted Performance		Equal-Weighted Performance		Active Success Rate (%)
	# at Beginning of Period	Survivorship Rate (%)	# at Beginning of Period	Survivorship Rate (%)	Active (%)	Passive (%)	Active (%)	Passive (%)	
Trailing Total Return									
1-Year	67	89.6	30	90.0	7.9	8.4	7.6	8.6	20.9
3-year	65	84.6	26	84.6	2.4	2.7	3.0	2.5	29.2
5-Year	64	75.0	23	73.9	2.8	2.8	2.3	2.6	29.7
10-Year	39	53.8	7	57.1	2.8	2.9	2.3	2.8	17.9
15-Year	18	61.1	5	60.0	5.1	4.4	4.3	4.3	33.3
20-Year	13	46.2	4	50.0	3.0	3.6	3.3	4.0	7.7

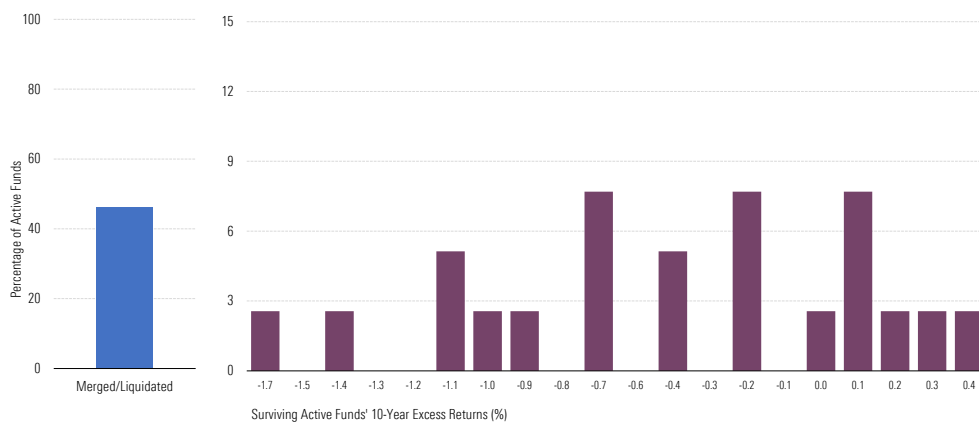
Source: Morningstar Direct. Data as of Dec. 31, 2023.

Exhibit 175 Rolling Success Rates for Surviving Active USD Corporate Bond Funds (%)



Source: Morningstar Direct. Data as of Dec. 31, 2023.

Exhibit 176 Mortality and Distribution of 10-Year Annualized Excess Returns for USD Corporate Bond Funds (%)



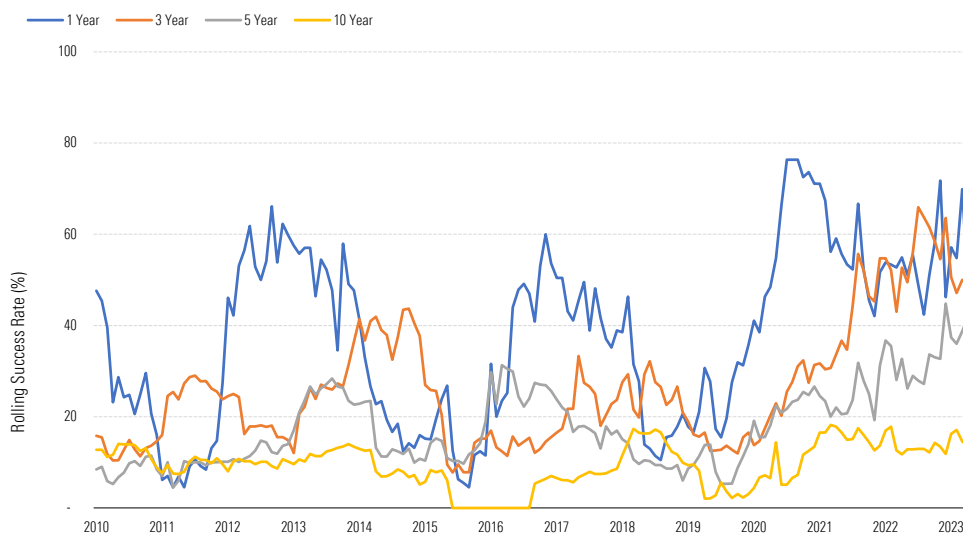
Source: Morningstar Direct. Data as of Dec. 31, 2023.

Exhibit 177 USD Diversified Bond

	Active Funds		Passive Funds		Asset-Weighted Performance		Equal-Weighted Performance		Active Success Rate (%)
	# at Beginning of Period	Survivorship Rate (%)	# at Beginning of Period	Survivorship Rate (%)	Active (%)	Passive (%)	Active (%)	Passive (%)	
Trailing Total Return									
1-Year	82	96.3	3	100.0	5.8	5.5	5.5	5.4	48.8
3-year	85	87.1	3	100.0	- 3.3	- 3.4	- 2.3	- 3.5	49.4
5-Year	98	71.4	3	100.0	1.1	1.0	1.4	0.9	41.8
10-Year	110	51.8	4	75.0	1.5	1.8	1.4	1.7	13.6
15-Year	170	24.7	3	33.3	2.5	2.5	1.9	2.4	10.0

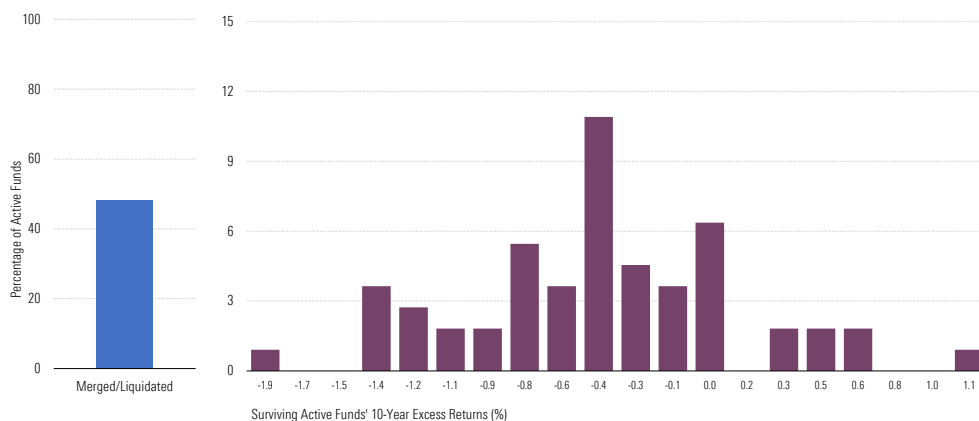
Source: Morningstar Direct. Data as of Dec. 31, 2023.

Exhibit 178 Rolling Success Rates for Surviving Active USD Diversified Bond Funds (%)



Source: Morningstar Direct. Data as of Dec. 31, 2023.

Exhibit 179 Mortality and Distribution of 10-Year Annualized Excess Returns for USD Diversified Bond Funds (%)



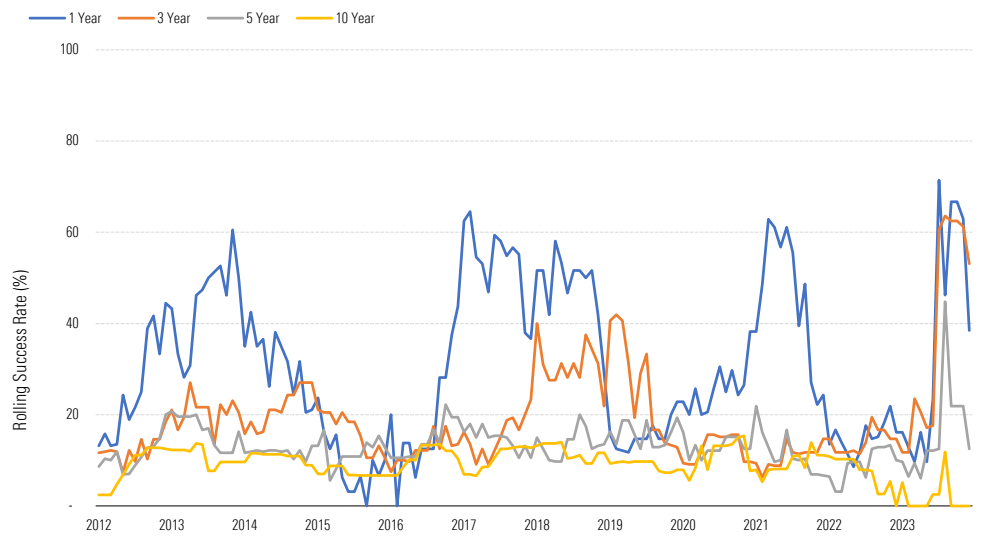
Source: Morningstar Direct. Data as of Dec. 31, 2023.

Exhibit 180 USD Government Bond

	Active Funds		Passive Funds		Asset-Weighted Performance		Equal-Weighted Performance		Active Success Rate (%)
	# at Beginning of Period	Survivorship Rate (%)	# at Beginning of Period	Survivorship Rate (%)	Active (%)	Passive (%)	Active (%)	Passive (%)	
Trailing Total Return									
1-Year	26	84.6	35	91.4	4.2	4.2	4.2	4.0	38.5
3-year	32	68.8	32	90.6	- 3.9	- 4.7	- 4.0	- 4.5	53.1
5-Year	32	62.5	28	71.4	0.1	0.2	0.1	0.2	12.5
10-Year	36	38.9	24	50.0	0.6	1.3	0.6	1.4	-
15-Year	43	30.2	4	75.0	1.7	1.7	1.2	1.6	9.3

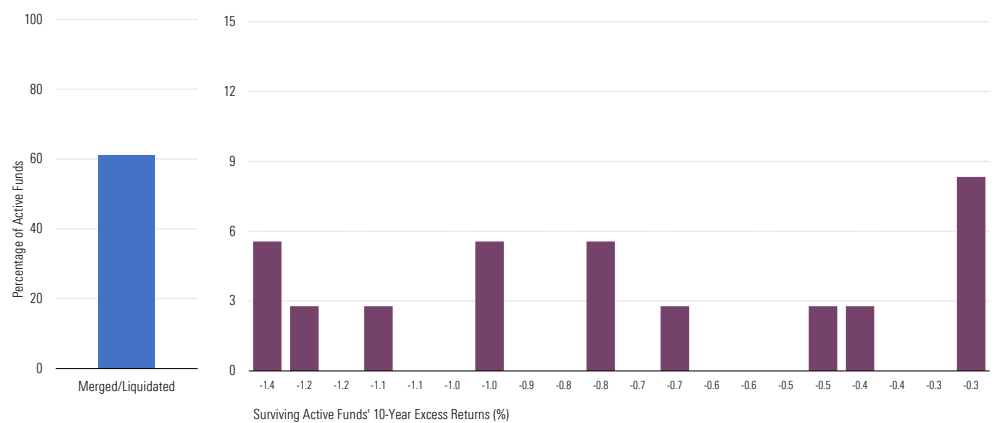
Source: Morningstar Direct. Data as of Dec. 31, 2023.

Exhibit 181 Rolling Success Rates for Surviving Active USD Government-Bond Funds (%)



Source: Morningstar Direct. Data as of Dec. 31, 2023.

Exhibit 182 Mortality and Distribution of 10-Year Annualized Excess Returns for USD Government-Bond Funds (%)



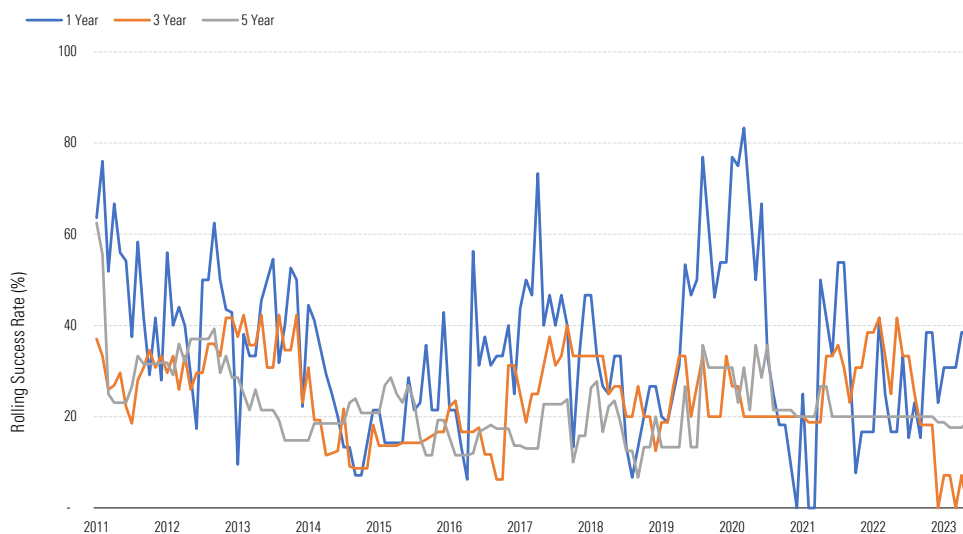
Source: Morningstar Direct. Data as of Dec. 31, 2023.

Exhibit 183 Property—Indirect Asia

	Active Funds		Passive Funds		Asset-Weighted Performance		Equal-Weighted Performance		Active Success Rate (%)
	# at Beginning of Period	Survivorship Rate (%)	# at Beginning of Period	Survivorship Rate (%)	Active (%)	Passive (%)	Active (%)	Passive (%)	
Trailing Total Return									
1-Year	13	84.6	3	100.0	1.6	- 1.8	0.3	0.3	38.5
3-year	14	64.3	3	100.0	- 4.8	- 3.4	- 4.7	- 2.9	-
5-Year	16	50.0	3	100.0	- 1.2	- 0.9	- 1.1	- 0.6	18.8
10-Year	17	35.3	6	33.3	1.0	1.4	0.9	2.2	11.8
15-Year	26	19.2	3	33.3	4.8	5.4	4.7	5.3	11.5

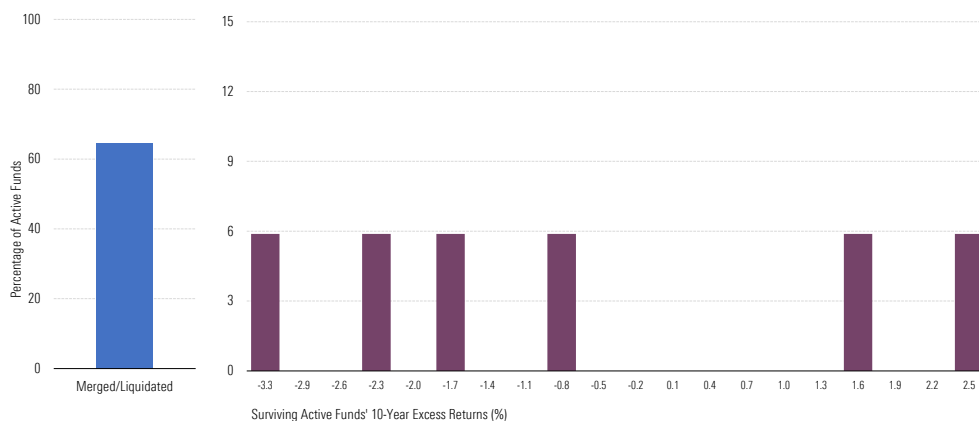
Source: Morningstar Direct. Data as of Dec. 31, 2023.

Exhibit 184 Rolling Success Rates for Surviving Active Property—Indirect Asia Funds (%)



Source: Morningstar Direct. Data as of Dec. 31, 2023.

Exhibit 185 Mortality and Distribution of 10-Year Annualized Excess Returns for Property—Indirect Asia Funds (%)



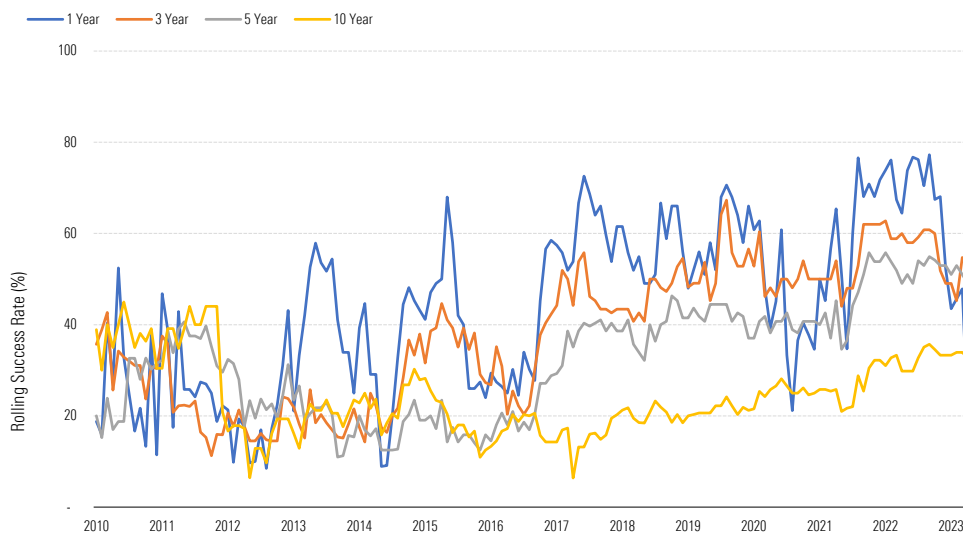
Source: Morningstar Direct. Data as of Dec. 31, 2023.

Exhibit 186 Property—Indirect Europe

	Active Funds		Passive Funds		Asset-Weighted Performance		Equal-Weighted Performance		Active Success Rate (%)
	# at Beginning of Period	Survivorship Rate (%)	# at Beginning of Period	Survivorship Rate (%)	Active (%)	Passive (%)	Active (%)	Passive (%)	
Trailing Total Return									
1-Year	45	82.2	12	100.0	16.0	17.3	15.1	17.0	20.0
3-year	52	69.2	13	92.3	- 2.3	- 6.4	- 2.9	- 5.2	51.9
5-Year	51	60.8	13	84.6	1.6	- 1.1	1.5	- 0.2	49.0
10-Year	55	47.3	15	46.7	4.7	3.6	4.5	3.6	32.7
15-Year	81	25.9	11	36.4	6.8	6.9	6.7	7.0	13.6
20-Year	31	41.9	4	25.0	5.0	6.0	4.8	6.0	9.7

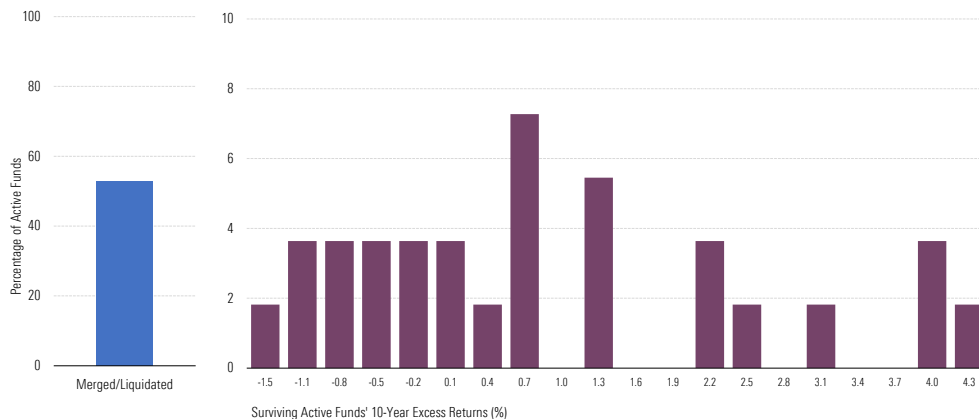
Source: Morningstar Direct. Data as of Dec. 31, 2023.

Exhibit 187 Rolling Success Rates for Surviving Property—Indirect Europe Funds (%)



Source: Morningstar Direct. Data as of Dec. 31, 2023.

Exhibit 188 Mortality and Distribution of 10-Year Annualized Excess Returns for Property—Indirect Europe Funds (%)



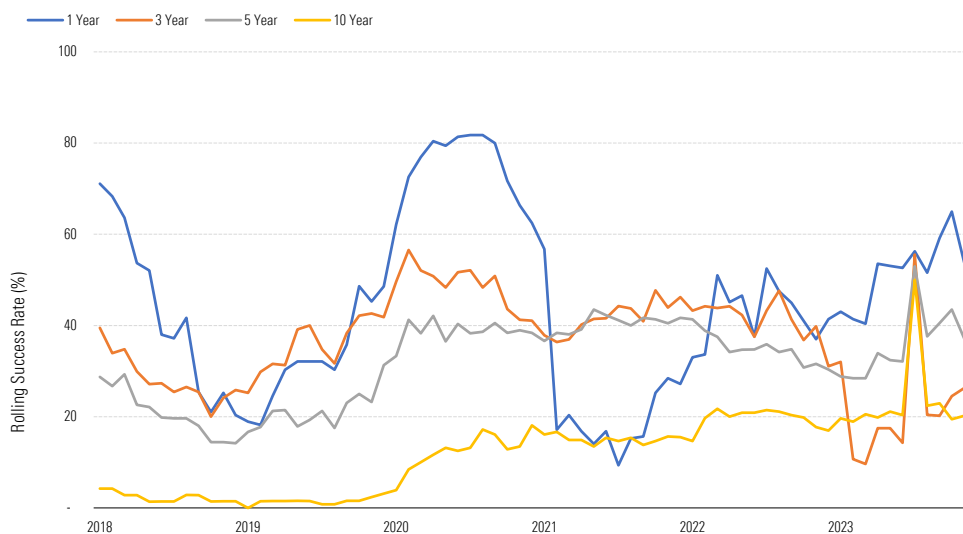
Source: Morningstar Direct. Data as of Dec. 31, 2023.

Exhibit 189 Property—Indirect Global

	Active Funds		Passive Funds		Asset-Weighted Performance		Equal-Weighted Performance		Active Success Rate (%)
	# at Beginning of Period	Survivorship Rate (%)	# at Beginning of Period	Survivorship Rate (%)	Active (%)	Passive (%)	Active (%)	Passive (%)	
Trailing Total Return									
1-Year	93	96.8	28	89.3	10.8	10.6	11.1	10.5	53.8
3-year	99	85.9	23	82.6	0.4	1.8	0.1	1.0	26.3
5-Year	105	71.4	16	93.8	3.5	3.3	3.0	3.1	37.1
10-Year	109	50.5	13	69.2	3.5	4.0	2.8	3.6	20.2
15-Year	135	32.6	4	75.0	6.7	8.0	5.8	8.6	3.0

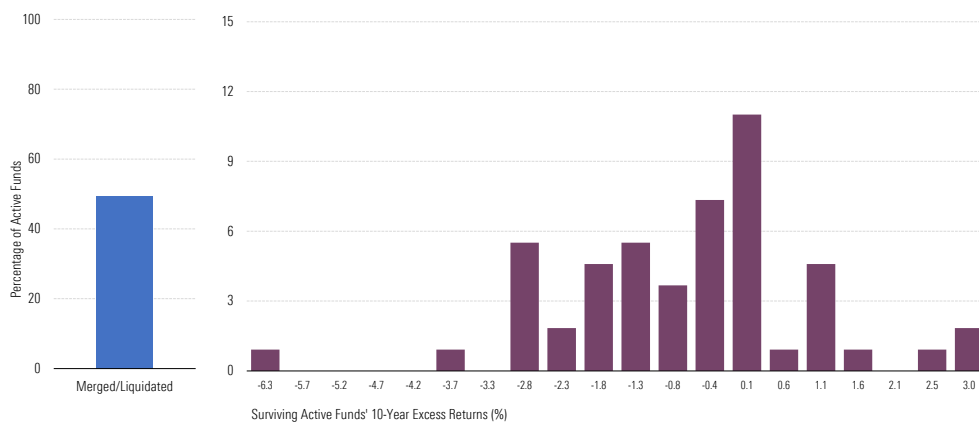
Source: Morningstar Direct. Data as of Dec. 31, 2023.

Exhibit 190 Rolling Success Rates for Surviving Property—Indirect Global Funds (%)



Source: Morningstar Direct. Data as of Dec. 31, 2023.

Exhibit 191 Mortality and Distribution of 10-Year Annualized Excess Returns for Property—Indirect Global Funds (%)



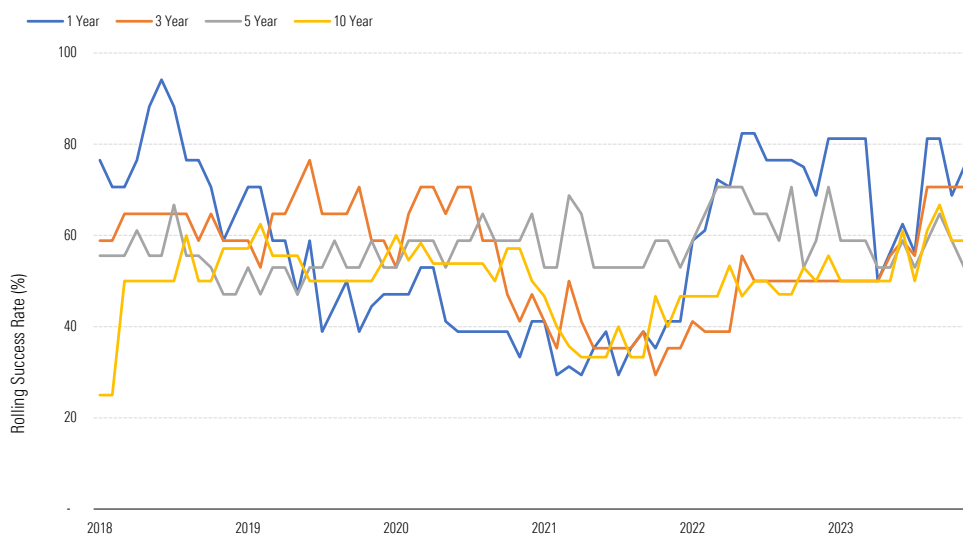
Source: Morningstar Direct. Data as of Dec. 31, 2023.

Exhibit 192 Property—Indirect Switzerland

	Active Funds		Passive Funds		Asset-Weighted Performance		Equal-Weighted Performance		Active Success Rate (%)
	# at Beginning of Period	Survivorship Rate (%)	# at Beginning of Period	Survivorship Rate (%)	Active (%)	Passive (%)	Active (%)	Passive (%)	
Trailing Total Return									
1-Year	16	100.0	5	100.0	5.2	4.8	5.2	4.6	75.0
3-year	17	94.1	5	100.0	0.9	1.5	0.6	1.6	70.6
5-Year	17	94.1	5	100.0	5.3	5.0	4.6	4.9	52.9
10-Year	17	94.1	5	100.0	5.4	5.1	5.1	5.1	58.8

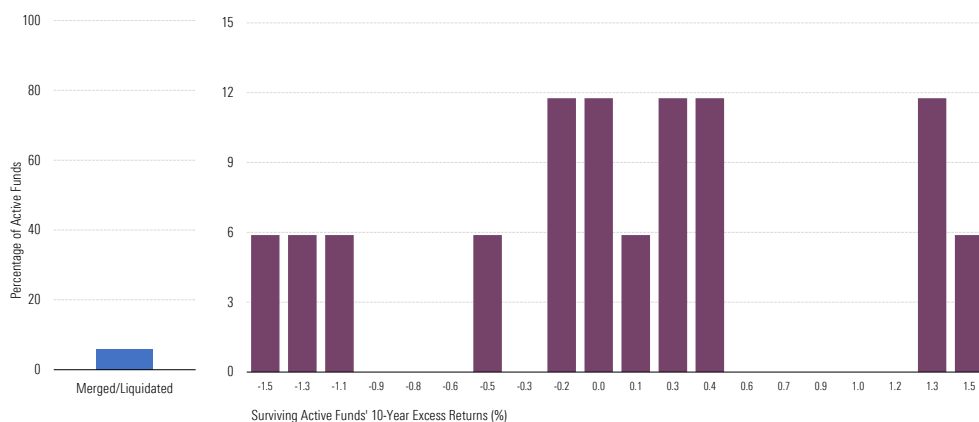
Source: Morningstar Direct. Data as of Dec. 31, 2023.

Exhibit 193 Rolling Success Rates for Surviving Property—Indirect Switzerland Funds (%)



Source: Morningstar Direct. Data as of Dec. 31, 2023.

Exhibit 194 Mortality and Distribution of 10-Year Annualized Excess Returns for Property—Indirect Switzerland Funds (%)



Source: Morningstar Direct. Data as of Dec. 31, 2023.

Appendix—Morningstar Categories Base Currencies

Exhibit 195 Morningstar Equity Categories Base Currencies

Morningstar Category	Base Currency
EUR Cautious Allocation - Global	EUR
Asia ex-Japan Equity	USD
Asia-Pacific Equity	USD
Asia-Pacific ex-Japan Equity	USD
Brazil Equity	USD
China Equity	USD
Denmark Equity	DKK
Europe Equity Income	EUR
Europe ex-UK Equity	EUR
Europe Large-Cap Blend Equity	EUR
Europe Large-Cap Growth Equity	EUR
Europe Small-Cap Equity	EUR
Eurozone Large-Cap Equity	EUR
Eurozone Small-Cap Equity	EUR
Finland Equity	EUR
France Equity	EUR
Germany Equity	EUR
Global Emerging Markets Equity	USD
Global Equity Income	USD
Global Large-Cap Blend Equity	USD
Global Large-Cap Value Equity	USD
India Equity	USD
Italy Equity	EUR
Japan Large-Cap Equity	JPY
Latin America Equity	USD
Nordic Equity	SEK
Norway Equity	NOK
Pacific ex-Japan Equity	USD
Spain Equity	EUR
Sweden Equity	SEK
Switzerland Equity	CHF
Switzerland Small/Mid-Cap Equity	CHF
UK Equity Income	GBP
UK Large-Cap Equity	GBP
UK Mid-Cap Equity	GBP
US Large-Cap Blend Equity	USD
US Large-Cap Growth Equity	USD
US Large-Cap Value Equity	USD
US Small-Cap Equity	USD

Source: Morningstar Direct. Data as of Dec. 31, 2023.

Exhibit 196 Morningstar Fixed-Income Categories Base Currencies

Morningstar Category	Base Currency
CHF Bond	CHF
EUR Bond - Long Term	EUR
EUR Corporate Bond	EUR
EUR Corporate Bond - Short Term	EUR
EUR Diversified Bond	EUR
EUR Government Bond	EUR
EUR Government Bond - Short Term	EUR
EUR High Yield Bond	EUR
EUR Inflation-Linked Bond	EUR
EUR Money Market	EUR
GBP Corporate Bond	GBP
GBP Government Bond	GBP
GBP Inflation-Linked Bond	GBP
Global Bond	USD
Global Emerging Markets Bond	USD
Global Emerging Markets Bond - Local Currency	USD
Global Inflation-Linked Bond	USD
USD Corporate Bond	USD
USD Diversified Bond	USD
USD Government Bond	USD

Source: Morningstar Direct. Data as of Dec. 31, 2023.

Exhibit 196 Morningstar Property Categories Base Currencies

Morningstar Category	Base Currency
Property - Indirect Asia	USD
Property - Indirect Europe	EUR
Property - Indirect Global	USD
Property - Indirect Switzerland	CHF

Source: Morningstar Direct. Data as of Dec. 31, 2023.

Appendix—Methodology

Data Source

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

Universe

All ETFs and open-end mutual funds (excluding funds of funds and money market funds) in each Morningstar Category that existed in the beginning of the relevant periods (including funds that did not survive to the end of the period) defined the eligible universe. To be included, the fund's inception date must precede the start of the period and the obsolete data cannot predate the start of the period. In addition, each must have asset data for at least one share class in the month prior to the start of the sample period (the beginning of the trailing one-, three-, five- and 10-year periods) to facilitate asset-weighting.

Survivorship

To calculate survivorship, 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).

Asset-Weighted Returns

We calculate the asset-weighted returns for each cohort using each share class' monthly asset and returns. When a fund becomes obsolete, its historical remains in the sample. Funds that incept or migrate into the category after the start of the period are not included. The return calculations are made in each category's base currency.

Equal-Weighted Returns

To come up with a single return figure for funds with multiple share classes, we first calculate the asset-weighted average of all the fund's share classes. We then take the simple equal-weighted average of the monthly returns for each fund in the group and compound those returns over the same period. As before, when a fund becomes obsolete, its historical data remains in the sample. Funds that incept or are moved into the category after the start of the period are not included. The return calculations are made in each category's base currency.

Success Rate

The success rate indicates what percentage of funds that started the sample period went on to survive and generate a return in excess of the equal-weighted average passive fund return over the period. This approach differs from the convention of using a single representative index to gauge success. We do not consider magnitude of outperformance in defining success—a fund that just barely beat the benchmark alternative counts as much as a fund that significantly outperformed.

As in the equal-weighted return calculation, 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 fund by their composite returns, count the number that rank higher than the equal-weighted average return for the passive funds in the category, and divide that number by the funds at the beginning of the period (using the same number from the denominator of the survivorship calculation).

Morningstar Manager Research Services, EMEA Report Disclosure

This Report is for informational purposes, intended for financial professionals and/or sophisticated investors ("Users") and should not be the sole piece of information used by such Users or their clients in making an investment decision.

The analysis within this report is prepared by the person(s) noted in their capacity as an analyst for Morningstar. The opinions expressed within the Report are given in good faith, are as of the date of the Report and are subject to change without notice. Neither the analyst nor Morningstar commits themselves in advance to whether and in which intervals updates to the Report are expected to be made. The written analysis and Morningstar Analyst Rating within this Report are statements of opinions; they are not statements of fact.

Morningstar believes its analysts make a reasonable effort to carefully research information contained in their analysis. The information on which the analysis is based has been obtained from sources which are believed to be reliable such as, for example, the fund's prospectus and shareholder reports (or their equivalents), fund company website, interviews with fund company personnel, and relevant and appropriate press sources as well as data, statistics and information within Morningstar's own database. Morningstar does not perform an audit or seek independent verification of any of the data, statistics, and information it receives.

Unless otherwise provided in a separate agreement, Users accessing this Report may only use it in the country in which the Morningstar distributor is based. Unless stated otherwise, the original distributor of the report is Morningstar Inc., a U.S.A. domiciled financial institution.

This Report is for informational purposes only and has no regard to the specific investment objectives, financial situation or particular needs of any specific recipient. This publication is intended to provide information to assist institutional investors in making their own investment decisions, not to provide investment advice to any specific investor. Therefore, investments discussed and recommendations made herein may not be suitable for all investors; Users and User clients must exercise their own independent judgment as to the suitability of such investments and recommendations in the light of their own investment objectives, experience, taxation status and financial position.

The information, data, analyses and opinions presented herein are not warranted to be accurate, correct, complete or timely. Unless otherwise provided in a separate agreement, Morningstar makes no representation that the Report contents meet all of the presentation and/or disclosure standards applicable in the jurisdiction the recipient is located.

Except as otherwise required by law or provided for in a separate agreement, the analyst, Morningstar and its officers, directors and employees will not be responsible or liable for any trading decisions, damages or other losses resulting from, or related to, the information, data, analyses or opinions within the report. Morningstar encourages Users and User clients to read all relevant issue documents (e.g., prospectus) pertaining to the security concerned, including without limitation, information relevant to its investment objectives, risks, and costs before making an investment decision and when deemed necessary, to seek the advice of a legal, tax, and/or accounting professional.

The Report and its contents are not directed to, or intended for distribution to or use by, any person or entity who is a citizen or resident of or located in any locality, state, country or other jurisdiction where such distribution, publication, availability or use would be contrary to law or regulation or which would subject Morningstar or its affiliates to any registration or licensing requirements in such jurisdiction.

This Report may be distributed in certain localities, countries and/or jurisdictions ("Territories") by independent third parties or independent intermediaries ("Distributors"). Such Distributors are not acting as agents or representatives of the analyst or Morningstar. In Territories where a Distributor distributes our Report, the Distributor, and not the analyst or Morningstar, is solely responsible for complying with all applicable regulations, laws, rules, circulars, codes and guidelines established by local and/or regional regulatory bodies, including laws in connection with the distribution third-party research reports.

For a list of funds which Morningstar currently covers and provides written analysis on please contact your local Morningstar office. For information on the historical Morningstar Analyst Rating for any Fund Morningstar covers, please contact your local Morningstar office.

Please note that investments in securities (including mutual funds) are subject to market and other risks and there is no assurance or guarantee that the intended investment objectives will be achieved. Past performance of a security may or may not be sustained in future and is no indication of future performance. A security investment return and an investor's principal value will fluctuate so that, when redeemed, an investor's shares may be worth more or less than their original cost. A security's current investment performance may be lower or higher than the investment performance noted within the report. Morningstar's Risk, Return and Star Rating serves as useful data points with respect to evaluating a fund's risk profile.

A current yield percentage is not a reflection of the actual return an investor will receive in all cases as market prices for securities are constantly changing due to such things as market factors. Where a security is denominated in a different currency than the currency of the User or User's clients, changes in rates of exchange may have an adverse effect on the value, price or income of or from that investment.

Indexes noted within the report are unmanaged, their returns do not include payment of any sales charges or fees an investor would pay to purchase securities, and cannot be invested in directly.

In certain jurisdictions, the Report contents, except for the Morningstar Analyst Rating and key analysis/ opinions, may be shared with the fund company prior to publication. In the unlikely event that Morningstar would change their analyses/opinions and/or the Morningstar Analyst Rating based on feedback as result of such review, the Report would disclose such a fact.

Conflicts of Interest

- ▶ Analysts may own (actual or beneficial) interests in the financial products that are the subject of the Report. No material interests are held by Morningstar, the analyst or their immediate family in the financial products that are the subject of the Report. The Conflicts of Interest disclosure above also applies to relatives and associates of Manager Research analysts in India.
- ▶ Analysts' compensation is derived from Morningstar's overall earnings and consists of salary, bonus and in some cases restricted stock. Analysts' receive no compensation or material benefits from product issuers or third parties in connection with the Report. The Conflicts of Interest disclosure above also applies to associates of Manager Research analysts in India. The terms and conditions on which Morningstar Investment Adviser India Private Limited offers investment research to clients, varies from client to client, and are detailed in the respective client agreement.
- ▶ Morningstar does not receive commissions for providing research and does not charge financial product issuers to be rated.
- ▶ Analysts may not pursue business and employment opportunities outside Morningstar within the investment industry (including but not limited to, working as a financial planner, an investment adviser or investment adviser representative, a broker-dealer or broker-dealer agent, a financial writer, reporter, or analyst).
- ▶ Morningstar may provide the product issuer or its related entities with services or products for a fee and on an arms' length basis including software products and licenses, research and consulting services, data services, licenses to republish our ratings and research in their promotional material, event sponsorship and website advertising.
- ▶ Morningstar affiliates (i.e., its investment management group) may have arrangements with a fund company's affiliate to provide investment consulting advice some of which an analyst may issue an investment research reports on one or more of the fund company's funds. However, analysts do not have authority over Morningstar's investment management group's business arrangements nor allow employees from the investment management group to participate or influence the analysis or opinion prepared by them.
- ▶ Morningstar, Inc. is a publicly traded company (Ticker Symbol: MORN) and thus a fund which is the subject of this Report may own more than 5% of Morningstar, Inc.'s total outstanding shares. Please access Morningstar, Inc.'s proxy statement, "Security Ownership of Certain Beneficial Owners and Management" section <http://investorrelations.morningstar.com/sec.cfm?doctype=Proxy&year=&x=12>. A fund's holding of Morningstar stock has no bearing on and is not a requirement for funds Morningstar determines to cover.

Analysts do not have any other material conflicts of interest at the time of publication. Users wishing to obtain further information should contact their local Morningstar office or refer to <https://corporate.morningstar.com/us/asp/subject.aspx?xmlfile=540.xml>.

The Morningstar Medalist Rating™

The Morningstar Medalist Rating™ is a forward-looking analysis of a fund. The Medalist Rating does not express a view on a given asset class or peer group; rather, it seeks to evaluate each fund within the context of its objective, an appropriate benchmark, and peer group.

The Five Pillars

Morningstar has identified five key areas that we believe are crucial to predicting the future success of funds: People, Parent, Process, Performance, and Price. Each pillar is evaluated when assessing a fund as well as the interaction between the pillars, which we believe is crucial to understanding a fund's overall merit.

People

The overall quality of a fund's investment team is a significant key to its ability to deliver superior performance relative to its benchmark and/or peers. Evaluating a fund's investment team requires that analysts assess several relevant items including how key decisions are made.

Parent

We believe the parent organization is of utmost importance in evaluating funds. The fund's management set the tone for key elements of our evaluation, including capacity management, risk management, recruitment and retention of talent, and incentive pay. Beyond these operational areas, we prefer firms that have a culture of stewardship and put investors first to those that are too heavily weighted to salesmanship.

Process

We look for funds with a performance objective and investment process (for both security selection and portfolio construction) that is sensible, clearly defined, and repeatable. In addition, the portfolio should be constructed in a manner that is consistent with the investment process and performance objective.

Performance

We do not believe past performance is necessarily predictive of future results, and this factor accordingly receives a relatively small weighting in our evaluation process. In particular, we strive not to anchor on short-term performance. However, we do believe that the evaluation of long-term return and risk patterns is vital to determining if a fund is delivering to our expectations.

Price

To reflect actual investor experience, price is evaluated within the context of the relevant market or cross-border region—for example, the United States, Australia, Canada, or Europe. In recognition of differences in scale and distribution costs in various markets, the level at which a fund is penalised for high fees or rewarded for low fees can vary with region. In Europe, for example, funds are penalised if they land in the most expensive quintile of their Morningstar category and are rewarded if they land in the cheapest quintile. The assessment is made using annual expense ratios, but in the case of funds with performance fees, expenses are evaluated excluding any performance fees and then the structure of the performance fee is evaluated separately.

Morningstar Medalist Ratings

Morningstar Medalist Ratings are assigned on a five-tier scale running from Gold to Negative. The top three ratings, Gold, Silver, and Bronze, all indicate that our analysts think highly of a fund; the difference between them corresponds to differences in the level of analyst conviction in a fund's ability to outperform its benchmark and peers through time, within the context of the level of risk taken.

Gold

Represents funds that our analyst has the highest-conviction in for that given investment mandate. By giving a fund a Gold rating, we are expressing an expectation that it will outperform its relevant performance benchmark and/or peer group within the context of the level of risk taken over the long term (defined as a full market cycle or at least five years). To earn a Gold rating, a fund must distinguish itself across the five pillars that are the basis for our analysis.

Silver

Represents funds our analyst has high-conviction in, but not in all of the five pillars. With those fundamental strengths, we expect these funds will outperform their relevant performance benchmark and/or peer group within the context of the level of risk taken over the long term (defined as a full market cycle or at least five years).

Bronze

Represents funds that have advantages that clearly outweigh any disadvantages across the pillars, giving analyst the conviction to award them a positive rating. We expect these funds to beat their relevant performance benchmark and/or peer group within the context of the level of risk taken over a full market cycle (or at least five years).

Neutral

Represents funds in which our analysts don't have a strong positive or negative conviction. In our judgment, these funds are not likely to deliver standout returns, but they aren't likely to seriously underperform their relevant performance benchmark and/or peer group either.

Negative

Represents funds that possess at least one flaw that our analysts believe is likely to significantly hamper future performance, such as high fees or an unstable management team. Because of these faults, we believe these funds are inferior to most competitors and will likely underperform their relevant performance benchmark and/or peer group, within the context of the level of risk taken, over a full market cycle.

Morningstar may also use two other designations in place of a rating:

Under Review

This designation means that a change that occurred with the fund or at the fund company requires further review to determine the impact on the rating.

Not Ratable

This designation is used only where we are providing a report on a new strategy or on a strategy where there are no relevant comparators, but where investors require information as to suitability.

For more information about our Medalist Rating methodology please go to <http://corporate1.morningstar.com/ResearchLibrary/>.

Morningstar Rating

The Morningstar Rating for funds is a proprietary data point that is quantitatively driven. Funds are rated from 1 to 5 stars based on how well the fund performed (after adjusting for risk and accounting for sales charges) in comparison to similar funds. Within each Morningstar Category, the top 10% of funds receive 5 stars and the bottom 10% receive 1 star. Funds are rated for up to three time periods—three, five, and 10 years—and these ratings are combined to produce an overall star rating, which is noted within the Report. Funds with less than three years of history are not rated. Morningstar Ratings are based entirely on a mathematical evaluation of past performance. Star ratings are in no way to be considered a buy or sell signal nor should be viewed as a statement of fact.

For Recipients in Australia: This Report has been issued and distributed in Australia by Morningstar Australasia Pty Ltd (ABN: 95 090 665 544; ASFL: 240892). Morningstar Australasia Pty Ltd is the provider of the general advice ('the Service') and takes responsibility for the production of this report. The Service is provided through the research of investment products. To the extent the Report contains general advice it has been prepared without reference to an investor's objectives, financial situation or needs. Investors should consider the advice in light of these matters and, if applicable, the relevant Product Disclosure Statement before making any decision to invest. Refer to our Financial Services Guide (FSG) for more information at www.morningstar.com.au/fsg.pdf.

For Recipients in Hong Kong: The Report is distributed by Morningstar Investment Management Asia Limited, which is regulated by the Hong Kong Securities and Futures Commission to provide services to professional investors only. Neither Morningstar Investment Management Asia Limited, nor its representatives, are acting or will be deemed to be acting as an investment advisor to any recipients of this information unless expressly agreed to by Morningstar Investment Management Asia Limited. For enquiries regarding this research, please contact a Morningstar Investment Management Asia Limited Licensed Representative at <https://shareholders.morningstar.com>.

For Recipients in India: This Investment Research is issued by Morningstar Investment Adviser India Private Limited. Morningstar Investment Adviser India Private Limited is registered with the Securities and Exchange Board of India (Registration number INA000001357) and provides investment advice and research. Morningstar Investment Adviser India Private Limited has not been the subject of any disciplinary action by SEBI or any other legal/regulatory body. Morningstar Investment Adviser India Private Limited is a wholly owned subsidiary of Morningstar Investment Management LLC. In India, Morningstar Investment Adviser India Private Limited has one associate, Morningstar India Private Limited, which provides data related services, financial data analysis and software development.

The Research Analyst has not served as an officer, director or employee of the fund company within the last 12 months, nor has it or its associates engaged in market making activity for the fund company.

For Recipients in Japan: The Report is distributed by Ibbotson Associates Japan, Inc., which is regulated by Financial Services Agency. Neither Ibbotson Associates Japan, Inc., nor its representatives, are acting or will be deemed to be acting as an investment advisor to any recipients of this information.

For Recipients in Singapore: This Report is distributed by Morningstar Investment Adviser Singapore Pte Limited, which is licensed by the Monetary Authority of Singapore to provide financial advisory services in Singapore. Investors should consult a financial adviser regarding the suitability of any investment product, taking into account their specific investment objectives, financial situation or particular needs, before making any investment decisions.

About Morningstar Manager Research

Morningstar Manager Research provides independent, fundamental analysis on managed investment strategies. Analyst views are expressed in the form of Morningstar Analyst Ratings, which are derived through research of five key pillars—Process, Performance, Parent, People, and Price. A global research team issues detailed Analyst Reports on strategies that span vehicle, asset class, and geography. Analyst Ratings are subjective in nature and should not be used as the sole basis for investment decisions. An Analyst Rating is an opinion, not a statement of fact, and is not intended to be nor is a guarantee of future performance.

About Morningstar Manager Research Services

Morningstar Manager Research Services combines the firm's fund research reports, ratings, software, tools, and proprietary data with access to Morningstar's manager research analysts. It complements internal due-diligence functions for institutions such as banks, wealth managers, insurers, sovereign wealth funds, pensions, endowments, and foundations. Morningstar's manager research analysts are employed by various wholly owned subsidiaries of Morningstar, Inc. including but not limited to Morningstar Research Services LLC (USA), Morningstar UK Ltd, and Morningstar Australasia Pty Ltd.



1 Oliver's Yard
55-71 City Road
London
EC1Y 1HQ

©2024 Morningstar. All Rights Reserved. Unless otherwise provided in a separate agreement, you may use this report only in the country in which its original distributor is based. The information, data, analyses, and opinions presented herein do not constitute investment advice; are provided solely for informational purposes and therefore are not an offer to buy or sell a security; and are not warranted to be correct, complete, or accurate. The opinions expressed are as of the date written and are subject to change without notice. Except as otherwise required by law, Morningstar shall not be responsible for any trading decisions, damages, or other losses resulting from, or related to, the information, data, analyses, or opinions or their use. The information contained herein is the proprietary property of Morningstar and may not be reproduced, in whole or in part, or used in any manner, without the prior written consent of Morningstar. To license the research, call +1 312 696-6869.