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# Morningstar's European Active/Passive Barometer

## Year-End 2022

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### Morningstar Manager Research Services, EMEA

2 March 2023

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### Executive Summary

The Morningstar Active/Passive Barometer is a semiannual report that measures the performance of active funds against passive peers in their respective Europe/Asia/Africa, or EAA, 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 nearly 26,000 unique active and passive EAA funds that account for approximately EUR 5.1 trillion in assets.

All told, the Active/Passive Barometer is a useful measuring stick 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.

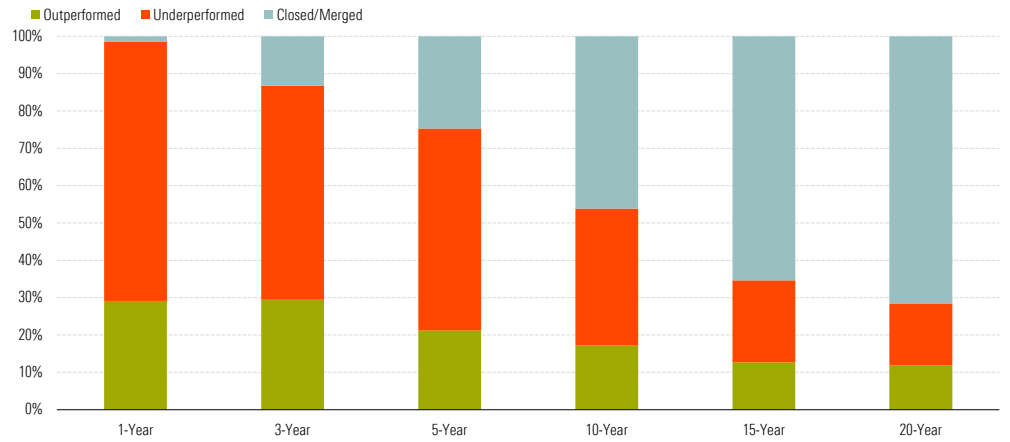
### Key Takeaways

- ▶ Last year was a tough one for investors. The Russian invasion of Ukraine sparked severe tensions in energy markets, and this exacerbated inflationary pressures. Major central banks put an end to a decade-long period of ultraloose policy and started to hike interest rates. This made for very challenging conditions for equity and bond markets. The Morningstar Global Equity and Morningstar Global Core Bond indexes closed 2022 with a 17% to 18% decline.
- ▶ This was the type of environment where active equity managers could have been expected to beat passive peers more easily, as the latter typically incorporate the full downside in market valuations. However, the rate of success of active managers in most EAA equity categories in the one-year period to the end of 2022 failed to impress.

- ▶ On average, 30.5% of active funds in the 43 equity categories that we analysed survived and outperformed their passive peer in the one-year period to the end of December 2022. Only a mere three equity categories showed a rate of success for active managers at or above 50.0% in this period.
- ▶ The outcome for fixed-income active managers in 2022 was more positive. Shortening duration was an effective way to cushion the downside brought about by the rise in interest rates. Passive funds tracking all-maturity indexes were at a clear disadvantage in that environment. The average rate of success for active fixed-income managers in the 23 categories we analysed stood at 46% in the 12 months ended December 2022. Nine categories showed a one-year success rate at or above 50%.
- ▶ Long-term success rates for active managers remain low overall. The average rate of success for active equity managers over the 10 years through December 2022 was 23%, while the average rate of success for fixed-income active managers was 19%.
- ▶ Over the past decade only three equity categories — global equity income, UK equity income, and Switzerland small/mid-cap equity — delivered a success rate for active managers over 50%. A key driver for the success of equity income managers was successful bets on energy coupled with underweights in companies from the consumer discretionary, communication services, and technology sectors.
- ▶ Ten-year success rates for active funds in the largest multicountry equity categories remained low to moderate. The percentage of active managers that both survived and outperformed across major market segments, such as global large-cap blend and Europe large-cap blend, were 5.4% and 10.4%, respectively. Active managers in the global emerging-markets equity and Europe ex-UK equity categories fared better, with success rates close to 25%.
- ▶ Ten-year success rates for active managers in single-country core equity categories were more mixed, although overall they still favoured passive funds. Success rates in the US large-cap blend category remained persistently low at 5.6%. By contrast, more than a fourth of the UK large-cap active managers beat their passive counterparts, and this increased to over a third in the case of the UK mid-cap category.
- ▶ Typically, success rates for active managers are higher in equity categories focusing on the mid and smaller segments of the cap spectrum than in large-cap categories. Active funds also have higher odds of success in equity categories where the average passive peer's exposure is structurally biased to a specific economic sector or top-heavy in terms of individual names.
- ▶ Ten-year success rates for active fixed-income managers also remained low to moderate across the categories we analysed. There were no categories showing a success rate over 50%, although there were a few bright spots for active management. The success rate for active funds in the EUR corporate bond and EUR high-yield bond categories stood at 42.7% and 43.3%, respectively. By contrast, the 10-year success rate for active funds in the global emerging-markets bond (US-dollar-denominated) stood at 26%.

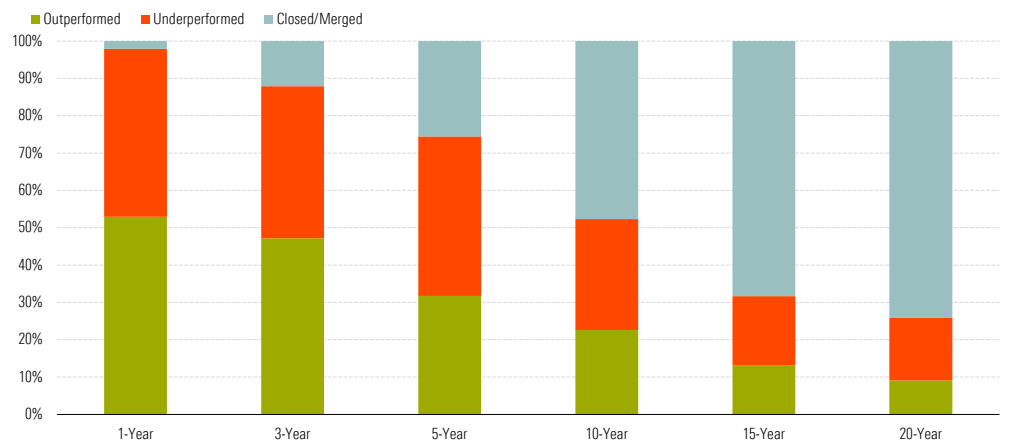
- ▶ Survivorship rates are positively correlated with odds for success. The biggest driver of active funds' failure is their inability to survive, which is often a result of lackluster performance. This can be explained by a mix of wrong stock-picking decisions and the compounding negative effects of higher fees relative to their low-cost passive competitors.
- ▶ Comparing mortality rates between active and passive funds shows that the latter have had better odds of surviving over the long term. Our analysis shows that the 10-year survivorship rate for active funds in the aggregated group of equity categories has averaged 50% from February 2014 to present. Over the same period, the average 10-year survivorship rate for passive funds was 64%. In the case of fixed-income funds, the 10-year survivorship rate for active funds has averaged 51%, compared with 67% for passive peers.
- ▶ It must be noted that we have not adjusted the long-term survivorship rate of passive funds for the practice of redomiciliation undertaken by French exchange-traded fund providers. Since 2016, many ETFs domiciled in France have switched country of domicile, typically to Luxembourg. Although the fund is the same, this involves a change of ISIN which counts as both a fund closure and opening in our database. This means that the 10-year survivorship rates for passive funds are higher than reported.

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



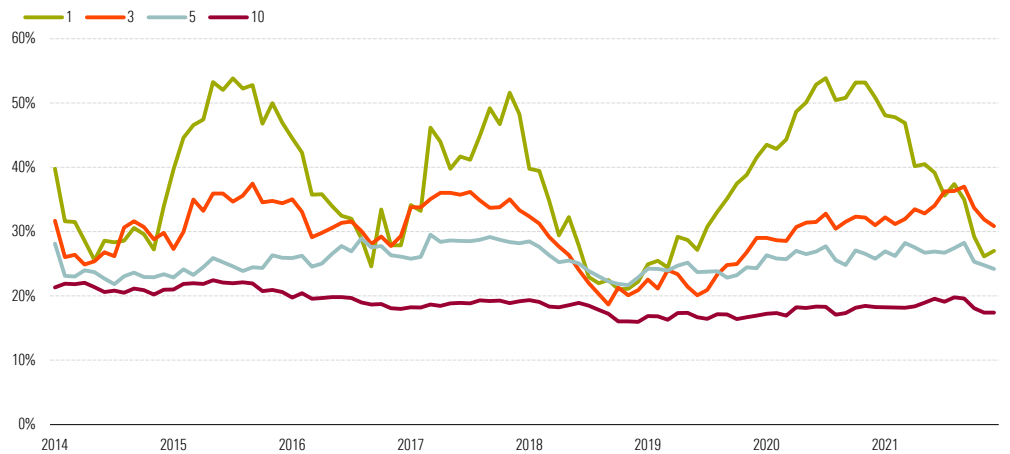
Source: Morningstar Direct. Data as of 31 Dec 2022.

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



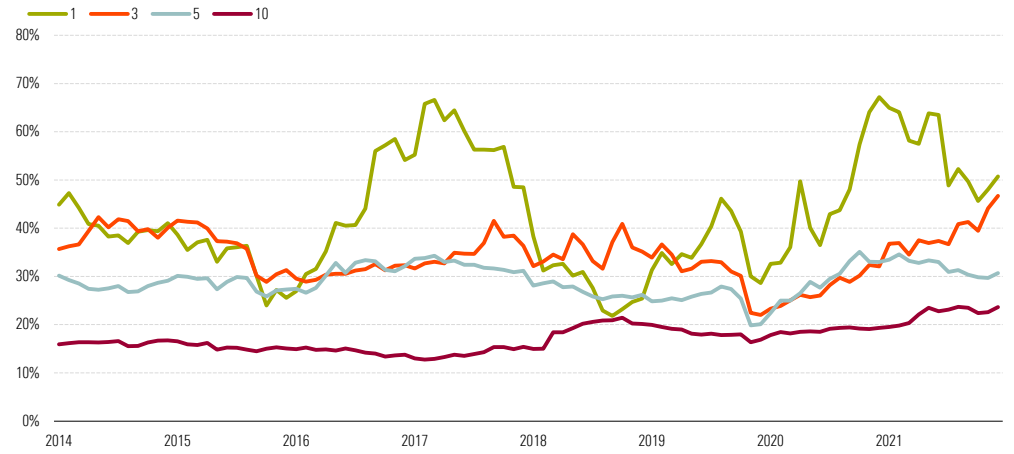
Source: Morningstar Direct. Data as of 31 Dec 2022.

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



Source: Morningstar Direct. Data as of 31 Dec 2022.

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



Source: Morningstar Direct. Data as of 31 Dec 2022.

**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	31.5	45.9	42.2	32.1	21.3	21.7
Asia-Pacific Equity	17.6	33.7	18.4	17.9	8.7	12.7
Asia-Pacific ex-Japan Equity	18.1	40.6	32.0	24.3	12.4	11.5
Australia & New Zealand Equity	0.0	80.0	50.0	9.1	25.0	27.3
Brazil Equity	0.0	7.1	11.8	5.4	30.8	-
Canada Equity	50.0	25.0	16.7	0.0	0.0	-
China Equity	23.2	74.5	64.4	45.6	32.9	-
Denmark Equity	14.7	18.9	17.1	33.3	11.4	18.2
Europe Equity Income	32.9	40.2	12.6	7.4	63.0	-
Europe ex-UK Equity	38.0	35.5	25.9	24.2	22.3	21.4
Europe Large-Cap Blend Equity	29.8	23.6	15.7	10.4	8.6	10.5
Europe Large-Cap Growth Equity	49.5	26.6	15.4	10.5	9.7	18.8
Europe Small-Cap Equity	15.0	56.3	36.6	37.1	17.6	27.0
Eurozone Large-Cap Equity	31.6	30.9	19.1	13.0	16.0	9.1
Eurozone Small-Cap Equity	24.4	46.2	18.9	34.5	11.8	-
Finland Equity	0.0	29.6	31.3	4.9	2.6	3.7
France Equity	10.4	11.0	3.5	3.4	9.9	14.7
Germany Equity	25.4	28.6	23.0	24.2	18.6	25.3
Global Emerging Markets Equity	22.8	35.3	28.5	24.7	21.3	22.3
Global Equity Income	16.9	42.3	39.0	60.0	66.7	-
Global Large-Cap Blend Equity	29.9	16.3	10.5	5.4	2.9	4.8
Global Large-Cap Value Equity	26.9	15.1	16.3	2.9	0.4	-
India Equity	9.6	21.9	18.4	45.5	34.8	-
Italy Equity	22.4	34.6	24.1	34.0	20.8	25.8
Japan Large-Cap Equity	46.4	35.8	23.1	18.1	12.5	8.2
Korea Equity	25.0	60.0	10.0	8.3	5.9	-
Latin America Equity	14.6	21.4	15.7	17.6	19.5	15.8
Netherlands Equity	0.0	40.0	16.7	15.4	8.0	4.5
Nordic Equity	25.9	22.0	14.9	19.1	17.6	21.6
Norway Equity	20.4	51.9	28.8	42.2	41.7	44.4
Pacific ex-Japan Equity	37.5	25.0	10.0	10.0	11.1	12.5
Spain Equity	38.2	39.3	26.8	26.9	18.8	16.9
Sweden Equity	38.3	42.1	29.2	29.5	18.6	13.9
Switzerland Equity	31.1	25.2	22.5	29.1	11.3	16.3
Switzerland Small/Mid-Cap Equity	38.5	72.9	53.4	56.0	50.0	-
Turkey Equity	80.0	55.6	31.3	19.2	6.7	-
UK Equity Income	48.0	63.9	58.6	54.1	58.4	-
UK Large-Cap Equity	21.7	27.0	21.1	26.5	19.6	19.6
UK Mid-Cap Equity	21.4	20.0	16.7	36.4	37.5	50.0
US Large-Cap Blend Equity	31.7	23.7	16.5	5.6	6.0	5.4
US Large-Cap Growth Equity	48.9	0.9	2.6	0.0	1.8	0.0
US Large-Cap Value Equity	66.2	50.0	28.2	16.4	11.3	21.4
US Small-Cap Equity	16.4	32.3	40.6	20.0	15.5	16.9

Source: Morningstar Direct. Data as of 31 Dec 2022.

**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	42.5	44.2	34.1	28.2	10.2	4.9
EUR Bond - Long Term	44.0	32.1	5.9	6.7	10.5	11.5
EUR Corporate Bond	32.4	39.3	33.3	42.7	37.1	37.7
EUR Corporate Bond - Short Term	39.7	37.3	30.0	25.6	-	-
EUR Diversified Bond	85.9	63.1	27.1	9.4	5.4	5.9
EUR Government Bond	47.1	39.8	30.1	23.9	8.6	5.9
EUR Government Bond - Short Term	14.7	35.7	28.6	24.2	7.7	31.0
EUR High Yield Bond	31.6	35.5	34.4	43.3	-	-
EUR Inflation-Linked Bond	67.4	34.9	8.0	7.6	1.6	-
EUR Money Market	82.4	77.4	57.6	38.5	18.6	7.0
GBP Corporate Bond	63.9	72.2	47.4	14.8	27.6	-
GBP Government Bond	23.3	30.0	36.5	14.7	20.6	24.1
GBP Inflation-Linked Bond	15.8	13.0	16.0	13.3	23.8	22.2
Global Bond	42.2	31.5	22.1	25.0	19.0	16.6
Global Bond - EUR Hedged	48.0	46.2	28.7	27.7	-	-
Global Bond - GBP Hedged	53.9	60.9	39.5	31.9	-	-
Global Emerging Markets Bond	43.7	38.7	24.2	25.9	-	-
Global Emerging Markets Bond - Local Currency	65.9	65.6	38.9	5.0	-	-
Global Inflation-Linked Bond	57.1	25.0	55.6	0.0	-	-
JPY Bond	66.7	16.7	12.5	6.7	3.8	-
USD Corporate Bond	29.0	24.6	23.3	15.6	20.0	9.1
USD Diversified Bond	50.0	45.3	31.0	11.5	4.7	5.6
USD Government Bond	19.4	14.7	12.9	5.3	12.7	10.4

Source: Morningstar Direct. Data as of 31 Dec 2022.

**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	9.1	27.3	21.4	10.5	12.0	-
Property - Indirect Europe	60.5	65.3	52.0	30.4	11.7	10.7
Property - Indirect Global	33.0	41.6	34.2	20.4	6.7	-
Property - Indirect North America	25.0	14.3	11.1	16.7	14.3	-
Property - Indirect Switzerland	86.7	43.8	68.8	64.7	50.0	-

Source: Morningstar Direct. Data as of 31 Dec 2022.

**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	65.4	41.2	17.6	3.2	25.0	18.7

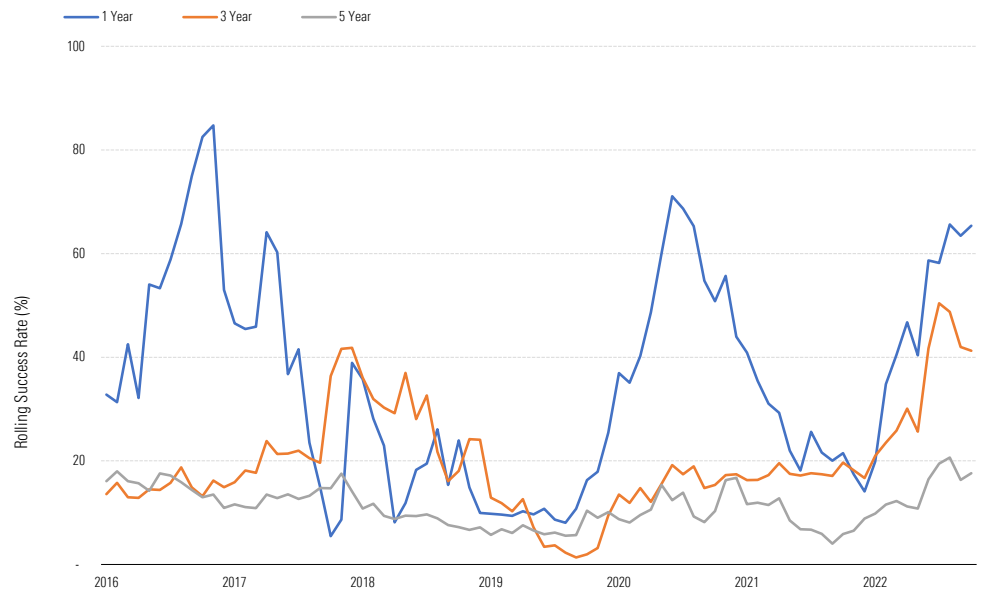
Source: Morningstar Direct. Data as of 31 Dec 2022.

**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 (%)	
<b>Trailing Total Return</b>									
1-Year	1,075	97.4	5	100.0	-10.1	11.4	-9.3	10.9	65.4
3-year	1,045	86.0	5	100.0	-1.8	2.2	-1.5	1.5	41.2
5-Year	993	75.4	5	100.0	-0.7	0.3	-0.5	0.3	17.6
10-Year	801	52.6	3	66.7	1.0	2.7	1.0	2.8	3.2

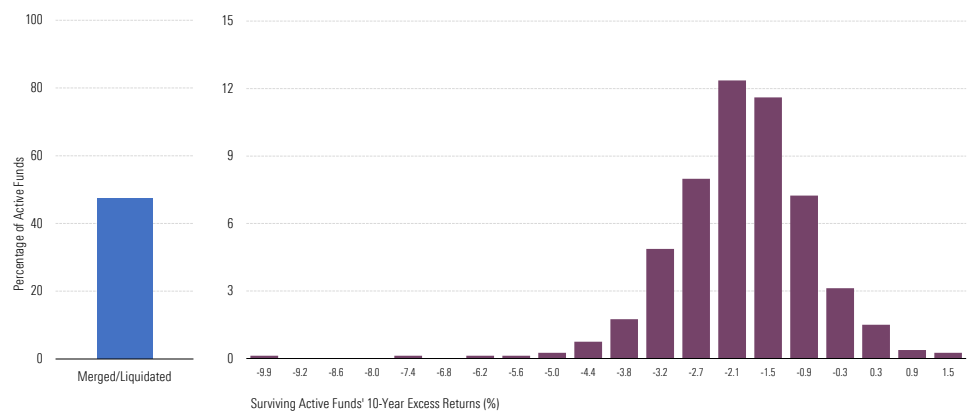
Source: Morningstar Direct. Data as of 31 Dec 2022.

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



Source: Morningstar Direct. Data as of 31 Dec 2022.

**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 31 Dec 2022.

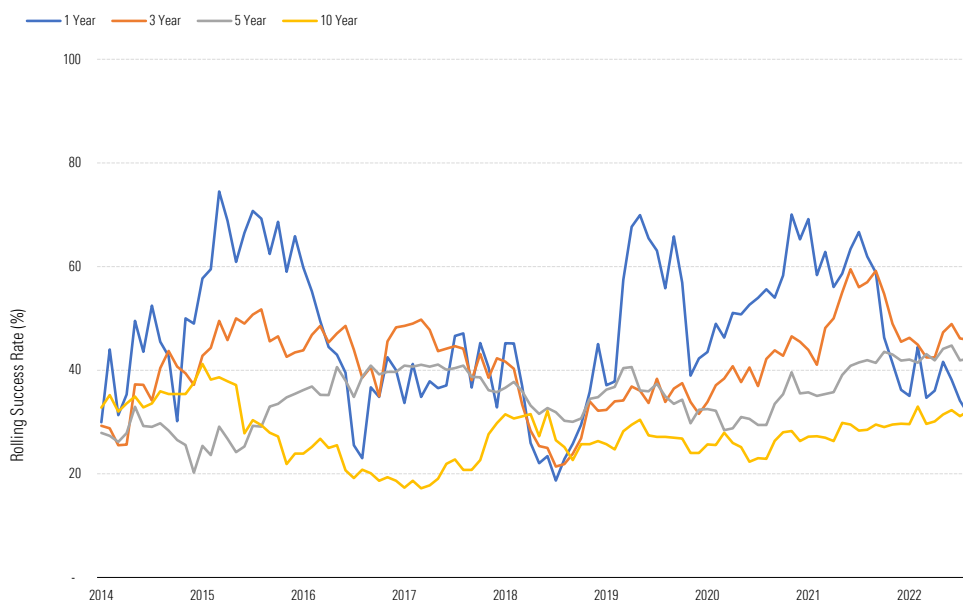


### Exhibit 12 Asia ex-Japan Equity

	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 (%)	
<b>Trailing Total Return</b>									
1-Year	168	99.4	18	94.4	-22.6	21.3	-22.5	20.8	31.5
3-Year	181	85.6	17	88.2	-2.5	2.4	-2.2	2.6	45.9
5-Year	180	77.2	18	66.7	-1.4	1.5	-1.7	1.7	42.2
10-Year	196	54.1	18	61.1	2.9	2.7	2.7	2.6	32.1
15-Year	155	51.0	4	75.0	1.3	1.5	0.6	1.4	21.3

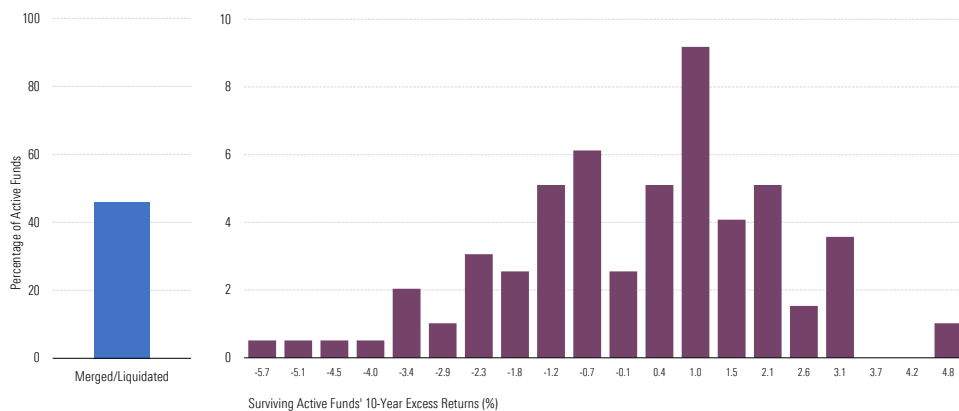
Source: Morningstar Direct. Data as of 31 Dec 2022.

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



Source: Morningstar Direct. Data as of 31 Dec 2022.

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



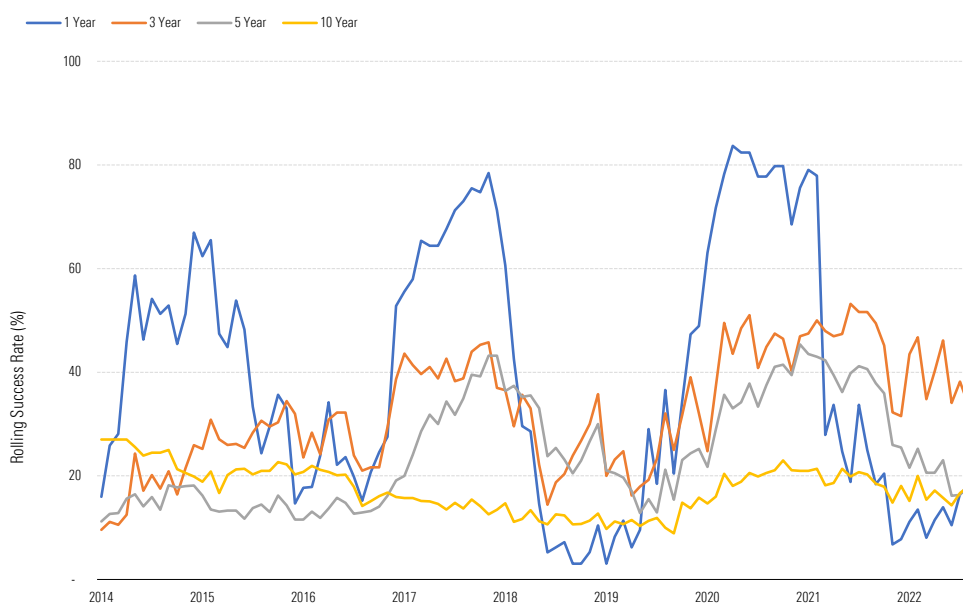
Source: Morningstar Direct. Data as of 31 Dec 2022.

### 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 (%)	
<b>Trailing Total Return</b>									
1-Year	85	94.1	16	100.0	- 22.6	- 15.7	- 20.9	- 14.6	17.6
3-year	89	83.1	16	93.8	- 2.4	- 2.4	- 2.6	- 1.8	33.7
5-Year	98	66.3	18	77.8	- 1.5	- 1.1	- 1.9	- 0.4	18.4
10-Year	123	44.7	14	78.6	3.2	2.2	2.4	3.5	17.9
15-Year	172	27.9	4	50.0	0.4	1.1	- 0.2	1.3	8.7

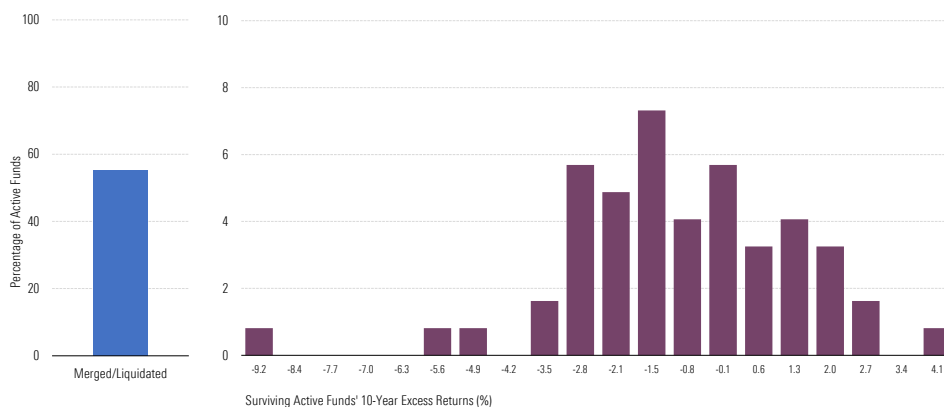
Source: Morningstar Direct. Data as of 31 Dec 2022.

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



Source: Morningstar Direct. Data as of 31 Dec 2022.

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



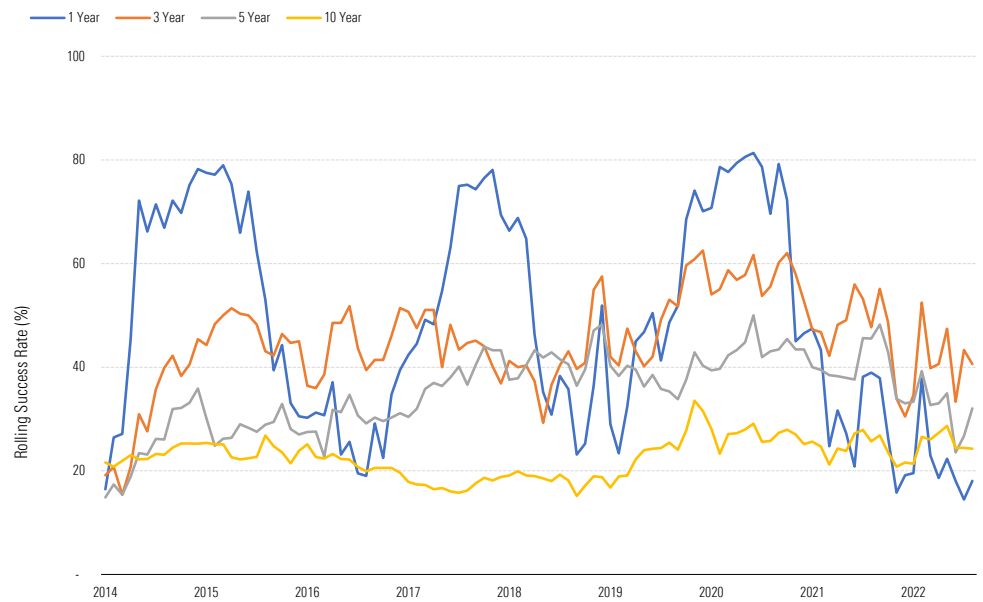
Source: Morningstar Direct. Data as of 31 Dec 2022.

**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 (%)	
<b>Trailing Total Return</b>									
1-Year	83	97.6	13	100.0	19.5	15.7	19.4	15.4	18.1
3-year	96	82.3	11	100.0	1.1	0.2	0.4	0.4	40.6
5-Year	103	69.9	11	72.7	1.5	0.1	0.1	0.2	32.0
10-Year	136	43.4	13	38.5	3.7	2.5	3.0	2.9	24.3
15-Year	217	21.7	10	60.0	2.6	1.1	0.9	1.5	12.4

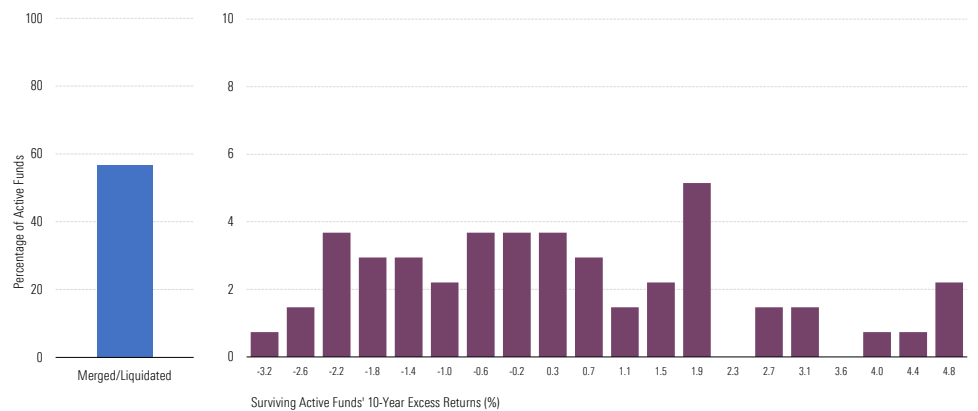
Source: Morningstar Direct. Data as of 31 Dec 2022.

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



Source: Morningstar Direct. Data as of 31 Dec 2022.

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



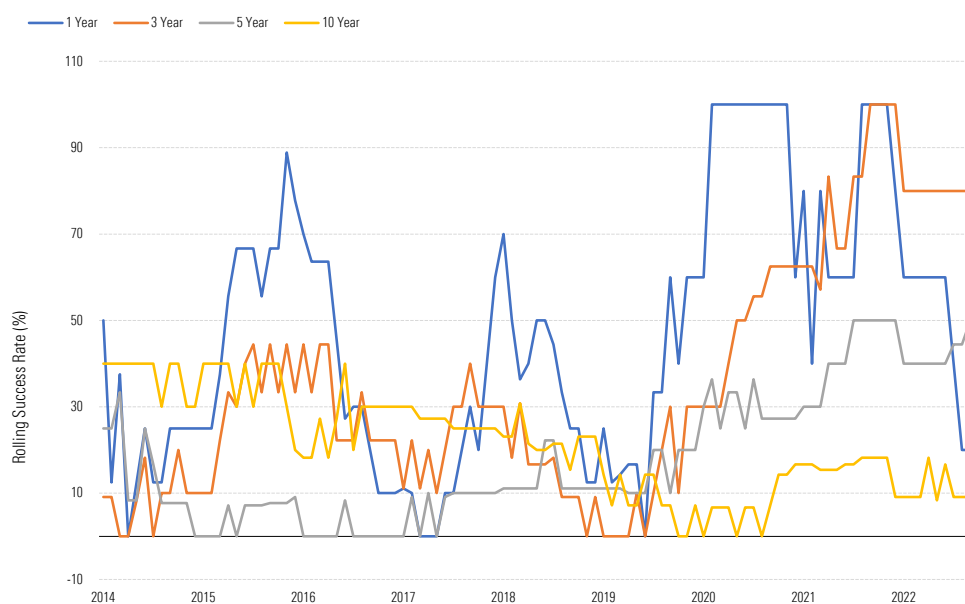
Source: Morningstar Direct. Data as of 31 Dec 2022.

### Exhibit 21 Australia & New Zealand 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 (%)	
<b>Trailing Total Return</b>									
1-Year	5	80.0	4	100.0	11.5	5.5	10.9	6.8	0.0
3-year	5	80.0	6	66.7	4.0	3.3	6.3	2.5	80.0
5-Year	8	50.0	6	66.7	3.3	3.3	3.9	2.8	50.0
10-Year	11	36.4	6	50.0	2.4	3.3	2.3	2.8	9.1

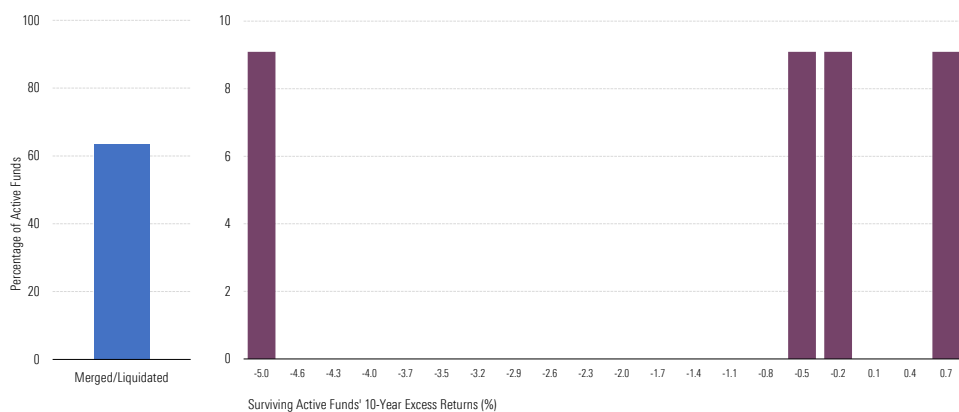
Source: Morningstar Direct. Data as of 31 Dec 2022.

### Exhibit 22 Rolling Success Rates for Surviving Active Australia & New Zealand Equity Funds (%)



Source: Morningstar Direct. Data as of 31 Dec 2022.

### Exhibit 23 Mortality and Distribution of 10-Year Annualized Excess Returns for Surviving Active Australia & New Zealand Equity Funds (%)



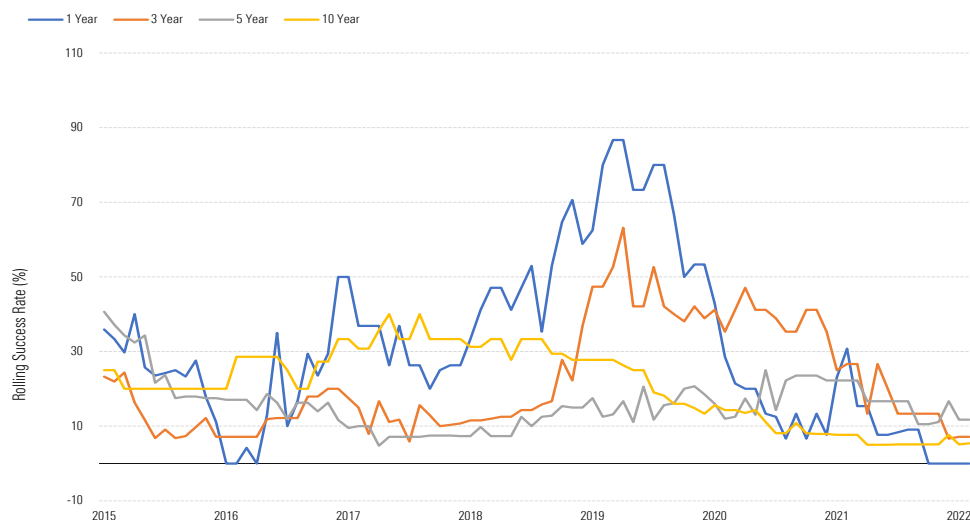
Source: Morningstar Direct. Data as of 31 Dec 2022.

### Exhibit 24 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 (%)	
<b>Trailing Total Return</b>									
1-Year	10	100.0	8	87.5	5.3	16.6	4.0	16.3	0.0
3-year	14	57.1	8	87.5	- 13.7	- 8.6	- 14.3	- 8.7	7.1
5-Year	17	47.1	9	55.6	- 4.6	- 1.7	- 4.6	- 1.6	11.8
10-Year	37	21.6	14	28.6	- 5.4	- 3.1	- 5.2	- 2.9	5.4
15-Year	13	38.5	6	50.0	- 5.4	- 4.1	- 4.1	- 4.5	30.8

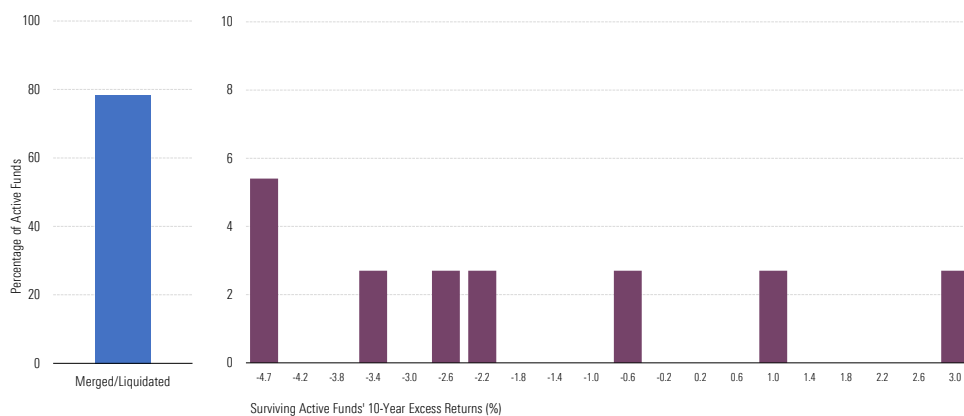
Source: Morningstar Direct. Data as of 31 Dec 2022.

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



Source: Morningstar Direct. Data as of 31 Dec 2022.

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



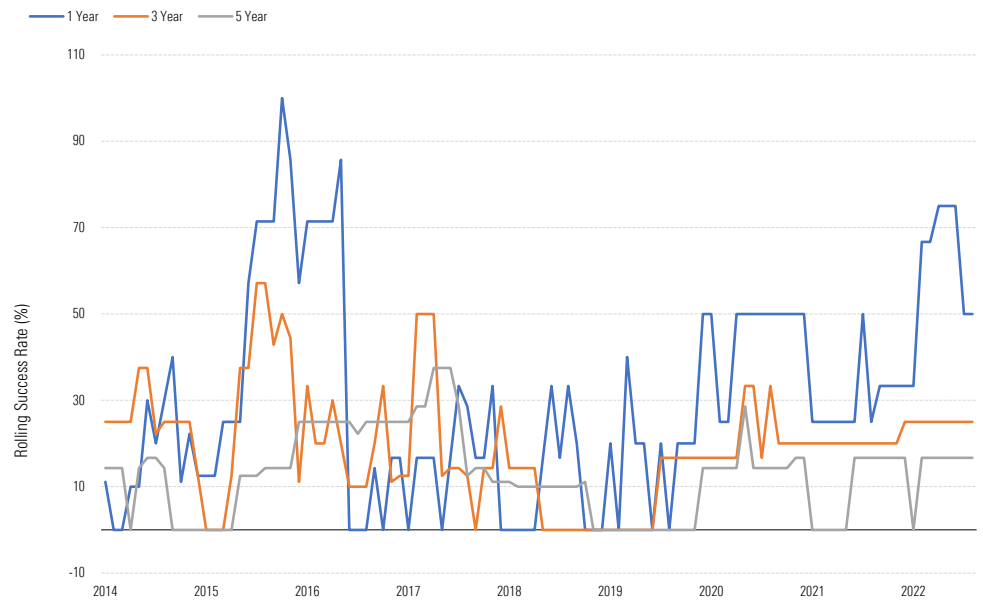
Source: Morningstar Direct. Data as of 31 Dec 2022.

**Exhibit 27** Canada 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 (%)	
<b>Trailing Total Return</b>									
1-Year	4	100.0	13	100.0	- 8.3	- 9.6	- 9.7	- 10.3	50.0
3-year	4	75.0	13	92.3	4.8	5.7	4.4	5.6	25.0
5-Year	6	50.0	13	84.6	3.1	4.4	2.8	4.4	16.7
10-Year	7	14.3	13	69.2	2.3	3.7	1.5	3.6	0.0
15-Year	7	14.3	3	66.7	- 1.9	1.1	- 2.3	0.8	0.0

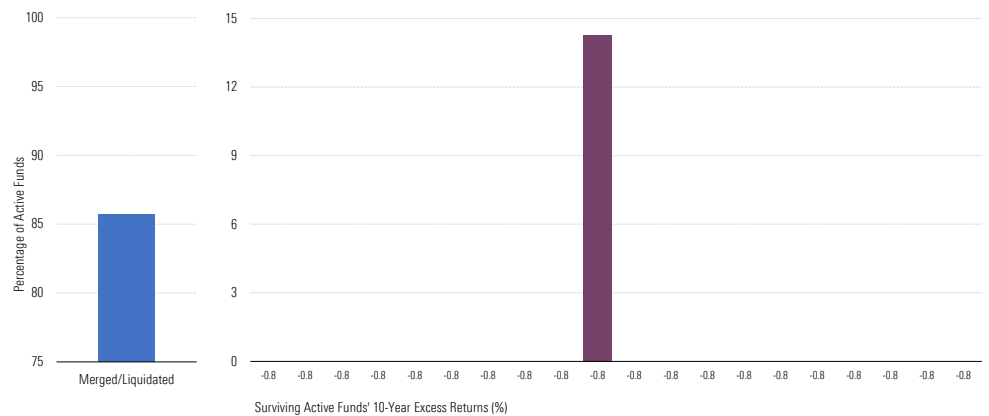
Source: Morningstar Direct. Data as of 31 Dec 2022.

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



Source: Morningstar Direct. Data as of 31 Dec 2022.

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



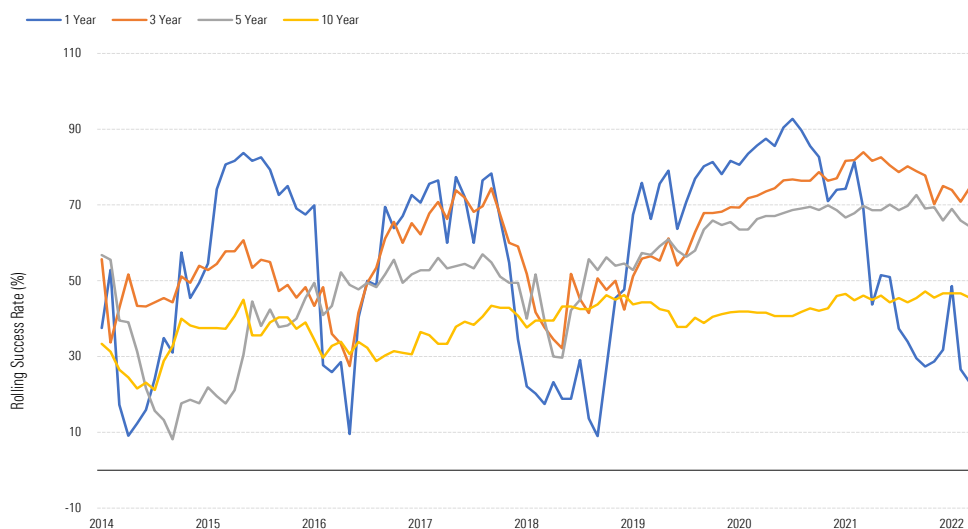
Source: Morningstar Direct. Data as of 31 Dec 2022.

### Exhibit 30 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 (%)	
<b>Trailing Total Return</b>									
1-Year	112	100.0	24	95.8	-27.6	26.3	-29.1	26.2	23.2
3-Year	98	89.8	20	90.0	-7.9	11.2	-5.6	10.6	74.5
5-Year	87	77.0	18	72.2	-3.6	7.3	-4.1	7.1	64.4
10-Year	90	50.0	16	56.3	3.3	1.0	1.9	0.7	45.6
15-Year	76	38.2	6	66.7	0.4	3.0	-1.5	2.6	32.9

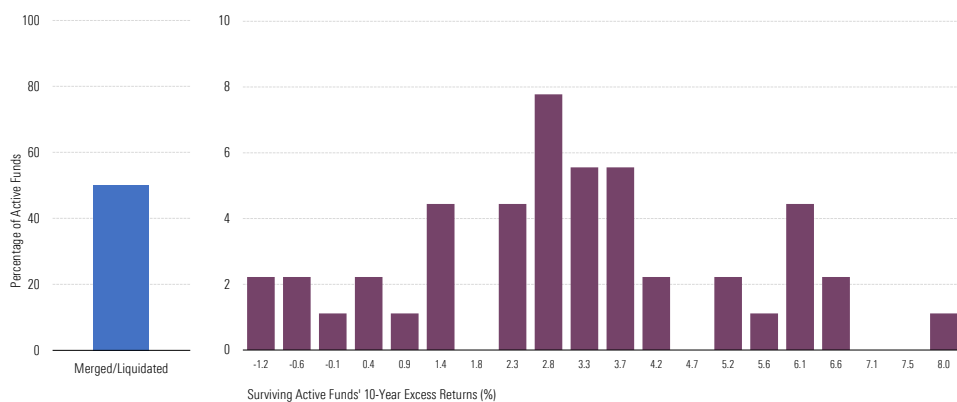
Source: Morningstar Direct. Data as of 31 Dec 2022.

### Exhibit 31 Rolling Success Rates for Surviving Active China Equity Funds (%)



Source: Morningstar Direct. Data as of 31 Dec 2022.

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



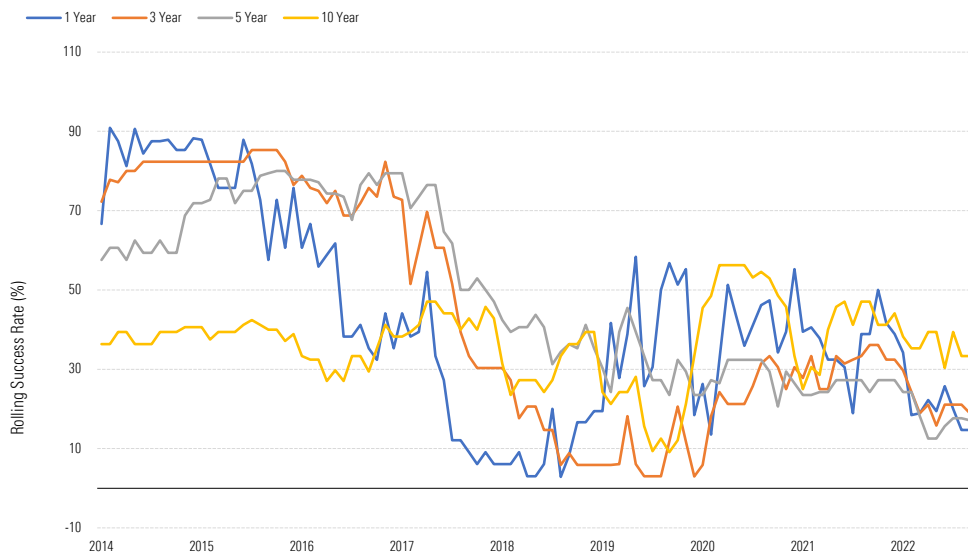
Source: Morningstar Direct. Data as of 31 Dec 2022.

### Exhibit 33 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 (%)	
<b>Trailing Total Return</b>									
1-Year	34	100.0	6	100.0	16.4	12.9	16.3	12.1	14.7
3-year	37	83.8	5	100.0	9.1	10.8	9.0	10.8	18.9
5-Year	35	77.1	4	100.0	8.0	9.2	7.3	9.4	17.1
10-Year	33	66.7	5	60.0	14.2	14.1	14.0	14.4	33.3
15-Year	35	48.6	5	40.0	8.9	8.7	8.2	9.1	11.4
20-Year	33	27.3	5	40.0	13.4	13.1	12.5	12.9	18.2

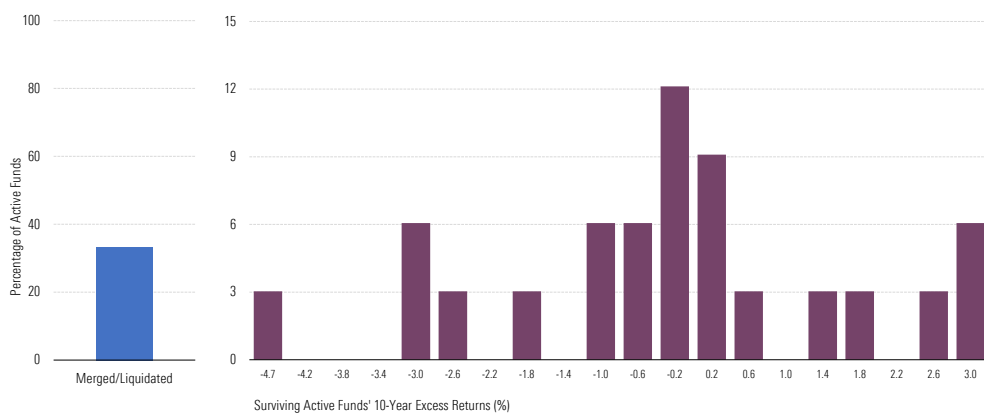
Source: Morningstar Direct. Data as of 31 Dec 2022.

### Exhibit 34 Rolling Success Rates for Surviving Active Denmark Equity Funds (%)



Source: Morningstar Direct. Data as of 31 Dec 2022.

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



Source: Morningstar Direct. Data as of 31 Dec 2022.

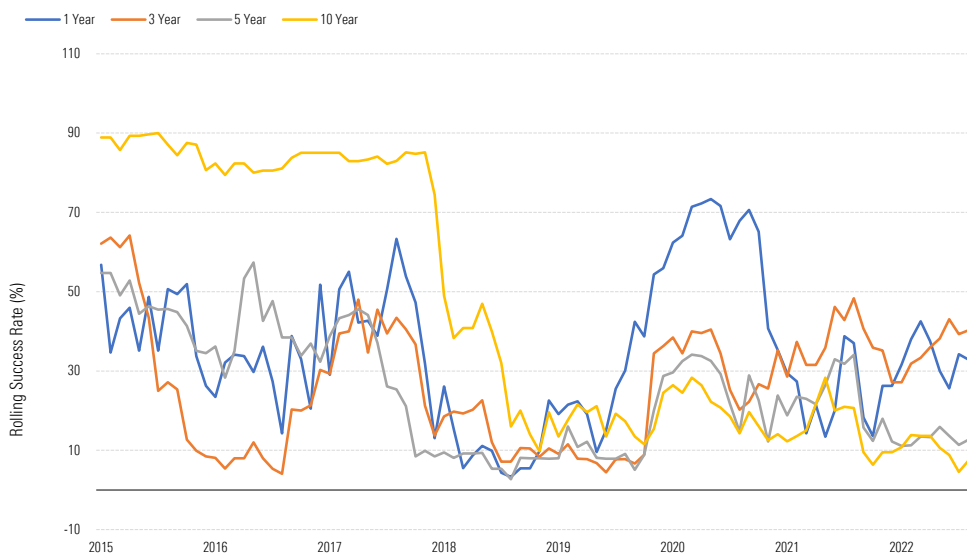


**Exhibit 36** Europe Equity Income

	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 (%)	
<b>Trailing Total Return</b>									
1-Year	76	100.0	9	100.0	- 5.2	- 3.1	- 5.9	- 3.1	32.9
3-year	82	89.0	9	100.0	1.2	2.6	1.9	2.1	40.2
5-Year	87	78.2	11	81.8	2.0	5.1	2.5	4.4	12.6
10-Year	68	72.1	5	60.0	4.9	7.0	5.6	7.1	7.4
15-Year	46	71.7	3	66.7	2.1	1.0	2.4	1.1	63.0

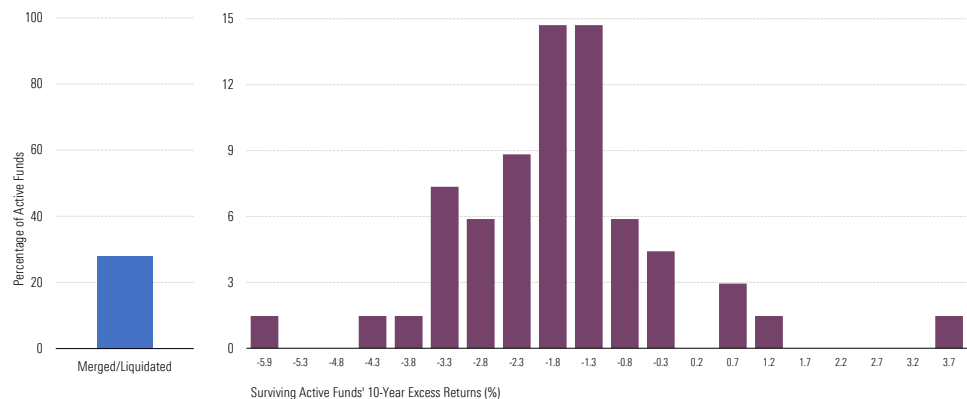
Source: Morningstar Direct. Data as of 31 Dec 2022.

**Exhibit 37** Rolling Success Rates for Surviving Active Europe Equity Income Funds (%)



Source: Morningstar Direct. Data as of 31 Dec 2022.

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



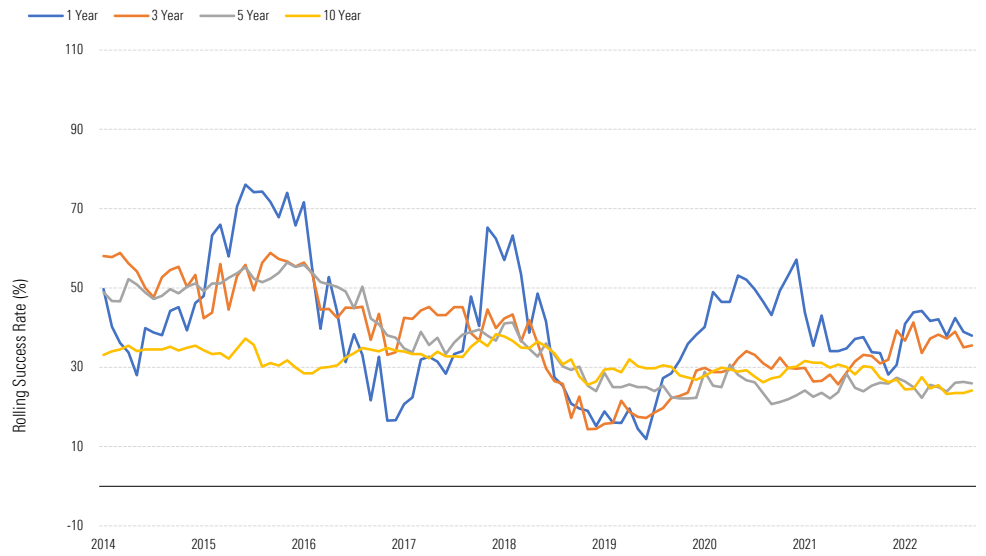
Source: Morningstar Direct. Data as of 31 Dec 2022.

**Exhibit 39** 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 (%)	
<b>Trailing Total Return</b>									
1-Year	129	96.9	24	100.0	- 14.9	- 10.2	- 11.8	- 9.8	38.0
3-year	138	79.0	24	87.5	3.6	4.5	4.0	4.5	35.5
5-Year	135	71.1	23	78.3	4.4	5.3	4.0	5.3	25.9
10-Year	149	51.0	13	76.9	7.9	7.8	7.5	8.0	24.2
15-Year	175	35.4	12	58.3	4.8	4.1	4.3	4.2	22.3
20-Year	140	32.1	4	100.0	6.8	5.1	7.2	7.0	21.4

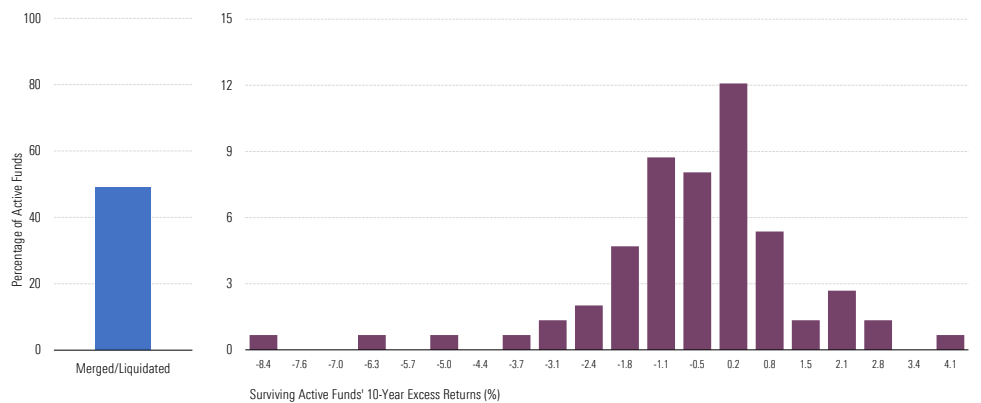
Source: Morningstar Direct. Data as of 31 Dec 2022.

**Exhibit 40** Rolling Success Rates for Surviving Active Europe ex-UK Equity Funds (%)



Source: Morningstar Direct. Data as of 31 Dec 2022.

**Exhibit 41** Mortality and Distribution of 10-Year Annualized Excess Returns for Surviving Active Europe ex-UK Equity Funds (%)



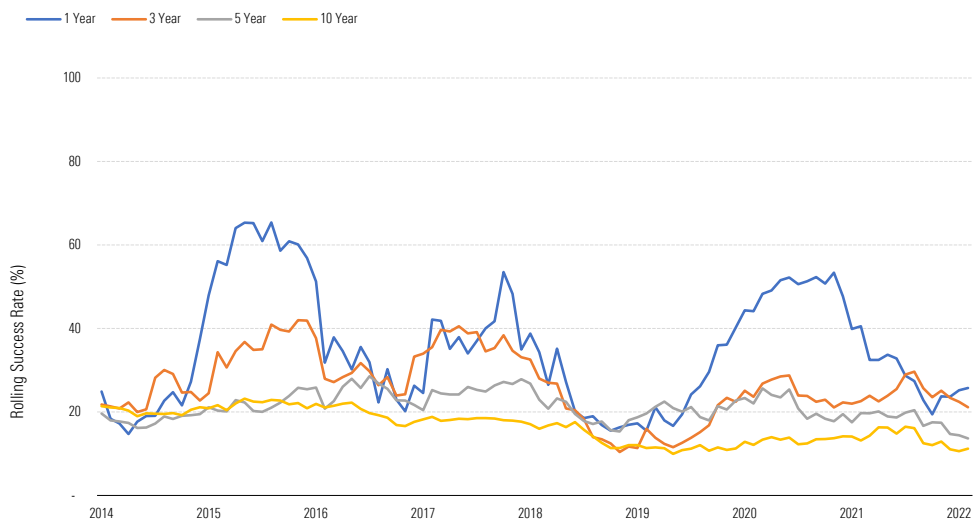
Source: Morningstar Direct. Data as of 31 Dec 2022.

**Exhibit 42 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 (%)	
<b>Trailing Total Return</b>									
1-Year	543	98.5	139	99.3	- 9.8	- 7.7	- 10.9	- 8.2	29.8
3-year	580	84.8	126	91.3	3.0	4.2	2.6	4.1	23.6
5-Year	578	72.0	122	77.9	3.6	5.1	3.0	5.1	15.7
10-Year	575	52.0	101	66.3	6.1	7.2	5.8	7.2	10.4
15-Year	801	28.8	64	50.0	2.7	3.9	2.5	3.6	8.6
20-Year	619	27.0	47	48.9	5.1	6.1	5.0	5.9	10.5

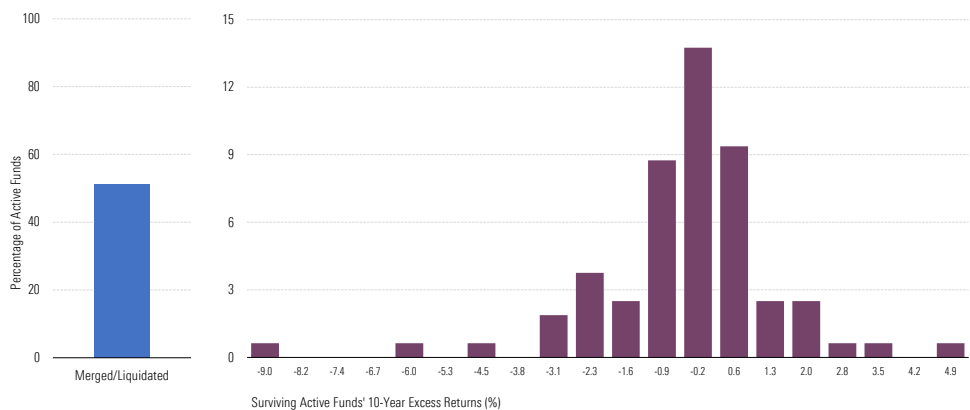
Source: Morningstar Direct. Data as of 31 Dec 2022.

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



Source: Morningstar Direct. Data as of 31 Dec 2022.

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



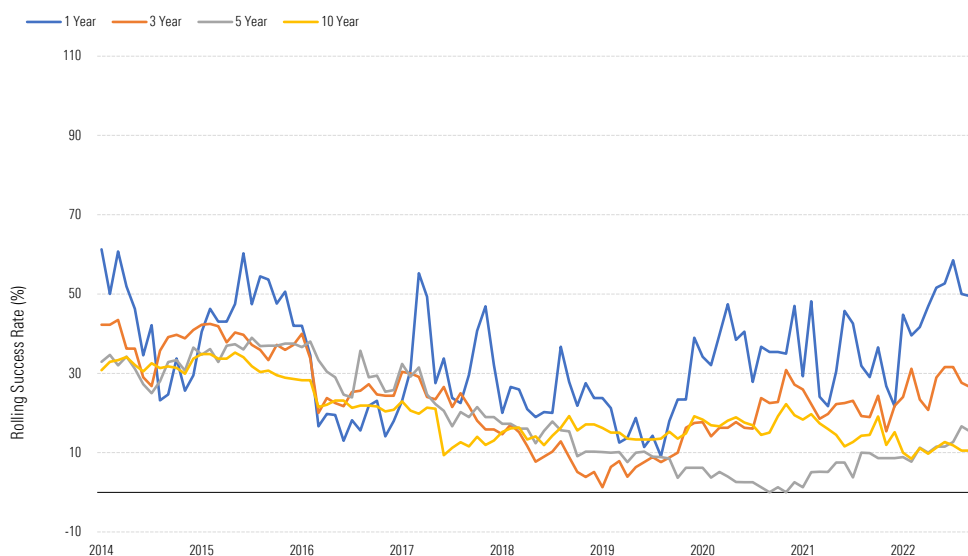
Source: Morningstar Direct. Data as of 31 Dec 2022.

**Exhibit 45 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 (%)	
<b>Trailing Total Return</b>									
1-Year	93	98.9	6	100.0	19.2	18.1	17.1	16.8	49.5
3-year	79	91.1	4	100.0	3.4	3.1	3.7	4.7	26.6
5-Year	78	83.3	6	66.7	5.5	6.4	4.9	7.2	15.4
10-Year	76	60.5	4	75.0	7.6	7.5	7.0	8.9	10.5

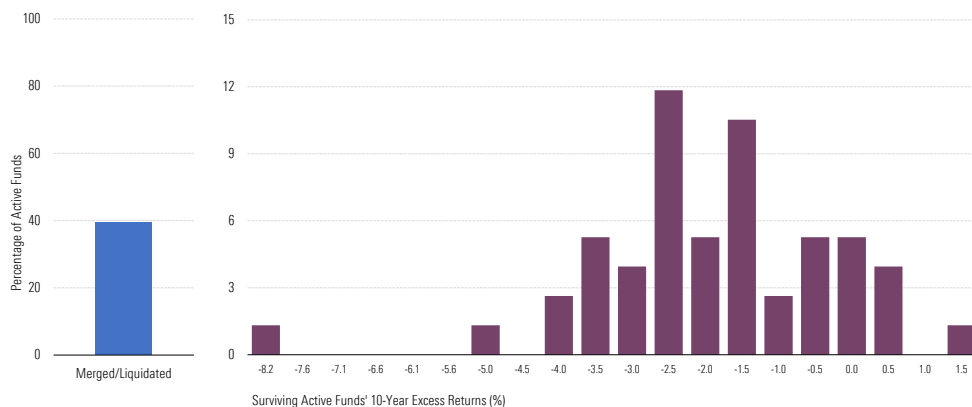
Source: Morningstar Direct. Data as of 31 Dec 2022.

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



Source: Morningstar Direct. Data as of 31 Dec 2022.

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



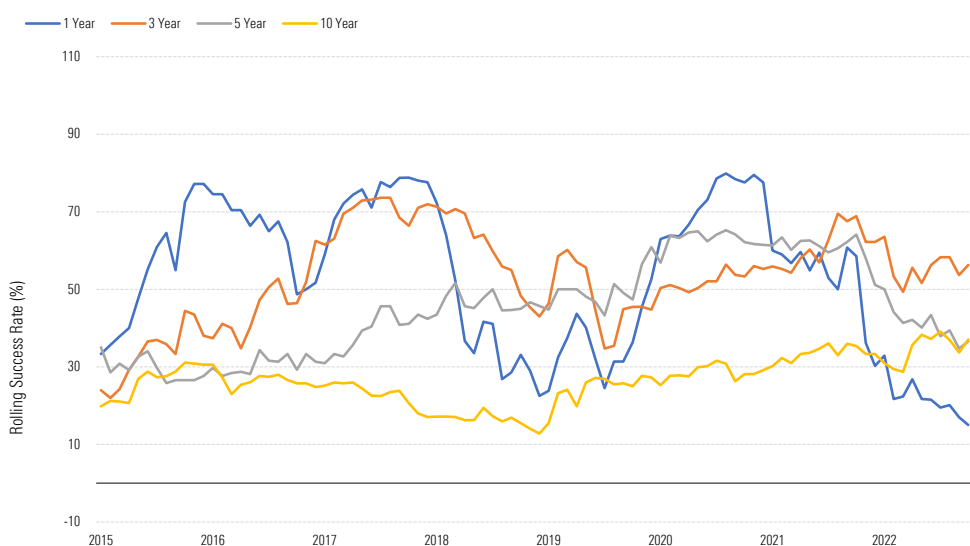
Source: Morningstar Direct. Data as of 31 Dec 2022.

### Exhibit 48 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 (%)	
<b>Trailing Total Return</b>									
1-Year	153	100.0	7	100.0	27.3	19.0	25.1	18.0	15.0
3-year	151	94.0	7	100.0	0.9	1.8	2.4	1.4	56.3
5-Year	145	87.6	7	100.0	1.8	3.3	2.0	2.7	36.6
10-Year	89	69.7	9	77.8	8.1	8.8	8.7	8.7	37.1
15-Year	125	41.6	4	75.0	5.1	5.0	4.8	5.9	17.6

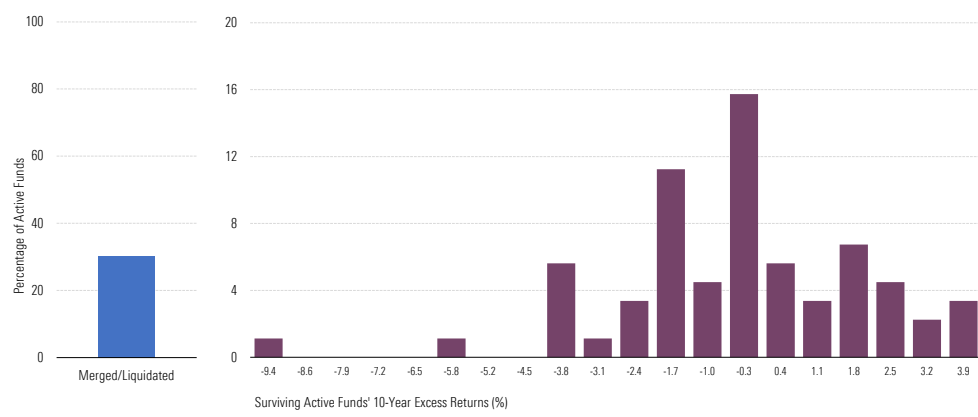
Source: Morningstar Direct. Data as of 31 Dec 2022.

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



Source: Morningstar Direct. Data as of 31 Dec 2022.

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



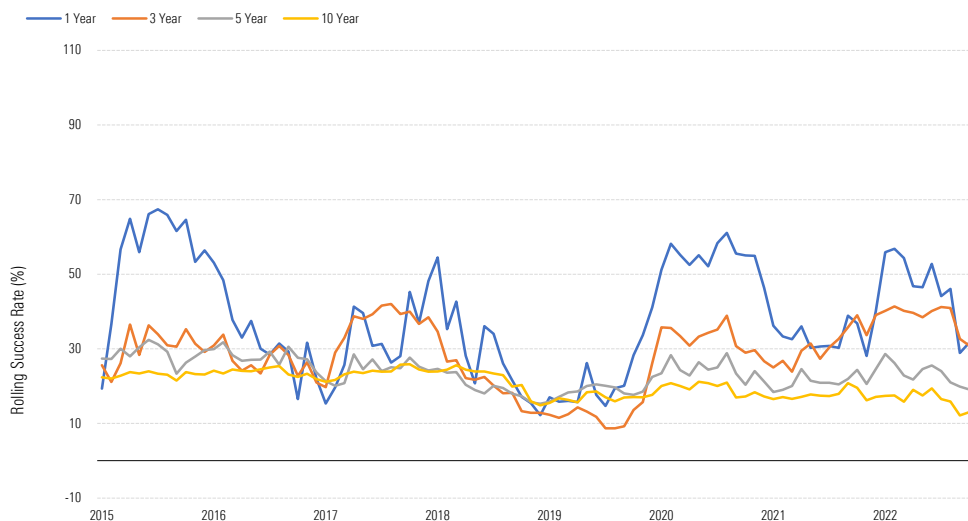
Source: Morningstar Direct. Data as of 31 Dec 2022.

### Exhibit 51 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 (%)	
<b>Trailing Total Return</b>									
1-Year	386	98.7	98	99.0	10.9	7.6	11.0	8.9	31.6
3-year	414	88.2	101	86.1	2.9	3.5	2.2	3.0	30.9
5-Year	408	80.9	95	80.0	2.9	4.5	2.4	4.0	19.1
10-Year	468	57.3	101	58.4	6.5	7.2	5.9	6.9	13.0
15-Year	677	34.4	106	36.8	2.2	2.5	2.0	2.2	16.0
20-Year	795	19.5	91	24.2	5.2	5.6	5.0	5.3	9.1

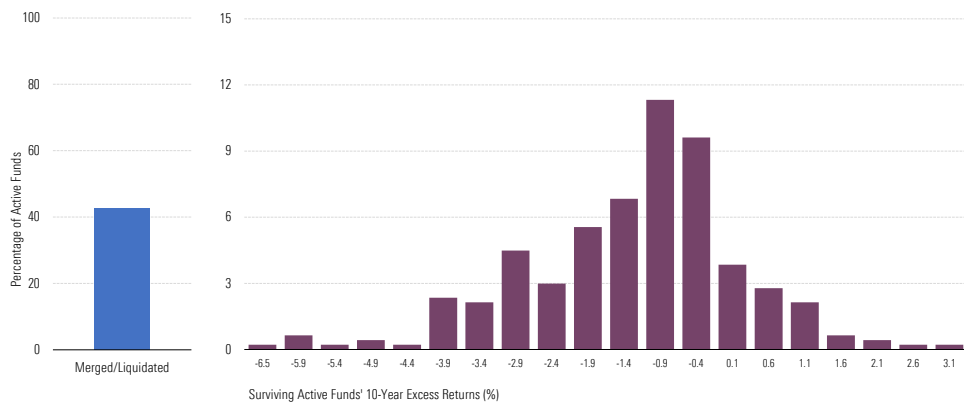
Source: Morningstar Direct. Data as of 31 Dec 2022.

### Exhibit 52 Rolling Success Rates for Surviving Active Eurozone Large-Cap Equity Funds (%)



Source: Morningstar Direct. Data as of 31 Dec 2022.

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



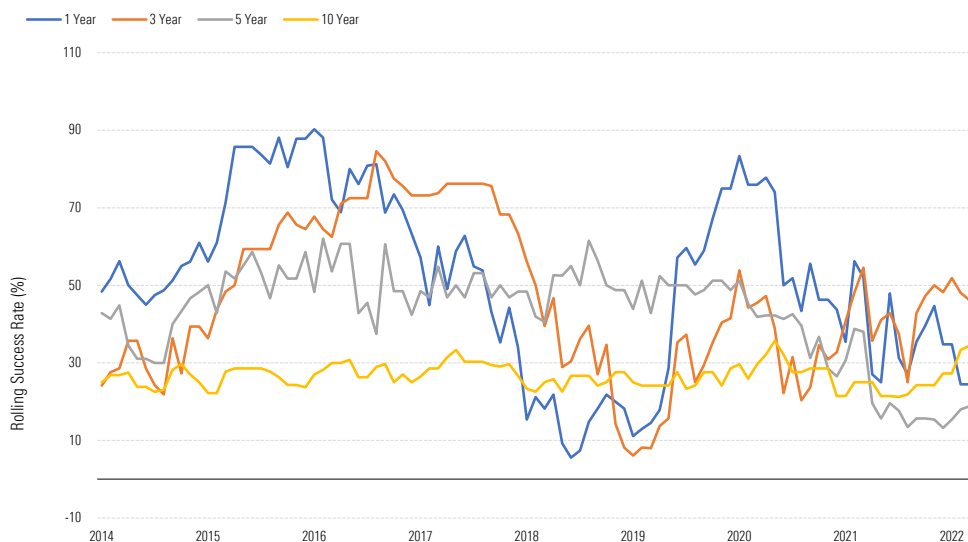
Source: Morningstar Direct. Data as of 31 Dec 2022.

### Exhibit 54 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 (%)	
<b>Trailing Total Return</b>									
1-Year	45	100.0	4	100.0	-20.4	-15.4	-20.2	-15.4	24.4
3-year	52	98.1	4	100.0	2.0	3.2	3.7	3.2	46.2
5-Year	53	94.3	3	100.0	0.1	3.1	1.2	3.1	18.9
10-Year	29	72.4	6	66.7	8.2	9.1	8.7	9.5	34.5
15-Year	34	32.4	3	66.7	4.2	4.7	4.6	5.1	11.8

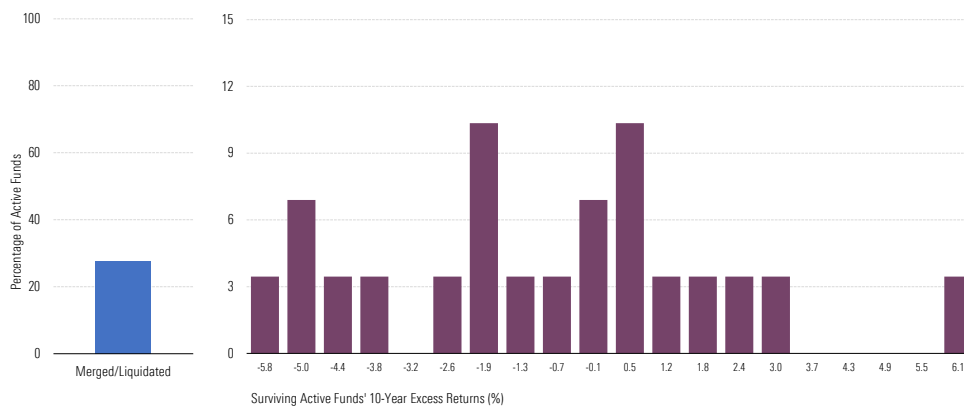
Source: Morningstar Direct. Data as of 31 Dec 2022.

### Exhibit 55 Rolling Success Rates for Surviving Active Eurozone Small-Cap Equity Funds (%)



Source: Morningstar Direct. Data as of 31 Dec 2022.

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



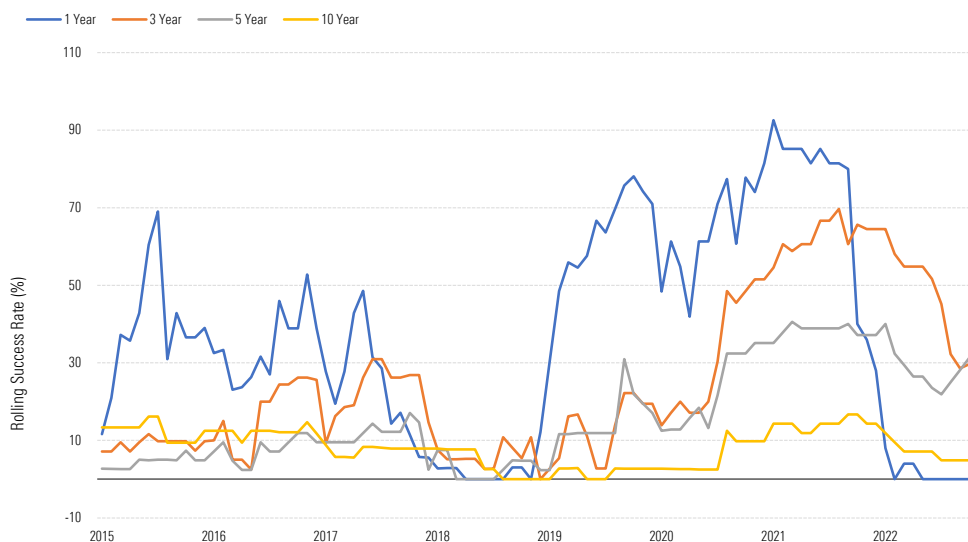
Source: Morningstar Direct. Data as of 31 Dec 2022.

### Exhibit 57 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 (%)	
<b>Trailing Total Return</b>									
1-Year	24	91.7	5	100.0	-17.3	-9.7	-21.1	-10.0	-
3-year	27	77.8	5	100.0	7.1	8.0	6.7	7.8	29.6
5-Year	32	62.5	4	100.0	6.9	8.0	7.2	7.9	31.3
10-Year	41	46.3	3	100.0	10.1	12.0	10.5	11.8	4.9
15-Year	38	47.4	4	50.0	5.7	7.3	5.8	7.1	2.6
20-Year	27	51.9	3	66.7	10.1	10.9	10.1	10.7	3.7

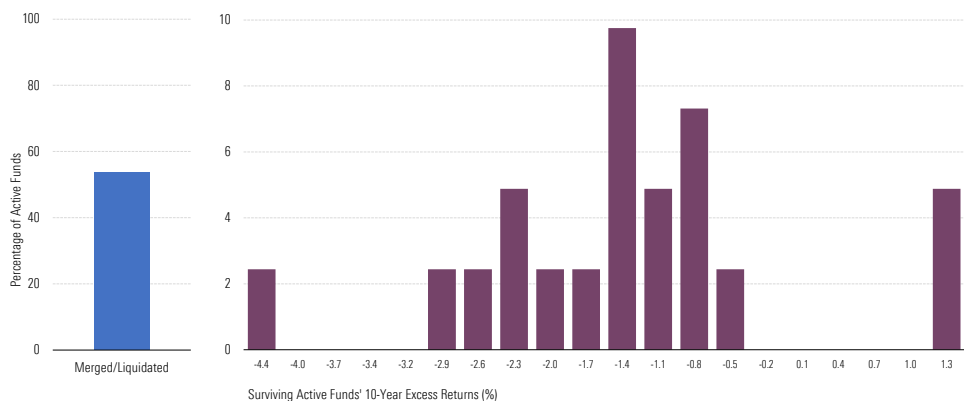
Source: Morningstar Direct. Data as of 31 Dec 2022.

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



Source: Morningstar Direct. Data as of 31 Dec 2022.

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



Source: Morningstar Direct. Data as of 31 Dec 2022.

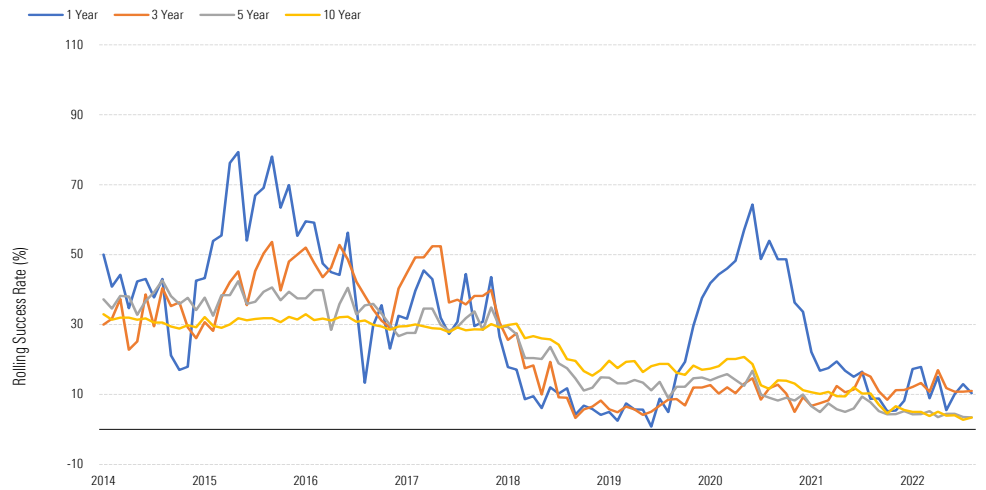


### Exhibit 60 France Equity

	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 (%)	
<b>Trailing Total Return</b>									
1-Year	106	100.0	19	100.0	-7.9	-3.8	-9.1	-4.5	10.4
3-Year	109	89.9	18	100.0	3.4	6.2	3.0	5.6	11.0
5-Year	115	76.5	21	85.7	3.4	7.2	2.9	6.8	3.5
10-Year	147	53.7	28	60.7	7.1	9.1	6.5	8.6	3.4
15-Year	192	31.8	31	25.8	3.0	4.3	2.9	3.7	9.9
20-Year	156	30.1	21	19.0	5.6	7.0	5.6	6.1	14.7

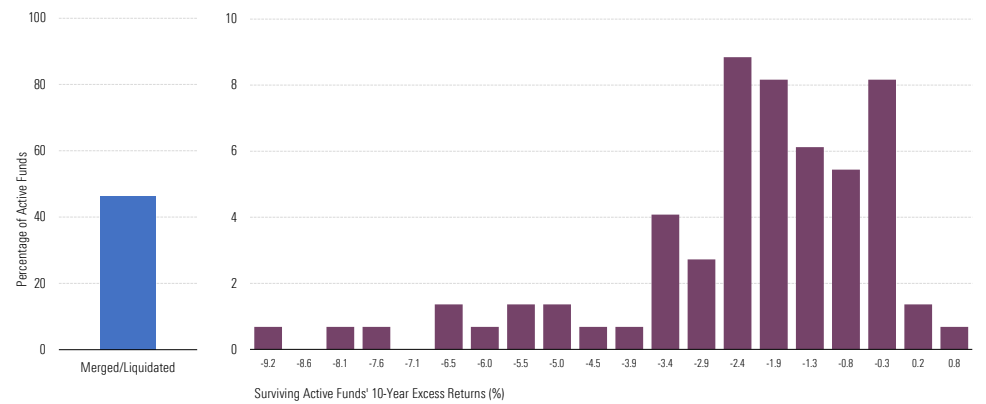
Source: Morningstar Direct. Data as of 31 Dec 2022.

### Exhibit 61 Rolling Success Rates for Surviving Active France Equity Funds (%)



Source: Morningstar Direct. Data as of 31 Dec 2022.

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



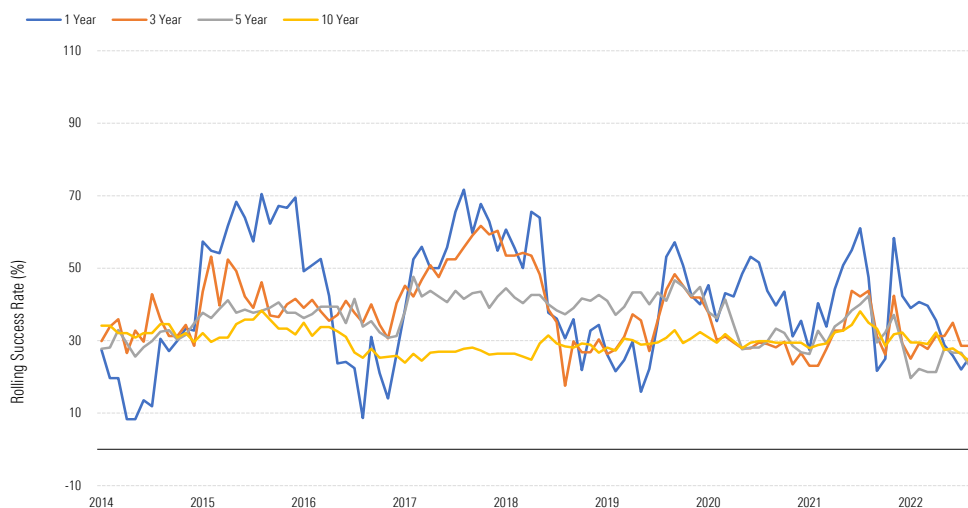
Source: Morningstar Direct. Data as of 31 Dec 2022.

### Exhibit 63 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 (%)	
<b>Trailing Total Return</b>									
1-Year	59	98.3	24	100.0	-17.7	-10.1	-16.2	-12.0	25.4
3-year	63	84.1	23	87.0	-0.5	2.1	-0.6	0.8	28.6
5-Year	61	77.0	22	81.8	-0.7	1.4	-0.7	0.5	23.0
10-Year	62	64.5	21	61.9	5.7	5.9	4.9	5.7	24.2
15-Year	86	39.5	14	42.9	3.3	3.4	2.8	3.3	18.6
20-Year	79	41.8	9	33.3	7.4	7.7	7.1	7.3	25.3

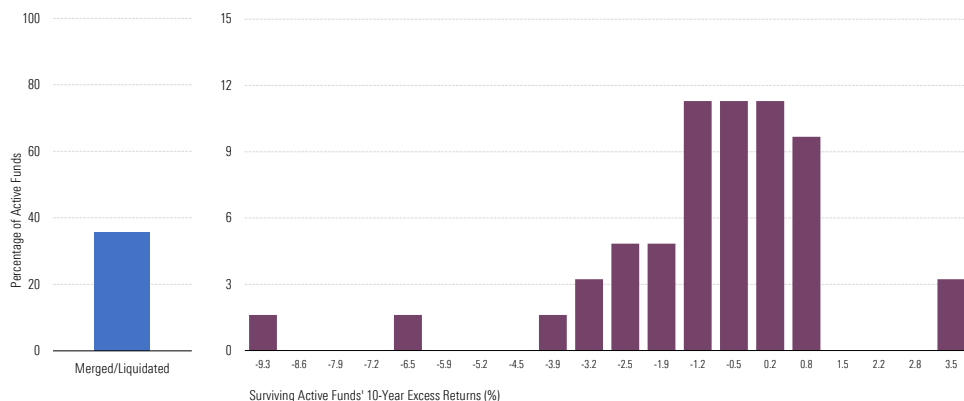
Source: Morningstar Direct. Data as of 31 Dec 2022.

### Exhibit 64 Rolling Success Rates for Surviving Active Germany Equity Funds (%)



Source: Morningstar Direct. Data as of 31 Dec 2022.

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



Source: Morningstar Direct. Data as of 31 Dec 2022.

**Exhibit 66** 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 (%)	
<b>Trailing Total Return</b>									
1-Year	549	97.1	120	97.5	23.4	19.8	22.5	19.3	22.8
3-year	535	86.9	108	88.9	4.5	3.0	4.2	3.4	35.3
5-Year	527	74.8	96	81.3	2.9	1.8	2.9	2.1	28.5
10-Year	507	56.6	54	81.5	0.5	0.8	0.1	0.6	24.7
15-Year	362	45.3	15	80.0	0.6	0.2	1.5	1.0	21.3
20-Year	265	38.1	3	100.0	7.0	5.2	6.1	6.3	22.3

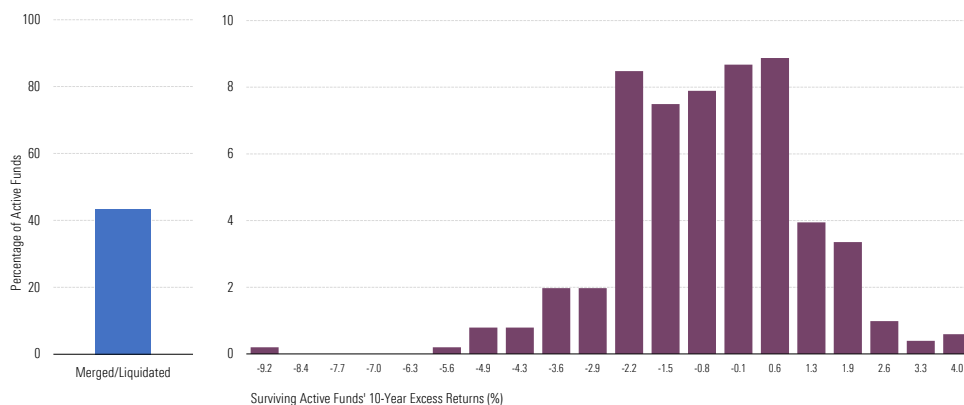
Source: Morningstar Direct. Data as of 31 Dec 2022.

**Exhibit 67** Rolling Success Rates for Surviving Active Global Emerging Markets Equity Funds (%)



Source: Morningstar Direct. Data as of 31 Dec 2022.

**Exhibit 68** Mortality and Distribution of 10-Year Annualized Excess Returns for Surviving Active Global Emerging Markets Equity Funds (%)



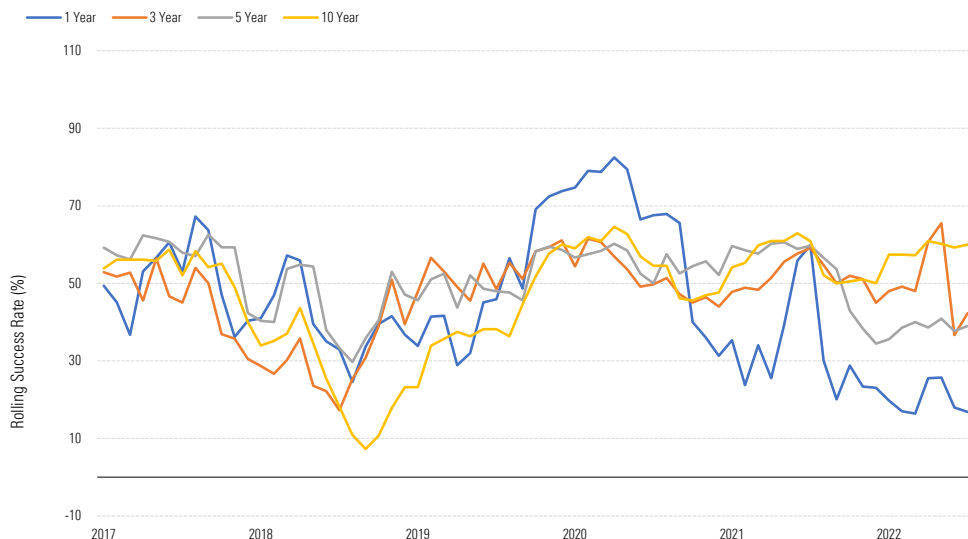
Source: Morningstar Direct. Data as of 31 Dec 2022.

**Exhibit 69 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 (%)	
<b>Trailing Total Return</b>									
1-Year	178	98.3	16	100.0	-10.5	-6.7	-12.1	-7.5	16.9
3-year	182	85.7	13	100.0	2.0	2.4	2.2	2.6	42.3
5-Year	177	72.3	10	100.0	2.7	2.7	2.7	3.0	39.0
10-Year	110	70.0	4	75.0	5.2	4.5	5.5	4.4	60.0

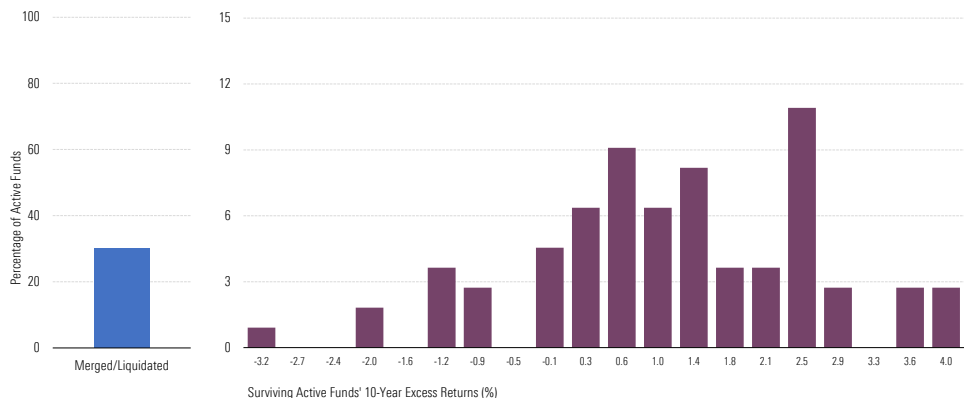
Source: Morningstar Direct. Data as of 31 Dec 2022.

**Exhibit 70 Rolling Success Rates for Surviving Active Global Equity Income Funds (%)**



Source: Morningstar Direct. Data as of 31 Dec 2022.

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



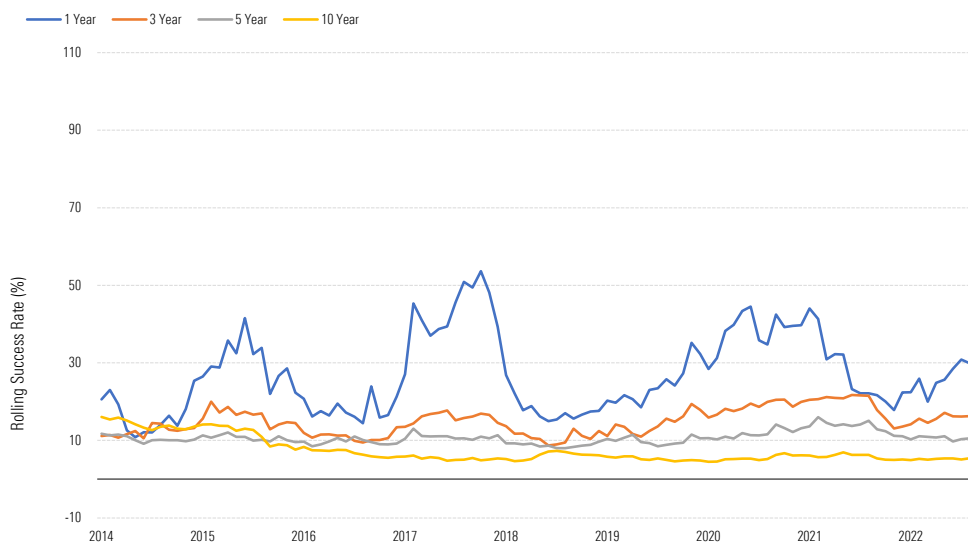
Source: Morningstar Direct. Data as of 31 Dec 2022.

**Exhibit 72 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 (%)	
<b>Trailing Total Return</b>									
1-Year	1,544	98.8	242	99.6	19.1	16.3	19.1	16.7	29.9
3-year	1,452	88.1	209	93.8	3.2	5.1	2.0	5.0	16.3
5-Year	1,499	77.2	172	85.5	4.0	5.9	2.6	5.9	10.5
10-Year	1,386	53.6	115	68.7	7.2	8.8	5.3	8.5	5.4
15-Year	1,661	34.1	56	58.9	2.5	5.0	1.4	4.6	2.9
20-Year	1,302	31.0	32	53.1	6.0	7.7	4.9	6.9	4.8

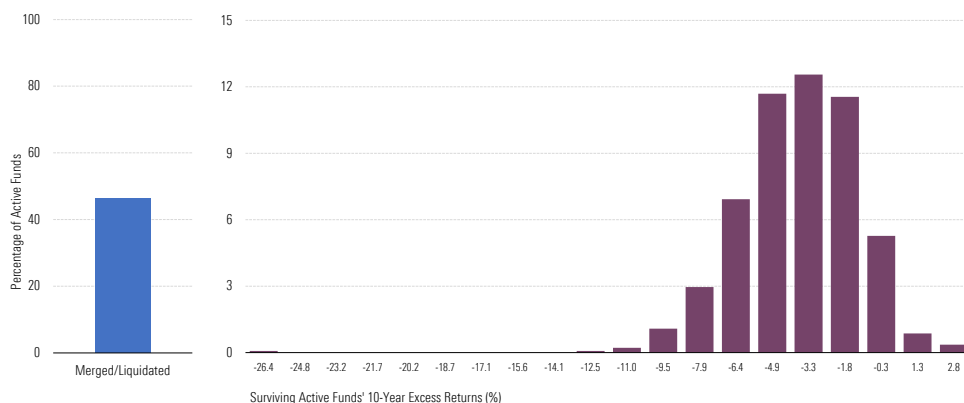
Source: Morningstar Direct. Data as of 31 Dec 2022.

**Exhibit 73 Rolling Success Rates for Surviving Active Global Large-Cap Blend Equity Funds (%)**



Source: Morningstar Direct. Data as of 31 Dec 2022.

**Exhibit 74 Mortality and Distribution of 10-Year Annualized Excess Returns for Surviving Active Global Large-Cap Blend Equity Funds (%)**



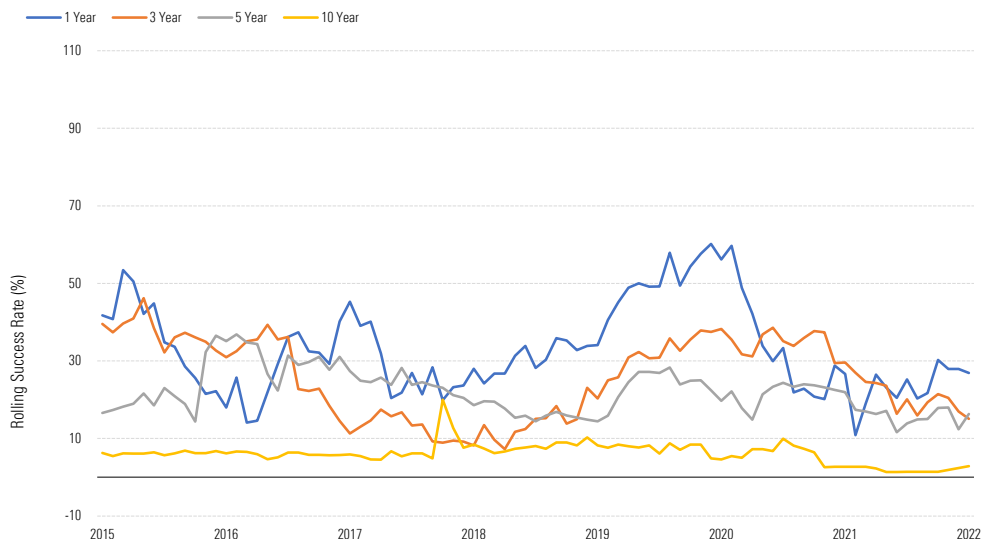
Source: Morningstar Direct. Data as of 31 Dec 2022.

**Exhibit 75 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 (%)	
<b>Trailing Total Return</b>									
1-Year	130	99.2	9	100.0	-9.6	-8.2	-11.0	-7.6	26.9
3-year	126	85.7	9	77.8	1.9	2.4	2.2	4.4	15.1
5-Year	178	71.9	9	77.8	1.8	5.3	1.8	4.0	16.3
10-Year	210	53.3	6	33.3	5.3	9.5	5.5	8.6	2.9

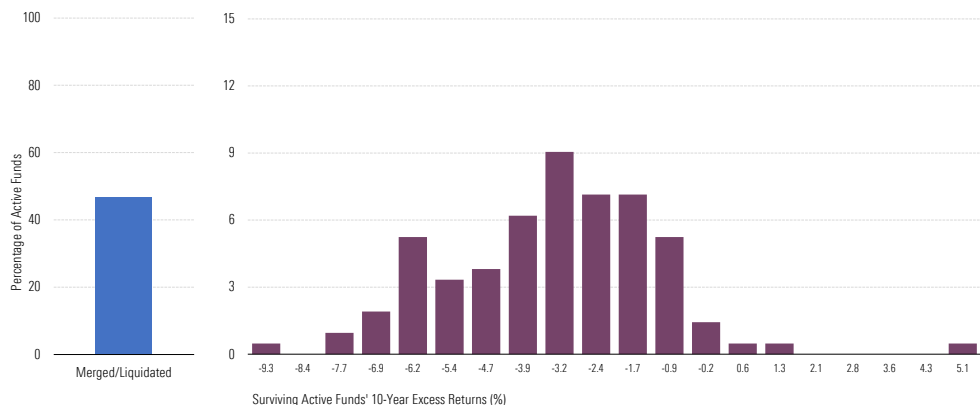
Source: Morningstar Direct. Data as of 31 Dec 2022.

**Exhibit 76 Rolling Success Rates for Surviving Active Global Large-Cap Value Equity Funds (%)**



Source: Morningstar Direct. Data as of 31 Dec 2022.

**Exhibit 77 Mortality and Distribution of 10-Year Annualized Excess Returns for Surviving Active Global Large-Cap Value Equity Funds (%)**



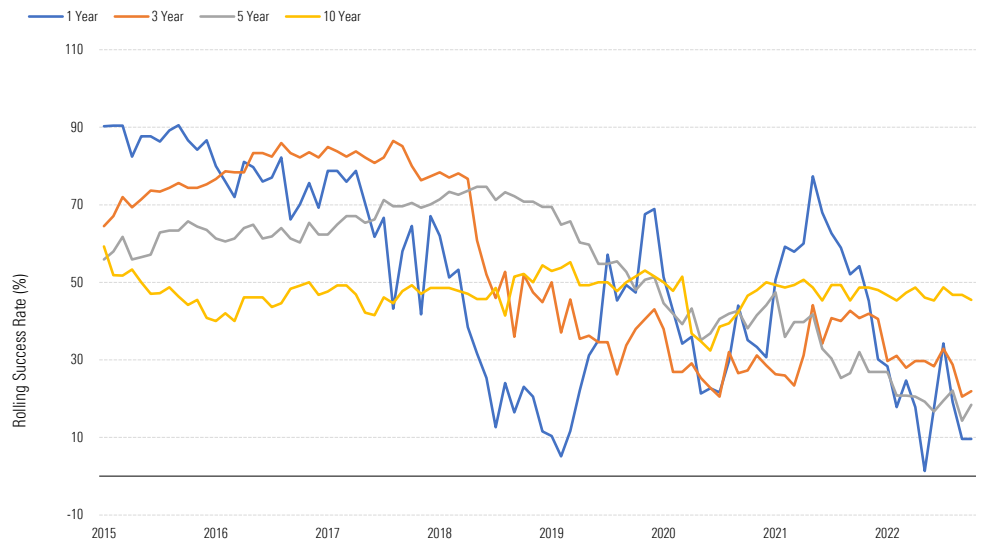
Source: Morningstar Direct. Data as of 31 Dec 2022.

### Exhibit 78 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 (%)	
<b>Trailing Total Return</b>									
1-Year	73	100.0	8	100.0	-9.8	-3.5	-8.6	-3.5	9.6
3-year	73	87.7	10	80.0	9.4	10.8	9.3	11.0	21.9
5-Year	76	77.6	10	60.0	3.8	5.4	3.5	5.6	18.4
10-Year	77	62.3	11	45.5	7.6	6.3	7.4	6.7	45.5
15-Year	66	54.5	4	75.0	2.2	0.7	1.6	1.5	34.8

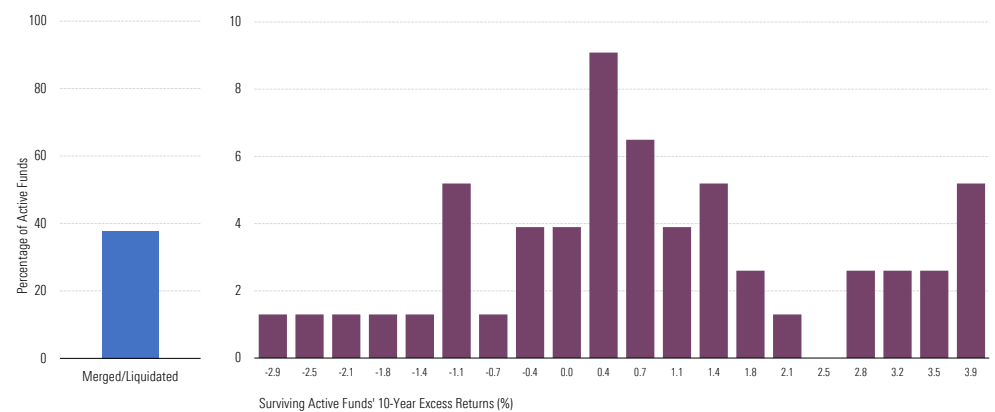
Source: Morningstar Direct. Data as of 31/12/2022.

### Exhibit 79 Rolling Success Rates for Surviving Active India Equity Funds (%)



Source: Morningstar Direct. Data as of 31 Dec 2022.

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



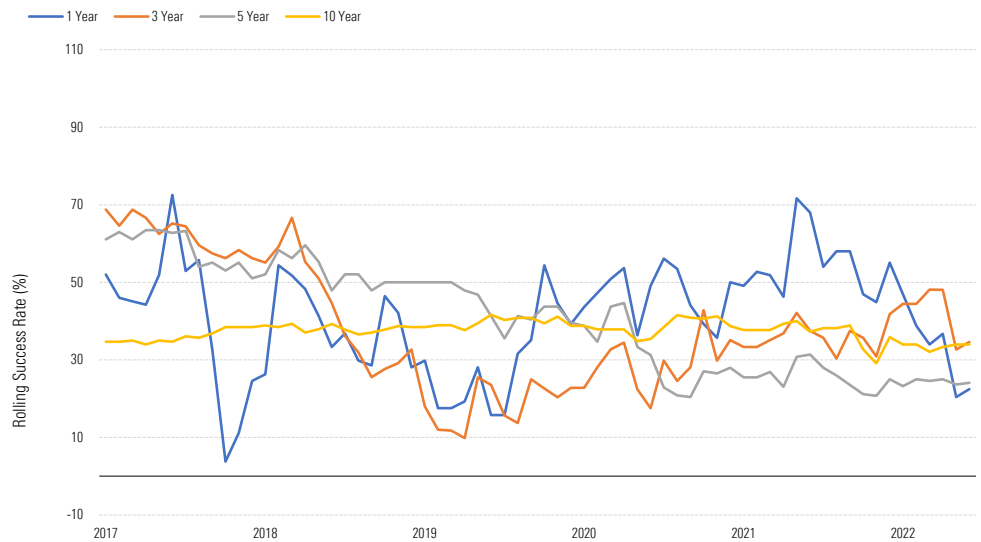
Source: Morningstar Direct. Data as of 31 Dec 2022.

### Exhibit 81 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 (%)	
<b>Trailing Total Return</b>									
1-Year	49	95.9	9	100.0	- 11.2	- 8.7	- 12.1	- 9.0	22.4
3-year	52	82.7	11	81.8	3.3	3.9	4.1	3.9	34.6
5-Year	54	77.8	13	69.2	2.9	4.2	3.4	4.3	24.1
10-Year	50	54.0	10	60.0	6.6	7.0	7.2	6.8	34.0
15-Year	96	27.1	6	50.0	0.5	0.1	1.0	0.1	20.8

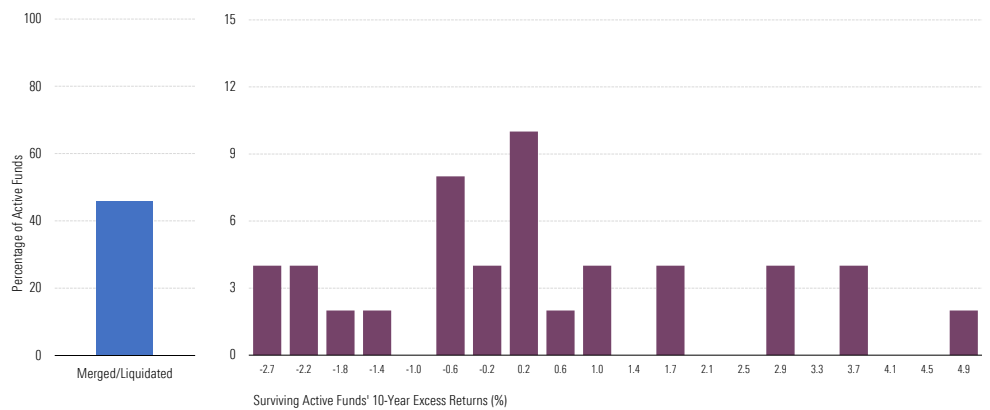
Source: Morningstar Direct. Data as of 31 Dec 2022.

### Exhibit 82 Rolling Success Rates for Surviving Active Italy Equity Funds (%)



Source: Morningstar Direct. Data as of 31 Dec 2022.

### Exhibit 83 Mortality and Distribution of 10-Year Annualized Excess Returns for Surviving Active Italy Equity Funds (%)



Source: Morningstar Direct. Data as of 31 Dec 2022.

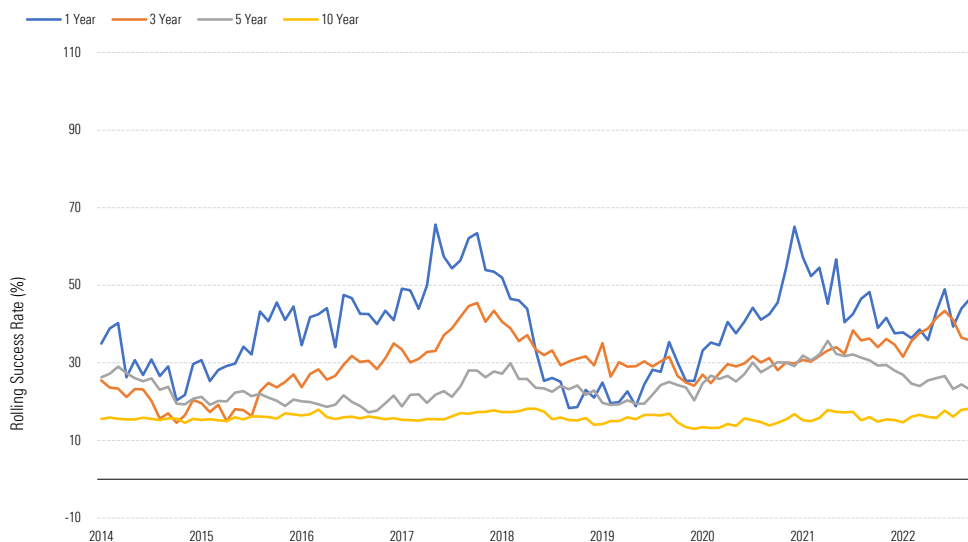


### Exhibit 84 Japan Large-Cap Equity

	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 (%)	
<b>Trailing Total Return</b>									
1-Year	181	97.8	90	96.7	- 2.4	1.3	0.1	1.1	46.4
3-year	201	85.1	83	94.0	6.3	7.4	6.9	7.3	35.8
5-Year	212	72.2	74	82.4	3.0	4.3	3.2	4.2	23.1
10-Year	270	46.7	57	68.4	10.0	10.4	9.7	10.3	18.1
15-Year	449	24.5	54	50.0	2.5	3.2	2.2	2.6	12.5
20-Year	390	20.3	39	35.9	4.3	5.6	4.1	4.8	8.2

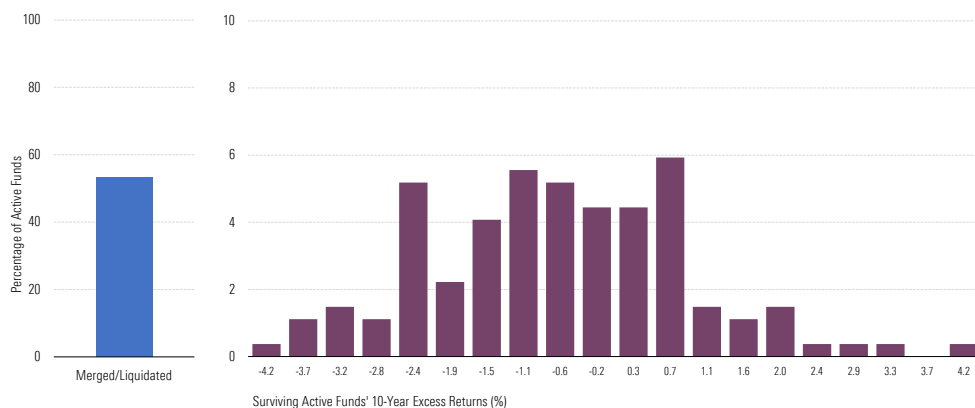
Source: Morningstar Direct. Data as of 31 Dec 2022.

### Exhibit 85 Rolling Success Rates for Surviving Active Japan Large-Cap Equity Funds (%)



Source: Morningstar Direct. Data as of 31 Dec 2022.

### Exhibit 86 Mortality and Distribution of 10-Year Annualized Excess Returns for Surviving Active Japan Large-Cap Equity Funds (%)



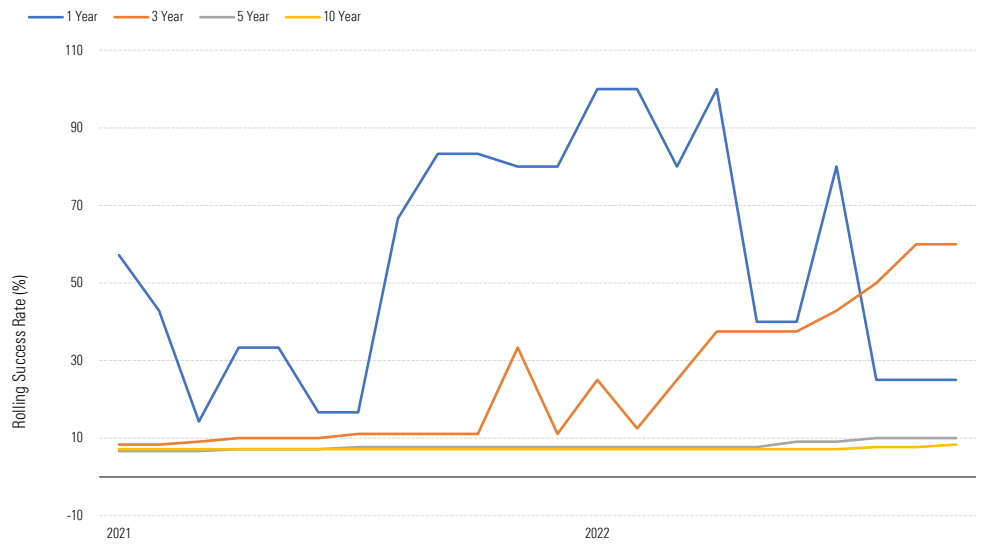
Source: Morningstar Direct. Data as of 31 Dec 2022.

### Exhibit 87 Korea 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 (%)	
<b>Trailing Total Return</b>									
1-Year	4	100.0	7	100.0	27.3	25.7	29.5	26.0	25.0
3-year	5	80.0	7	100.0	2.7	0.6	1.1	1.0	60.0
5-Year	10	40.0	8	75.0	2.0	3.1	5.2	3.1	10.0
10-Year	12	33.3	7	71.4	0.2	1.2	1.6	1.2	8.3
15-Year	17	23.5	4	75.0	1.8	0.7	2.3	0.3	5.9

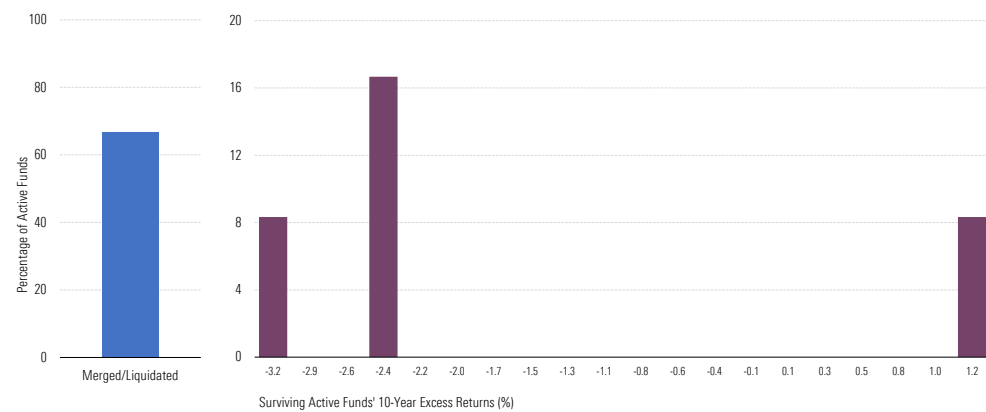
Source: Morningstar Direct. Data as of 31 Dec 2022.

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



Source: Morningstar Direct. Data as of 31 Dec 2022.

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



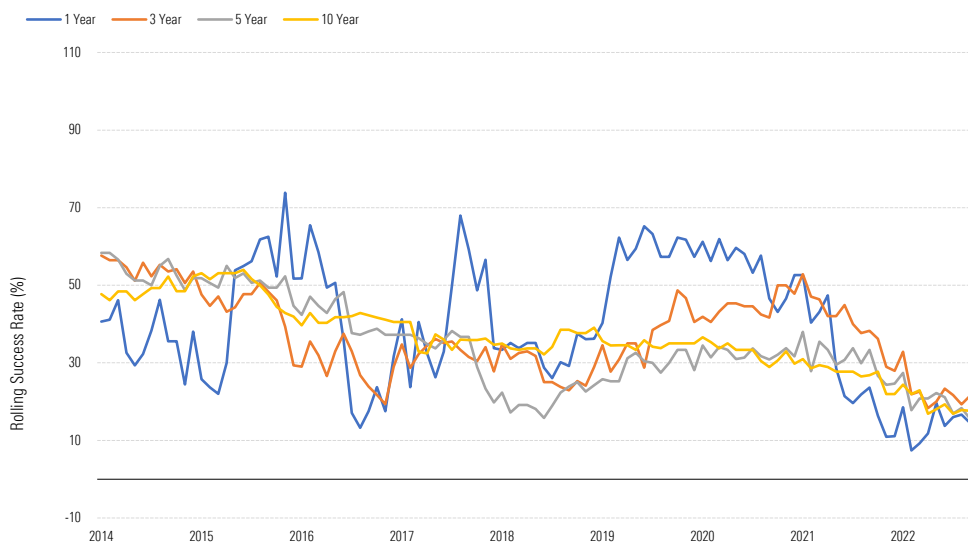
Source: Morningstar Direct. Data as of 31 Dec 2022.

### Exhibit 90 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 (%)	
<b>Trailing Total Return</b>									
1-Year	48	93.8	7	100.0	6.9	11.0	4.1	11.3	14.6
3-year	56	76.8	7	100.0	- 7.9	- 5.3	- 8.3	- 5.5	21.4
5-Year	70	54.3	9	66.7	- 3.2	- 1.8	- 3.6	- 2.0	15.7
10-Year	85	37.6	14	42.9	- 3.7	- 3.0	- 3.8	- 3.2	17.6
15-Year	77	26.0	8	50.0	- 3.1	- 3.1	- 3.6	- 3.8	19.5
20-Year	95	16.8	4	25.0	7.5	2.7	6.8	5.5	15.8

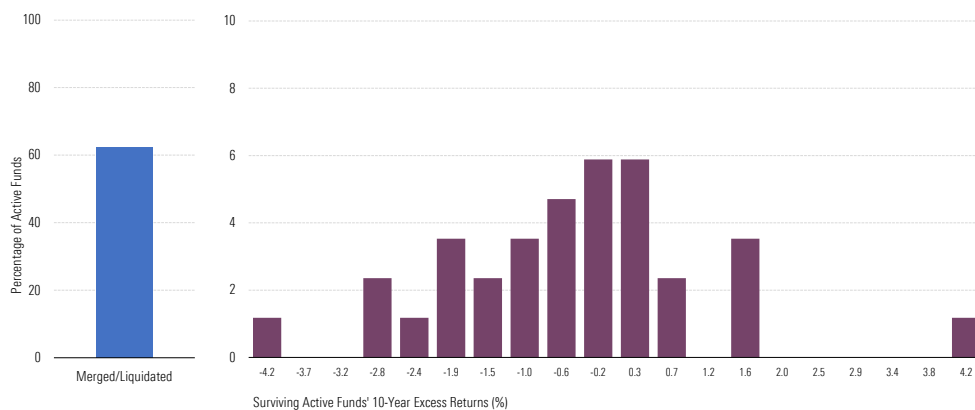
Source: Morningstar Direct. Data as of 31 Dec 2022.

### Exhibit 91 Rolling Success Rates for Surviving Active Latin America Equity Funds (%)



Source: Morningstar Direct. Data as of 31 Dec 2022.

### Exhibit 92 Mortality and Distribution of 10-Year Annualized Excess Returns for Surviving Latin America Equity Funds (%)



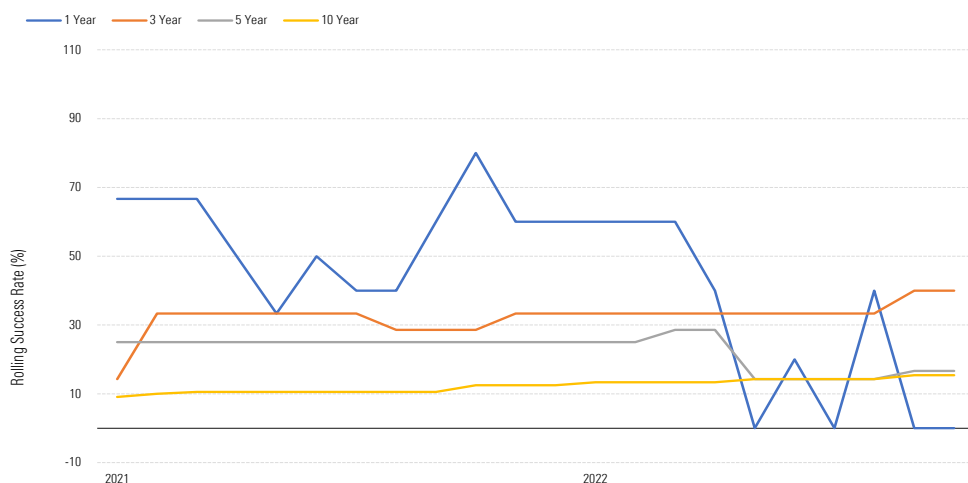
Source: Morningstar Direct. Data as of 31 Dec 2022.

### Exhibit 93 Netherlands 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 (%)	
<b>Trailing Total Return</b>									
1-Year	4	100.0	6	100.0	- 10.3	- 7.3	- 11.7	- 8.6	-
3-year	5	80.0	7	85.7	5.3	8.8	8.0	8.1	40.0
5-Year	6	50.0	8	62.5	5.5	8.7	7.2	8.3	16.7
10-Year	13	23.1	11	45.5	8.7	10.7	10.1	10.6	15.4
15-Year	25	12.0	7	28.6	3.8	5.4	4.9	5.3	8.0
20-Year	22	4.5	6	16.7	7.7	7.6	6.6	7.2	4.5

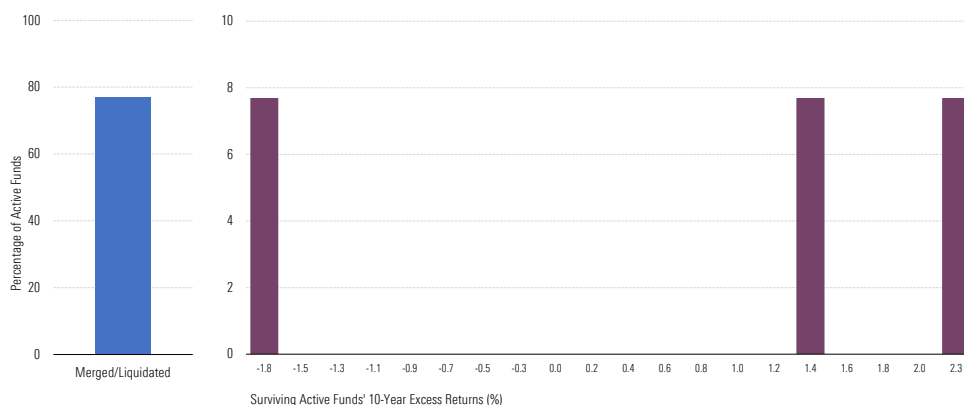
Source: Morningstar Direct. Data as of 31 Dec 2022.

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



Source: Morningstar Direct. Data as of 31 Dec 2022.

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



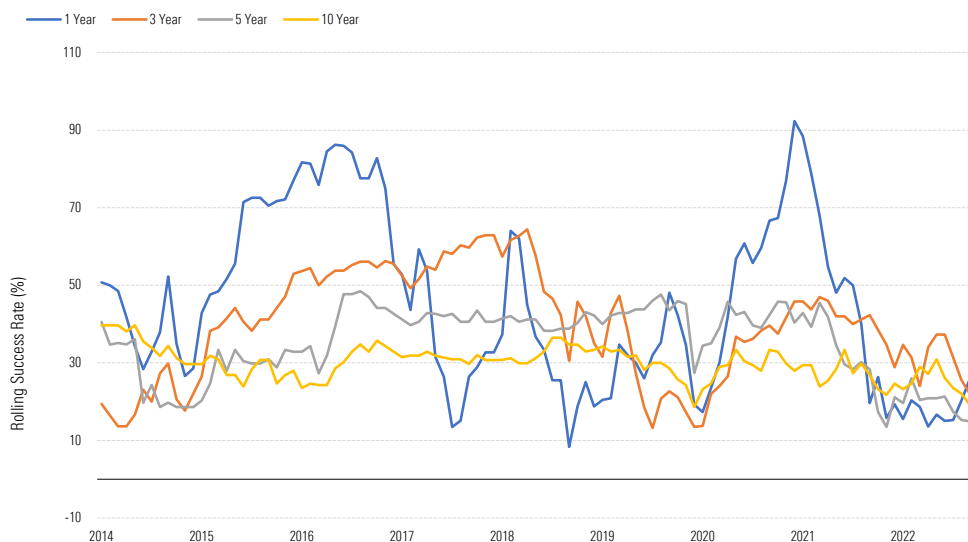
Source: Morningstar Direct. Data as of 31 Dec 2022.

### Exhibit 96 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 (%)	
<b>Trailing Total Return</b>									
1-Year	58	98.3	9	100.0	-12.3	-7.9	-11.4	-6.0	25.9
3-year	50	94.0	9	100.0	7.9	9.7	8.6	10.7	22.0
5-Year	47	78.7	9	88.9	8.4	10.3	9.0	10.9	14.9
10-Year	68	47.1	10	50.0	11.4	12.7	11.5	12.4	19.1
15-Year	74	39.2	6	33.3	6.5	7.7	7.1	7.4	17.6
20-Year	74	25.7	6	16.7	11.2	10.4	10.7	10.4	21.6

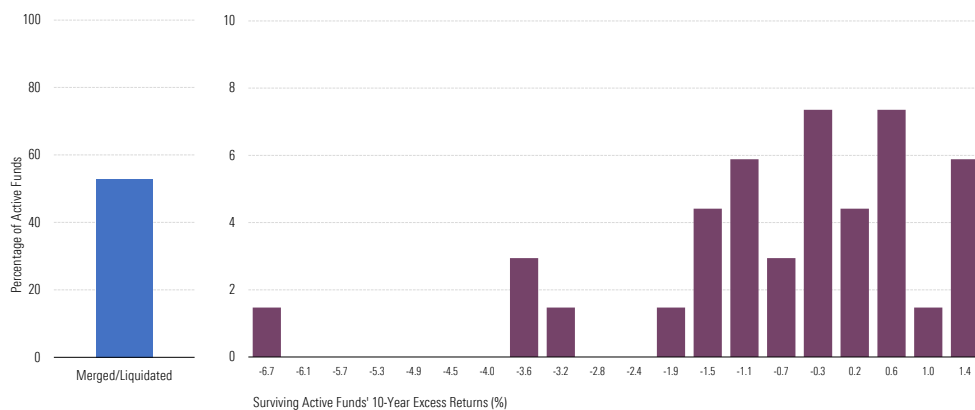
Source: Morningstar Direct. Data as of 31 Dec 2022.

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



Source: Morningstar Direct. Data as of 31 Dec 2022.

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



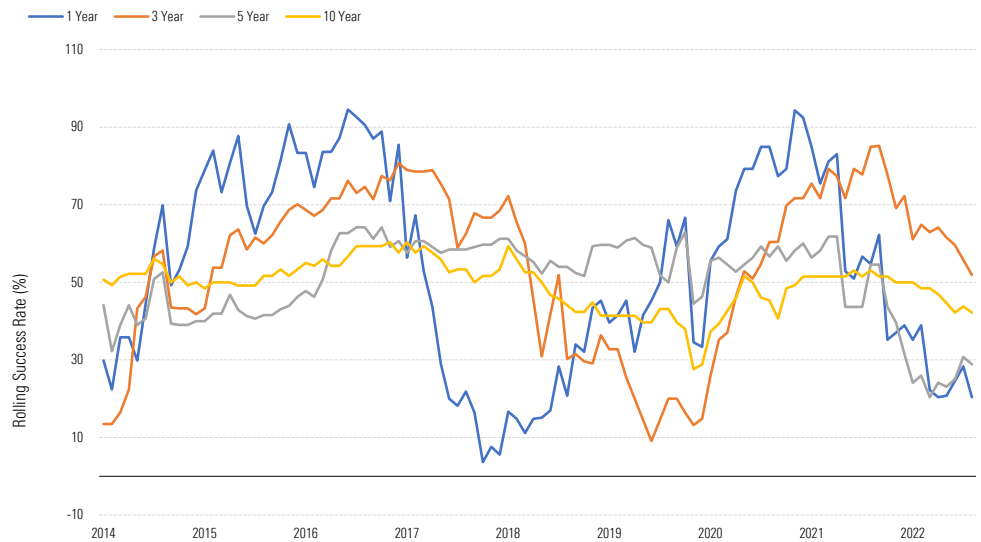
Source: Morningstar Direct. Data as of 31 Dec 2022.

### Exhibit 99 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 (%)			
<b>Trailing Total Return</b>											
1-Year	54	100.0	8	100.0	-	5.4	1.1	-	6.6	1.4	20.4
3-year	52	100.0	10	80.0	7.8	9.1	8.3	7.8	51.9		
5-Year	52	90.4	9	77.8	7.0	8.4	7.6	8.0	28.8		
10-Year	64	62.5	9	44.4	10.3	10.4	10.8	10.0	42.2		
15-Year	60	60.0	8	37.5	5.9	6.3	6.4	6.1	41.7		

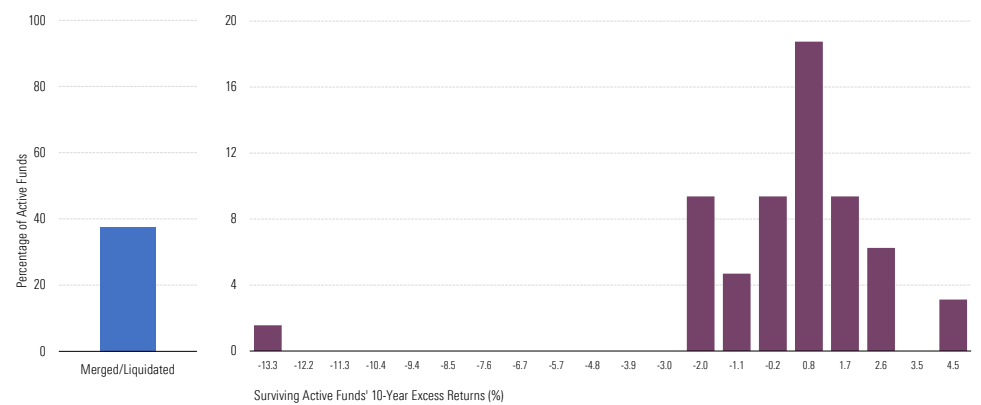
Source: Morningstar Direct. Data as of 31 Dec 2022.

### Exhibit 100 Rolling Success Rates for Surviving Active Norway Equity Funds (%)



Source: Morningstar Direct. Data as of 31 Dec 2022.

### Exhibit 101 Mortality and Distribution of 10-Year Annualized Excess Returns for Surviving Norway Equity Funds (%)



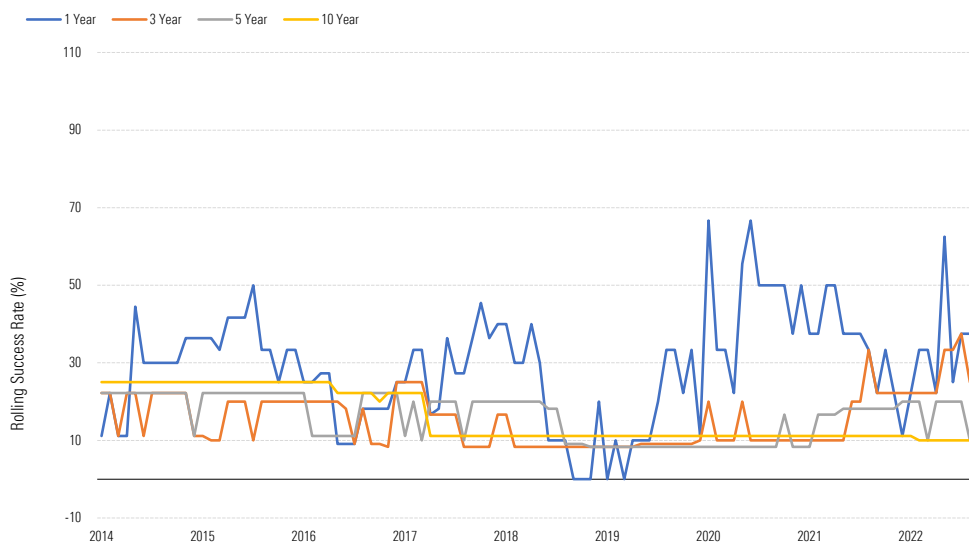
Source: Morningstar Direct. Data as of 31 Dec 2022.

**Exhibit 102 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 (%)	
<b>Trailing Total Return</b>									
1-Year	8	100.0	27	100.0	-7.8	-7.8	-9.4	-7.8	37.5
3-year	8	87.5	26	96.2	1.4	0.6	-0.7	0.6	25.0
5-Year	10	80.0	24	91.7	0.8	1.5	-2.2	1.5	10.0
10-Year	10	80.0	18	88.9	2.6	3.3	1.6	3.3	10.0
15-Year	9	66.7	6	100.0	2.1	2.6	0.5	2.4	11.1
20-Year	8	75.0	3	100.0	8.7	8.8	7.2	8.3	12.5

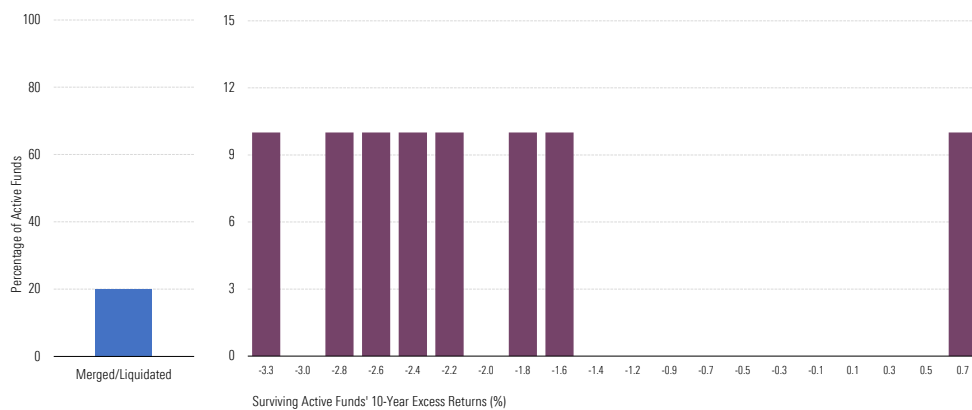
Source: Morningstar Direct. Data as of 31 Dec 2022.

**Exhibit 103 Rolling Success Rates for Surviving Active Pacific ex-Japan Equity Funds (%)**



Source: Morningstar Direct. Data as of 31 Dec 2022.

**Exhibit 104 Mortality and Distribution of 10-Year Annualized Excess Returns for Surviving Pacific ex-Japan Equity Funds (%)**



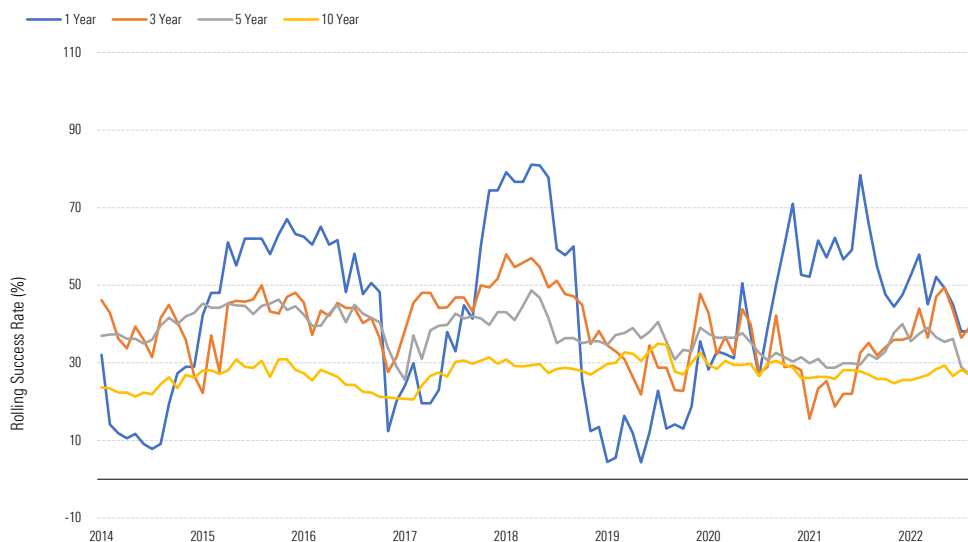
Source: Morningstar Direct. Data as of 31 Dec 2022.

### Exhibit 105 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 (%)	
<b>Trailing Total Return</b>									
1-Year	68	100.0	11	100.0	- 3.1	- 1.1	- 3.0	- 1.2	38.2
3-year	84	78.6	12	91.7	- 1.5	- 1.8	- 1.7	- 1.7	39.3
5-Year	82	74.4	13	84.6	- 1.3	- 0.7	- 1.6	- 0.9	26.8
10-Year	78	56.4	16	56.3	3.6	3.5	3.1	3.2	26.9
15-Year	117	34.2	24	29.2	- 0.1	- 0.3	- 0.6	- 0.7	18.8
20-Year	83	31.3	11	36.4	4.6	4.8	4.3	4.4	16.9

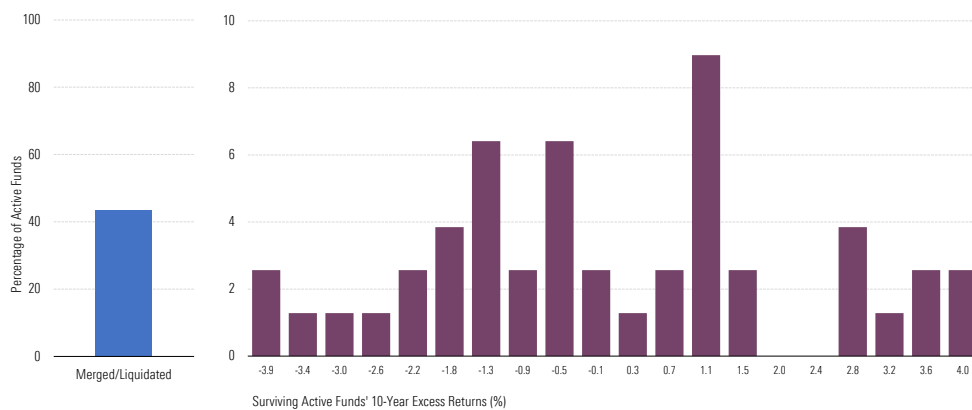
Source: Morningstar Direct. Data as of 31 Dec 2022.

### Exhibit 106 Rolling Success Rates for Surviving Active Spain Equity Funds (%)



Source: Morningstar Direct. Data as of 31 Dec 2022.

### Exhibit 107 Mortality and Distribution of 10-Year Annualized Excess Returns for Surviving Spain Equity Funds (%)



Source: Morningstar Direct. Data as of 31 Dec 2022.



**Exhibit 108 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 (%)					
<b>Trailing Total Return</b>													
1-Year	60	95.0	27	100.0	-	20.1	-	19.8	-	20.0	-	19.0	38.3
3-year	57	93.0	24	100.0	6.3	6.6	6.8	7.0				42.1	
5-Year	72	68.1	26	92.3	7.4	8.7	8.2	8.9				29.2	
10-Year	78	48.7	26	65.4	10.6	10.7	11.0	10.6				29.5	
15-Year	86	29.1	20	55.0	8.1	8.1	8.0	8.1				18.6	
20-Year	79	22.8	12	41.7	11.2	8.6	10.7	11.0				13.9	

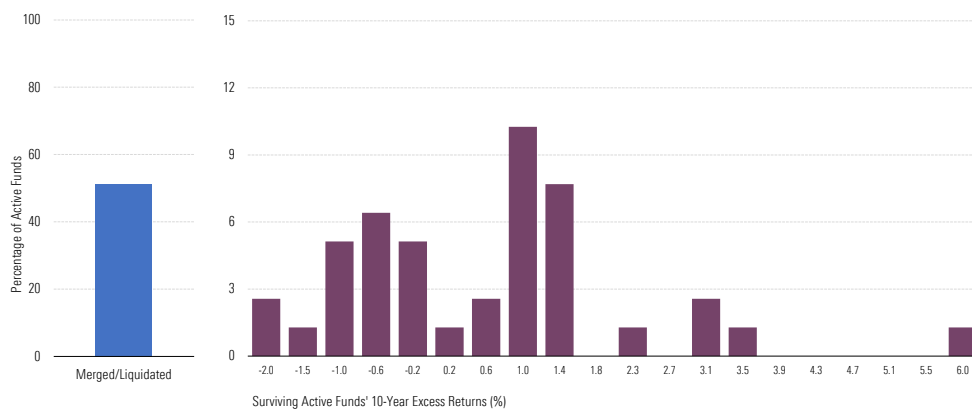
Source: Morningstar Direct. Data as of 31 Dec 2022.

**Exhibit 109 Rolling Success Rates for Surviving Active Sweden Equity Funds (%)**



Source: Morningstar Direct. Data as of 31 Dec 2022.

**Exhibit 110 Mortality and Distribution of 10-Year Annualized Excess Returns for Surviving Sweden Equity Funds (%)**



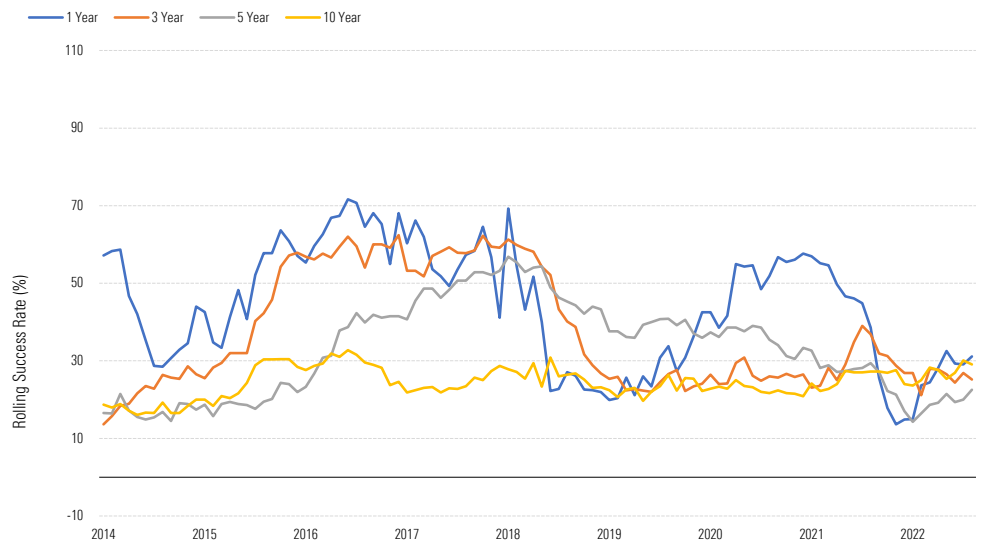
Source: Morningstar Direct. Data as of 31 Dec 2022.

### Exhibit 111 Switzerland 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 (%)	
<b>Trailing Total Return</b>									
1-Year	164	99.4	54	100.0	-15.2	-13.3	-16.3	-13.7	31.1
3-year	159	89.9	48	100.0	2.7	3.5	2.3	3.4	25.2
5-Year	151	82.8	48	93.8	4.7	5.8	3.9	5.6	22.5
10-Year	141	60.3	36	83.3	7.9	8.3	7.4	7.9	29.1
15-Year	115	45.2	26	76.9	3.9	4.8	3.4	4.5	11.3
20-Year	98	33.7	14	50.0	6.2	7.1	6.1	6.6	16.3

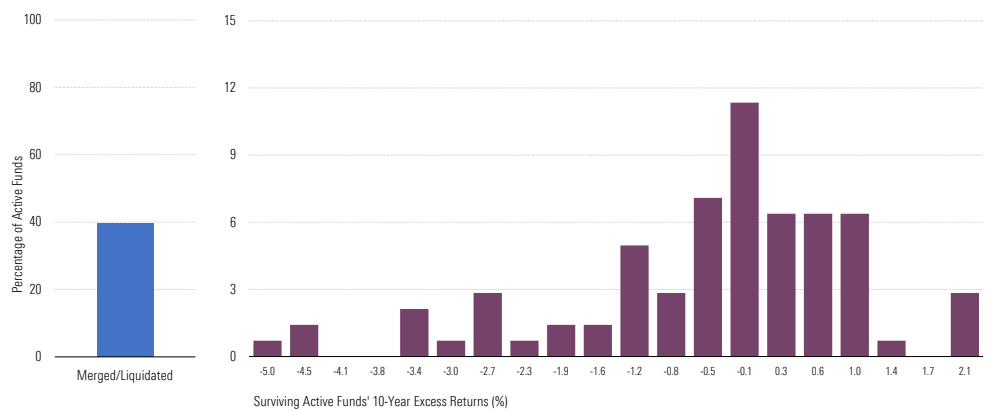
Source: Morningstar Direct. Data as of 31 Dec 2022.

### Exhibit 112 Rolling Success Rates for Surviving Active Switzerland Equity Funds (%)



Source: Morningstar Direct. Data as of 31 Dec 2022.

### Exhibit 113 Mortality and Distribution of 10-Year Annualized Excess Returns for Surviving Switzerland Equity Funds (%)



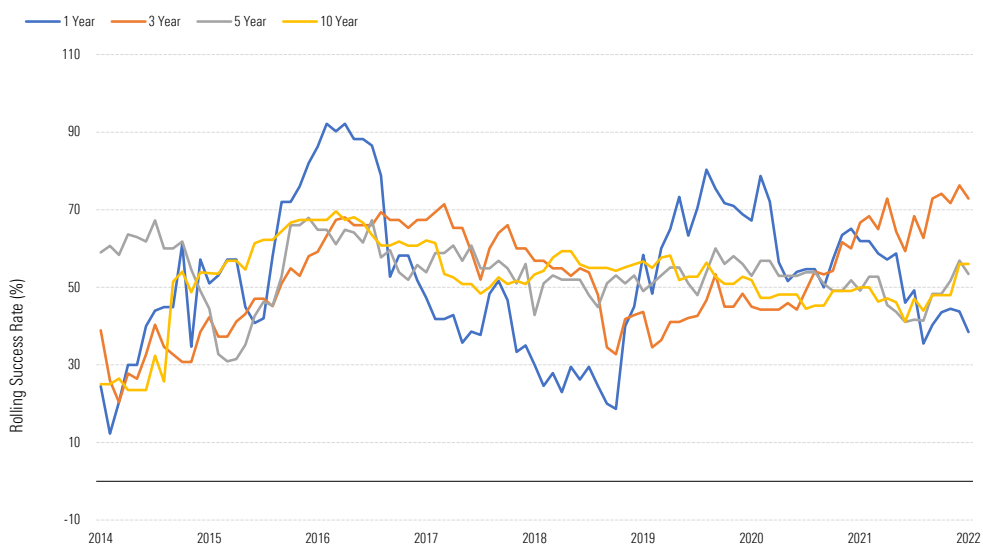
Source: Morningstar Direct. Data as of 31 Dec 2022.

**Exhibit 114** 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 (%)	
<b>Trailing Total Return</b>									
1-Year	65	98.5	7	100.0	- 24.3	- 23.7	- 23.8	- 23.5	38.5
3-year	59	98.3	8	87.5	1.3	0.1	1.3	0.1	72.9
5-Year	58	89.7	9	77.8	2.0	1.6	1.0	1.3	53.4
10-Year	50	78.0	7	71.4	9.9	9.4	9.2	8.7	56.0
15-Year	56	62.5	4	50.0	4.8	5.0	4.5	3.9	50.0

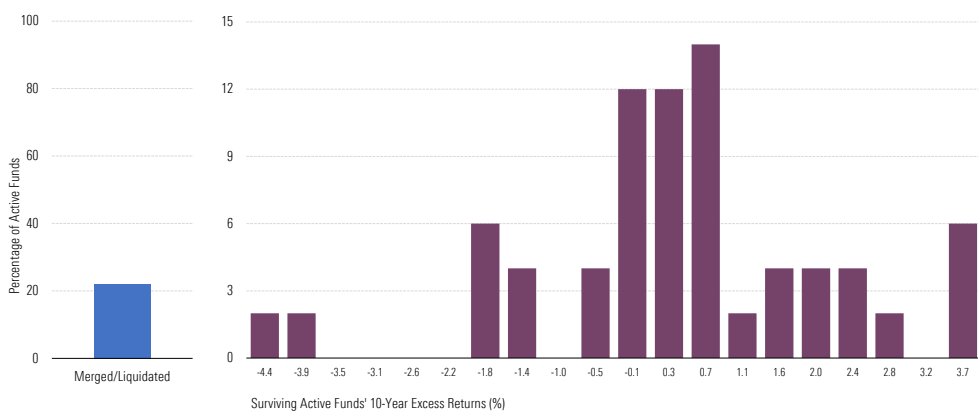
Source: Morningstar Direct. Data as of 31 Dec 2022.

**Exhibit 115** Rolling Success Rates for Surviving Active Switzerland Small/Mid-Cap Equity Funds (%)



Source: Morningstar Direct. Data as of 31 Dec 2022.

**Exhibit 116** Mortality and Distribution of 10-Year Annualized Excess Returns for Surviving Switzerland Small/Mid-Cap Equity Funds (%)



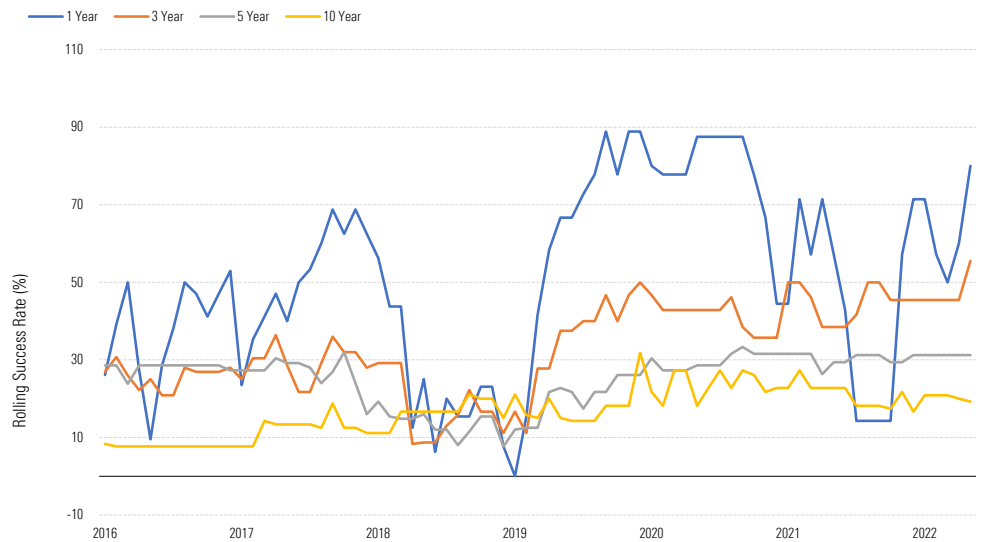
Source: Morningstar Direct. Data as of 31 Dec 2022.

### Exhibit 117 Turkey 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 (%)	
<b>Trailing Total Return</b>									
1-Year	5	100.0	3	100.0	117.0	95.2	113.4	95.2	80.0
3-year	9	55.6	4	75.0	18.5	8.1	17.1	8.2	55.6
5-Year	16	31.3	5	60.0	3.9	3.1	2.6	2.9	31.3
10-Year	26	23.1	7	42.9	0.5	3.7	1.1	3.4	19.2
15-Year	15	20.0	4	50.0	0.6	0.7	0.6	1.3	6.7

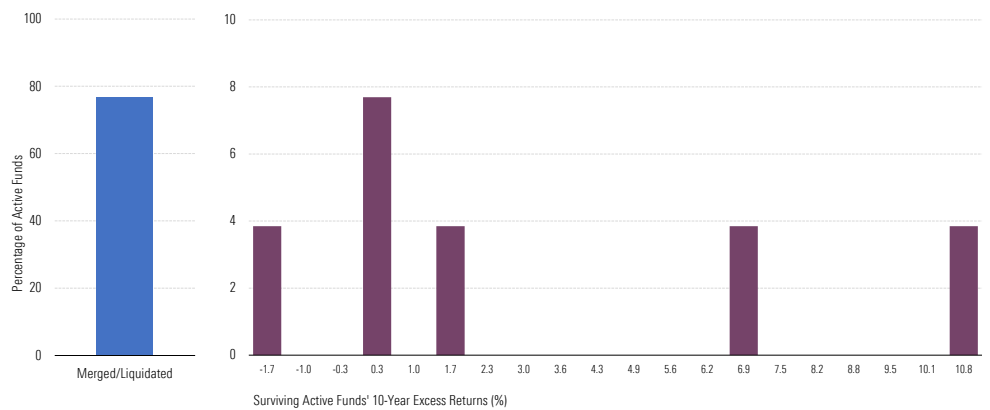
Source: Morningstar Direct. Data as of 31 Dec 2022.

### Exhibit 118 Rolling Success Rates for Surviving Active Turkey Equity Funds (%)



Source: Morningstar Direct. Data as of 31 Dec 2022.

### Exhibit 119 Mortality and Distribution of 10-Year Annualized Excess Returns for Surviving Turkey Equity Funds (%)



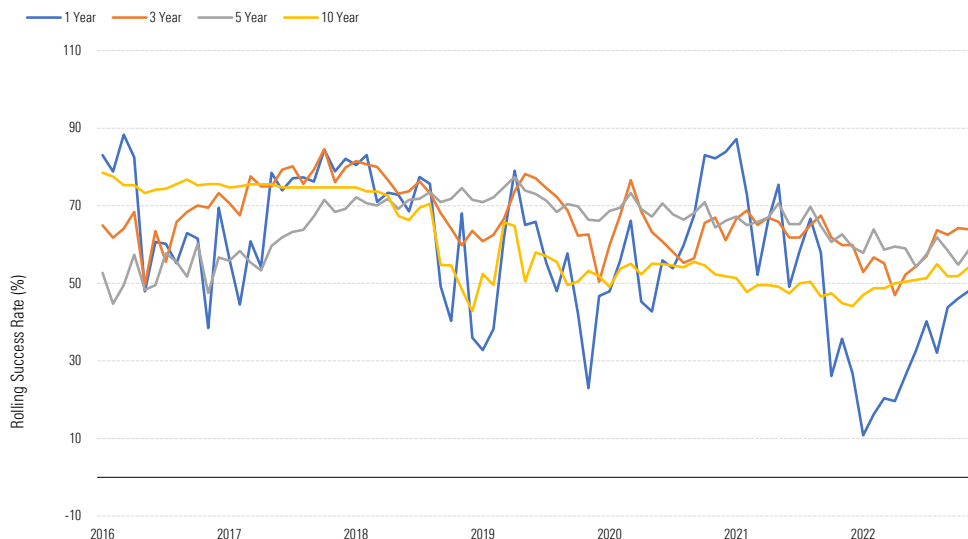
Source: Morningstar Direct. Data as of 31 Dec 2022.

### Exhibit 120 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 (%)	
<b>Trailing Total Return</b>									
1-Year	102	98.0	4	100.0	- 2.2	3.6	- 3.0	- 1.1	48.0
3-year	108	83.3	5	80.0	0.9	1.4	0.6	- 1.2	63.9
5-Year	116	75.0	6	66.7	1.5	1.8	1.6	0.7	58.6
10-Year	109	61.5	4	75.0	6.4	5.2	6.2	5.0	54.1

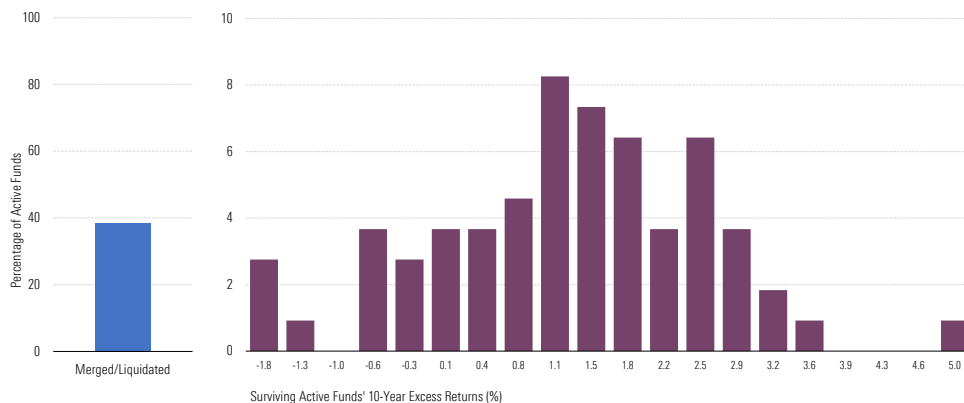
Source: Morningstar Direct. Data as of 31 Dec 2022.

### Exhibit 121 Rolling Success Rates for Surviving Active UK Equity Income Funds (%)



Source: Morningstar Direct. Data as of 31 Dec 2022.

### Exhibit 122 Mortality and Distribution of 10-Year Annualized Excess Returns for Surviving UK Equity Income Funds (%)



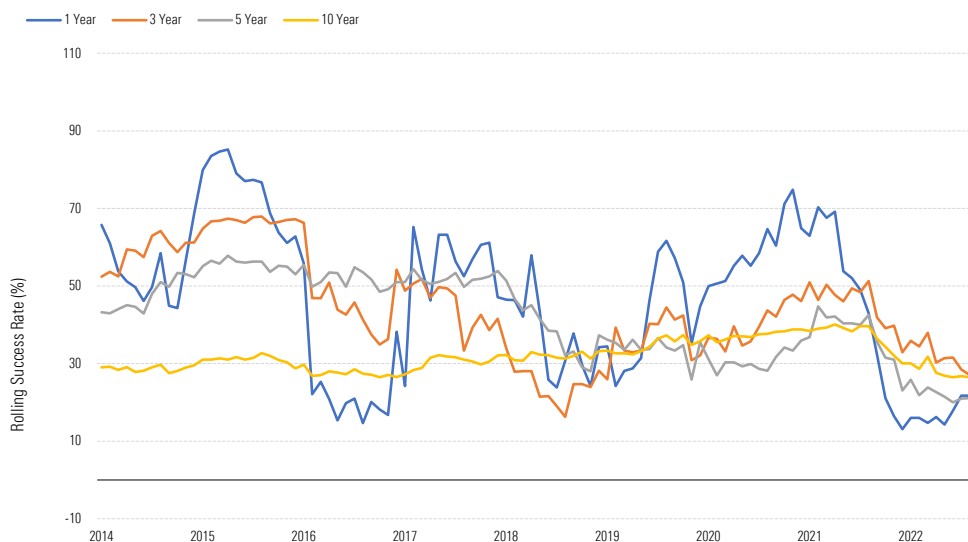
Source: Morningstar Direct. Data as of 31 Dec 2022.

### Exhibit 123 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 (%)		
<b>Trailing Total Return</b>										
1-Year	138	98.6	69	98.6	-	1.9	3.0	-	2.4	21.7
3-year	148	82.4	69	91.3	1.4	2.8	1.9	2.5	27.0	
5-Year	147	68.7	71	77.5	2.0	3.2	3.3	2.9	21.1	
10-Year	185	49.2	77	63.6	6.1	6.3	6.0	6.1	26.5	
15-Year	271	34.7	59	57.6	4.8	4.8	4.8	4.7	19.6	
20-Year	255	29.8	51	51.0	6.5	6.9	6.9	6.7	19.6	

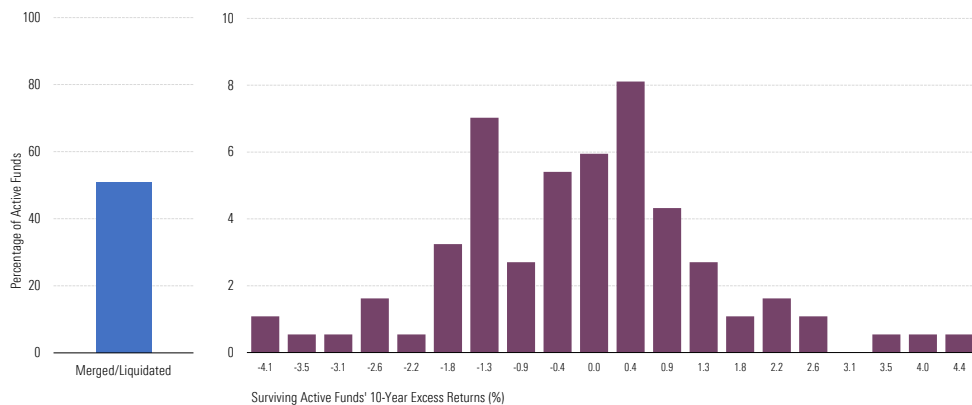
Source: Morningstar Direct. Data as of 31 Dec 2022.

### Exhibit 124 Rolling Success Rates for Surviving Active UK Large-Cap Equity Funds (%)



Source: Morningstar Direct. Data as of 31 Dec 2022.

### Exhibit 125 Mortality and Distribution of 10-Year Annualized Excess Returns for Surviving UK Large-Cap Equity Funds (%)



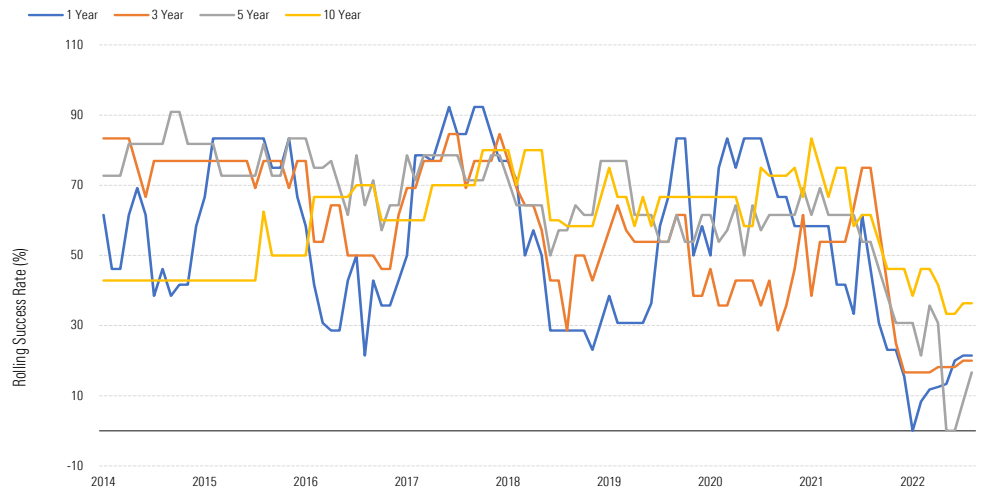
Source: Morningstar Direct. Data as of 31 Dec 2022.

### Exhibit 126 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 (%)	
<b>Trailing Total Return</b>									
1-Year	14	100.0	9	100.0	-26.3	16.2	-23.2	16.9	21.4
3-year	10	90.0	8	100.0	-7.0	2.4	-4.1	2.6	20.0
5-Year	12	66.7	9	88.9	-3.4	0.7	-1.1	0.6	16.7
10-Year	11	72.7	9	66.7	6.3	6.9	6.8	6.8	36.4
15-Year	8	87.5	4	75.0	6.1	6.5	7.0	6.5	37.5

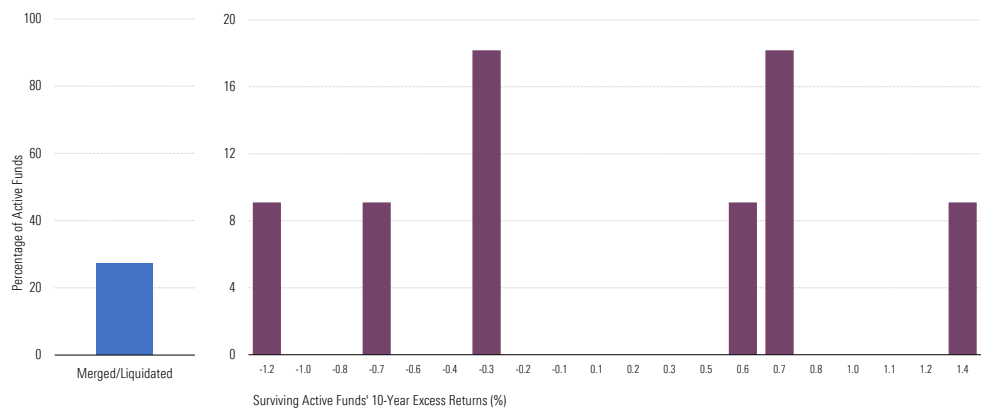
Source: Morningstar Direct. Data as of 31 Dec 2022.

### Exhibit 127 Rolling Success Rates for Surviving Active UK Mid-Cap Equity Funds (%)



Source: Morningstar Direct. Data as of 31 Dec 2022.

### Exhibit 128 Mortality and Distribution of 10-Year Annualized Excess Returns for Surviving UK Mid-Cap Equity Funds (%)



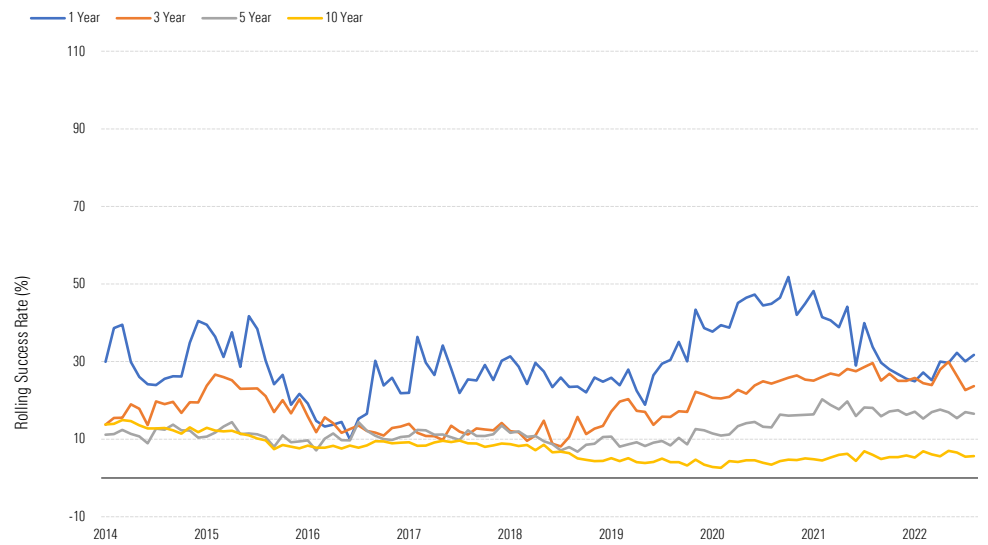
Source: Morningstar Direct. Data as of 31 Dec 2022.

**Exhibit 129 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 (%)	
<b>Trailing Total Return</b>									
1-Year	350	98.9	186	99.5	17.1	15.3	17.2	15.0	31.7
3-year	342	85.4	172	87.8	6.9	8.7	6.4	8.2	23.7
5-Year	351	69.8	155	81.3	7.8	9.8	7.1	9.1	16.5
10-Year	355	48.2	129	66.7	10.4	12.4	9.7	11.7	5.6
15-Year	530	28.9	89	46.1	6.1	8.1	5.3	7.1	6.0
20-Year	448	27.9	57	40.4	7.1	9.2	6.6	8.2	5.4

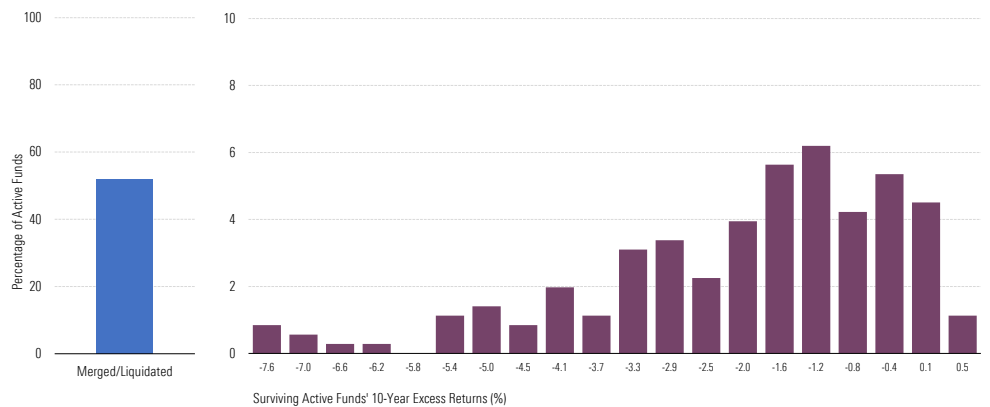
Source: Morningstar Direct. Data as of 31 Dec 2022.

**Exhibit 130 Rolling Success Rates for Surviving Active US Large-Cap Blend Equity Funds (%)**



Source: Morningstar Direct. Data as of 31 Dec 2022.

**Exhibit 131 Mortality and Distribution of 10-Year Annualized Excess Returns for US Large-Cap Blend Equity Funds (%)**



Source: Morningstar Direct. Data as of 31 Dec 2022.

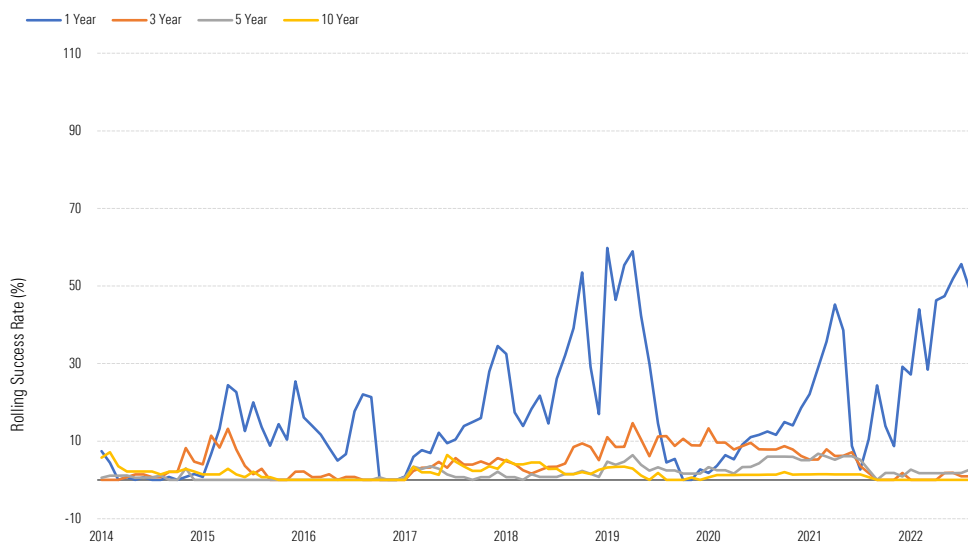


**Exhibit 132 US Large-Cap Growth Equity**

	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 (%)	
<b>Trailing Total Return</b>									
1-Year	133	99.2	15	100.0	- 33.4	- 25.8	- 27.6	- 25.4	48.9
3-year	111	93.7	10	90.0	3.0	11.5	4.7	10.8	0.9
5-Year	114	86.0	11	72.7	6.8	13.8	7.8	13.2	2.6
10-Year	133	57.9	11	54.5	10.2	16.8	10.4	16.2	-
15-Year	169	34.9	13	53.8	6.3	11.5	6.2	9.8	1.8
20-Year	117	31.6	3	66.7	7.2	9.5	7.5	11.0	-

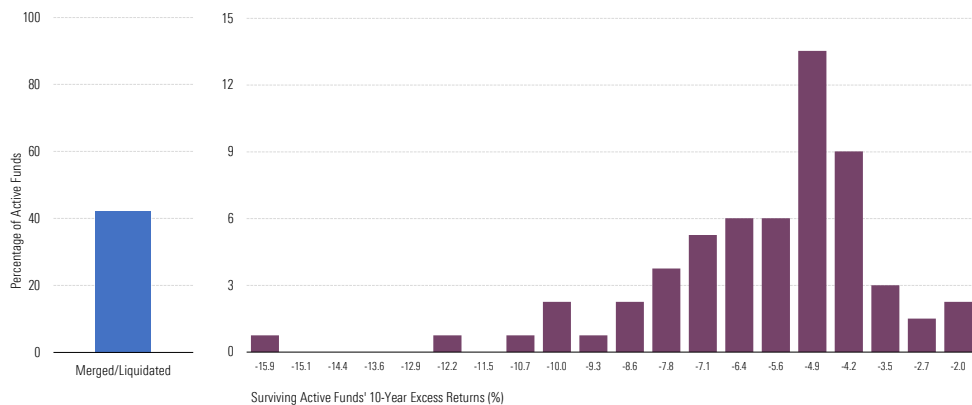
Source: Morningstar Direct. Data as of 31 Dec 2022.

**Exhibit 133 Rolling Success Rates for Surviving Active US Large-Cap Growth Equity Funds (%)**



Source: Morningstar Direct. Data as of 31 Dec 2022.

**Exhibit 134 Mortality and Distribution of 10-Year Annualized Excess Returns for US Large-Cap Growth Equity Funds (%)**



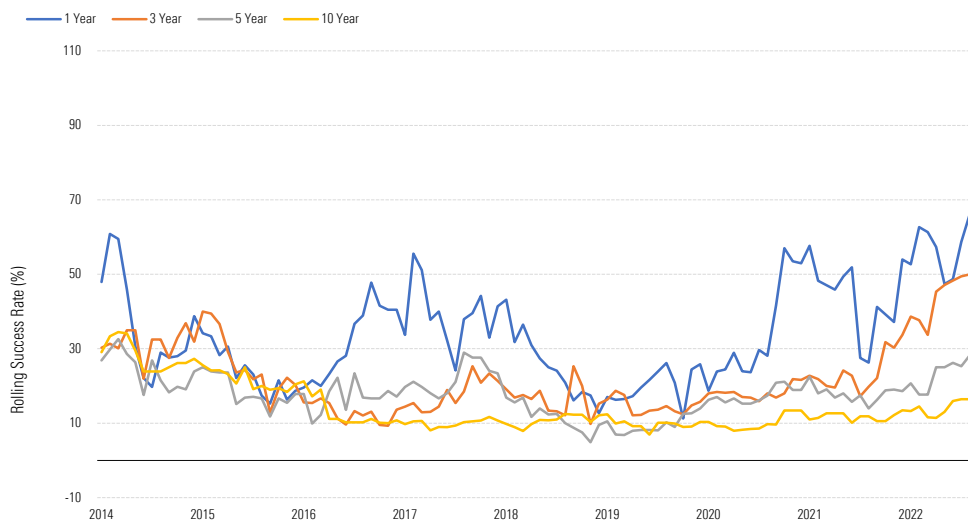
Source: Morningstar Direct. Data as of 31 Dec 2022.

**Exhibit 135 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 (%)	
<b>Trailing Total Return</b>									
1-Year	74	98.6	12	100.0	- 3.7	- 7.4	- 5.9	- 6.9	66.2
3-year	86	74.4	13	84.6	7.4	5.9	6.5	6.1	50.0
5-Year	85	65.9	14	78.6	6.2	6.4	6.1	6.9	28.2
10-Year	73	53.4	9	66.7	9.8	10.4	9.5	10.6	16.4
15-Year	106	32.1	4	50.0	6.1	7.2	5.5	6.9	11.3
20-Year	70	38.6	2	100.0	6.8	7.3	7.0	7.4	21.4

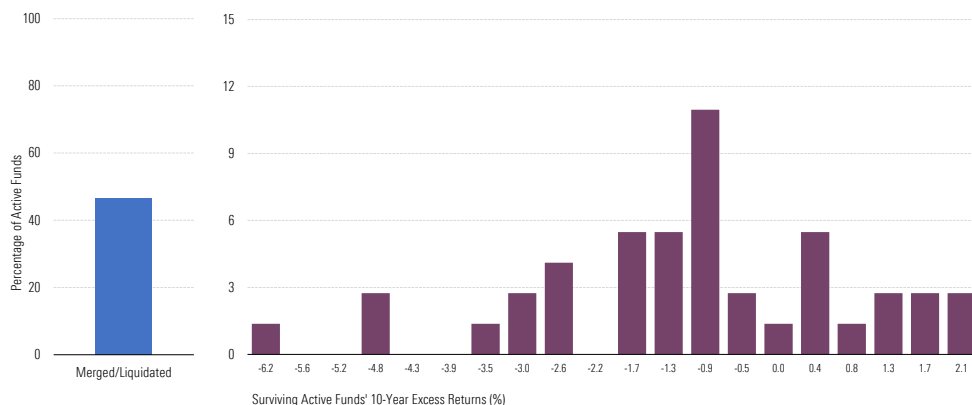
Source: Morningstar Direct. Data as of 31 Dec 2022.

**Exhibit 136 Rolling Success Rates for Surviving Active US Large-Cap Value Equity Funds (%)**



Source: Morningstar Direct. Data as of 31 Dec 2022.

**Exhibit 137 Mortality and Distribution of 10-Year Annualized Excess Returns for US Large-Cap Value Equity Funds (%)**



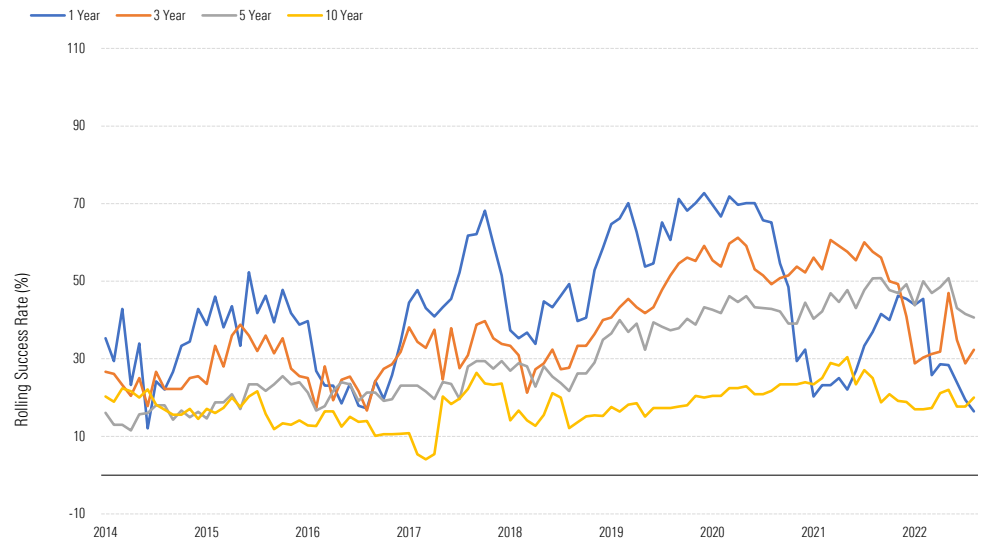
Source: Morningstar Direct. Data as of 31 Dec 2022.

**Exhibit 138 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 (%)	
<b>Trailing Total Return</b>									
1-Year	67	100.0	12	100.0	- 21.5	- 13.0	- 20.8	- 12.4	16.4
3-year	65	92.3	13	84.6	4.4	6.1	5.8	6.6	32.3
5-Year	64	81.3	13	76.9	5.1	5.8	6.1	5.9	40.6
10-Year	50	62.0	8	75.0	9.2	10.5	9.5	10.2	20.0

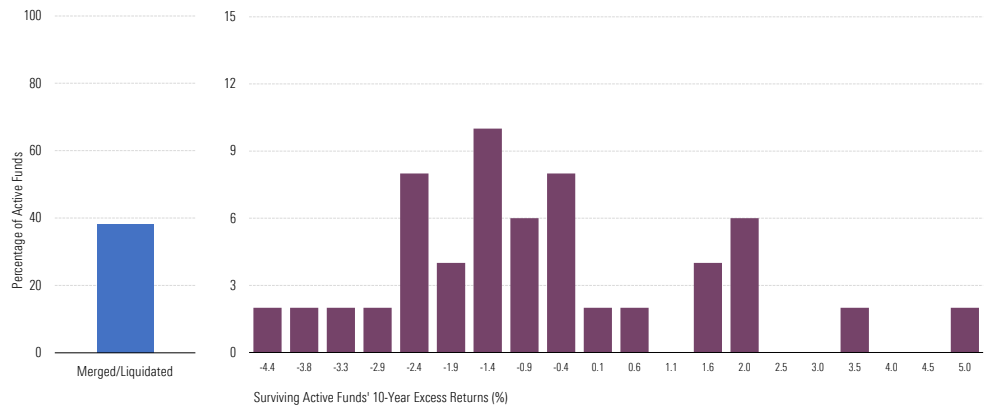
Source: Morningstar Direct. Data as of 31 Dec 2022.

**Exhibit 139 Rolling Success Rates for Surviving Active US Small-Cap Equity Funds (%)**



Source: Morningstar Direct. Data as of 31 Dec 2022.

**Exhibit 140 Mortality and Distribution of 10-Year Annualized Excess Returns for US Small-Cap Equity Funds (%)**



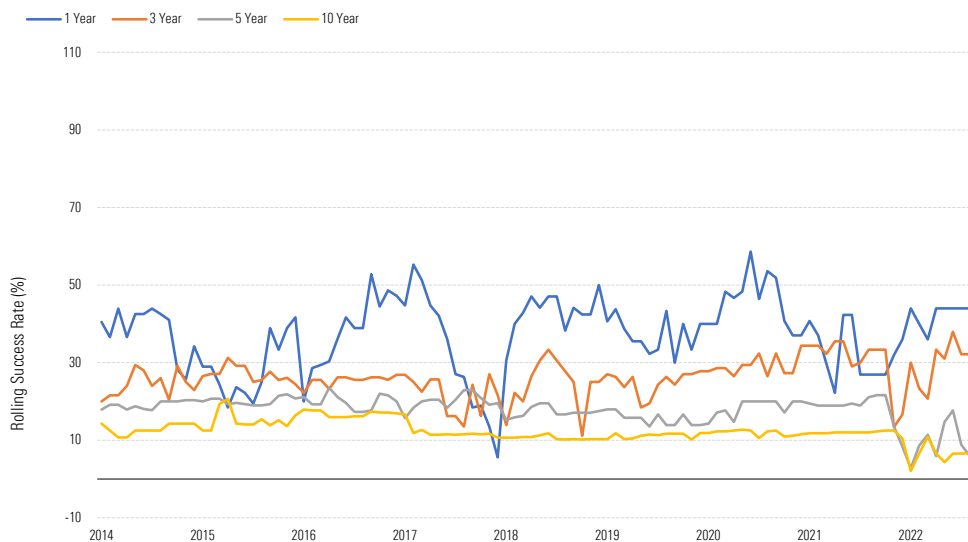
Source: Morningstar Direct. Data as of 31 Dec 2022.

**Exhibit 141 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 (%)	
<b>Trailing Total Return</b>									
1-Year	25	100.0	19	100.0	- 25.6	- 27.5	- 32.9	- 26.5	44.0
3-year	28	89.3	22	77.3	- 8.5	- 9.3	- 11.4	- 8.6	32.1
5-Year	34	64.7	25	68.0	- 1.9	- 2.4	- 3.2	- 2.0	5.9
10-Year	45	35.6	25	56.0	2.4	2.4	1.6	2.3	6.7
15-Year	76	26.3	15	53.3	4.6	3.9	4.1	3.9	10.5

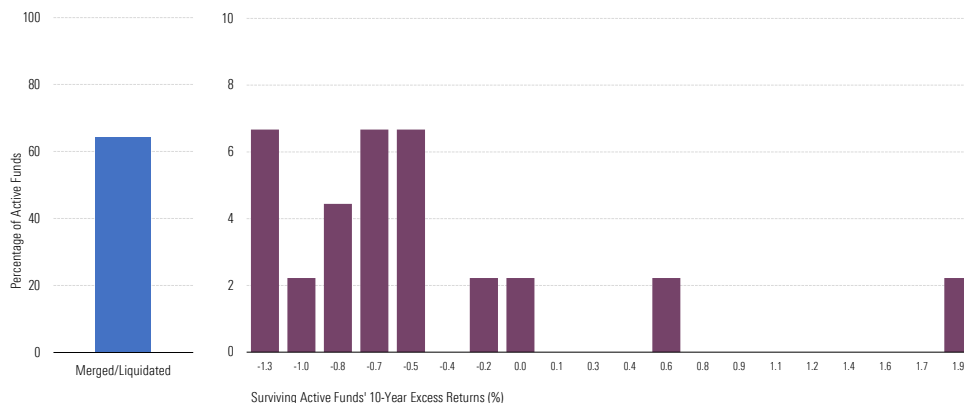
Source: Morningstar Direct. Data as of 31 Dec 2022.

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



Source: Morningstar Direct. Data as of 31 Dec 2022.

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



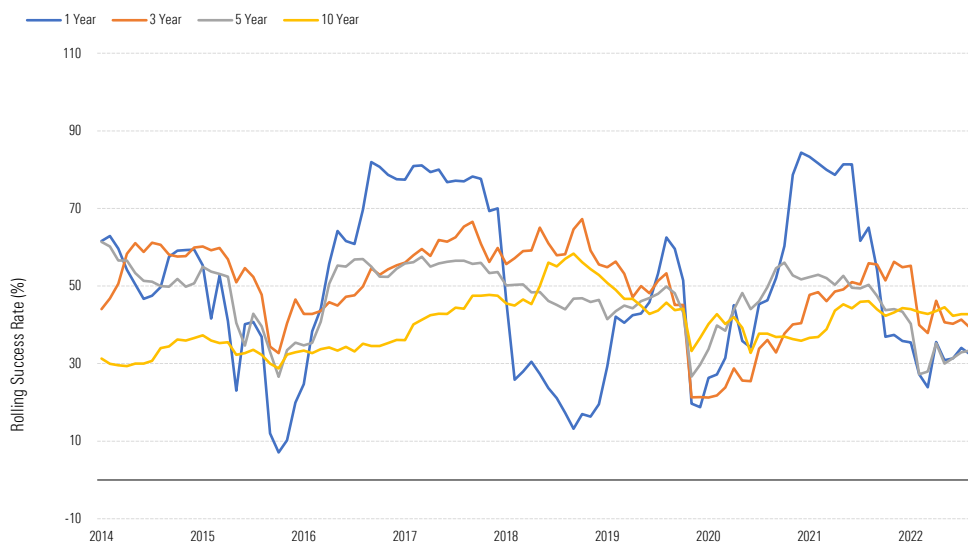
Source: Morningstar Direct. Data as of 31 Dec 2022.

**Exhibit 144 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 (%)	
<b>Trailing Total Return</b>									
1-Year	367	98.1	57	98.2	- 12.5	- 12.0	- 11.9	- 11.9	32.4
3-year	354	89.8	56	85.7	- 3.7	- 3.8	- 3.8	- 3.8	39.3
5-Year	324	78.7	58	69.0	- 1.5	- 1.5	- 1.7	- 1.5	33.3
10-Year	351	59.0	49	61.2	0.9	0.6	0.6	0.5	42.7
15-Year	194	49.5	7	71.4	2.1	2.2	1.9	1.9	37.1
20-Year	114	52.6	3	66.7	2.3	1.9	2.3	2.2	37.7

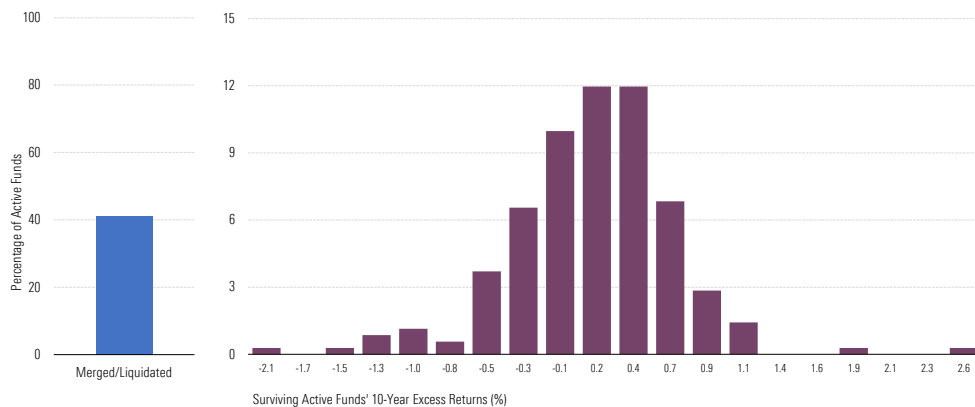
Source: Morningstar Direct. Data as of 31 Dec 2022.

**Exhibit 145 Rolling Success Rates for Surviving Active EUR Corporate Bond Funds (%)**



Source: Morningstar Direct. Data as of 31 Dec 2022.

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



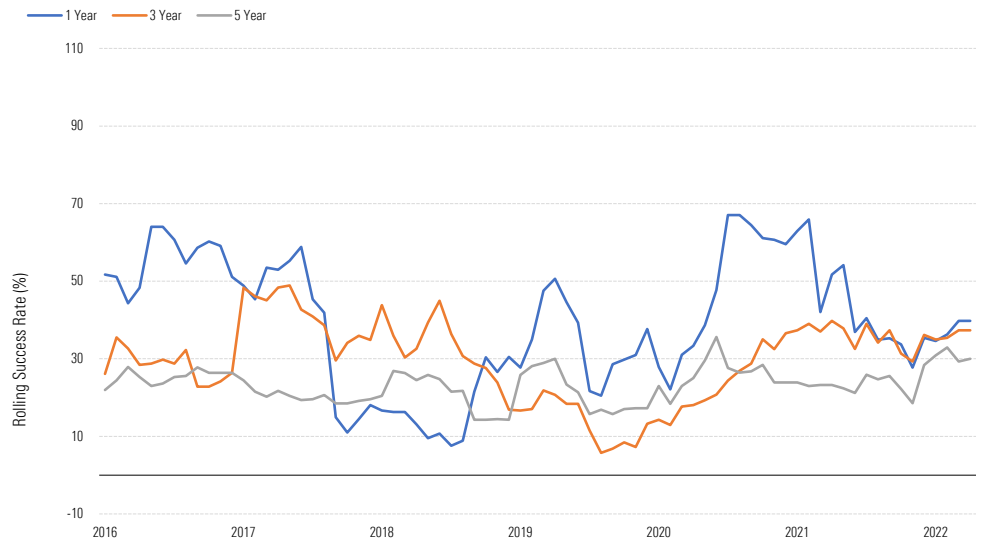
Source: Morningstar Direct. Data as of 31 Dec 2022.

**Exhibit 147** 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 (%)	
<b>Trailing Total Return</b>									
1-Year	78	96.2	11	100.0	- 3.8	- 5.0	- 4.4	- 4.0	39.7
3-year	83	83.1	10	100.0	- 1.2	- 1.6	- 1.5	- 1.4	37.3
5-Year	80	73.8	7	85.7	- 0.7	- 0.8	- 0.9	- 0.8	30.0
10-Year	90	60.0	3	66.7	0.3	0.4	0.2	0.2	25.6

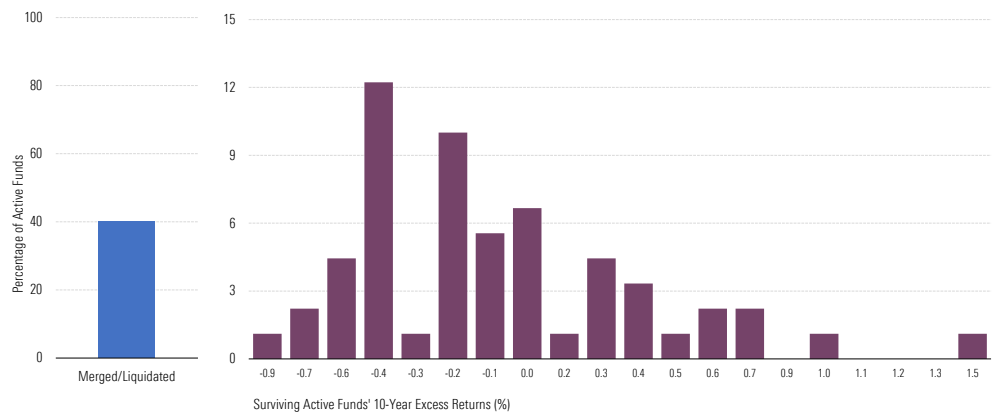
Source: Morningstar Direct. Data as of 31 Dec 2022.

**Exhibit 148** Rolling Success Rates for Surviving Active EUR Corporate Bond—Short-Term Funds (%)



Source: Morningstar Direct. Data as of 31 Dec 2022.

**Exhibit 149** Mortality and Distribution of 10-Year Annualized Excess Returns for EUR Corporate Bond - Short-Term Funds (%)



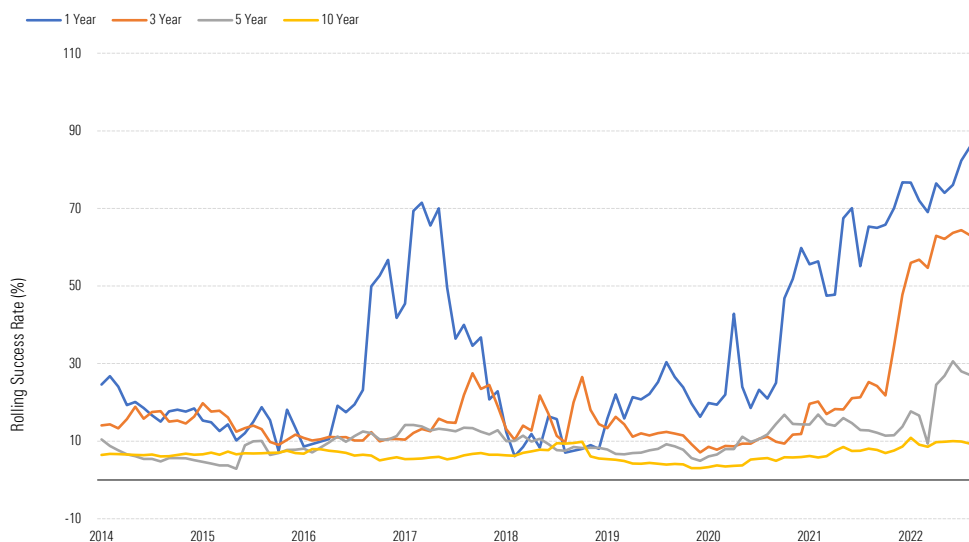
Source: Morningstar Direct. Data as of 31 Dec 2022.

**Exhibit 150** 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 (%)	
<b>Trailing Total Return</b>									
1-Year	516	97.9	11	100.0	-12.1	-14.0	-11.0	-14.9	85.9
3-year	542	86.5	10	90.0	-4.0	-4.5	-3.7	-4.7	63.1
5-Year	591	75.0	7	85.7	-1.8	-1.6	-1.7	-1.5	27.1
10-Year	768	51.7	4	75.0	0.4	0.9	0.3	0.9	9.4
15-Year	932	31.8	10	40.0	1.7	2.5	1.6	2.5	5.4
20-Year	917	27.0	12	8.3	2.0	2.6	1.9	2.6	5.9

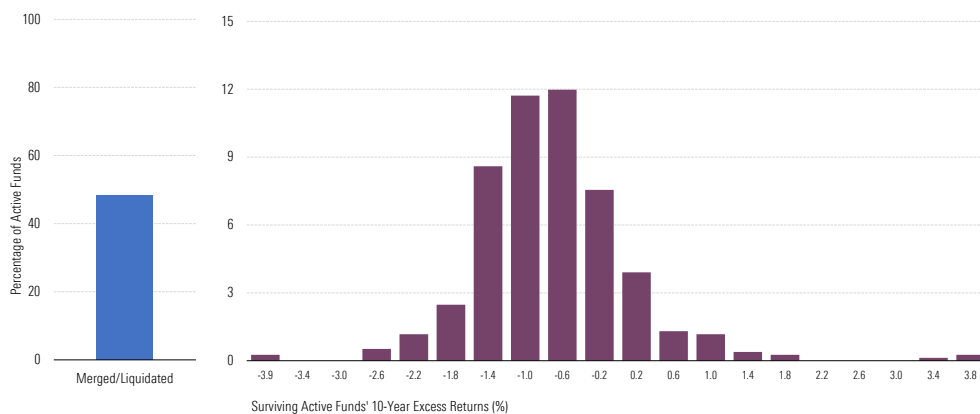
Source: Morningstar Direct. Data as of 31 Dec 2022.

**Exhibit 151** Rolling Success Rates for Surviving Active EUR Diversified Bond Funds (%)



Source: Morningstar Direct. Data as of 31 Dec 2022.

**Exhibit 152** Mortality and Distribution of 10-Year Annualized Excess Returns for EUR Diversified Bond Funds (%)



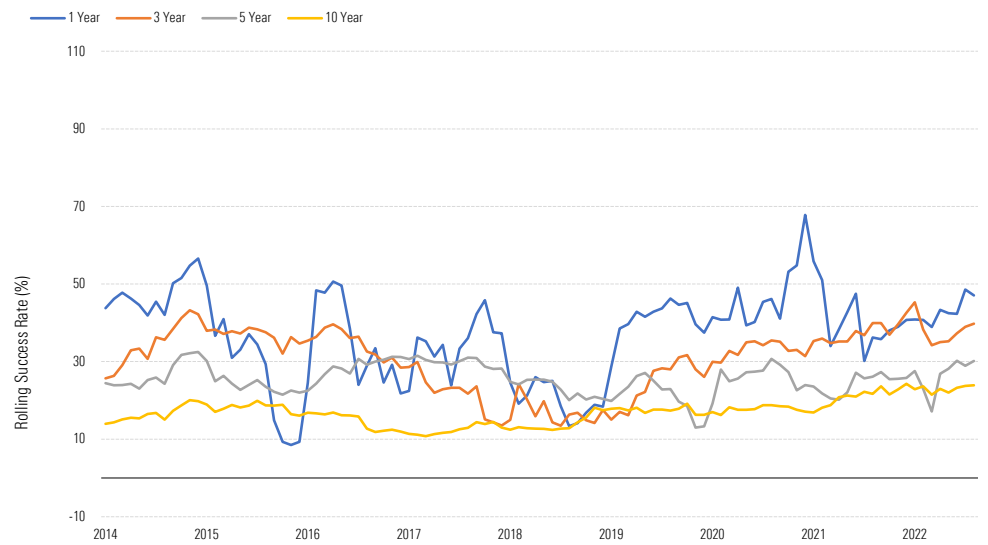
Source: Morningstar Direct. Data as of 31 Dec 2022.

**Exhibit 153** 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 (%)	
<b>Trailing Total Return</b>									
1-Year	170	97.1	99	100.0	- 11.6	- 13.6	- 12.1	- 13.5	47.1
3-year	191	82.7	106	88.7	- 3.9	- 4.5	- 4.2	- 4.5	39.8
5-Year	209	66.0	112	75.9	- 1.5	- 1.6	- 1.8	- 1.6	30.1
10-Year	268	43.7	111	55.0	0.8	0.8	0.4	0.7	23.9
15-Year	337	30.9	38	55.3	2.2	2.5	1.8	2.5	8.6
20-Year	286	25.5	5	40.0	2.2	2.5	2.0	2.5	5.9

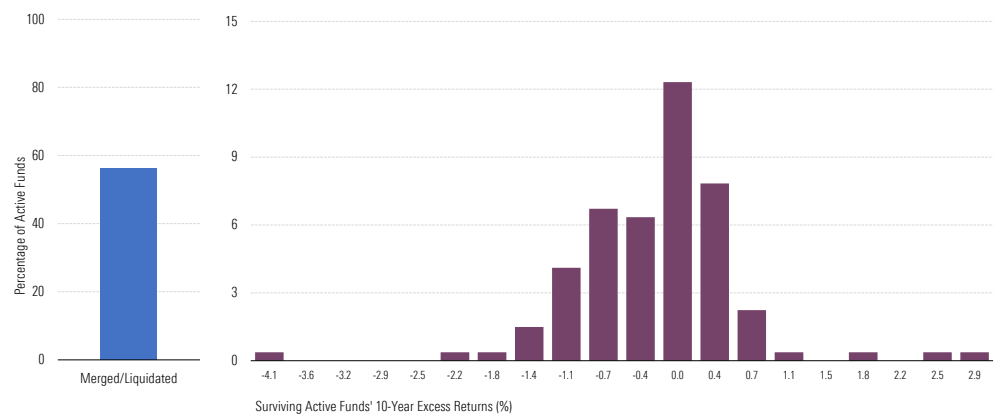
Source: Morningstar Direct. Data as of 31 Dec 2022.

**Exhibit 154** Rolling Success Rates for Surviving Active EUR Government Bond Funds (%)



Source: Morningstar Direct. Data as of 31 Dec 2022.

**Exhibit 155** Mortality and Distribution of 10-Year Annualized Excess Returns for EUR Government Bond Funds (%)



Source: Morningstar Direct. Data as of 31 Dec 2022.

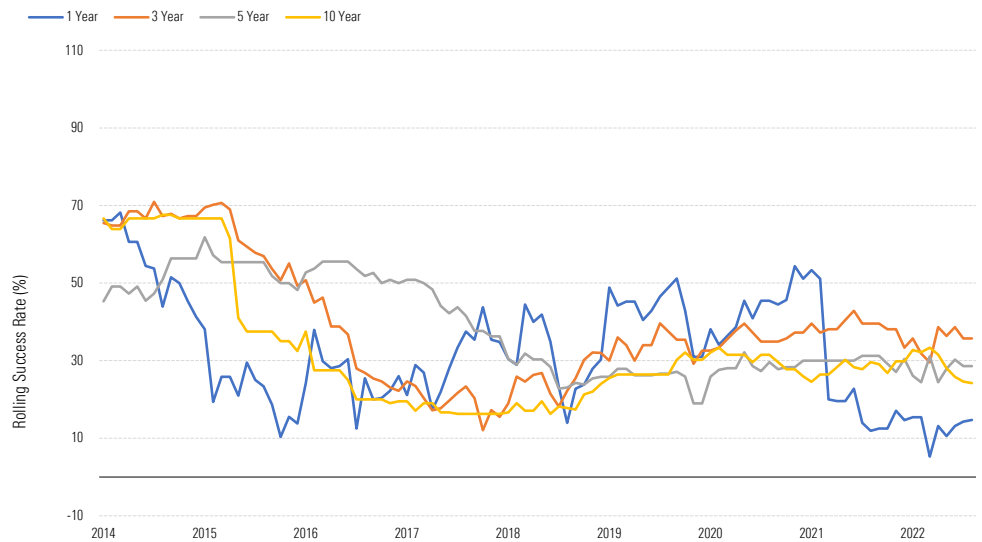


**Exhibit 156** EUR Government Bond—Short Term

	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 (%)	
<b>Trailing Total Return</b>									
1-Year	34	100.0	18	100.0	- 10.9	- 3.9	- 8.2	- 2.7	14.7
3-year	42	76.2	22	77.3	- 3.9	- 1.7	- 2.4	- 1.8	35.7
5-Year	42	69.0	22	68.2	- 0.6	- 1.0	- 1.3	- 1.2	28.6
10-Year	62	40.3	24	54.2	- 0.2	- 0.3	- 0.2	- 0.4	24.2
15-Year	39	30.8	7	71.4	0.6	0.9	0.7	0.8	7.7

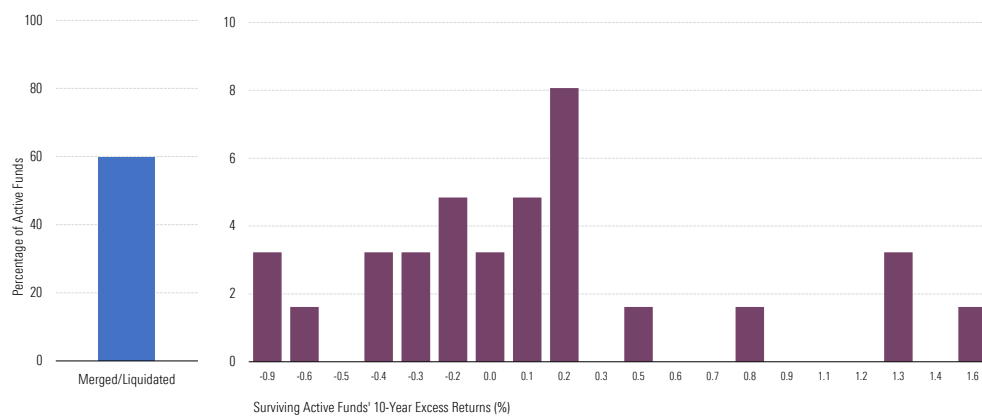
Source: Morningstar Direct. Data as of 31 Dec 2022.

**Exhibit 157** Rolling Success Rates for Surviving Active EUR Government Bond—Short-Term Funds (%)



Source: Morningstar Direct. Data as of 31 Dec 2022.

**Exhibit 158** Mortality and Distribution of 10-Year Annualized Excess Returns for EUR Government Bond—Short-Term Funds (%)



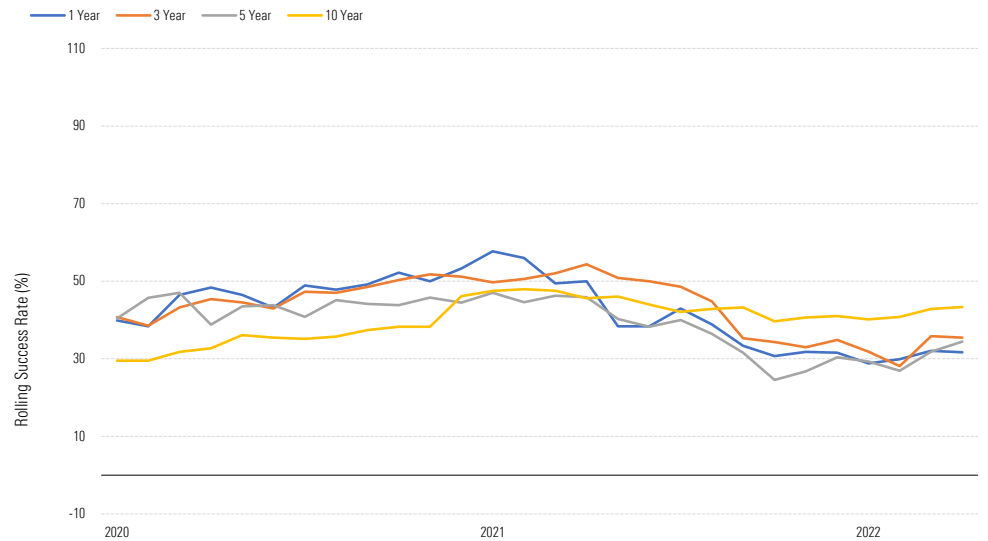
Source: Morningstar Direct. Data as of 31 Dec 2022.

**Exhibit 159** 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 (%)	
<b>Trailing Total Return</b>									
1-Year	177	98.9	11	100.0	- 9.7	- 9.5	- 9.8	- 8.9	31.6
3-year	172	89.0	11	90.9	- 1.9	- 2.0	- 2.1	- 1.8	35.5
5-Year	154	83.1	12	75.0	- 0.2	- 0.1	- 0.6	- 0.1	34.4
10-Year	127	70.1	4	75.0	2.4	2.3	2.1	2.2	43.3

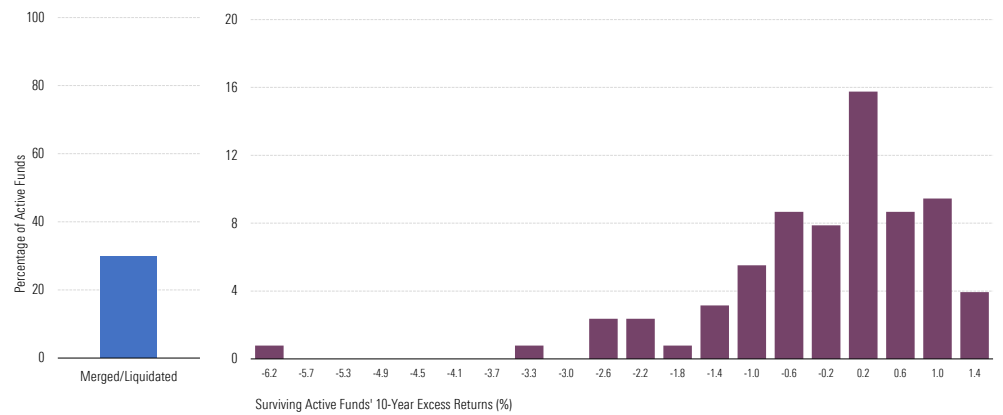
Source: Morningstar Direct. Data as of 31 Dec 2022.

**Exhibit 160** Rolling Success Rates for Surviving Active EUR High Yield Bond Funds (%)



Source: Morningstar Direct. Data as of 31 Dec 2022.

**Exhibit 161** Mortality and Distribution of 10-Year Annualized Excess Returns for EUR High Yield Bond Funds (%)



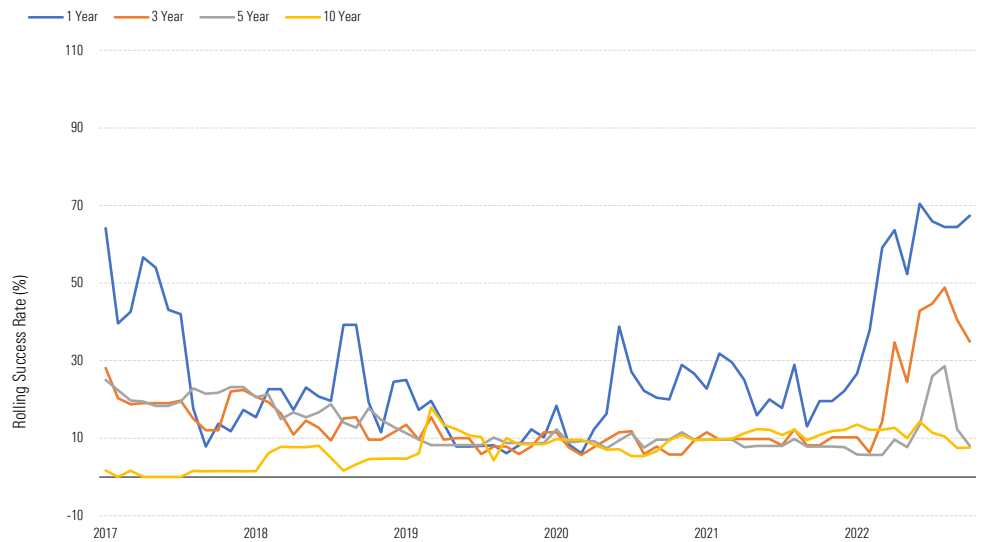
Source: Morningstar Direct. Data as of 31 Dec 2022.

**Exhibit 162 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 (%)	
<b>Trailing Total Return</b>									
1-Year	46	95.7	13	100.0	- 4.5	- 5.0	- 2.5	- 4.9	67.4
3-year	43	88.4	14	92.9	1.0	1.3	1.1	1.2	34.9
5-Year	50	70.0	15	80.0	1.0	1.7	1.0	1.6	8.0
10-Year	66	48.5	18	55.6	1.2	1.8	1.3	1.8	7.6
15-Year	62	30.6	4	50.0	2.0	3.1	2.3	3.1	1.6

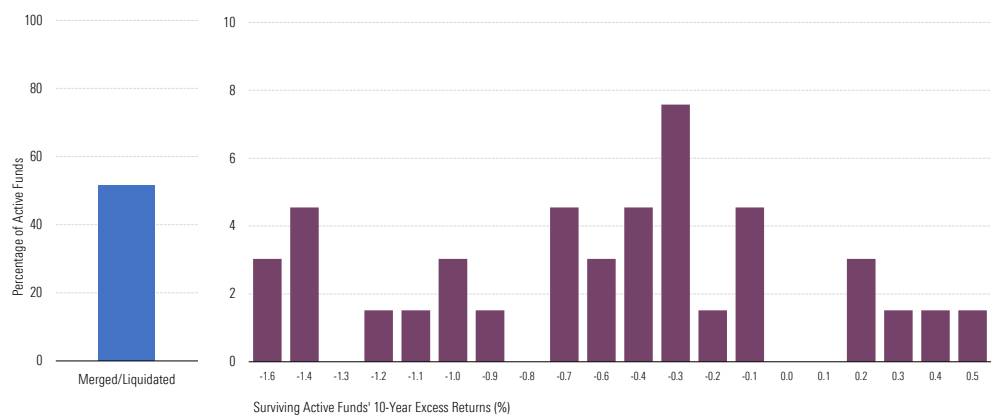
Source: Morningstar Direct. Data as of 31 Dec 2022.

**Exhibit 163 Rolling Success Rates for Surviving Active EUR Inflation-Linked Bond Funds (%)**



Source: Morningstar Direct. Data as of 31 Dec 2022.

**Exhibit 164 Mortality and Distribution of 10-Year Annualized Excess Returns for EUR Inflation-Linked Bond Funds (%)**



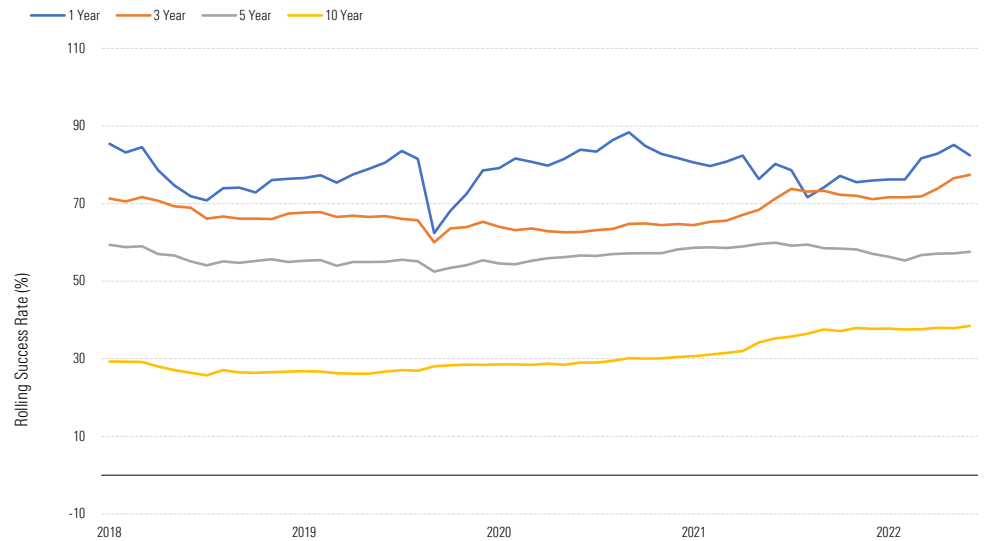
Source: Morningstar Direct. Data as of 31 Dec 2022.

**Exhibit 165** 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 (%)	
<b>Trailing Total Return</b>									
1-Year	182	98.4	3	100.0	-0.2	1.1	-0.6	0.9	82.4
3-year	195	90.8	3	100.0	-0.4	0.9	-0.5	0.8	77.4
5-Year	264	65.2	3	100.0	-0.3	0.9	-0.5	0.8	57.6
10-Year	390	41.0	4	75.0	-0.2	0.6	-0.2	0.6	38.5

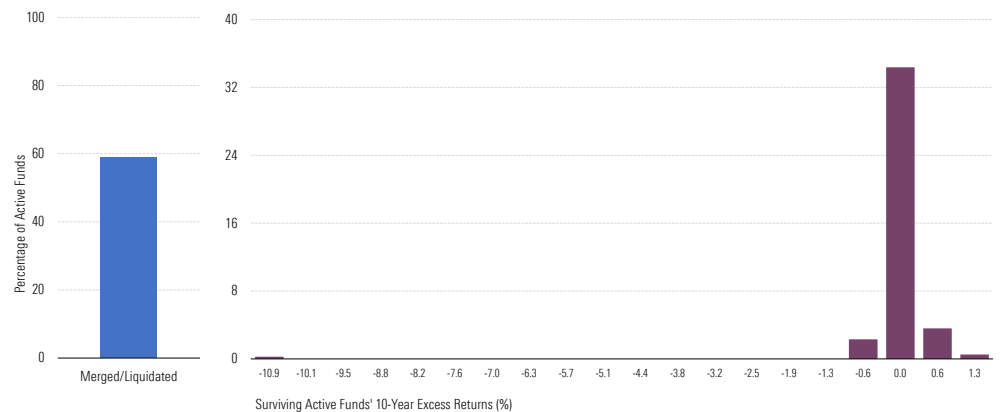
Source: Morningstar Direct. Data as of 31 Dec 2022.

**Exhibit 166** Rolling Success Rates for Surviving Active EUR Money Market Funds (%)



Source: Morningstar Direct. Data as of 31 Dec 2022.

**Exhibit 167** Mortality and Distribution of 10-Year Annualized Excess Returns for EUR Money Market Funds (%)



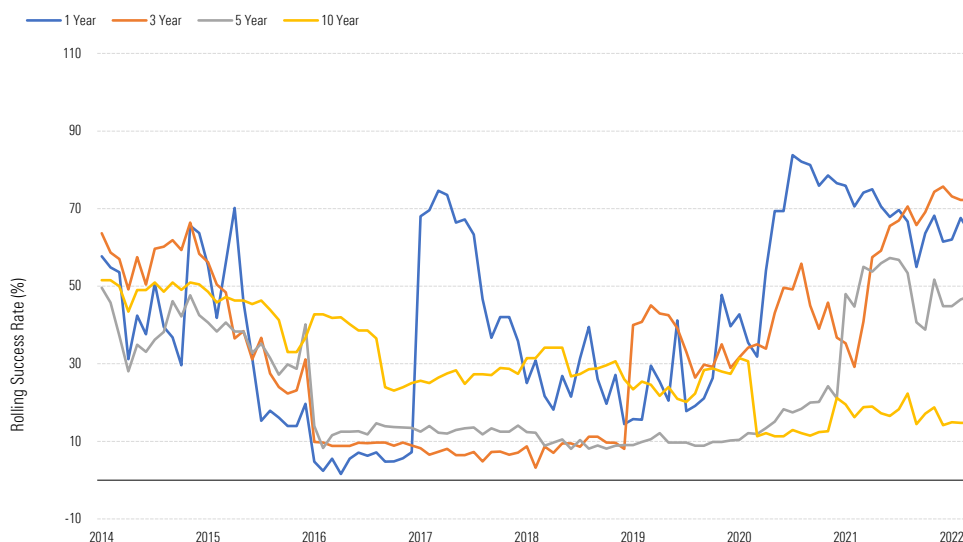
Source: Morningstar Direct. Data as of 31 Dec 2022.

**Exhibit 168** 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 (%)	
<b>Trailing Total Return</b>									
1-Year	108	99.1	23	100.0	-16.4	16.3	-17.4	17.0	63.9
3-year	108	94.4	17	100.0	-4.0	4.4	-4.3	4.9	72.2
5-Year	116	81.0	13	100.0	-1.0	1.2	-1.2	1.2	47.4
10-Year	115	64.3	12	83.3	2.3	2.2	2.2	2.6	14.8

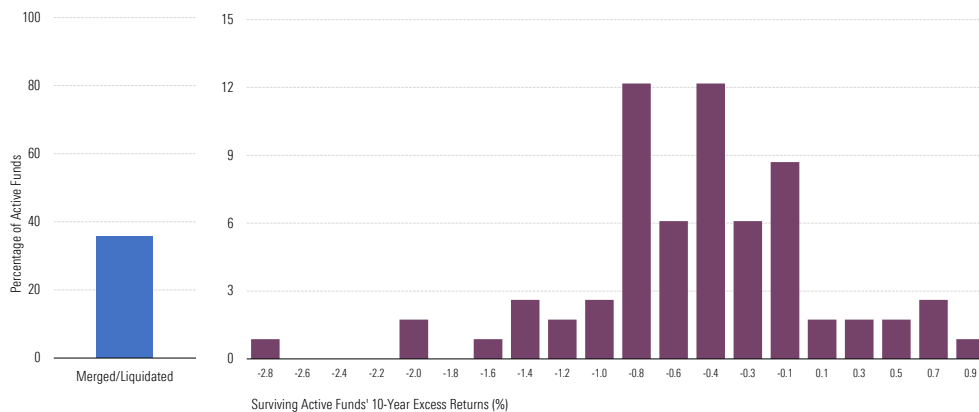
Source: Morningstar Direct. Data as of 31 Dec 2022.

**Exhibit 169** Rolling Success Rates for Surviving Active GBP Corporate Bond Funds (%)



Source: Morningstar Direct. Data as of 31 Dec 2022.

**Exhibit 170** Mortality and Distribution of 10-Year Annualized Excess Returns for GBP Corporate Bond Funds (%)



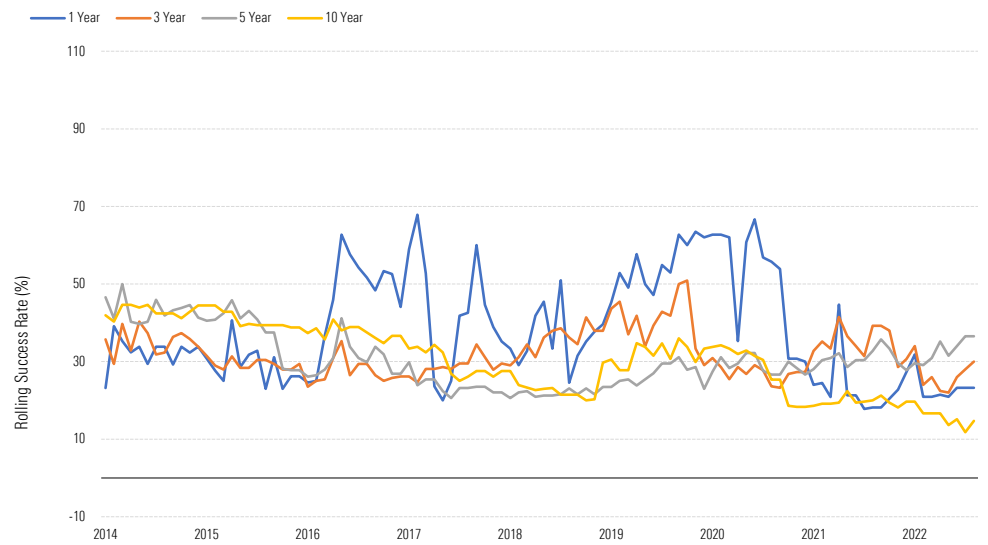
Source: Morningstar Direct. Data as of 31 Dec 2022.

**Exhibit 171** 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 (%)	
<b>Trailing Total Return</b>									
1-Year	43	97.7	30	100.0	-14.8	18.0	-20.4	18.8	23.3
3-year	50	82.0	26	100.0	-4.6	5.8	-6.3	6.3	30.0
5-Year	52	69.2	22	100.0	-1.5	2.7	-2.6	2.8	36.5
10-Year	68	44.1	23	69.6	1.4	0.4	0.7	0.6	14.7
15-Year	68	35.3	12	50.0	2.6	2.7	2.6	2.5	20.6
20-Year	58	27.6	6	33.3	2.6	2.3	2.8	2.3	24.1

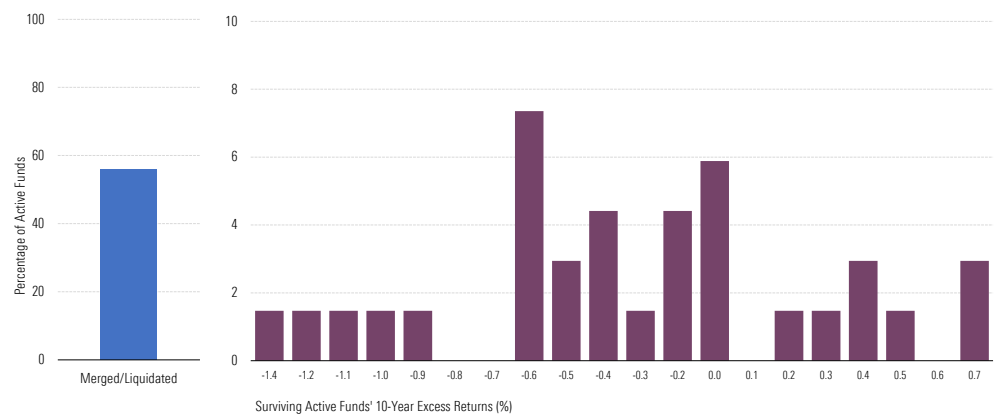
Source: Morningstar Direct. Data as of 31 Dec 2022.

**Exhibit 172** Rolling Success Rates for Surviving Active GBP Government Bond Funds (%)



Source: Morningstar Direct. Data as of 31 Dec 2022.

**Exhibit 173** Mortality and Distribution of 10-Year Annualized Excess Returns for GBP Government Bond Funds (%)



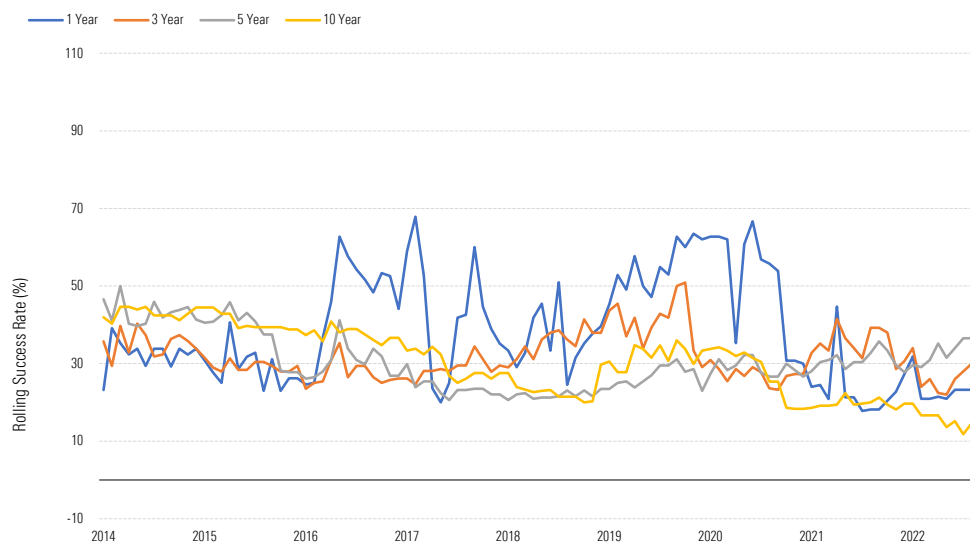
Source: Morningstar Direct. Data as of 31 Dec 2022.

**Exhibit 174** 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 (%)	
<b>Trailing Total Return</b>									
1-Year	43	97.7	30	100.0	-14.8	18.0	-20.4	18.8	23.3
3-year	50	82.0	26	100.0	-4.6	5.8	-6.3	6.3	30.0
5-Year	52	69.2	22	100.0	-1.5	2.7	-2.6	2.8	36.5
10-Year	68	44.1	23	69.6	1.4	0.4	0.7	0.6	14.7
15-Year	68	35.3	12	50.0	2.6	2.7	2.6	2.5	20.6
20-Year	58	27.6	6	33.3	2.6	2.3	2.8	2.3	24.1

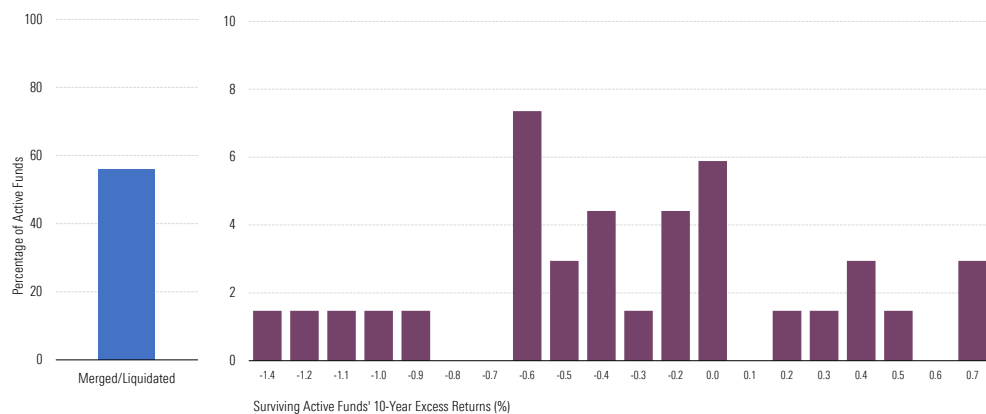
Source: Morningstar Direct. Data as of 31 Dec 2022.

**Exhibit 175** Rolling Success Rates for Surviving Active GBP Government Bond Funds (%)



Source: Morningstar Direct. Data as of 31 Dec 2022.

**Exhibit 176** Mortality and Distribution of 10-Year Annualized Excess Returns for GBP Government Bond Funds (%)



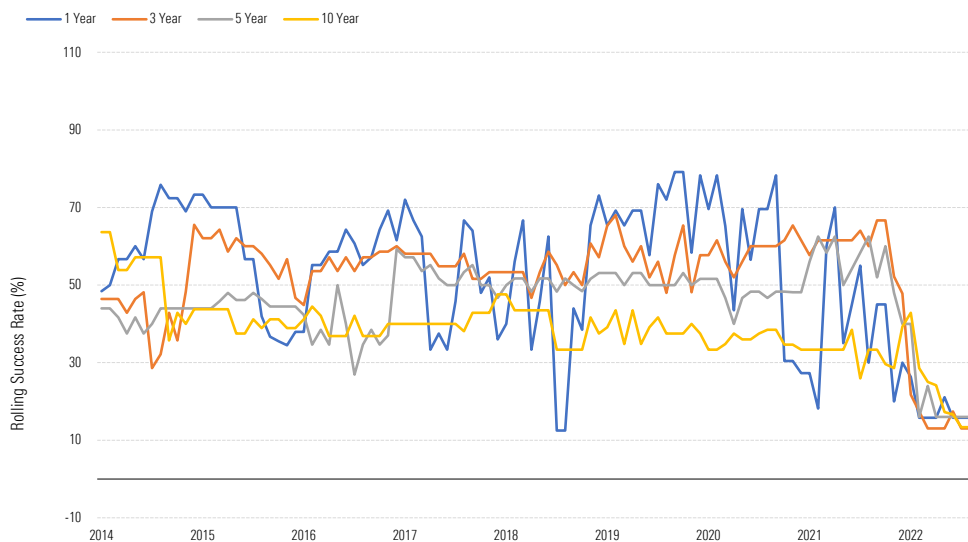
Source: Morningstar Direct. Data as of 31 Dec 2022.

**Exhibit 177** GBP 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 (%)	
<b>Trailing Total Return</b>									
1-Year	19	100.0	8	100.0	- 23.9	- 31.3	- 30.1	- 27.8	15.8
3-year	23	82.6	8	100.0	- 4.5	- 7.3	- 6.5	- 6.0	13.0
5-Year	25	72.0	9	77.8	- 1.8	- 3.4	- 3.0	- 2.7	16.0
10-Year	30	50.0	13	53.8	2.9	2.3	2.4	2.5	13.3
15-Year	21	47.6	9	33.3	3.9	4.2	4.0	4.2	23.8

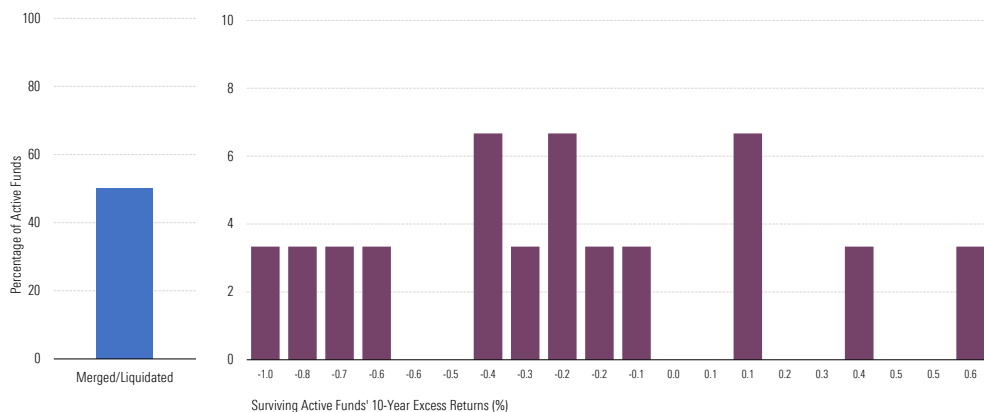
Source: Morningstar Direct. Data as of 31 Dec 2022.

**Exhibit 178** Rolling Success Rates for Surviving Active GBP Inflation-Linked Bond Funds (%)



Source: Morningstar Direct. Data as of 31 Dec 2022.

**Exhibit 179** Mortality and Distribution of 10-Year Annualized Excess Returns for GBP Inflation-Linked Bond Funds (%)



Source: Morningstar Direct. Data as of 31 Dec 2022.

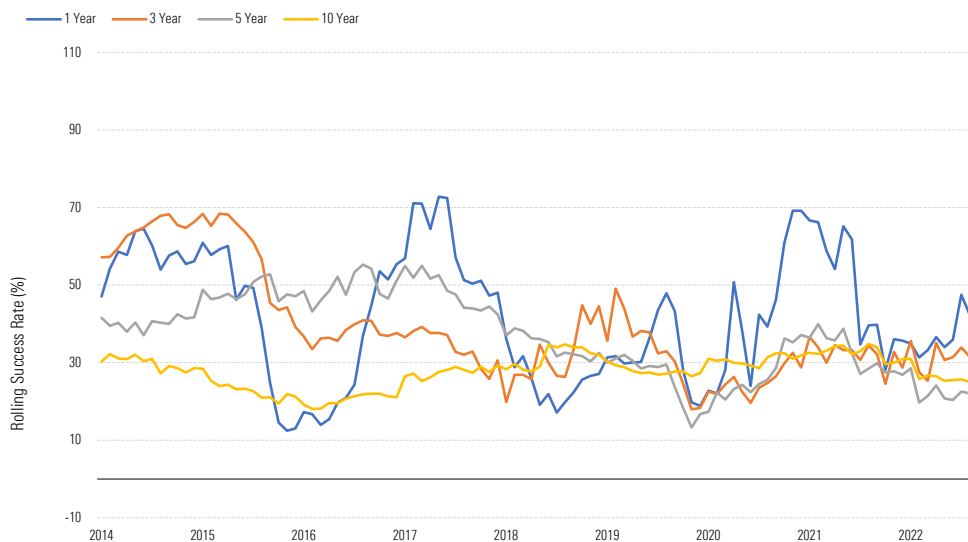


**Exhibit 180 Global Bond**

	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 (%)	
<b>Trailing Total Return</b>									
1-Year	258	97.3	36	100.0	- 18.2	- 17.8	- 17.2	- 17.4	42.2
3-year	254	84.6	32	96.9	- 5.7	- 5.3	- 6.0	- 5.2	31.5
5-Year	263	74.1	28	85.7	- 3.4	- 2.1	- 3.2	- 2.3	22.1
10-Year	256	56.3	24	62.5	- 1.7	- 1.2	- 1.8	- 1.5	25.0
15-Year	200	52.5	10	60.0	0.8	1.1	0.4	0.8	19.0

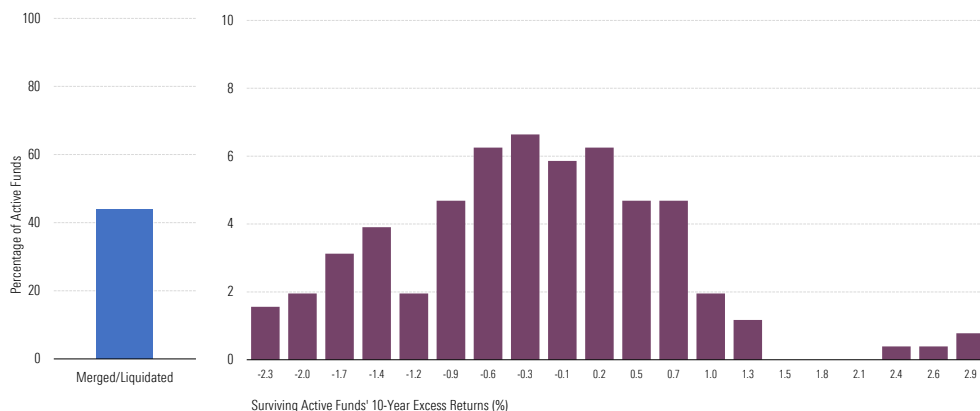
Source: Morningstar Direct. Data as of 31 Dec 2022.

**Exhibit 181 Rolling Success Rates for Surviving Active Global Bond Funds (%)**



Source: Morningstar Direct. Data as of 31 Dec 2022.

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



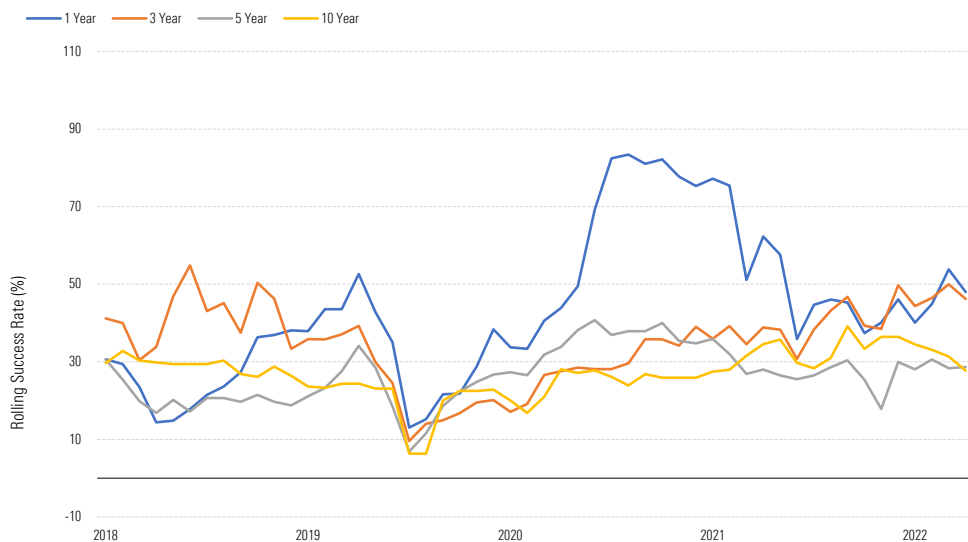
Source: Morningstar Direct. Data as of 31 Dec 2022.

**Exhibit 183 Global Bond—EUR Hedged**

	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 (%)	
<b>Trailing Total Return</b>									
1-Year	200	99.5	26	100.0	- 12.5	- 11.9	- 12.3	- 12.2	48.0
3-year	171	92.4	22	100.0	- 3.8	- 3.7	- 3.7	- 3.7	46.2
5-Year	157	78.3	16	81.3	- 2.0	- 1.7	- 2.0	- 1.6	28.7
10-Year	119	57.1	4	50.0	0.0	0.1	- 0.4	- 0.2	27.7

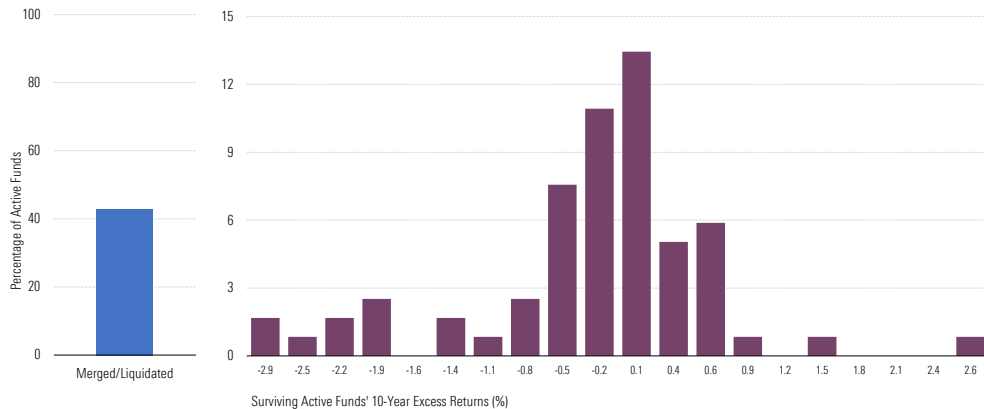
Source: Morningstar Direct. Data as of 31 Dec 2022.

**Exhibit 184 Rolling Success Rates for Surviving Active Global Bond - EUR Hedged Funds (%)**



Source: Morningstar Direct. Data as of 31 Dec 2022.

**Exhibit 185 Mortality and Distribution of 10-Year Annualized Excess Returns for Global Bond - EUR Hedged Funds (%)**



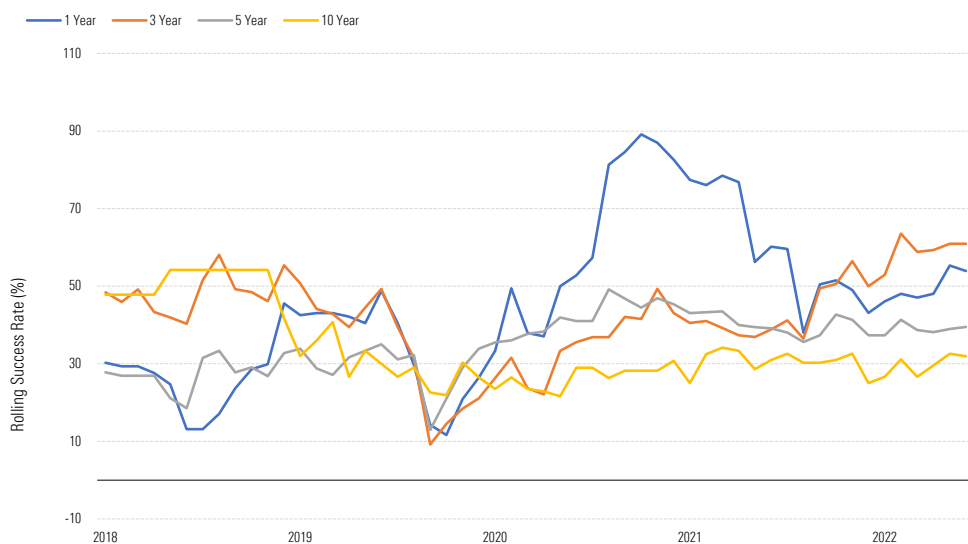
Source: Morningstar Direct. Data as of 31 Dec 2022.

**Exhibit 186 Global Bond—GBP Hedged**

	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 (%)	
<b>Trailing Total Return</b>									
1-Year	102	100.0	22	100.0	- 9.1	- 11.5	- 10.0	- 11.1	53.9
3-year	87	88.5	18	100.0	- 2.5	- 3.0	- 2.4	- 3.1	60.9
5-Year	76	78.9	11	81.8	- 0.7	- 0.7	- 0.6	- 0.7	39.5
10-Year	47	59.6	4	75.0	0.6	1.0	0.9	0.9	31.9

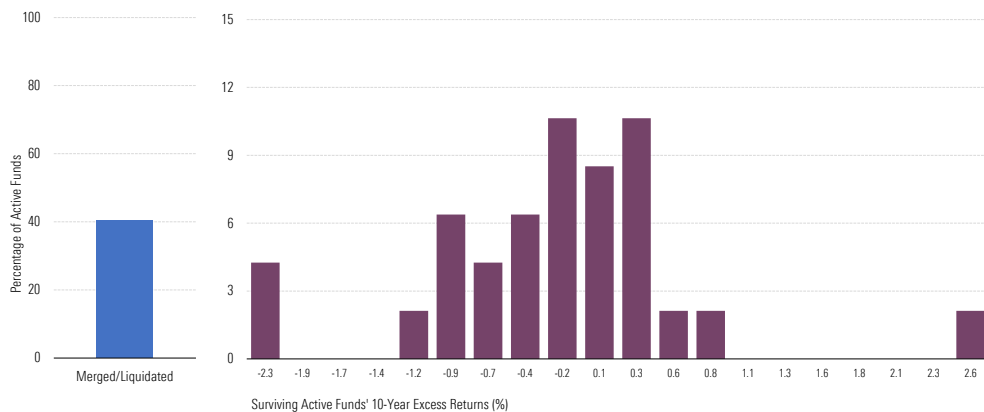
Source: Morningstar Direct. Data as of 31 Dec 2022.

**Exhibit 187 Rolling Success Rates for Surviving Active Global Bond - GBP Hedged Funds (%)**



Source: Morningstar Direct. Data as of 31 Dec 2022.

**Exhibit 188 Mortality and Distribution of 10-Year Annualized Excess Returns for Global Bond - GBP Hedged Funds (%)**



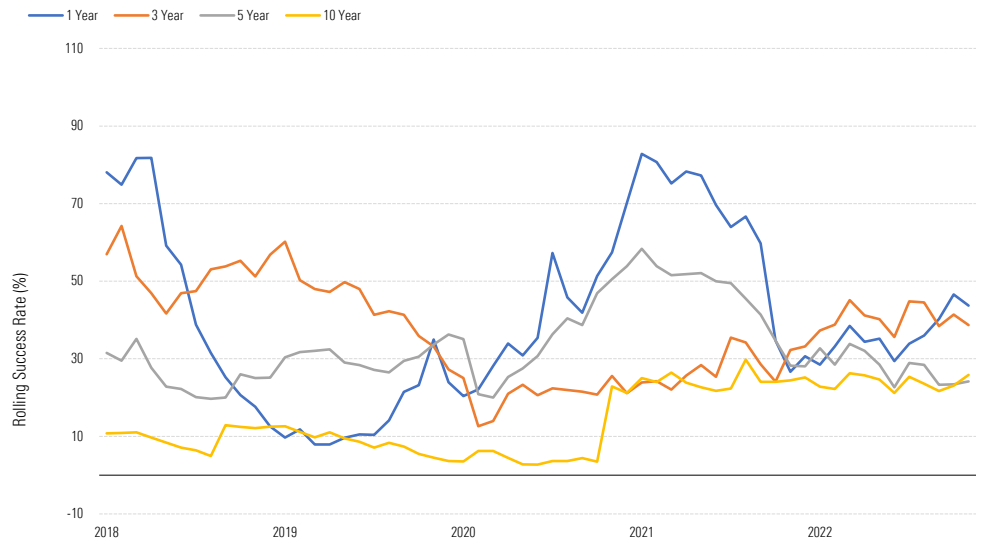
Source: Morningstar Direct. Data as of 31 Dec 2022.

**Exhibit 189 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 (%)	
<b>Trailing Total Return</b>									
1-Year	254	98.0	25	100.0	-17.5	17.8	-16.7	16.7	43.7
3-year	217	93.5	23	100.0	-6.0	5.5	-5.6	5.2	38.7
5-Year	211	80.6	17	88.2	-3.1	1.5	-2.6	1.5	24.2
10-Year	147	62.6	7	57.1	-0.5	1.0	-0.7	0.2	25.9

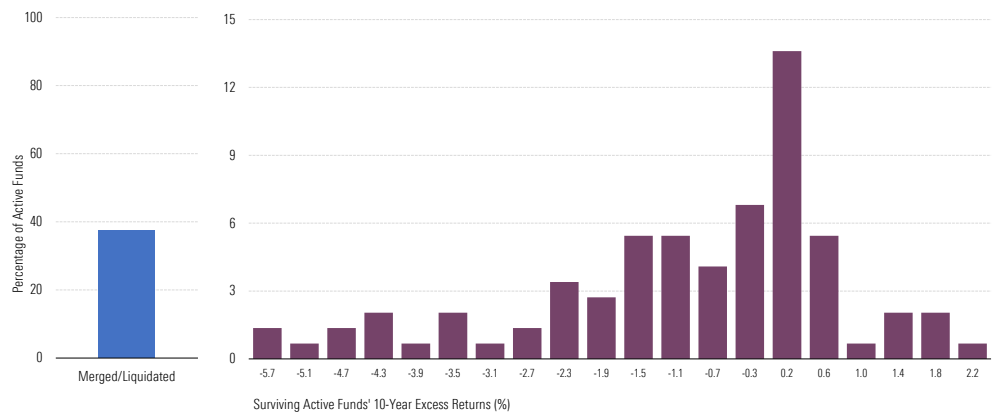
Source: Morningstar Direct. Data as of 31 Dec 2022.

**Exhibit 190 Rolling Success Rates for Surviving Active Global Emerging Markets Bond Funds (%)**



Source: Morningstar Direct. Data as of 31 Dec 2022.

**Exhibit 191 Mortality and Distribution of 10-Year Annualized Excess Returns for Global Emerging Markets Bond Funds (%)**



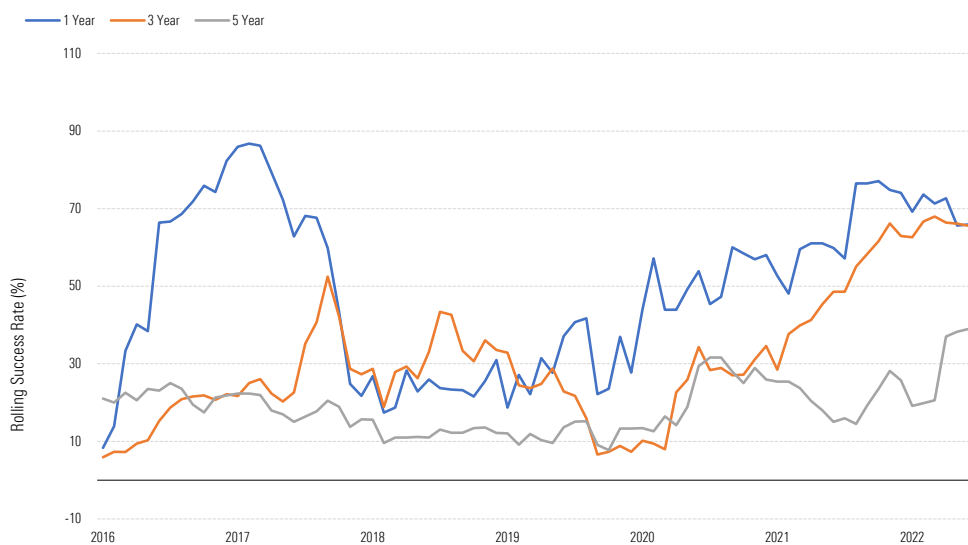
Source: Morningstar Direct. Data as of 31 Dec 2022.

**Exhibit 192 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 (%)	
<b>Trailing Total Return</b>									
1-Year	129	99.2	12	100.0	- 11.8	- 13.3	- 11.9	- 13.0	65.9
3-year	125	96.0	12	100.0	- 5.9	- 7.1	- 6.2	- 6.9	65.6
5-Year	131	80.9	7	85.7	- 3.0	- 3.5	- 3.4	- 3.2	38.9
10-Year	119	52.9	5	80.0	- 2.7	- 2.5	- 3.0	- 1.8	5.0

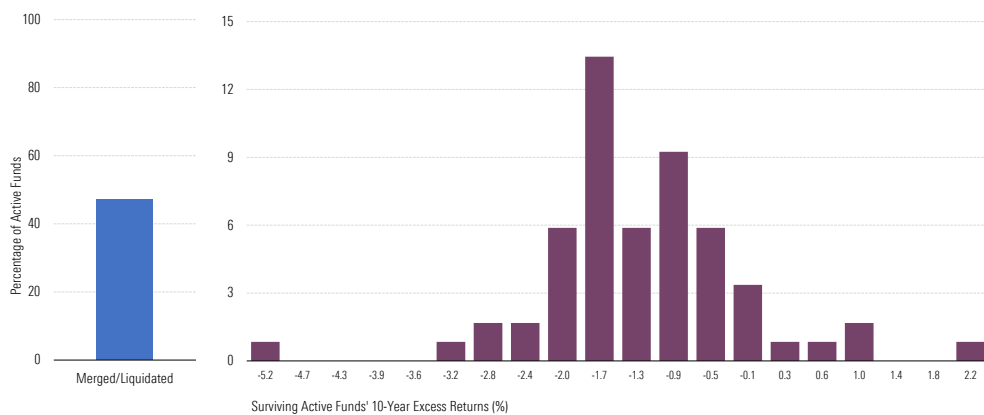
Source: Morningstar Direct. Data as of 31 Dec 2022.

**Exhibit 193 Rolling Success Rates for Surviving Active Global Emerging Markets Bond—Local Currency Funds (%)**



Source: Morningstar Direct. Data as of 31 Dec 2022.

**Exhibit 194 Mortality and Distribution of 10-Year Annualized Excess Returns for Global Emerging Markets Bond—Local Currency Funds (%)**



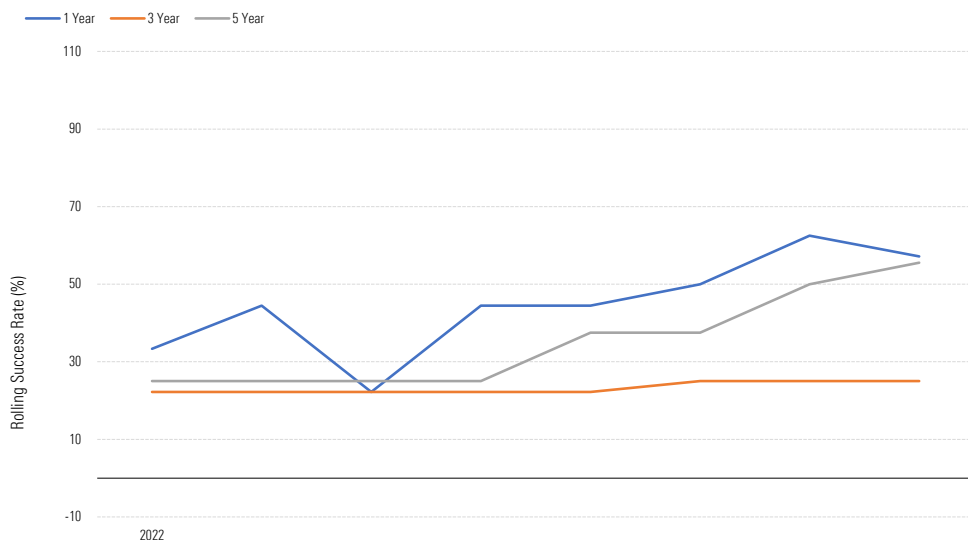
Source: Morningstar Direct. Data as of 31 Dec 2022.

**Exhibit 195 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 (%)	
<b>Trailing Total Return</b>									
1-Year	129	99.2	12	100.0	- 11.8	- 13.3	- 11.9	- 13.0	65.9
3-year	125	96.0	12	100.0	- 5.9	- 7.1	- 6.2	- 6.9	65.6
5-Year	131	80.9	7	85.7	- 3.0	- 3.5	- 3.4	- 3.2	38.9
10-Year	119	52.9	5	80.0	- 2.7	- 2.5	- 3.0	- 1.8	5.0

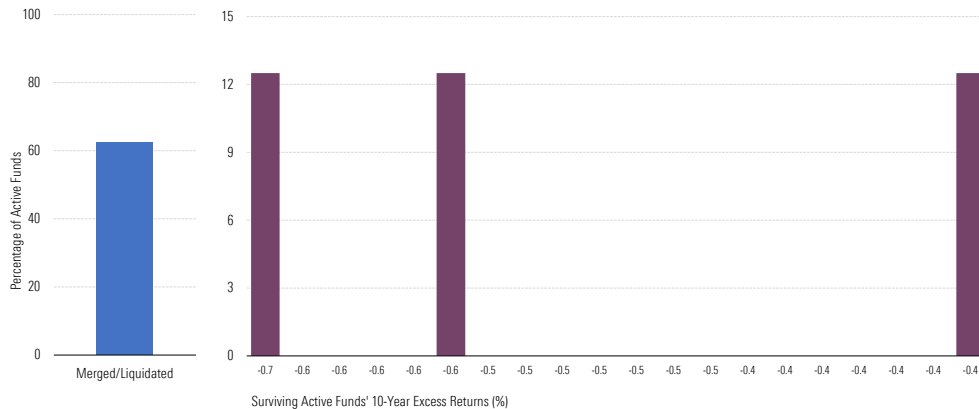
Source: Morningstar Direct. Data as of 31 Dec 2022.

**Exhibit 196 Rolling Success Rates for Surviving Active Global Inflation-Linked Bond Funds (%)**



Source: Morningstar Direct. Data as of 31 Dec 2022.

**Exhibit 197 Mortality and Distribution of 10-Year Annualized Excess Returns for Global Inflation-Linked Bond Funds (%)**



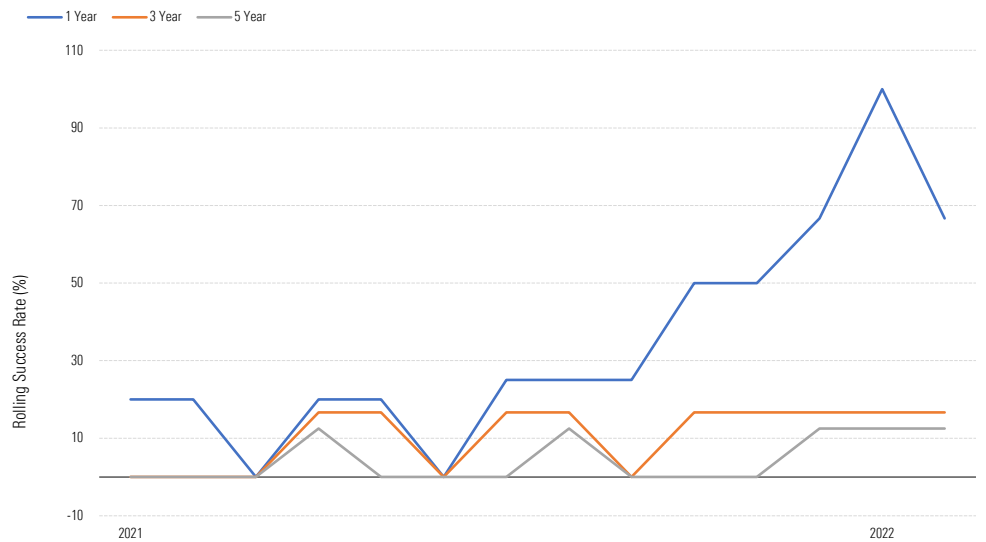
Source: Morningstar Direct. Data as of 31 Dec 2022.

**Exhibit 198 JPY 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 (%)	
<b>Trailing Total Return</b>									
1-Year	3	100.0	8	100.0	- 4.1	- 5.4	- 4.8	- 4.9	66.7
3-year	6	50.0	6	100.0	- 1.8	- 2.3	- 2.1	- 2.3	16.7
5-Year	8	37.5	6	100.0	- 0.7	- 0.8	- 1.0	- 0.8	12.5
10-Year	15	20.0	4	100.0	0.7	0.7	0.4	0.7	6.7
15-Year	26	15.4	4	75.0	4.1	1.1	1.5	1.1	3.8

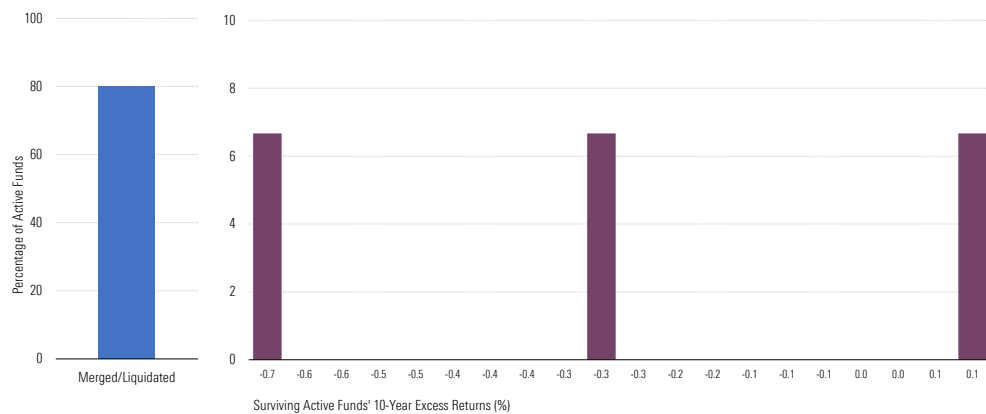
Source: Morningstar Direct. Data as of 31 Dec 2022.

**Exhibit 199 Rolling Success Rates for Surviving Active JPY Bond Funds (%)**



Source: Morningstar Direct. Data as of 31 Dec 2022.

**Exhibit 200 Mortality and Distribution of 10-Year Annualized Excess Returns for JPY Bond Funds (%)**



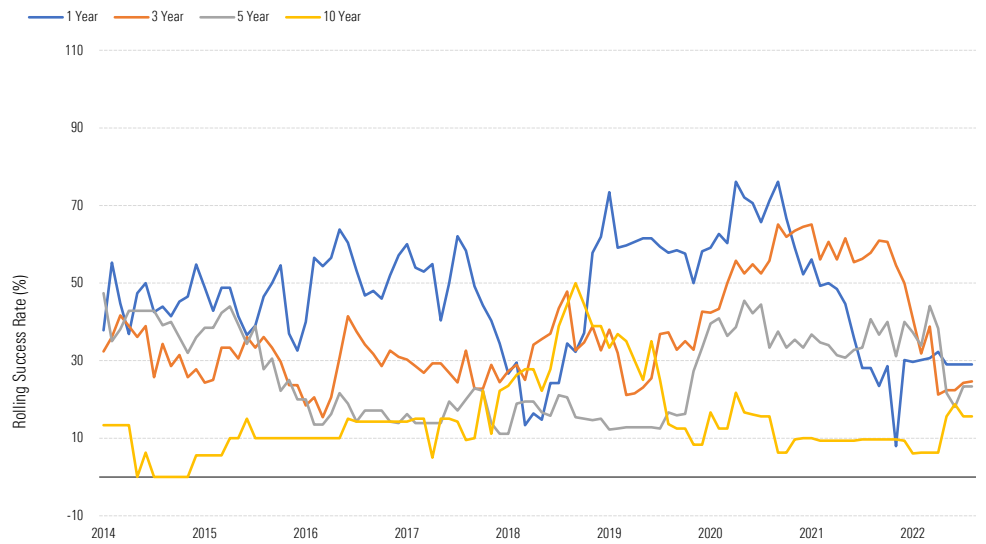
Source: Morningstar Direct. Data as of 31 Dec 2022.

### Exhibit 201 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 (%)	
<b>Trailing Total Return</b>									
1-Year	62	100.0	27	100.0	-13.2	13.2	-14.3	12.9	29.0
3-year	65	90.8	25	84.0	-2.0	1.9	-2.8	2.3	24.6
5-Year	60	76.7	21	81.0	0.8	0.5	0.2	0.5	23.3
10-Year	32	62.5	7	57.1	2.0	1.9	1.3	1.8	15.6
15-Year	20	50.0	5	60.0	4.0	3.6	3.3	3.7	20.0

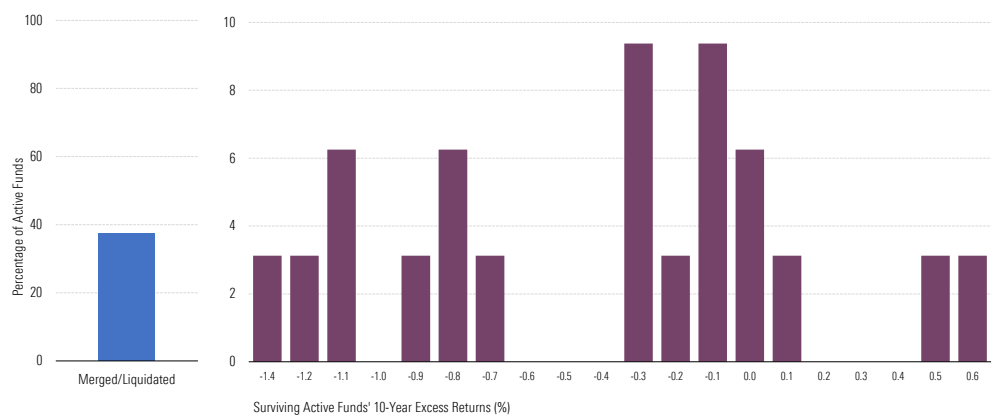
Source: Morningstar Direct. Data as of 31 Dec 2022.

### Exhibit 202 Rolling Success Rates for Surviving Active USD Corporate Bond Funds (%)



Source: Morningstar Direct. Data as of 31 Dec 2022.

### Exhibit 203 Mortality and Distribution of 10-Year Annualized Excess Returns for USD Corporate Bond Funds (%)



Source: Morningstar Direct. Data as of 31 Dec 2022.

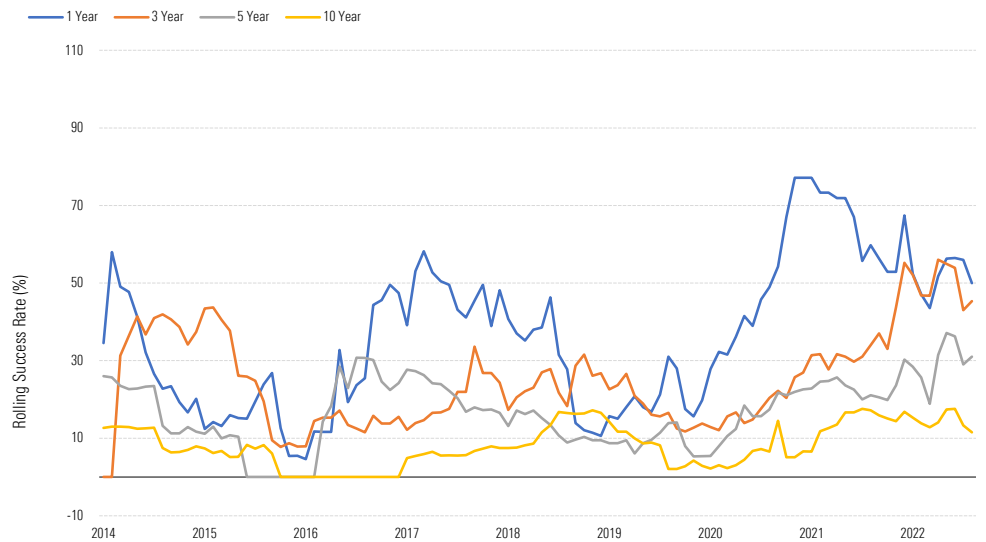


**Exhibit 204 USD Diversified Bond**

	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 (%)	
<b>Trailing Total Return</b>									
1-Year	84	96.4	3	100.0	-12.5	-12.7	-10.4	-12.7	50.0
3-year	86	86.0	3	100.0	-2.7	-2.7	-1.9	-2.8	45.3
5-Year	100	70.0	3	100.0	-0.3	0.0	0.1	0.1	31.0
10-Year	113	52.2	4	75.0	0.7	1.1	0.7	0.9	11.5
15-Year	193	22.3	3	33.3	2.2	2.5	1.7	2.6	4.7

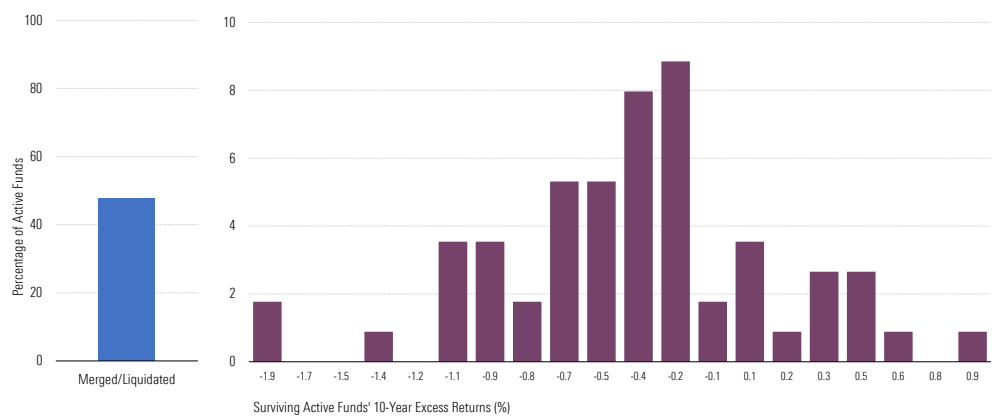
Source: Morningstar Direct. Data as of 31 Dec 2022.

**Exhibit 205 Rolling Success Rates for Surviving Active USD Diversified Bond Funds (%)**



Source: Morningstar Direct. Data as of 31 Dec 2022.

**Exhibit 206 Mortality and Distribution of 10-Year Annualized Excess Returns for USD Diversified Bond Funds (%)**



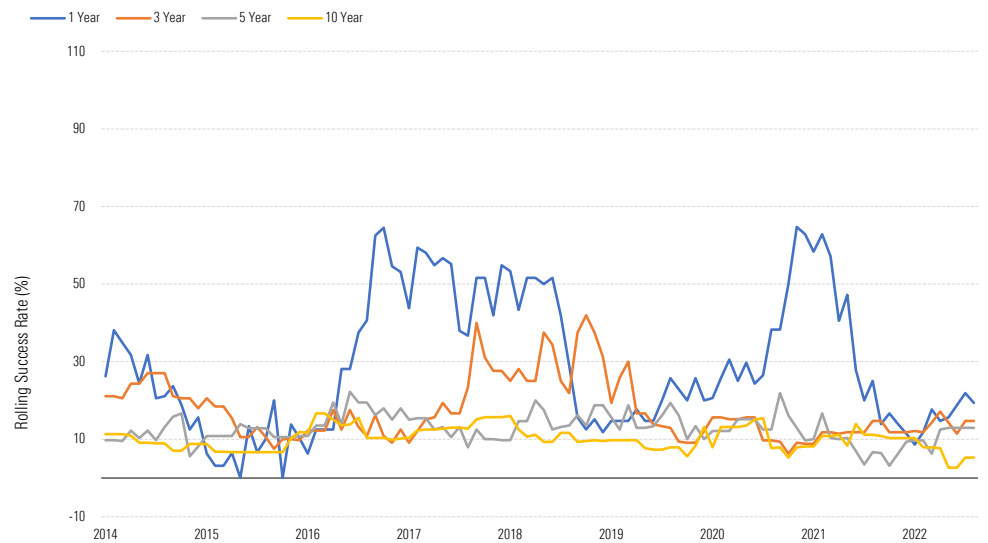
Source: Morningstar Direct. Data as of 31 Dec 2022.

**Exhibit 207 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 (%)	
<b>Trailing Total Return</b>									
1-Year	31	96.8	51	100.0	-12.5	-9.6	-13.0	-9.4	19.4
3-year	34	82.4	46	93.5	-3.3	-2.0	-3.4	-2.0	14.7
5-Year	31	71.0	36	77.8	-1.1	-0.0	-1.1	-0.1	12.9
10-Year	38	47.4	30	66.7	-0.4	0.5	-0.5	0.7	5.3
15-Year	55	30.9	5	60.0	2.0	2.3	1.3	2.0	12.7

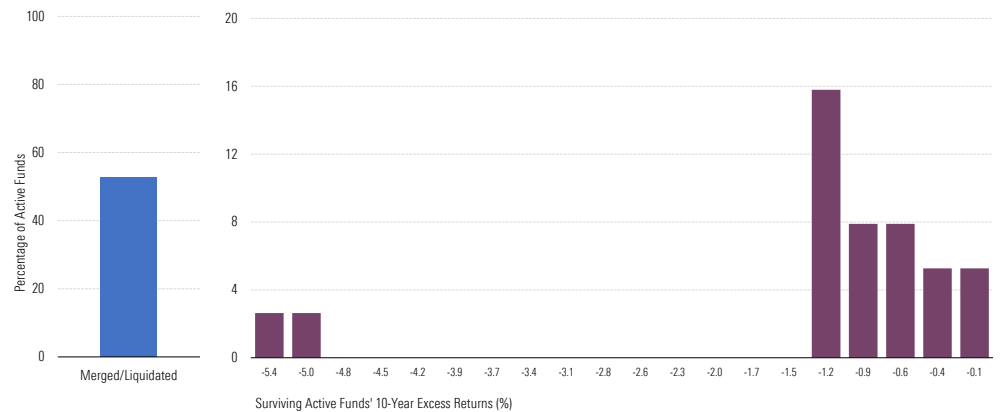
Source: Morningstar Direct. Data as of 31 Dec 2022.

**Exhibit 208 Rolling Success Rates for Surviving Active USD Government Bond Funds (%)**



Source: Morningstar Direct. Data as of 31 Dec 2022.

**Exhibit 209 Mortality and Distribution of 10-Year Annualized Excess Returns for USD Government Bond Funds (%)**



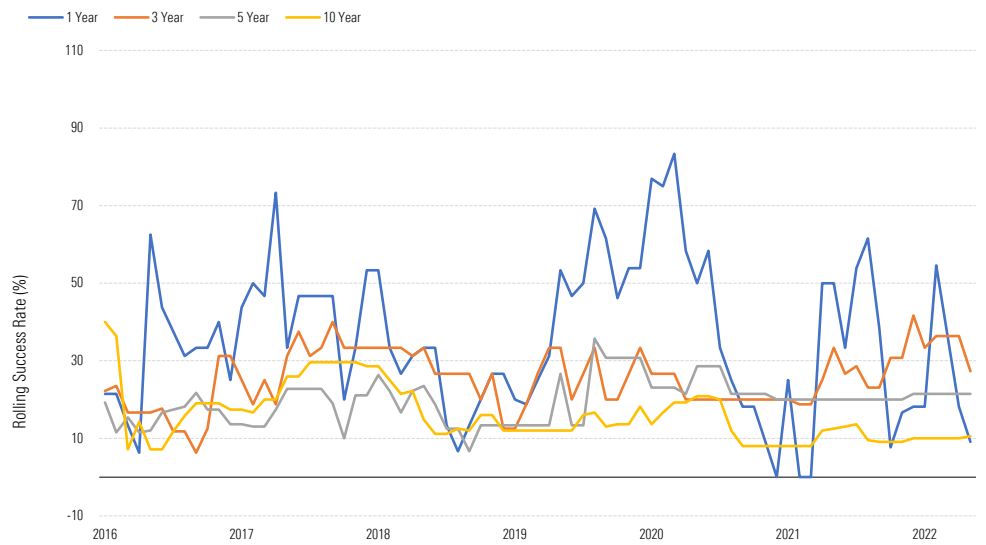
Source: Morningstar Direct. Data as of 31 Dec 2022.

**Exhibit 210 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 (%)	
<b>Trailing Total Return</b>									
1-Year	11	100.0	3	100.0	-18.0	-14.4	-16.9	-15.2	9.1
3-year	11	81.8	3	100.0	-7.9	-6.6	-7.5	-7.0	27.3
5-Year	14	57.1	4	75.0	-1.0	-1.6	-2.1	-2.0	21.4
10-Year	19	36.8	6	33.3	1.2	1.0	0.8	1.5	10.5

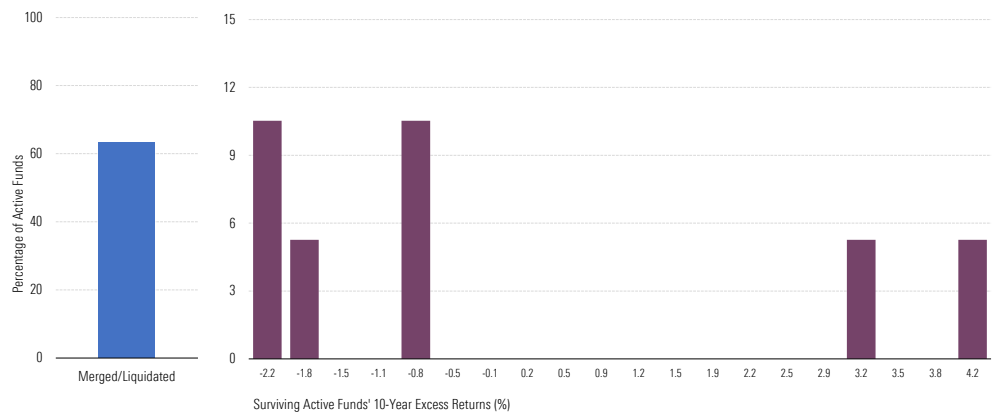
Source: Morningstar Direct. Data as of 31 Dec 2022.

**Exhibit 211 Rolling Success Rates for Surviving Active Property—Indirect Asia Funds (%)**



Source: Morningstar Direct. Data as of 31 Dec 2022.

**Exhibit 212 Mortality and Distribution of 10-Year Annualized Excess Returns for Property—Indirect Asia Funds (%)**



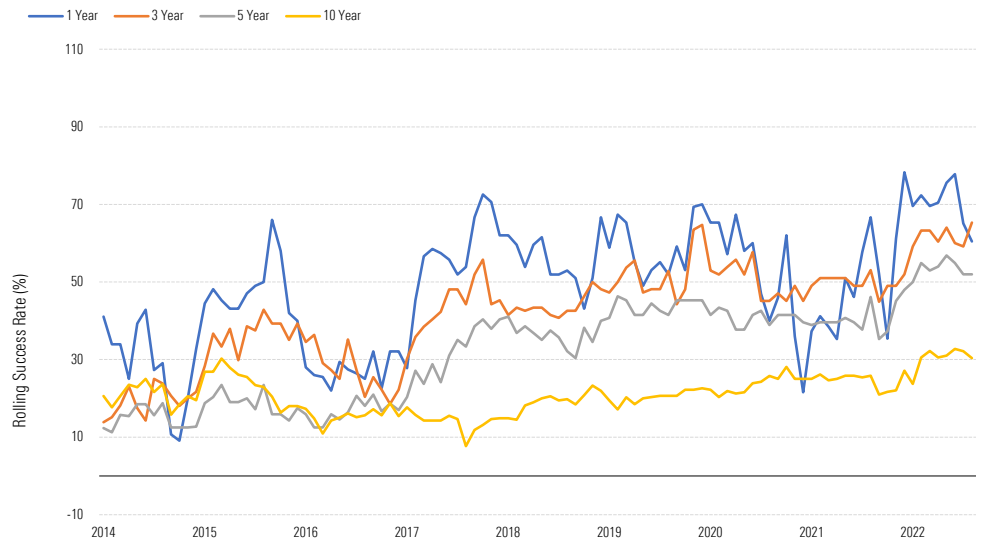
Source: Morningstar Direct. Data as of 31 Dec 2022.

**Exhibit 213 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 (%)	
<b>Trailing Total Return</b>									
1-Year	43	95.3	13	100.0	32.8	37.0	32.0	35.8	60.5
3-year	49	79.6	14	92.9	10.2	13.8	9.9	12.6	65.3
5-Year	50	70.0	16	75.0	2.7	5.5	2.7	4.8	52.0
10-Year	56	51.8	15	53.3	4.2	2.7	3.9	3.0	30.4
15-Year	77	31.2	10	40.0	2.0	2.0	1.4	2.0	11.7
20-Year	28	53.6	4	25.0	5.2	6.3	5.1	6.2	10.7

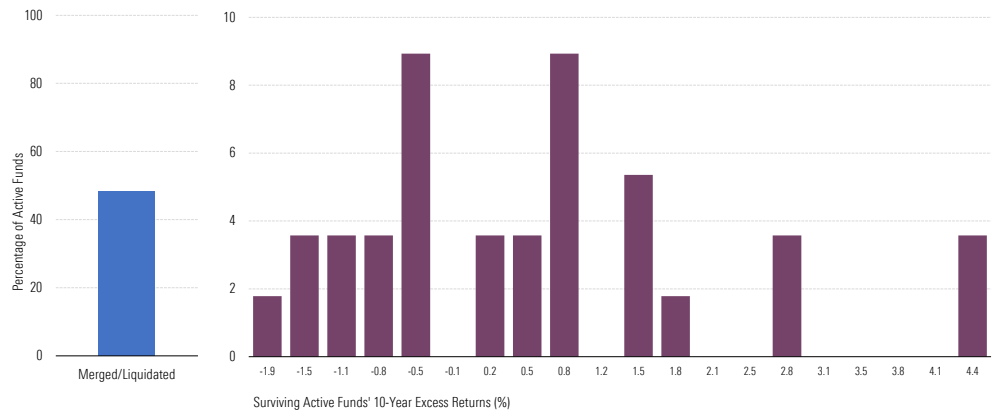
Source: Morningstar Direct. Data as of 31/12/2022.

**Exhibit 214 Rolling Success Rates for Surviving Active Property—Indirect Europe Funds (%)**



Source: Morningstar Direct. Data as of 31 Dec 2022.

**Exhibit 215 Mortality and Distribution of 10-Year Annualized Excess Returns for Property—Indirect Europe Funds (%)**



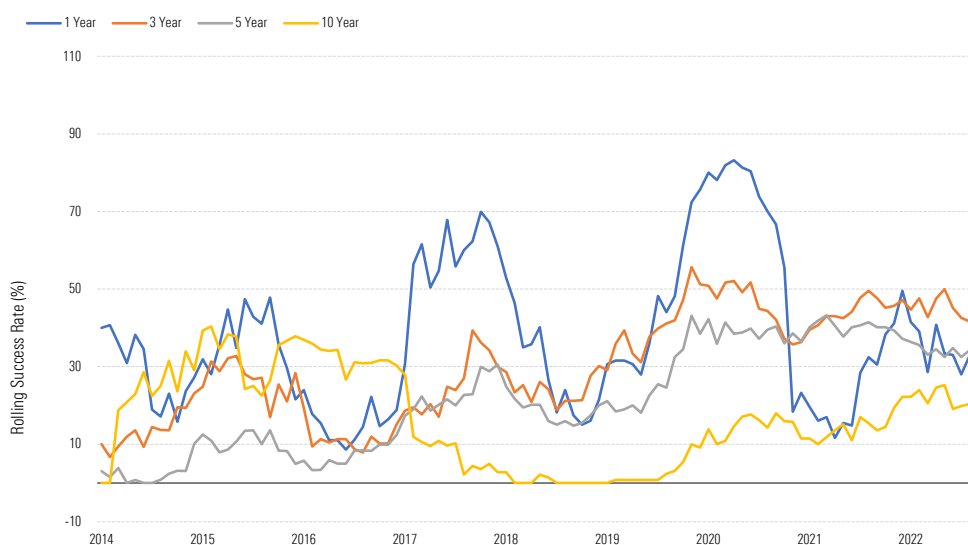
Source: Morningstar Direct. Data as of 31 Dec 2022.

**Exhibit 216** 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 (%)	
<b>Trailing Total Return</b>									
1-Year	100	97.0	18	100.0	-26.4	-23.7	-25.9	-24.6	33.0
3-year	101	86.1	16	100.0	-4.4	-4.3	-4.9	-4.8	41.6
5-Year	111	70.3	16	87.5	-0.2	0.2	-0.9	-0.1	34.2
10-Year	113	52.2	11	72.7	2.5	3.1	1.9	2.7	20.4
15-Year	134	31.3	4	75.0	0.9	3.2	-0.1	1.6	6.7

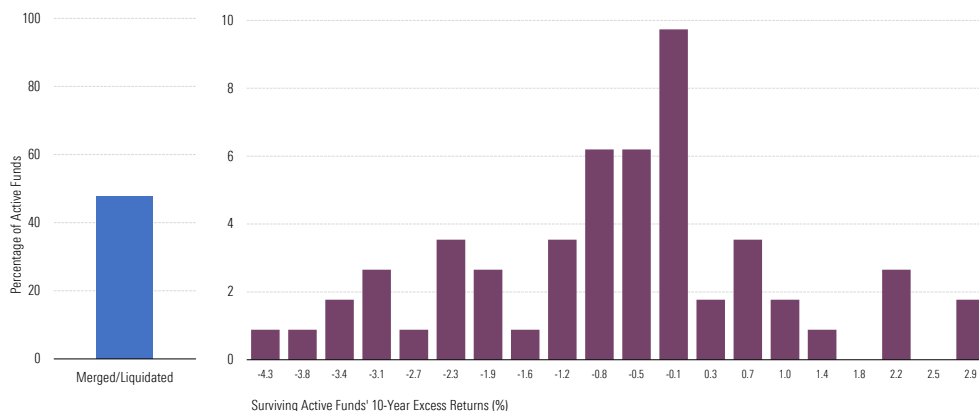
Source: Morningstar Direct. Data as of 31 Dec 2022.

**Exhibit 217** Rolling Success Rates for Surviving Property—Indirect Global Funds (%)



Source: Morningstar Direct. Data as of 31 Dec 2022.

**Exhibit 218** Mortality and Distribution of 10-Year Annualized Excess Returns for Property—Indirect Global Funds (%)



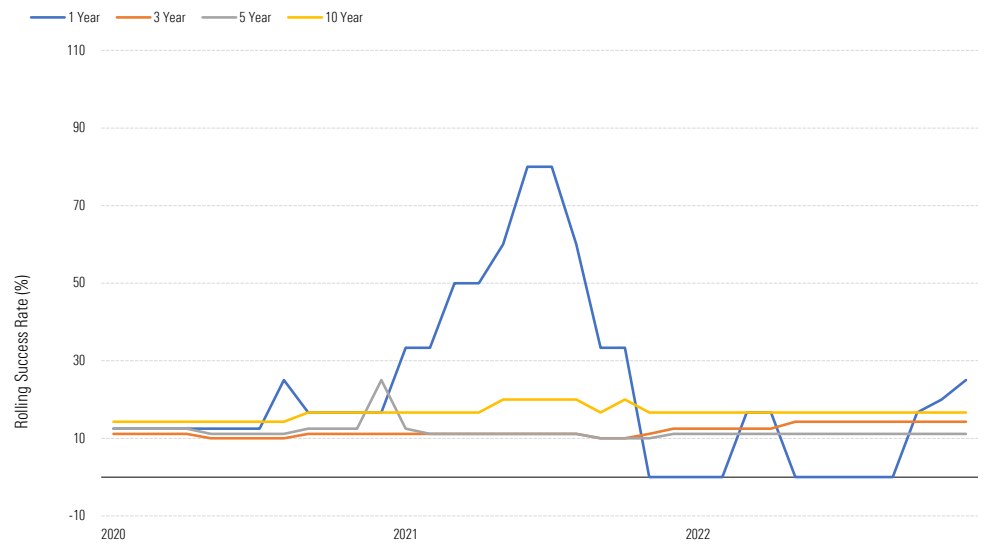
Source: Morningstar Direct. Data as of 31 Dec 2022.

**Exhibit 219** Property—Indirect North America

	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 (%)	
<b>Trailing Total Return</b>									
1-Year	4	100.0	5	100.0	24.6	21.3	24.4	22.6	25.0
3-year	7	42.9	5	80.0	2.2	0.1	1.9	0.1	14.3
5-Year	9	33.3	8	50.0	0.8	3.2	0.9	3.5	11.1
10-Year	6	33.3	5	20.0	3.3	5.5	3.6	5.3	16.7

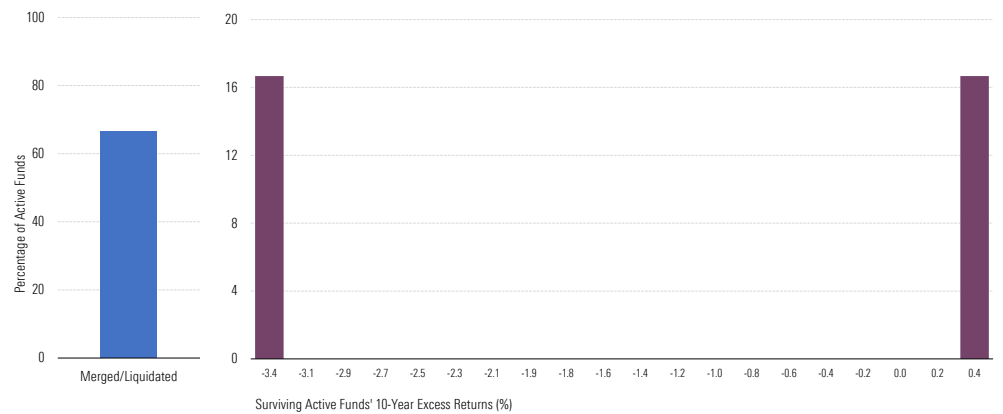
Source: Morningstar Direct. Data as of 31 Dec 2022.

**Exhibit 220** Rolling Success Rates for Surviving Property—Indirect North America Funds (%)



Source: Morningstar Direct. Data as of 31 Dec 2022.

**Exhibit 221** Mortality and Distribution of 10-Year Annualized Excess Returns for Property—Indirect North America Funds (%)



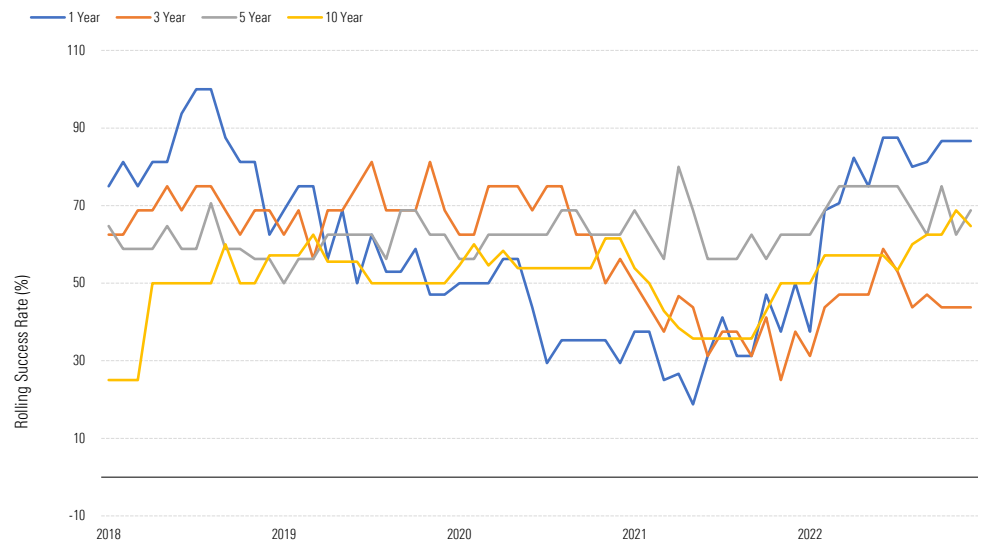
Source: Morningstar Direct. Data as of 31 Dec 2022.

**Exhibit 222 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 (%)	
<b>Trailing Total Return</b>									
1-Year	15	100.0	6	100.0	-14.8	16.5	-14.4	16.5	86.7
3-year	16	93.8	6	100.0	0.1	0.2	0.7	0.7	43.8
5-Year	16	93.8	6	100.0	3.0	2.5	2.4	2.4	68.8
10-Year	17	88.2	6	100.0	4.5	4.2	4.1	4.0	64.7

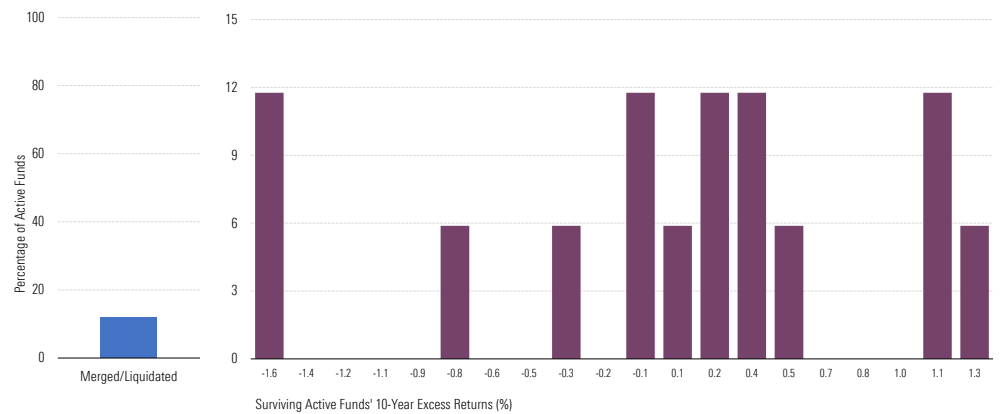
Source: Morningstar Direct. Data as of 31 Dec 2022.

**Exhibit 223 Rolling Success Rates for Surviving Property—Indirect Switzerland Funds (%)**



Source: Morningstar Direct. Data as of 31 Dec 2022.

**Exhibit 224 Mortality and Distribution of 10-Year Annualized Excess Returns for Property—Indirect Switzerland Funds (%)**



Source: Morningstar Direct. Data as of 31 Dec 2022.

## Appendix — Morningstar Categories Base Currencies

### Exhibit 225 Morningstar Equity Categories' Base Currencies

<b>Name</b>	<b>Base Currency</b>
Asia ex-Japan Equity	US Dollar
Asia-Pacific ex-Japan Equity	US Dollar
Asia-Pacific inc. Japan Equity	US Dollar
Austria Equity	Euro
Brazil Equity	US Dollar
BRIC Equity	US Dollar
Canada Equity	US Dollar
China Equity	US Dollar
Denmark Equity	Danish Krone
Emerging Europe ex-Russia Equity	Euro
Europe ex-UK Large-Cap Equity	Euro
Europe Large-Cap Blend Equity	Euro
Europe Large-Cap Growth Equity	Euro
Europe Large-Cap Value Equity	Euro
Europe Small-Cap Equity	Euro
Eurozone Large-Cap Equity	Euro
France Large-Cap Equity	Euro
Germany Large-Cap Equity	Euro
Global Emerging Markets Equity	US Dollar
Global Large-Cap Blend Equity	US Dollar
Global Large-Cap Value Equity	US Dollar
Hong Kong Equity	Hong Kong Dollar
India Equity	US Dollar
Islamic Equity - Other	US Dollar
Italy Equity	Euro
Japan Large-Cap Equity	Japanese Yen
Japan Small/Mid-Cap Equity	Japanese Yen
Korea Equity	US Dollar
Latin America Equity	US Dollar
Netherlands Equity	Euro
Nordic Equity	Swedish Krona
Norway Equity	Norwegian Krone
Pacific ex-Japan Equity	US Dollar
Property - Indirect Asia	US Dollar
Property - Indirect Europe	Euro
Property - Indirect Eurozone	Euro
Property - Indirect Global	US Dollar
Russia Equity	US Dollar
South Africa & Namibia Equity	South African Rand
Spain Equity	Euro
Sweden Equity	Swedish Krona
Switzerland Large-Cap Equity	Swiss Franc
Switzerland Small/Mid-Cap Equity	Swiss Franc
Taiwan Large-Cap Equity	New Taiwan Dollar
Turkey Equity	Euro
UK Large-Cap Equity	Pound Sterling
UK Mid-Cap Equity	Pound Sterling
US Large-Cap Blend Equity	US Dollar
US Large-Cap Growth Equity	US Dollar
US Large-Cap Value Equity	US Dollar
US Small-Cap Equity	US Dollar

Source: Morningstar Direct.



**Exhibit 226** Morningstar Fixed-Income Categories' Base Currencies

<b>Name</b>	<b>Base Currency</b>
CHF Bond	Swiss Franc
EUR Bond - Long Term	Euro
EUR Corporate Bond	Euro
EUR Diversified Bond	Euro
EUR Government Bond	Euro
EUR Government Bond - Short Term	Euro
EUR Inflation-Linked Bond	Euro
Global Bond	US Dollar
GBP Government Bond	Pound Sterling
GBP Inflation-Linked Bond	Pound Sterling
ILS Government Bond	New Israeli Sheqel
JPY Bond	Japanese Yen
USD Corporate Bond	US Dollar
USD Diversified Bond	US Dollar
USD Government Bond	US Dollar

Source: Morningstar Direct.

## 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).

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