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# Morningstar's European Active/Passive Barometer

## Year-End 2024

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### Morningstar Manager Research Services, EMEA

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

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

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

The Active/Passive Barometer is also comprehensive, spanning around 29,500 unique active and passive Europe-domiciled funds that account for about half of the assets of the European fund market.

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

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

#### Methodology Changes

In this edition of the report, we've made two key changes to the passive composite return calculation, our benchmark to measure active fund performance. First, we have switched from an equal-weighted to an asset-weighted composite. This is because the proliferation of small, narrowly focused passive funds made the previous equal-weighted approach less representative of the investment options effectively used by investors. Second, we have adopted a buy-and-hold methodology when constructing the passive composite. This adjustment moves us closer to interpreting the passive composite return as an investable return, better reflecting the experience of real investors. For a more detailed explanation, please refer to the Methodology Appendix.

Our findings using the new passive composite largely align with previous editions of the study. However, one notable trend stands out. In categories that are highly competitive and dominated by large, low-cost passive funds—such as large-cap blend equity—the long-term success rate of active funds, which was already low, has declined even further. This reinforces the long-held view that in these segments, where

investors have access to well-diversified, low-cost passive options, it is especially challenging for active strategies to consistently outperform their passive composites. The presence of these large and inexpensive passive funds sets a high performance threshold for active managers, making it increasingly difficult for them to justify their higher fees.

### Key Takeaways

- ▶ Developed equity markets continued their positive run in the second half of 2024 despite a few hiccups caused by the scaling back of expectations for a fast pace of delivery of interest-rate cuts, particularly in the United States. The electoral victory of Donald Trump fueled the momentum in the fourth quarter, with the "Magnificent Seven" tech stocks leading the way. Meanwhile, emerging markets found support on China's announcement of a comprehensive stimulus package to address its current economy challenges<sup>1</sup>.

The active managers' weighted success rate over one year for the 38 equity categories examined stood at 29.1% as of December 2024, up very slightly from 28.7% in December 2023. Over the past decade, the average success rate for active equity managers in the group of categories analyzed remained disappointingly low at 14.2%.

- ▶ Generally, active managers tend to achieve higher success rates within mid-cap and small-cap equity categories compared with those focusing on large-cap stocks. Additionally, active managers are more likely to succeed in equity categories where the average passive counterpart exhibits a structural bias toward a particular economic sector or is concentrated on a few individual names.
- ▶ Bond markets experienced significant volatility in the last quarter of 2024. Inflation proved stickier than anticipated, and this led central banks to tone down their bearish rhetoric. This caused a spike in yields. An environment of change in monetary policy settings can be an opportunity for active managers to showcase their skills against the inflexible index-tracking approach of passive strategies. But equally, it can prove a minefield for those who are slow to react to changes, particularly if conditions become volatile, as was the case in the latter part of 2024.
- ▶ The average one-year success rate for active bond managers across the 21 categories analyzed stood at 53.5% in December 2024. This was up from 46.5% a year earlier, as managers found an easy way to add value via the management of duration. However, it was down from 58.3% in June 2024, signaling that some of these managers were unable to adapt to quickly changing conditions in the second half of the year. Over the long term, the compounding benefits of low fees associated with passive funds add up also in bond categories, though not to the same extent as in equity. The average rate of success for active bond managers in the 10-year period to the end of 2024 stood at 26.0%.
- ▶ Irrespective of asset class, the likelihood of a fund's survival is linked closely to its success rate. The primary reason most active funds falter is their short lifespan, often attributed to subpar

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<sup>1</sup> Time to Go Back Into China?

performance. This typically stems from a combination of poor security selection and the compounded impact of higher fees compared with cheaper passive alternatives.

## Equity

- ▶ The US equity market had strong performance in 2024, led by the ongoing rally in the tech sector. This made it difficult for active managers to beat low-cost market-cap-weighted passive strategies, which have become the default option to gain exposure in this market. In the US large-cap blend Morningstar Category, only 30.0% of active equity funds outperformed their passive competitors in 2024. In the US large-cap growth category, the one-year success rate for active managers was 36.1%, while in the US large-cap value category, it came in at a much higher 69.4%. The bulk of tech stocks driving the current momentum fall in the growth style bucket, and so value managers have enjoyed more latitude to find opportunities.
- ▶ Irrespective of style, over the long term, the case for passives for US large-cap equity remains overwhelming. On a 10-year period, only 3.5% of active funds in the US large-cap blend category beat the passive alternative, whereas for value style managers, the success rate was 10.3%.
- ▶ Eurozone equity markets remained volatile in the last part of 2024, although there was a clear divide between core markets such as France and Germany, which suffered from political instability, and the thriving periphery. Active managers in the eurozone large-cap blend category struggled, with only 15.7% beating their passive counterparts in the one-year period to December 2024. In this category, too, long-term success rates for active managers remain pitifully low. The average 10-year success rate stood at 5.3%.
- ▶ Going down the market-cap spectrum ups the odds for active managers over the long term. The 10-year success rate in the US small-cap equity category was 33.3%, while in the eurozone small-cap equity category, it stood at 35.9%.
- ▶ In the broad emerging-markets category, 32.9% of active managers beat their passive peers in 2024. This goes down to 27.4% over five years and further down to 19.6% over 10 years. Much like that of their developed counterparts, performance in the past few years has been largely driven by a small cohort of tech names, particularly TSMC and Tencent. Underexposure to these two names has proved a common source of underperformance for many active managers<sup>2</sup>.
- ▶ Investors' interest for India has been on the increase. We saw healthy inflows into active funds in 2024 and for good reason, as this is one of the few equity categories where our study shows a high rate of success for active funds through time. This is because passive funds in this category tend to have a large- and mega-cap bias, which leaves ample room across the market-cap spectrum for active managers to add value. In 2024, the one-year success rate of active managers in this category stood at 70.0% in 2024, while over 10 years, it was a strong 57.6%.
- ▶ Active managers in the Asia-Pacific ex-Japan category posted a remarkably high success rate of 84.2% in 2024. Curiously, the one-year success rate for active managers in the Asia ex-Japan

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<sup>2</sup> Concentration in Emerging-Markets Equities

category was 29.8%. A likely explanation is that APAC active funds were significantly underweighted in China relative to the category benchmark throughout the year, while their Asia peers were roughly neutral. China rallied from mid-September until year-end, but prior to that, it did poorly. APAC active funds also had an overweighting in smaller ASEAN countries like Singapore, which gave them an advantage relative to index and passives.

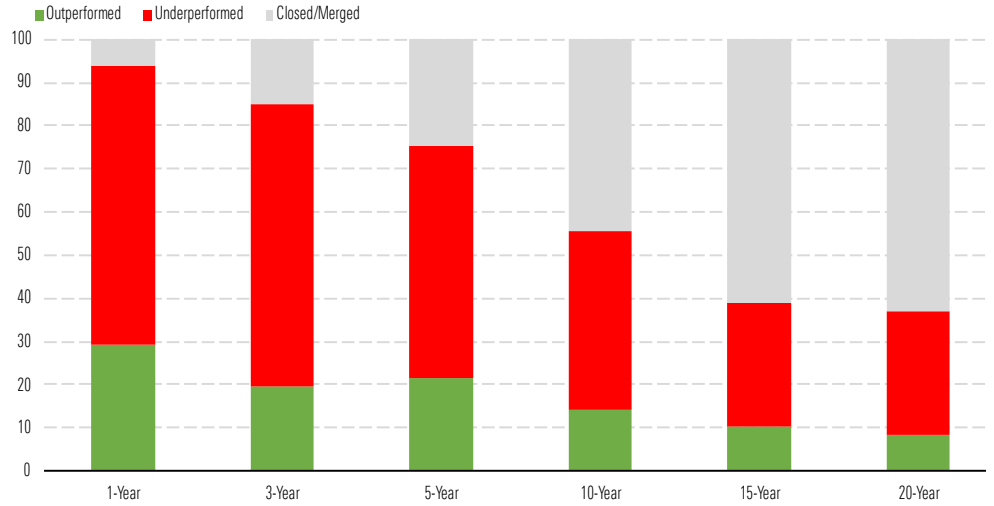
### Fixed Income

- ▶ Active managers in the EUR government-bond category had a one-year success rate of 38.7% in 2024, up from 29.6% in 2023. This backs up the message that successfully executed duration plays can add value over short periods. However, the value of these plays severely dilutes when confronted against the compounding benefits of low management fees charged by passive funds. The 10-year success rate in this category stood at 16.9%.
- ▶ Investment-grade credit remains an area where active bond managers have more latitude to add value over extended periods. The one-year success rates for active managers in the EUR, GBP, and global corporate bond categories stood above 60%. Meanwhile, the 10-year success rates for EUR and global active managers were around 40%, while in the GBP category, it was 32.2%.
- ▶ The same applies to high-yield corporate bonds, where most indexes tend to represent the more liquid segments of the market. This favors replication for passive managers, but it leaves plenty of pockets for active managers to explore and find opportunities to add value. The one-year success rate for active managers in the EUR high-yield category stood at 64.1% in December 2024, while the 10-year rate came in at 37.7%.
- ▶ Money markets is also an area where the current crop of passive funds doesn't appear excessively hard to beat. This is because they typically track overnight interbank lending rates, such as the Euro Overnight Index Average, or T-bill rates. Active managers can easily up yield without compromising the short-term near-risk-free nature of the strategy. In fact, money market has been a historically fertile area in the development of active ETFs<sup>3</sup>. The one-year success rate of active managers in the EUR money market category stood at 78.7% in 2024 and remains around this high level on a three- and five-year basis, dropping to a still-high 42.9% on a 10-year horizon as the full effect of higher fees feeds through.

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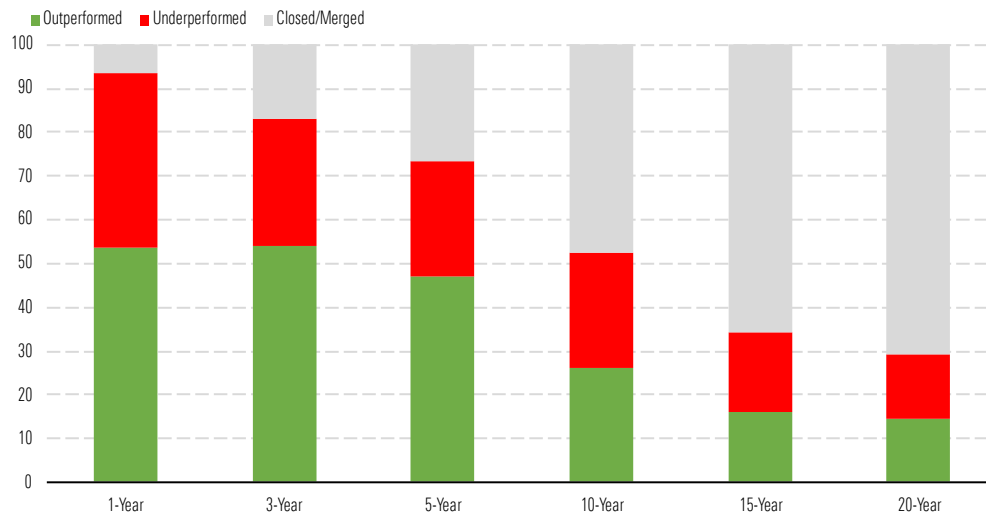
<sup>3</sup> Active ETFs in Europe: Small, Shy, and on the Rise

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



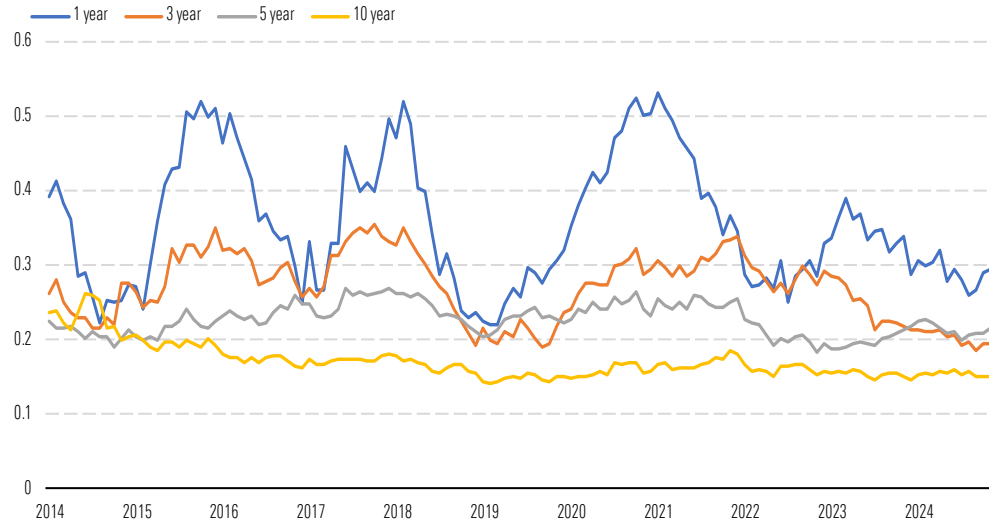
Source: Morningstar Direct. Data as of Dec. 31, 2024.

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



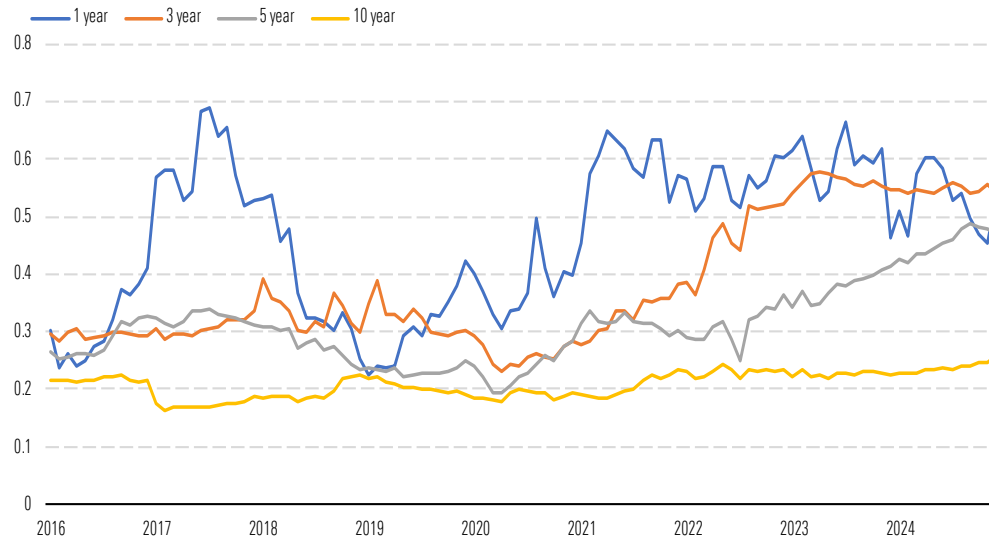
Source: Morningstar Direct. Data as of Dec. 31, 2024.

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



Source: Morningstar Direct. Data as of Dec. 31, 2024.

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



Source: Morningstar Direct. Data as of Dec. 31, 2024.

**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	29.8	16.5	29.8	29.6	20.2	-
Asia-Pacific Equity	46.0	15.6	15.8	14.8	7.8	-
Asia-Pacific ex-Japan Equity	84.2	27.3	37.7	14.0	11.8	-
Brazil Equity	25.0	0.0	15.8	5.0	5.0	-
China Equity	3.1	6.5	50.0	43.1	32.6	-
Denmark Equity	93.3	54.8	33.3	45.2	43.3	33.3
Europe Equity Income	38.5	48.8	39.5	21.5	24.1	-
Europe ex-UK Equity	33.6	32.0	25.0	13.5	18.0	0.0
Europe Large-Cap Blend Equity	28.4	14.8	14.1	9.0	6.5	3.3
Europe Large-Cap Growth Equity	40.5	36.2	27.8	15.0	17.2	-
Europe Small-Cap Equity	26.5	12.9	33.1	37.5	24.4	-
Eurozone Large-Cap Equity	15.7	7.7	10.9	5.3	5.7	7.8
Eurozone Small-Cap Equity	10.2	6.4	20.4	35.9	21.7	-
Finland Equity	21.1	0.0	36.0	11.1	12.5	16.7
France Equity	20.2	3.6	2.5	1.6	3.0	4.0
Germany Equity	5.3	1.6	1.5	9.7	8.5	48.1
Global Emerging Markets Equity	32.9	28.4	27.4	19.6	18.1	-
Global Equity Income	48.4	35.0	51.8	44.1	-	-
Global Large-Cap Blend Equity	13.7	10.2	9.8	3.9	2.1	1.5
Global Large-Cap Value Equity	54.3	32.9	38.6	2.0	-	-
India Equity	70.0	53.1	51.5	57.6	44.3	-
Italy Equity	31.3	14.0	21.1	13.0	22.6	-
Japan Large-Cap Equity	44.3	37.0	32.7	21.3	11.2	1.9
Latin America Equity	38.1	26.0	17.2	17.0	26.0	-
Nordic Equity	61.8	28.3	20.8	5.0	3.7	23.1
Norway Equity	78.8	48.0	58.3	42.9	40.4	-
Pacific ex-Japan Equity	12.5	0.0	25.0	8.3	14.3	0.0
Spain Equity	12.1	5.3	8.9	15.2	15.5	10.1
Sweden Equity	50.0	38.7	38.3	28.8	16.5	0.0
Switzerland Equity	40.7	26.4	25.8	27.8	12.9	12.9
Switzerland Small/Mid-Cap Equity	34.3	41.5	55.0	48.9	40.4	-
UK Equity Income	11.2	18.3	23.3	34.8	-	-
UK Large-Cap Equity	35.4	18.2	24.0	13.5	18.2	26.3
UK Mid-Cap Equity	31.8	13.3	25.0	18.2	11.1	-
US Large-Cap Blend Equity	30.0	20.6	12.9	3.5	1.9	1.9
US Large-Cap Growth Equity	36.1	6.2	0.8	0.0	0.0	3.4
US Large-Cap Value Equity	69.4	64.0	46.5	10.3	11.3	-
US Small-Cap Equity	47.8	39.1	52.9	33.3	24.5	-

Source: Morningstar Direct. Data as of Dec. 31, 2024.

**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	53.8	48.7	42.9	25.8	18.9	30.6
EUR Bond - Long Term	40.0	41.7	40.7	28.1	13.7	-
EUR Corporate Bond	61.3	54.9	50.6	41.5	37.4	-
EUR Corporate Bond - Short Term	54.2	66.3	60.5	28.6	-	-
EUR Diversified Bond	53.6	62.8	51.7	19.1	7.1	14.6
EUR Government Bond	38.7	36.6	32.0	16.9	16.8	11.7
EUR Government Bond - Short Term	35.0	47.2	26.7	18.0	18.9	-
EUR High Yield Bond	64.1	44.3	37.3	37.7	-	-
EUR Inflation-Linked Bond	31.6	46.7	36.4	8.5	7.6	-
EUR Money Market	78.7	79.5	74.1	42.9	19.5	-
GBP Corporate Bond	68.4	54.5	59.1	32.2	-	-
GBP Government Bond	20.6	16.7	16.2	5.4	4.9	-
GBP Inflation-Linked Bond	29.4	31.3	25.0	17.4	0.0	40.0
Global Diversified Bond	23.4	23.5	12.4	13.9	13.4	-
Global Corporate Bond	69.6	50.0	33.3	40.0	-	-
Global Government Bond	13.7	41.3	43.6	29.6	23.5	41.0
Global Emerging Markets Bond	55.5	64.9	54.4	21.0	-	-
Global Emerging Markets Bond - Local Currency	28.0	51.1	59.7	38.1	-	-
USD Corporate Bond	88.6	76.5	68.6	19.1	28.6	-
USD Diversified Bond	55.2	45.9	36.8	18.3	-	-
USD Government Bond	100.0	76.7	65.6	10.0	6.3	-

Source: Morningstar Direct. Data as of Dec. 31, 2024.

**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	53.3	12.5	30.0	29.2	6.9	-
Property - Indirect Europe	20.5	46.5	53.1	26.1	12.3	23.5
Property - Indirect Global	23.0	17.1	29.1	21.6	4.1	-
Property - Indirect Switzerland	33.3	86.7	43.8	60.0	50.0	-

Source: Morningstar Direct. Data as of Dec. 31, 2024.

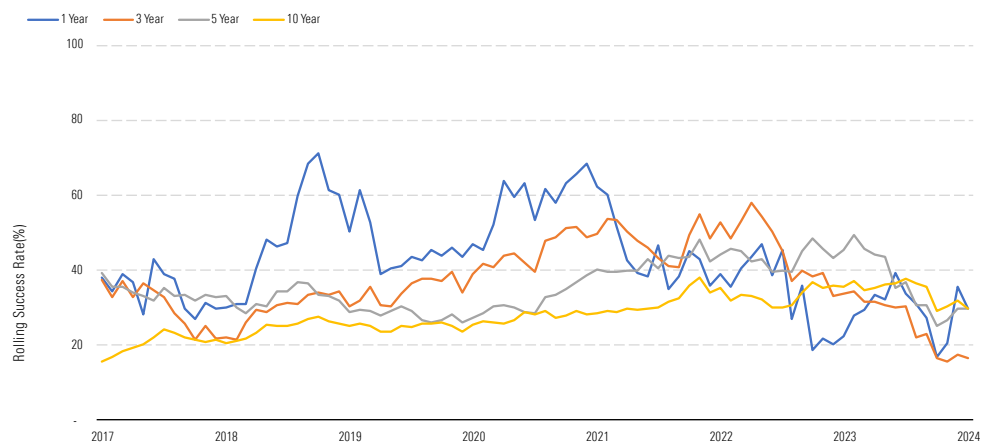


**Exhibit 8** Asia ex-Japan Equity

	Active Funds		Passive Funds		Asset-Weighted Performance		Active Success Rate (%)
	# at Beginning of Period	Survivorship Rate (%)	# at Beginning of Period	Survivorship Rate (%)	Active (%)	Passive (%)	
<b>Trailing Total Return</b>							
1-Year	188	90.4	22	95.5	16.9	18.9	29.8
3-year	188	83.5	22	81.8	-1.4	0.8	16.5
5-Year	205	71.7	23	69.6	3.3	3.5	29.8
10-Year	216	53.2	22	50.0	5.3	5.2	29.6

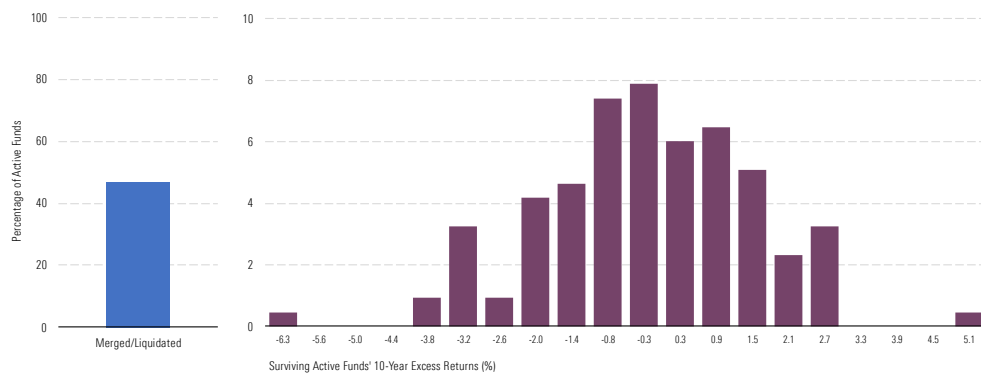
Source: Morningstar Direct. Data as of Dec. 31, 2024.

**Exhibit 9** Rolling Success Rates for Surviving Active Asia ex-Japan Equity Funds



Source: Morningstar Direct. Data as of Dec. 31, 2024.

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



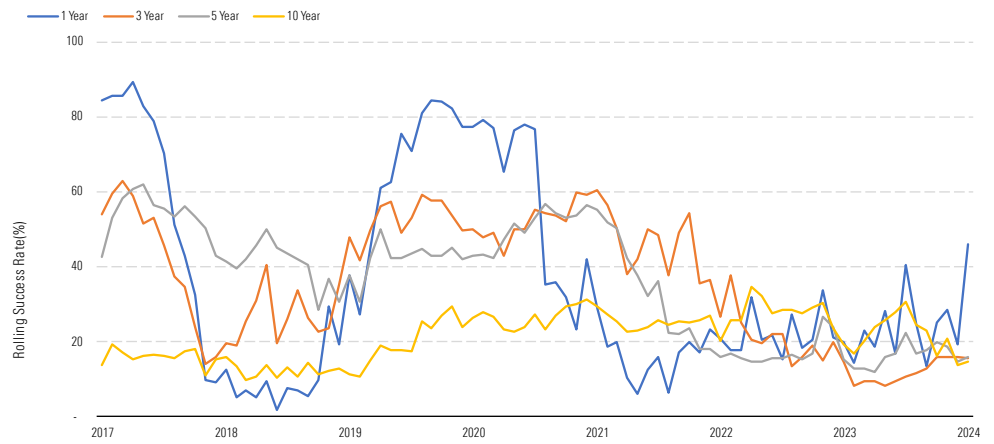
Source: Morningstar Direct. Data as of Dec. 31, 2024.

**Exhibit 11** Asia-Pacific Equity

	Active Funds		Passive Funds		Asset-Weighted Performance		Active Success Rate (%)
	# at Beginning of Period	Survivorship Rate (%)	# at Beginning of Period	Survivorship Rate (%)	Active (%)	Passive (%)	
<b>Trailing Total Return</b>							
1-Year	87	90.8	19	100.0	14.0	13.5	46.0
3-year	96	78.1	17	88.2	0.1	4.9	15.6
5-Year	101	68.3	16	81.3	3.9	5.3	15.8
10-Year	135	43.0	15	60.0	5.7	5.4	14.8

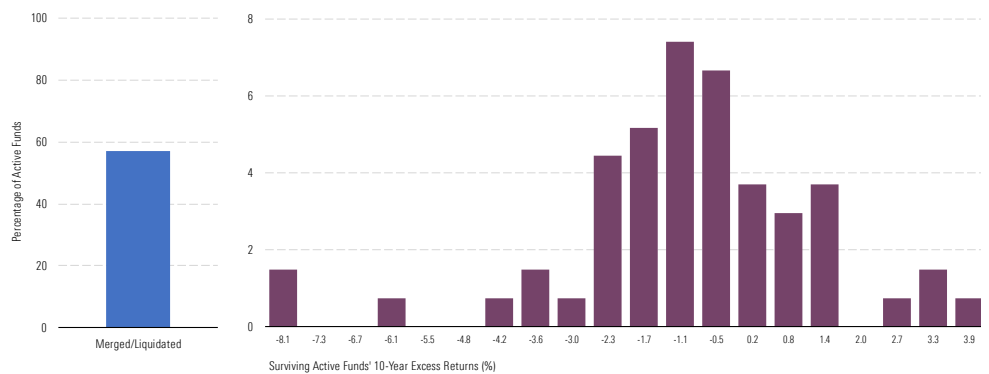
Source: Morningstar Direct. Data as of Dec. 31, 2024.

**Exhibit 12** Rolling Success Rates for Surviving Active Asia-Pacific Equity Funds (%)



Source: Morningstar Direct. Data as of Dec. 31, 2024.

**Exhibit 13** Mortality and Distribution of 10-Year Annualized Excess Returns for Surviving Active Asia-Pacific Equity (%)



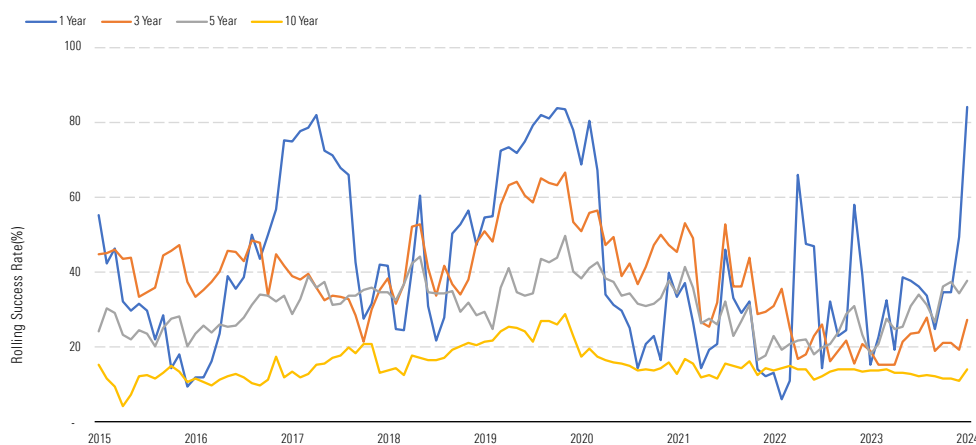
Source: Morningstar Direct. Data as of Dec. 31, 2024.

**Exhibit 14** Asia-Pacific ex-Japan Equity

	Active Funds		Passive Funds		Asset-Weighted Performance		Active Success Rate (%)
	# at Beginning of Period	Survivorship Rate (%)	# at Beginning of Period	Survivorship Rate (%)	Active (%)	Passive (%)	
<b>Trailing Total Return</b>							
1-Year	95	92.6	18	94.4	14.9	10.5	84.2
3-year	99	81.8	13	92.3	0.0	1.9	27.3
5-Year	106	70.8	10	90.0	5.2	4.6	37.7
10-Year	136	45.6	13	38.5	5.9	6.9	14.0

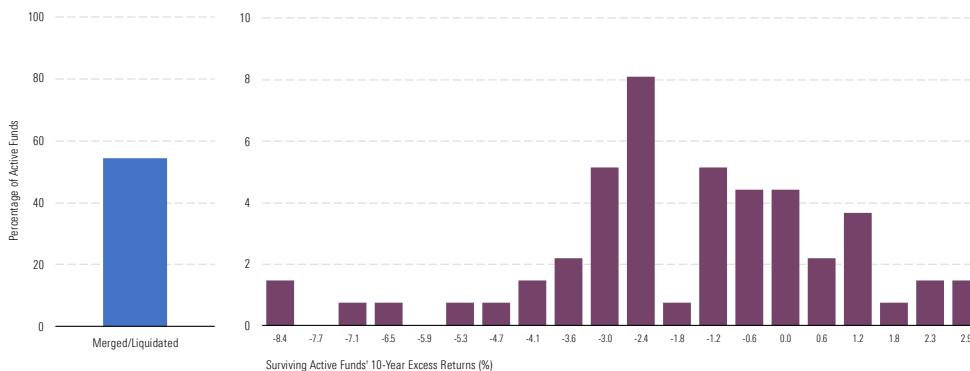
Source: Morningstar Direct. Data as of Dec. 31, 2024.

**Exhibit 15** Rolling Success Rates for Surviving Active Asia-Pacific ex-Japan Equity Funds (%)



Source: Morningstar Direct. Data as of Dec. 31, 2024.

**Exhibit 16** Mortality and Distribution of 10-Year Annualized Excess Returns for Surviving Active Asia-Pacific ex-Japan Equity Funds (%)



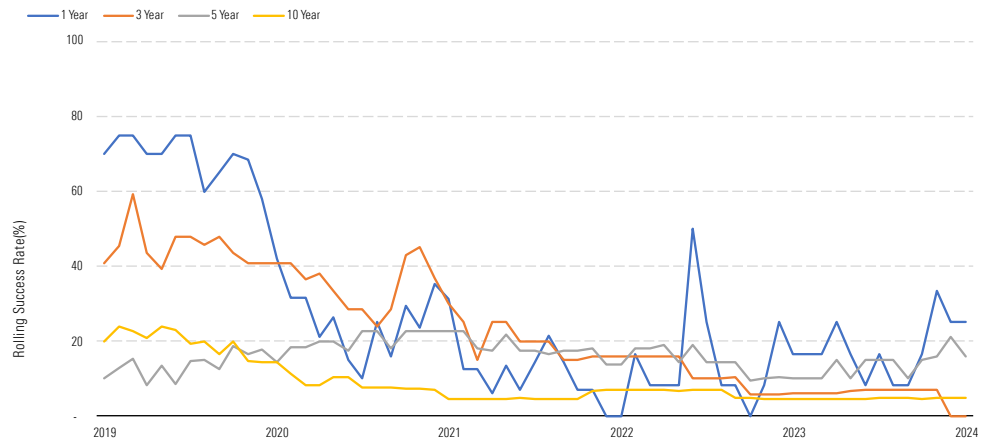
Source: Morningstar Direct. Data as of Dec. 31, 2024.

**Exhibit 17** Brazil Equity

	Active Funds		Passive Funds		Asset-Weighted Performance		Active Success Rate (%)
	# at Beginning of Period	Survivorship Rate (%)	# at Beginning of Period	Survivorship Rate (%)	Active (%)	Passive (%)	
<b>Trailing Total Return</b>							
1-Year	12	91.7	8	87.5	-29.1	-25.8	25.0
3-year	12	91.7	8	87.5	-1.1	4.5	0.0
5-Year	19	52.6	9	77.8	-10.1	-5.9	15.8
10-Year	40	20.0	12	25.0	-1.2	1.3	5.0

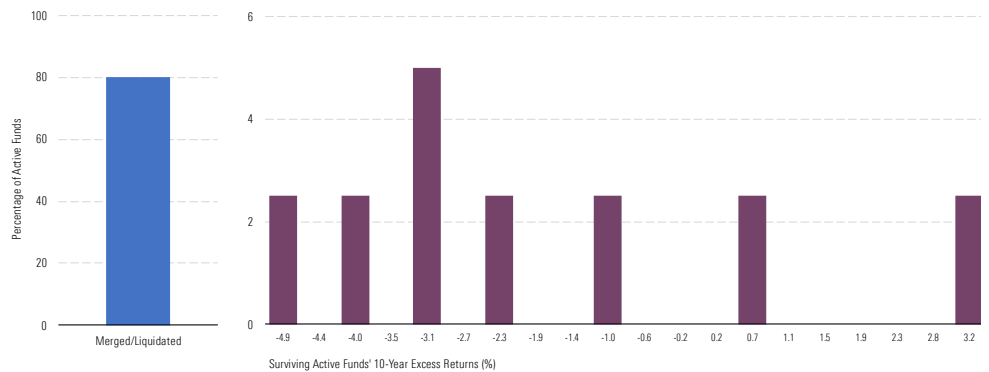
Source: Morningstar Direct. Data as of Dec. 31, 2024.

**Exhibit 18** Rolling Success Rates for Surviving Active Brazil Equity Funds (%)



Source: Morningstar Direct. Data as of Dec. 31, 2024.

**Exhibit 19** Mortality and Distribution of 10-Year Annualized Excess Returns for Surviving Active Brazil Equity Funds (%)



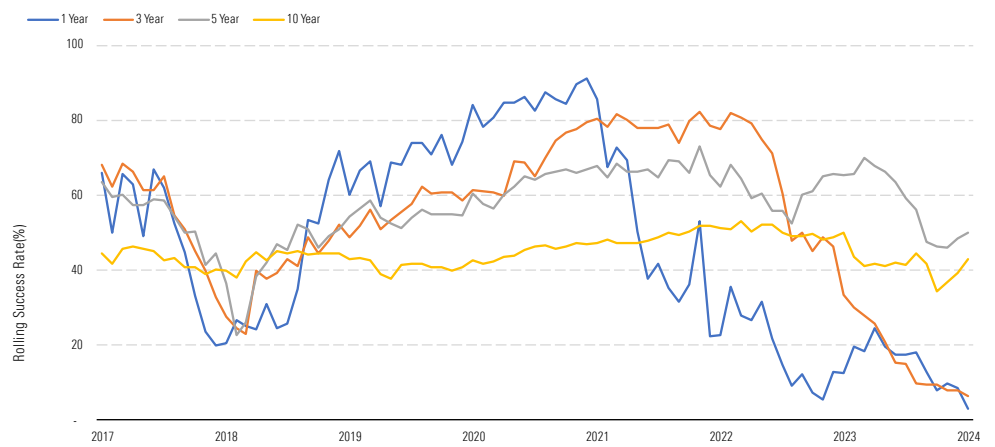
Source: Morningstar Direct. Data as of Dec. 31, 2024.

**Exhibit 20** China Equity

	Active Funds		Passive Funds		Asset-Weighted Performance		Active Success Rate (%)
	# at Beginning of Period	Survivorship Rate (%)	# at Beginning of Period	Survivorship Rate (%)	Active (%)	Passive (%)	
<b>Trailing Total Return</b>							
1-Year	161	87.6	46	97.8	15.2	30.3	3.1
3-year	155	80.6	37	89.2	-9.1	-2.9	6.5
5-Year	138	77.5	31	80.6	-3.1	-3.3	50.0
10-Year	123	53.7	18	61.1	3.4	1.1	43.1

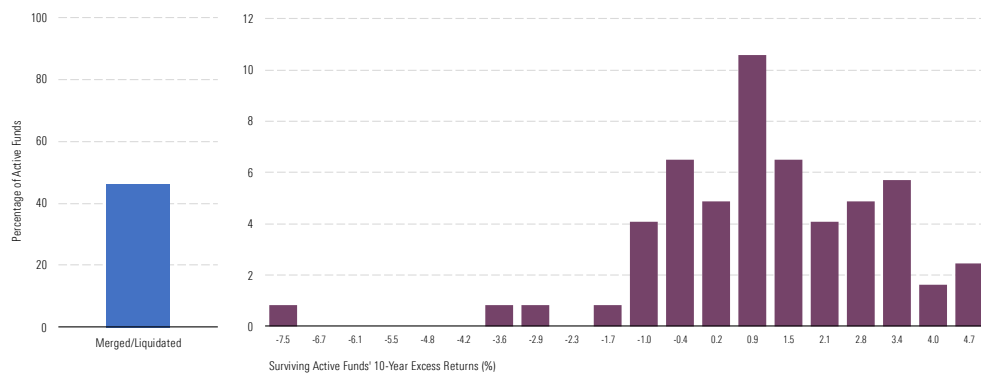
Source: Morningstar Direct. Data as of Dec. 31, 2024.

**Exhibit 21** Rolling Success Rates for Surviving Active China Equity Funds (%)



Source: Morningstar Direct. Data as of Dec. 31, 2024.

**Exhibit 22** Mortality and Distribution of 10-Year Annualized Excess Returns for Surviving Active China Equity Funds (%)



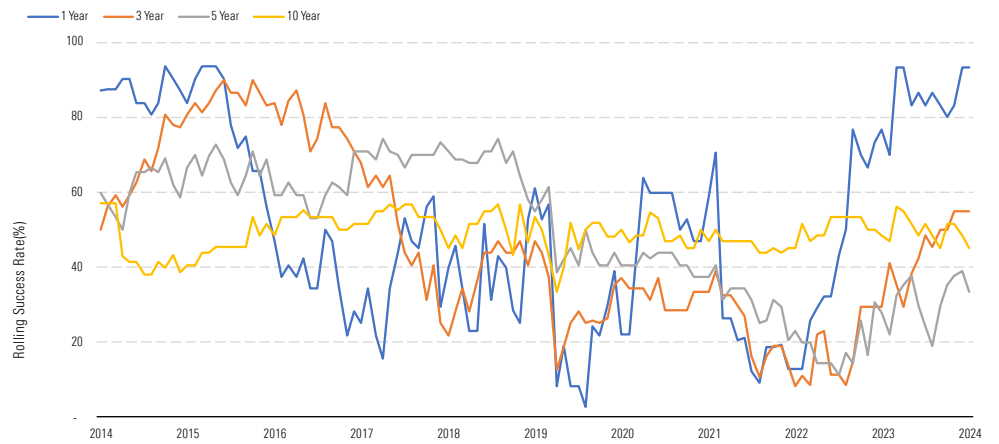
Source: Morningstar Direct. Data as of Dec. 31, 2024.

**Exhibit 23** Denmark Equity

	Active Funds		Passive Funds		Asset-Weighted Performance		Active Success Rate (%)
	# at Beginning of Period	Survivorship Rate (%)	# at Beginning of Period	Survivorship Rate (%)	Active (%)	Passive (%)	
<b>Trailing Total Return</b>							
1-Year	30	96.7	11	100.0	5.5	0.5	93.3
3-Year	31	93.5	11	100.0	-1.8	-1.7	54.8
5-Year	36	77.8	8	100.0	8.3	8.3	33.3
10-Year	31	71.0	6	83.3	9.9	9.7	45.2

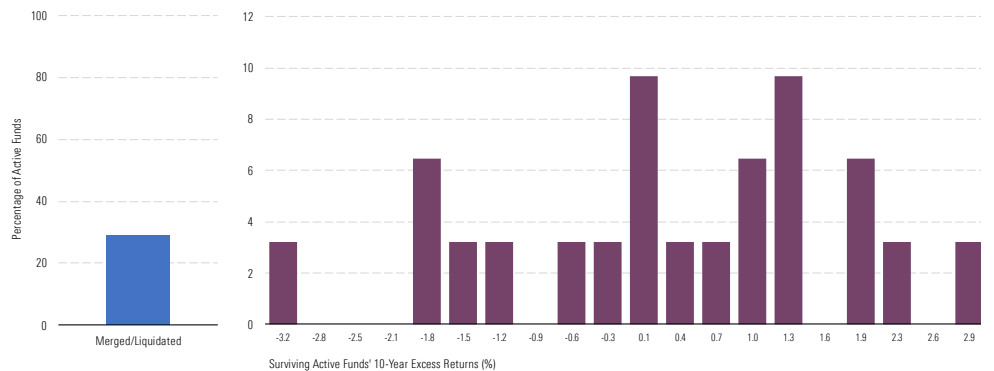
Source: Morningstar Direct. Data as of Dec. 31, 2024.

**Exhibit 24** Rolling Success Rates for Surviving Active Denmark Equity Funds (%)



Source: Morningstar Direct. Data as of Dec. 31, 2024.

**Exhibit 25** Mortality and Distribution of 10-Year Annualized Excess Returns for Surviving Active Denmark Equity Funds (%)



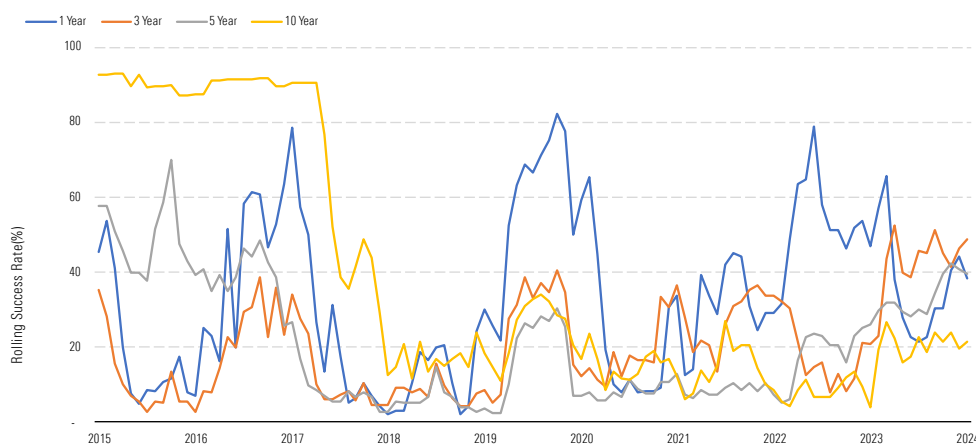
Source: Morningstar Direct. Data as of Dec. 31, 2024.

**Exhibit 26** Europe Equity Income

	Active Funds		Passive Funds		Asset-Weighted Performance		Active Success Rate (%)
	# at Beginning of Period	Survivorship Rate (%)	# at Beginning of Period	Survivorship Rate (%)	Active (%)	Passive (%)	
<b>Trailing Total Return</b>							
1-Year	78	92.3	10	90.0	6.9	7.1	38.5
3-year	82	85.4	9	88.9	4.1	4.0	48.8
5-Year	86	75.6	9	88.9	4.3	4.3	39.5
10-Year	79	62.0	5	40.0	4.5	5.6	21.5

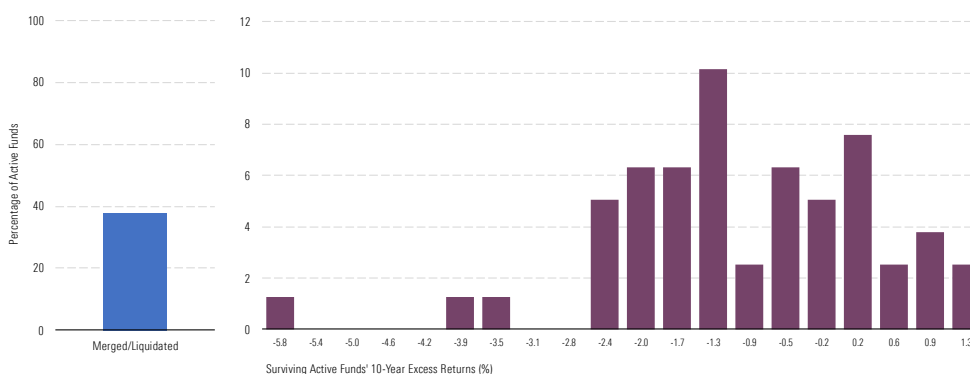
Source: Morningstar Direct. Data as of Dec. 31, 2024.

**Exhibit 27** Rolling Success Rates for Surviving Active Europe Equity Income Funds (%)



Source: Morningstar Direct. Data as of Dec. 31, 2024.

**Exhibit 28** Mortality and Distribution of 10-Year Annualized Excess Returns for Surviving Active Europe Equity Income Funds (%)



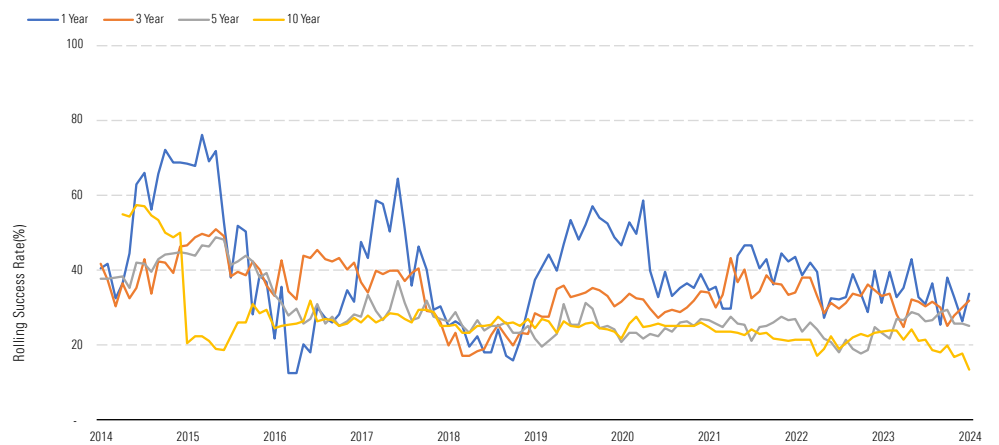
Source: Morningstar Direct. Data as of Dec. 31, 2024.

**Exhibit 29** Europe ex-UK Equity

	Active Funds		Passive Funds		Asset-Weighted Performance		Active Success Rate (%)
	# at Beginning of Period	Survivorship Rate (%)	# at Beginning of Period	Survivorship Rate (%)	Active (%)	Passive (%)	
<b>Trailing Total Return</b>							
1-Year	119	87.4	24	95.8	5.6	7.0	33.6
3-year	122	76.2	22	81.8	0.8	3.4	32.0
5-Year	120	64.2	23	69.6	6.4	7.2	25.0
10-Year	111	42.3	17	47.1	7.4	7.5	13.5

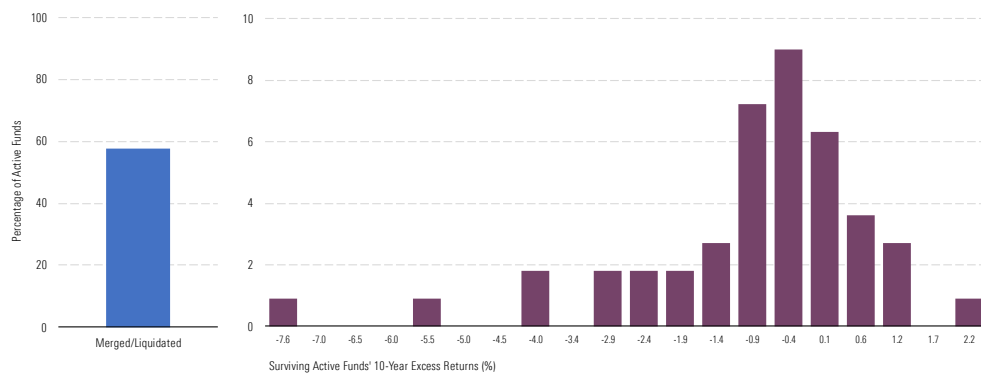
Source: Morningstar Direct. Data as of Dec. 31, 2024.

**Exhibit 30** Rolling Success Rates for Surviving Active Europe ex-UK Equity Funds (%)



Source: Morningstar Direct. Data as of Dec. 31, 2024.

**Exhibit 31** Mortality and Distribution of 10-Year Annualized Excess Returns for Surviving Active Europe ex-UK Equity Funds (%)



Source: Morningstar Direct. Data as of Dec. 31, 2024.

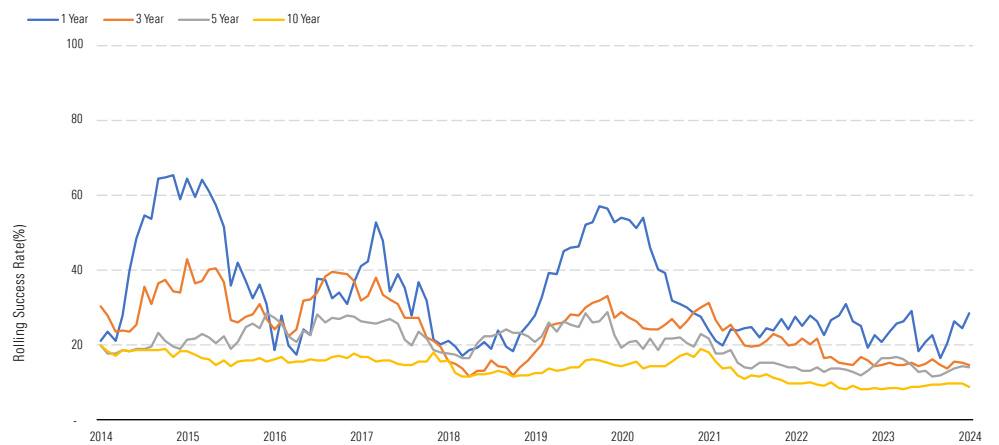


**Exhibit 32** Europe Large-Cap Blend Equity

	Active Funds		Passive Funds		Asset-Weighted Performance		Active Success Rate (%)
	# at Beginning of Period	Survivorship Rate (%)	# at Beginning of Period	Survivorship Rate (%)	Active (%)	Passive (%)	
<b>Trailing Total Return</b>							
1-Year	521	93.1	149	93.3	8.0	8.4	28.4
3-year	554	82.7	147	86.4	2.4	4.0	14.8
5-Year	603	71.3	134	81.3	5.5	6.8	14.1
10-Year	569	53.4	98	60.2	5.7	6.8	9.0

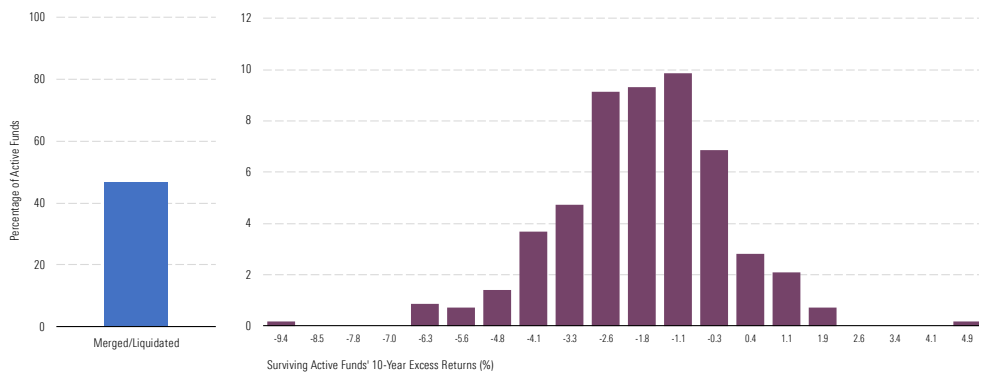
Source: Morningstar Direct. Data as of Dec. 31, 2024.

**Exhibit 33** Rolling Success Rates for Surviving Active Europe Large-Cap Blend Equity Funds (%)



Source: Morningstar Direct. Data as of Dec. 31, 2024.

**Exhibit 34** Mortality and Distribution of 10-Year Annualized Excess Returns for Surviving Active Europe Large-Cap Blend Equity Funds (%)



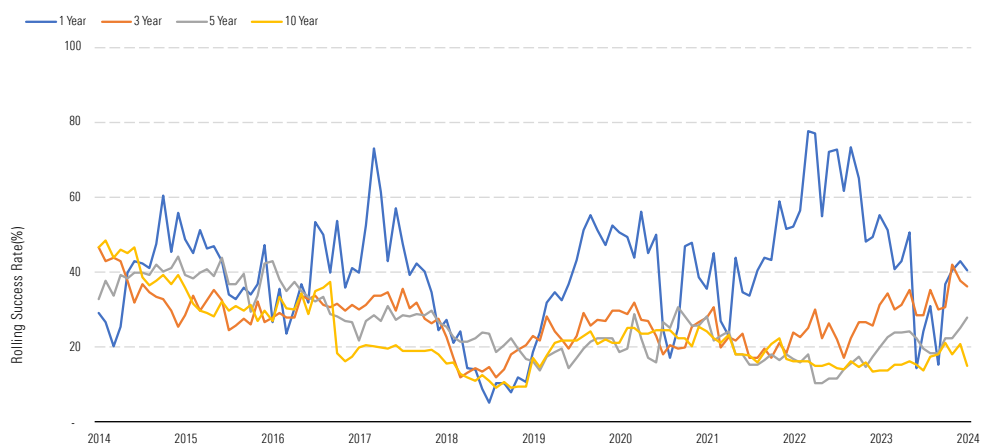
Source: Morningstar Direct. Data as of Dec. 31, 2024.

**Exhibit 35** Europe Large-Cap Growth Equity

	Active Funds		Passive Funds		Asset-Weighted Performance		Active Success Rate (%)
	# at Beginning of Period	Survivorship Rate (%)	# at Beginning of Period	Survivorship Rate (%)	Active (%)	Passive (%)	
<b>Trailing Total Return</b>							
1-Year	84	95.2	6	100.0	2.2	4.6	40.5
3-year	94	86.2	6	100.0	-2.4	-0.9	36.2
5-Year	79	79.7	4	100.0	5.0	6.0	27.8
10-Year	80	62.5	3	66.7	6.9	7.6	15.0

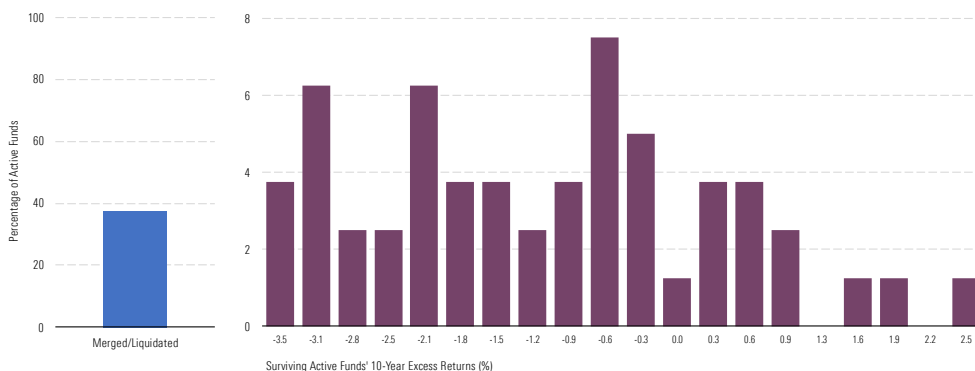
Source: Morningstar Direct. Data as of Dec. 31, 2024.

**Exhibit 36** Rolling Success Rates for Surviving Active Europe Large-Cap Growth Equity Funds (%)



Source: Morningstar Direct. Data as of Dec. 31, 2024.

**Exhibit 37** Mortality and Distribution of 10-Year Annualized Excess Returns for Surviving Active Europe Large-Cap Growth Equity Funds (%)



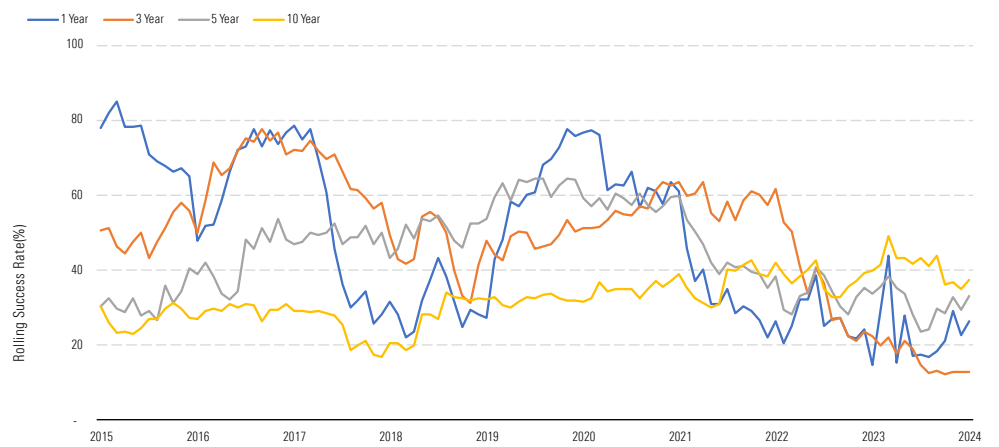
Source: Morningstar Direct. Data as of Dec. 31, 2024.

**Exhibit 38** Europe Small-Cap Equity

	Active Funds		Passive Funds		Asset-Weighted Performance		Active Success Rate (%)
	# at Beginning of Period	Survivorship Rate (%)	# at Beginning of Period	Survivorship Rate (%)	Active (%)	Passive (%)	
<b>Trailing Total Return</b>							
1-Year	151	93.4	7	100.0	3.1	5.5	26.5
3-year	155	86.5	7	85.7	-7.4	-2.5	12.9
5-Year	154	82.5	7	85.7	2.5	3.6	33.1
10-Year	104	71.2	9	55.6	6.4	6.6	37.5

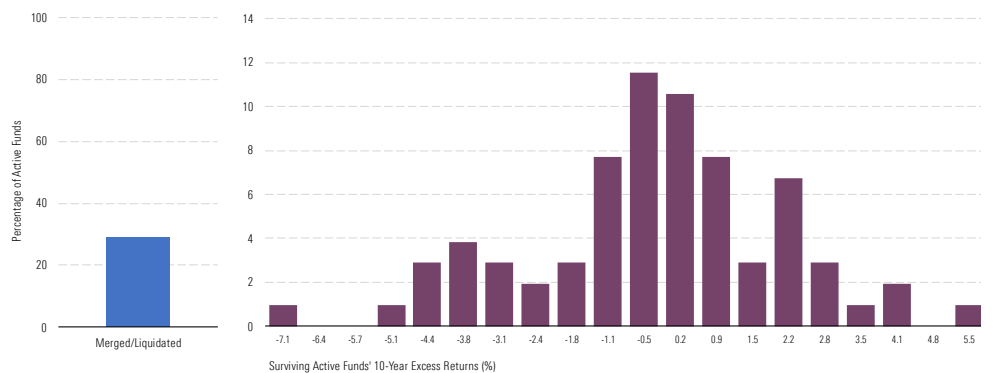
Source: Morningstar Direct. Data as of Dec. 31, 2024.

**Exhibit 39** Rolling Success Rates for Surviving Active Europe Small-Cap Equity Funds (%)



Source: Morningstar Direct. Data as of Dec. 31, 2024.

**Exhibit 40** Mortality and Distribution of 10-Year Annualized Excess Returns for Surviving Active Europe Small-Cap Equity Funds (%)



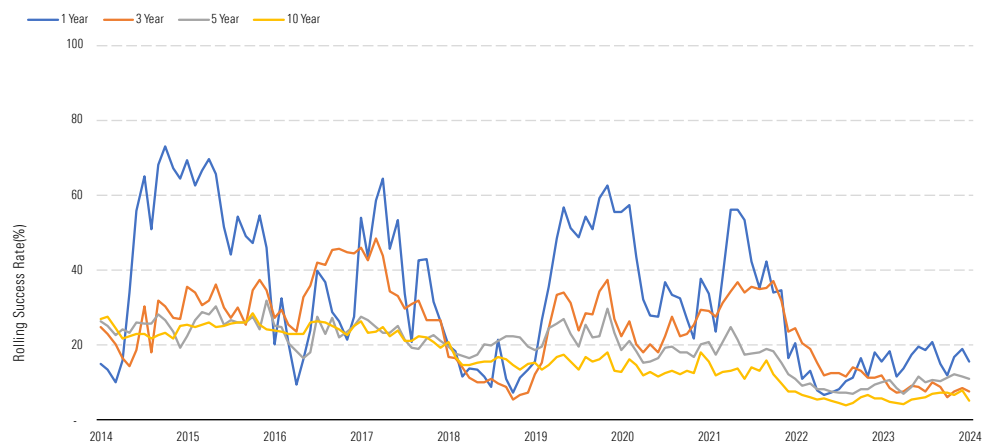
Source: Morningstar Direct. Data as of Dec. 31, 2024.

**Exhibit 41** Eurozone Large-Cap Equity

	Active Funds		Passive Funds		Asset-Weighted Performance		Active Success Rate (%)
	# at Beginning of Period	Survivorship Rate (%)	# at Beginning of Period	Survivorship Rate (%)	Active (%)	Passive (%)	
<b>Trailing Total Return</b>							
1-Year	370	94.1	106	93.4	6.8	10.2	15.7
3-year	388	85.8	104	88.5	2.5	5.7	7.7
5-Year	422	75.4	105	78.1	5.6	7.3	10.9
10-Year	436	61.7	88	60.2	6.1	7.4	5.3

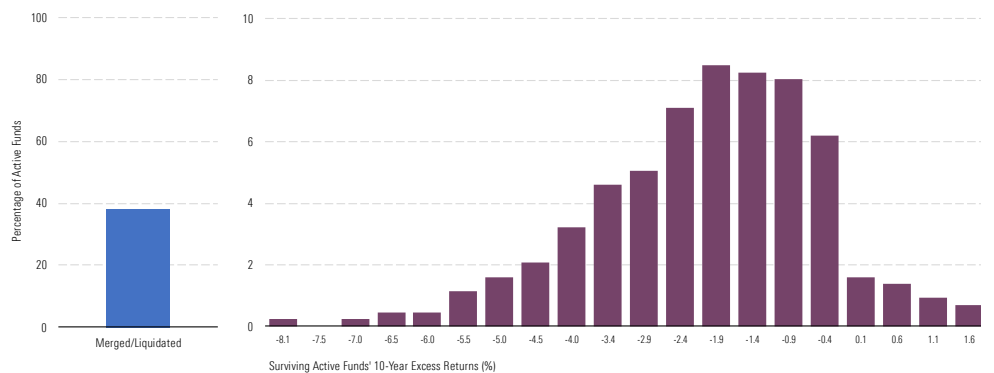
Source: Morningstar Direct. Data as of Dec. 31, 2024.

**Exhibit 42** Rolling Success Rates for Surviving Active Eurozone Large-Cap Equity Funds (%)



Source: Morningstar Direct. Data as of Dec. 31, 2024.

**Exhibit 43** Mortality and Distribution of 10-Year Annualized Excess Returns for Surviving Active Eurozone Large-Cap Equity Funds (%)



Source: Morningstar Direct. Data as of Dec. 31, 2024.

**Exhibit 44** Eurozone Small-Cap Equity

	Active Funds		Passive Funds		Asset-Weighted Performance		Active Success Rate (%)
	# at Beginning of Period	Survivorship Rate (%)	# at Beginning of Period	Survivorship Rate (%)	Active (%)	Passive (%)	
<b>Trailing Total Return</b>							
1-Year	49	98.0	4	75.0	-4.8	0.5	10.2
3-year	47	91.5	4	75.0	-6.9	-1.5	6.4
5-Year	54	90.7	4	75.0	2.0	4.4	20.4
10-Year	39	79.5	5	60.0	5.7	7.2	35.9

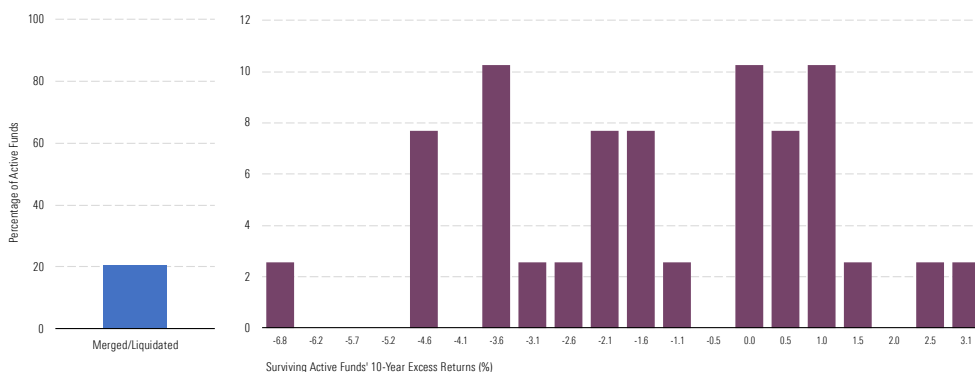
Source: Morningstar Direct. Data as of Dec. 31, 2024.

**Exhibit 45** Rolling Success Rates for Surviving Active Eurozone Small-Cap Equity Funds (%)



Source: Morningstar Direct. Data as of Dec. 31, 2024.

**Exhibit 46** Mortality and Distribution of 10-Year Annualized Excess Returns for Surviving Active Eurozone Small-Cap Equity Funds (%)



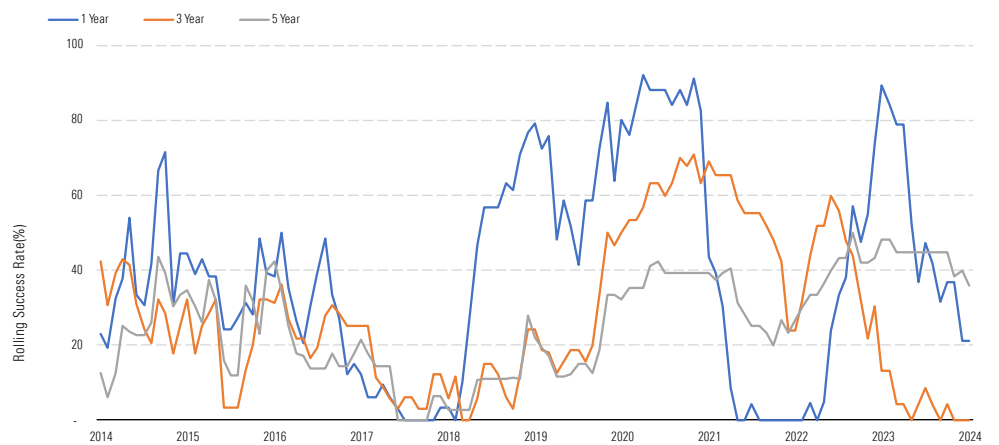
Source: Morningstar Direct. Data as of Dec. 31, 2024.

**Exhibit 47** Finland Equity

	Active Funds		Passive Funds		Asset-Weighted Performance		Active Success Rate (%)
	# at Beginning of Period	Survivorship Rate (%)	# at Beginning of Period	Survivorship Rate (%)	Active (%)	Passive (%)	
<b>Trailing Total Return</b>							
1-Year	19	100.0	6	100.0	-2.8	2.5	21.1
3-year	22	81.8	5	100.0	-7.4	-4.2	0.0
5-Year	25	68.0	5	100.0	3.4	4.1	36.0
10-Year	36	41.7	3	100.0	6.8	7.8	11.1

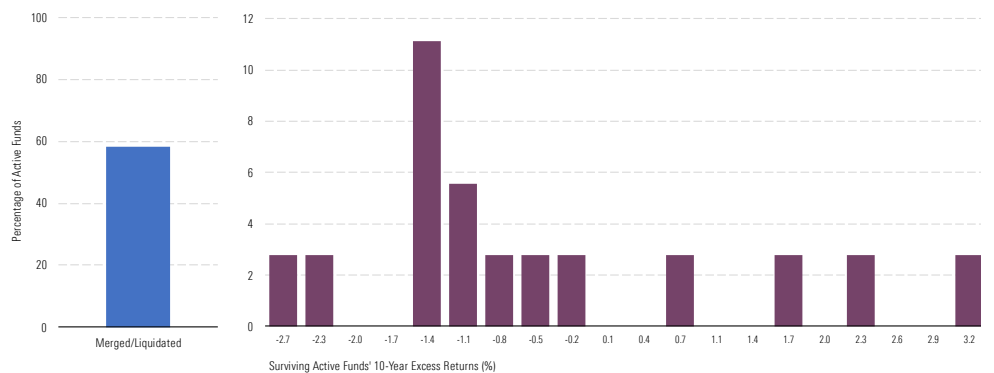
Source: Morningstar Direct. Data as of Dec. 31, 2024.

**Exhibit 48** Rolling Success Rates for Surviving Active Finland Equity Funds (%)



Source: Morningstar Direct. Data as of Dec. 31, 2024.

**Exhibit 49** Mortality and Distribution of 10-Year Annualized Excess Returns for Surviving Active Finland Equity Funds (%)



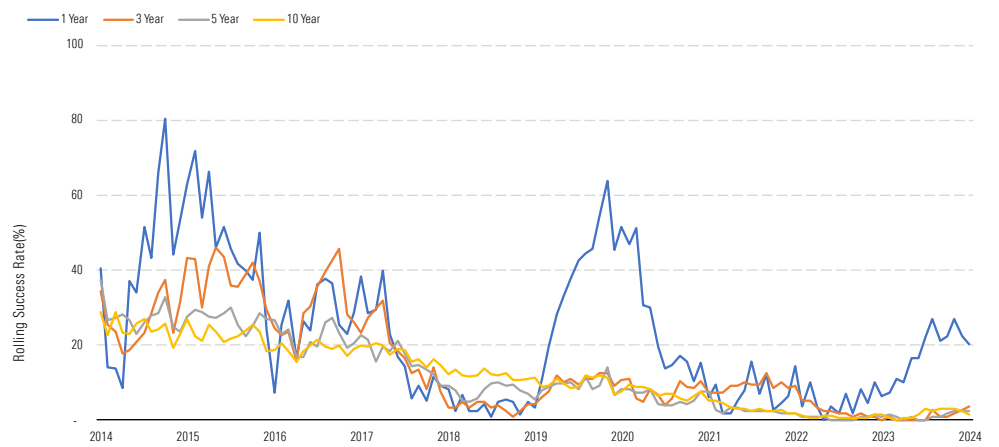
Source: Morningstar Direct. Data as of Dec. 31, 2024.

**Exhibit 50** France Equity

	Active Funds		Passive Funds		Asset-Weighted Performance		Active Success Rate (%)
	# at Beginning of Period	Survivorship Rate (%)	# at Beginning of Period	Survivorship Rate (%)	Active (%)	Passive (%)	
<b>Trailing Total Return</b>							
1-Year	104	93.3	11	100.0	-1.3	1.0	20.2
3-year	110	83.6	18	61.1	0.2	3.8	3.6
5-Year	118	76.3	17	58.8	3.9	6.8	2.5
10-Year	124	59.7	23	34.8	5.7	8.3	1.6

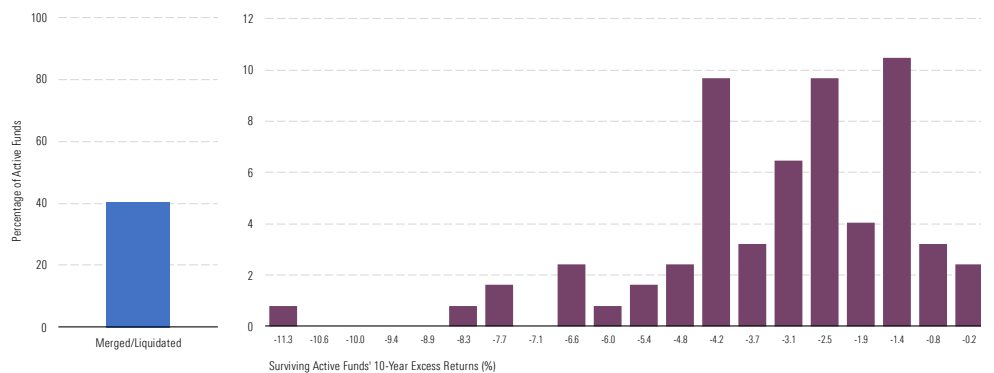
Source: Morningstar Direct. Data as of Dec. 31, 2024.

**Exhibit 51** Rolling Success Rates for Surviving Active France Equity Funds (%)



Source: Morningstar Direct. Data as of Dec. 31, 2024.

**Exhibit 52** Mortality and Distribution of 10-Year Annualized Excess Returns for Surviving Active France Equity Funds (%)



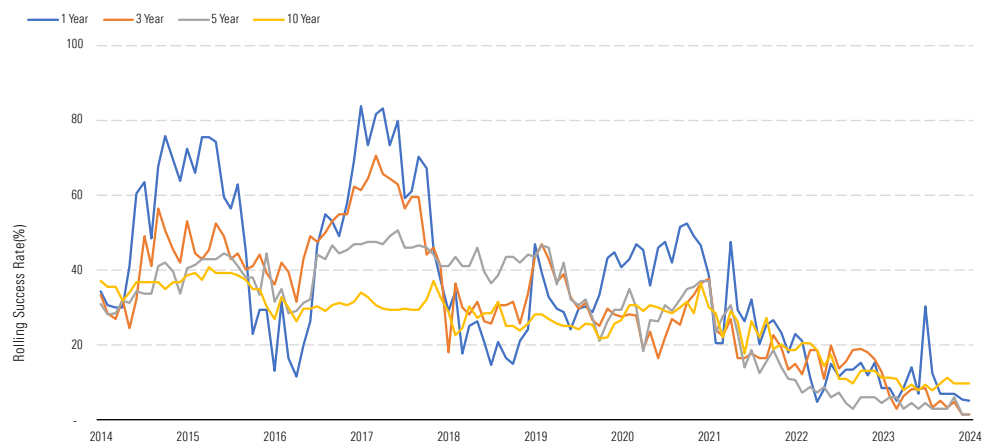
Source: Morningstar Direct. Data as of Dec. 31, 2024.

**Exhibit 53** Germany Equity

	Active Funds		Passive Funds		Asset-Weighted Performance		Active Success Rate (%)
	# at Beginning of Period	Survivorship Rate (%)	# at Beginning of Period	Survivorship Rate (%)	Active (%)	Passive (%)	
<b>Trailing Total Return</b>							
1-Year	57	100.0	24	95.8	9.6	16.4	5.3
3-Year	61	95.1	28	75.0	-0.1	6.1	1.6
5-Year	66	84.8	26	65.4	3.7	7.3	1.5
10-Year	62	71.0	20	55.0	4.9	6.6	9.7

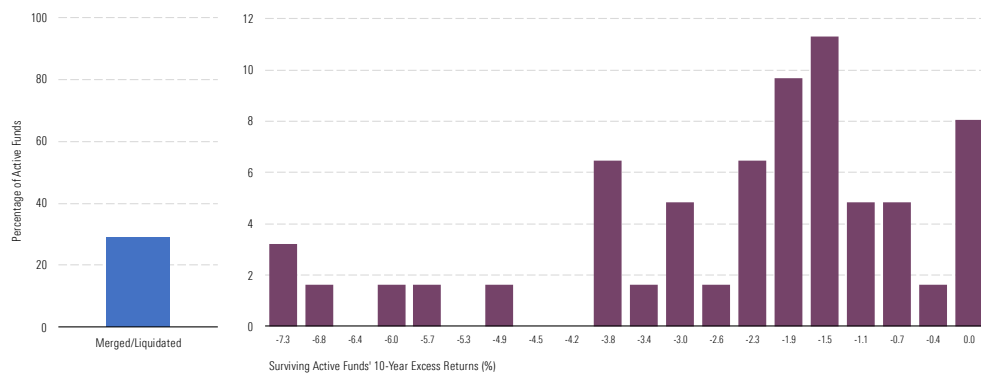
Source: Morningstar Direct. Data as of Dec. 31, 2024.

**Exhibit 54** Rolling Success Rates for Surviving Active Germany Equity Funds (%)



Source: Morningstar Direct. Data as of Dec. 31, 2024.

**Exhibit 55** Mortality and Distribution of 10-Year Annualized Excess Returns for Surviving Active Germany Equity Funds (%)



Source: Morningstar Direct. Data as of Dec. 31, 2024.



**Exhibit 56** Global Emerging-Markets Equity

	Active Funds		Passive Funds		Asset-Weighted Performance		Active Success Rate (%)
	# at Beginning of Period	Survivorship Rate (%)	# at Beginning of Period	Survivorship Rate (%)	Active (%)	Passive (%)	
<b>Trailing Total Return</b>							
1-Year	583	94.5	135	96.3	13.3	14.9	32.9
3-year	580	83.8	125	88.0	-0.8	1.0	28.4
5-Year	572	76.2	107	81.3	2.5	3.3	27.4
10-Year	541	54.9	66	69.7	4.3	5.0	19.6

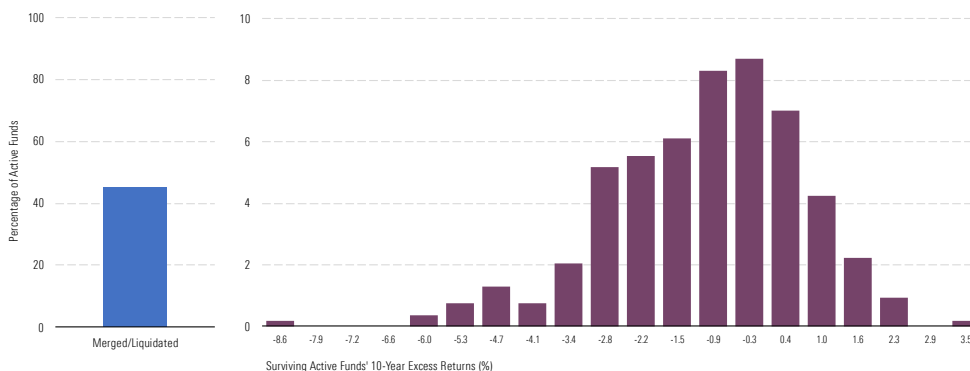
Source: Morningstar Direct. Data as of Dec. 31, 2024.

**Exhibit 57** Rolling Success Rates for Surviving Active Global Emerging-Markets Equity Funds (%)



Source: Morningstar Direct. Data as of Dec. 31, 2024.

**Exhibit 58** Mortality and Distribution of 10-Year Annualized Excess Returns for Surviving Active Global Emerging-Markets Equity Funds (%)



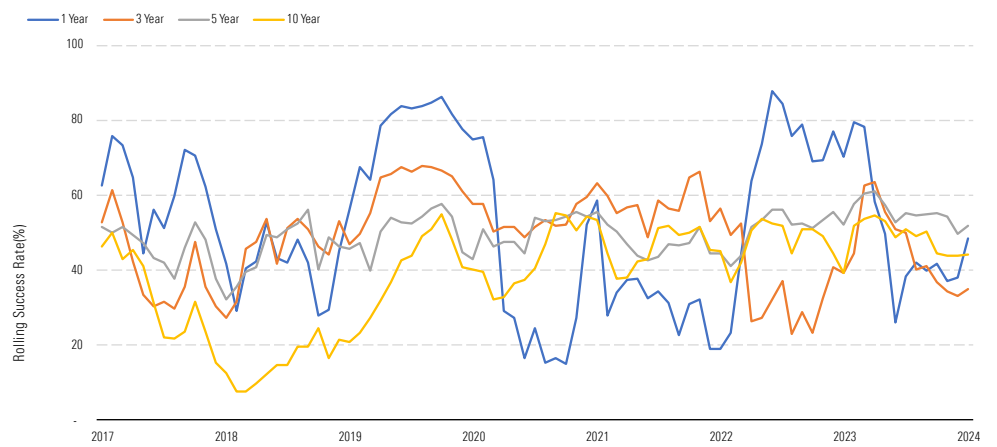
Source: Morningstar Direct. Data as of Dec. 31, 2024.

**Exhibit 59** Global Equity Income

	Active Funds		Passive Funds		Asset-Weighted Performance		Active Success Rate (%)
	# at Beginning of Period	Survivorship Rate (%)	# at Beginning of Period	Survivorship Rate (%)	Active (%)	Passive (%)	
<b>Trailing Total Return</b>							
1-Year	190	97.9	17	100.0	15.7	15.4	48.4
3-year	183	88.5	17	94.1	6.1	6.8	35.0
5-Year	191	75.9	14	100.0	7.2	6.4	51.8
10-Year	127	59.1	5	100.0	7.8	6.1	44.1

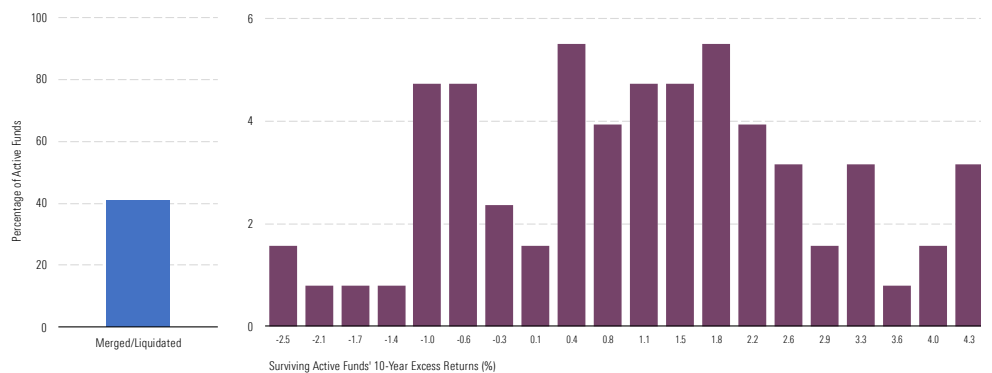
Source: Morningstar Direct. Data as of Dec. 31, 2024.

**Exhibit 60** Rolling Success Rates for Surviving Active Global Equity Income Funds (%)



Source: Morningstar Direct. Data as of Dec. 31, 2024.

**Exhibit 61** Mortality and Distribution of 10-Year Annualized Excess Returns for Surviving Active Global Equity Income Funds (%)



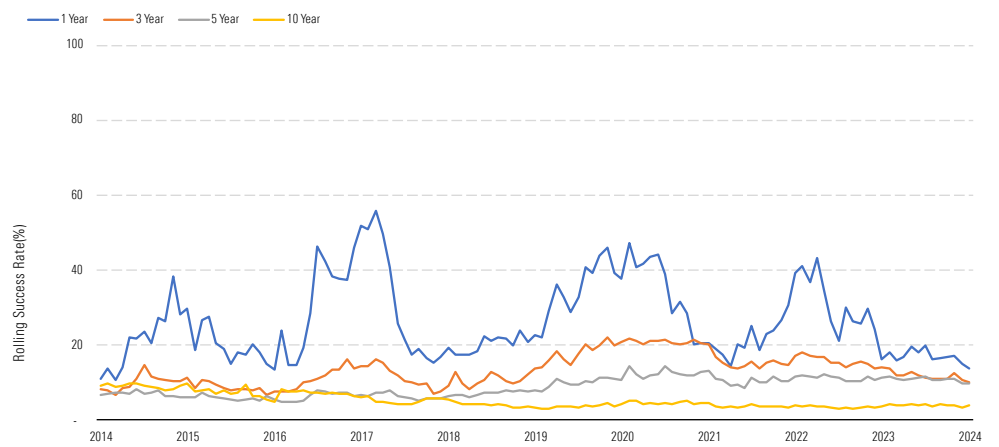
Source: Morningstar Direct. Data as of Dec. 31, 2024.

**Exhibit 62** Global Large-Cap Blend Equity

	Active Funds		Passive Funds		Asset-Weighted Performance		Active Success Rate (%)
	# at Beginning of Period	Survivorship Rate (%)	# at Beginning of Period	Survivorship Rate (%)	Active (%)	Passive (%)	
<b>Trailing Total Return</b>							
1-Year	1,718	95.3	320	96.6	21.9	25.8	13.7
3-year	1,612	87.7	276	91.7	6.7	9.2	10.2
5-Year	1,571	77.7	220	87.3	10.7	12.5	9.8
10-Year	1,398	58.4	123	68.3	9.8	11.6	3.9

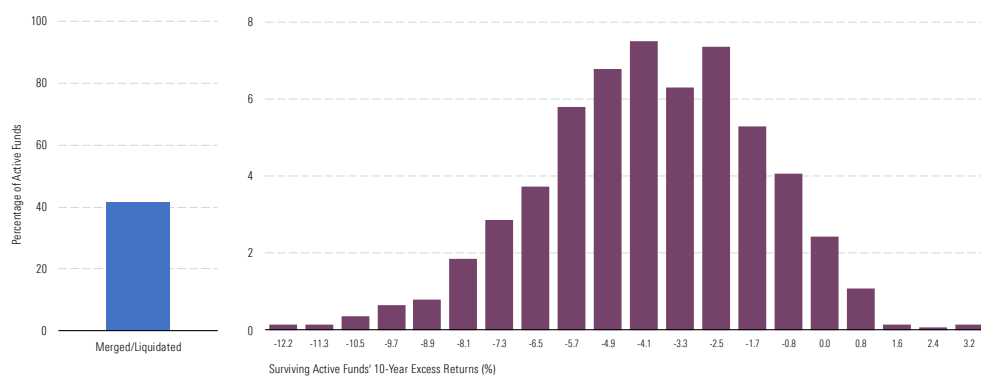
Source: Morningstar Direct. Data as of Dec. 31, 2024.

**Exhibit 63** Rolling Success Rates for Surviving Active Global Large-Cap Blend Equity Funds (%)



Source: Morningstar Direct. Data as of Dec. 31, 2024.

**Exhibit 64** Mortality and Distribution of 10-Year Annualized Excess Returns for Surviving Active Global Large-Cap Blend Equity Funds (%)



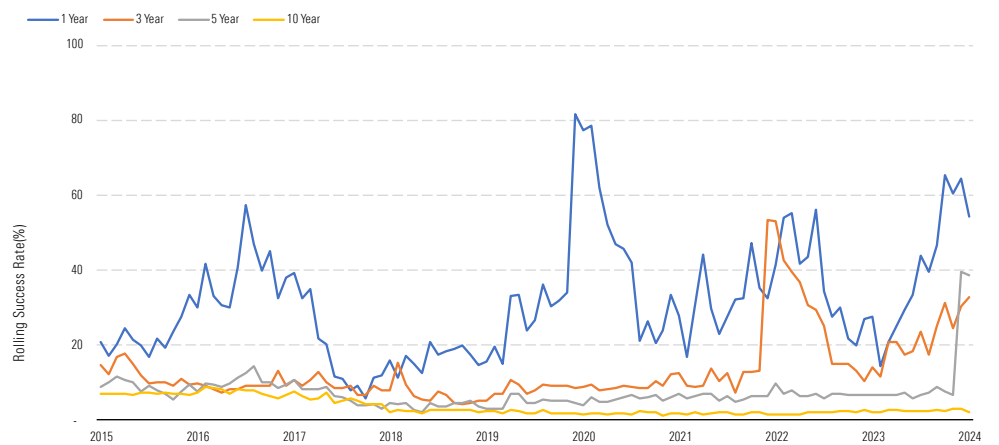
Source: Morningstar Direct. Data as of Dec. 31, 2024.

**Exhibit 65** Global Large-Cap Value Equity

	Active Funds		Passive Funds		Asset-Weighted Performance		Active Success Rate (%)
	# at Beginning of Period	Survivorship Rate (%)	# at Beginning of Period	Survivorship Rate (%)	Active (%)	Passive (%)	
<b>Trailing Total Return</b>							
1-Year	140	96.4	12	100.0	14.1	13.3	54.3
3-year	140	88.6	10	100.0	7.4	7.8	32.9
5-Year	132	77.3	10	80.0	7.4	7.9	38.6
10-Year	198	56.6	11	63.6	7.1	11.9	2.0

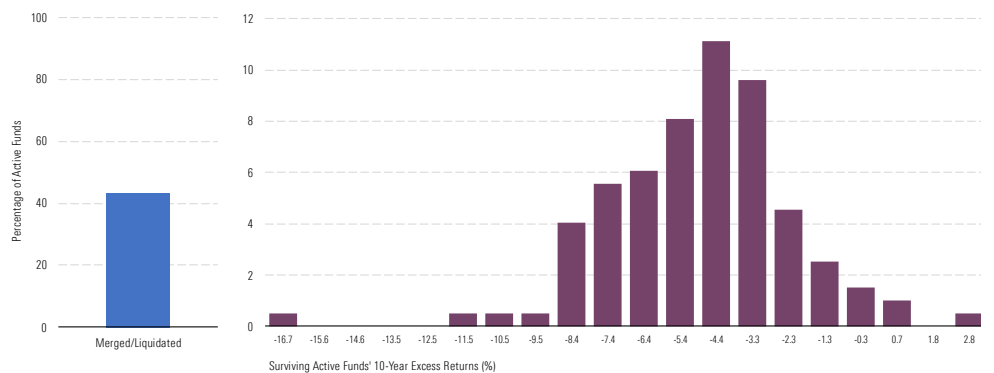
Source: Morningstar Direct. Data as of Dec. 31, 2024.

**Exhibit 66** Rolling Success Rates for Surviving Active Global Large-Cap Value Equity Funds (%)



Source: Morningstar Direct. Data as of Dec. 31, 2024.

**Exhibit 67** Mortality and Distribution of 10-Year Annualized Excess Returns for Surviving Active Global Large-Cap Value Equity Funds (%)



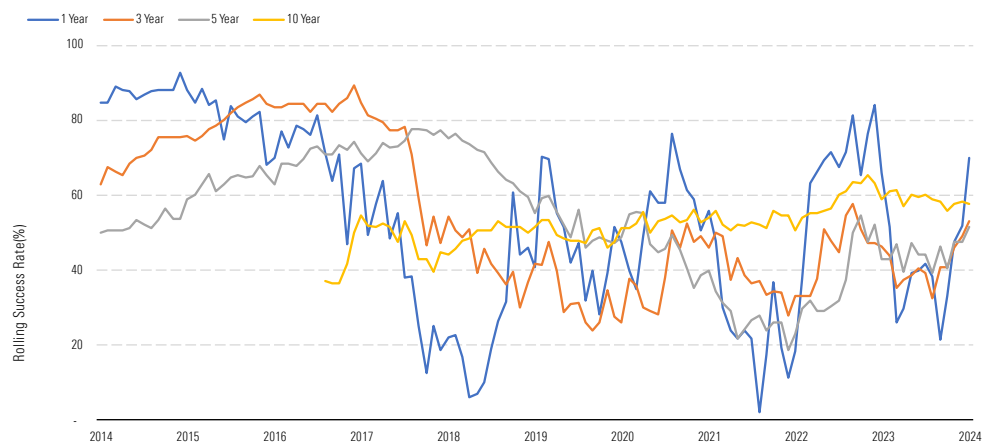
Source: Morningstar Direct. Data as of Dec. 31, 2024.

**Exhibit 68** India Equity

	Active Funds		Passive Funds		Asset-Weighted Performance		Active Success Rate (%)
	# at Beginning of Period	Survivorship Rate (%)	# at Beginning of Period	Survivorship Rate (%)	Active (%)	Passive (%)	
<b>Trailing Total Return</b>							
1-Year	100	96.0	11	100.0	22.9	17.1	70.0
3-year	98	88.8	10	100.0	10.3	9.4	53.1
5-Year	97	80.4	13	76.9	14.1	12.5	51.5
10-Year	85	70.6	10	50.0	9.7	8.6	57.6

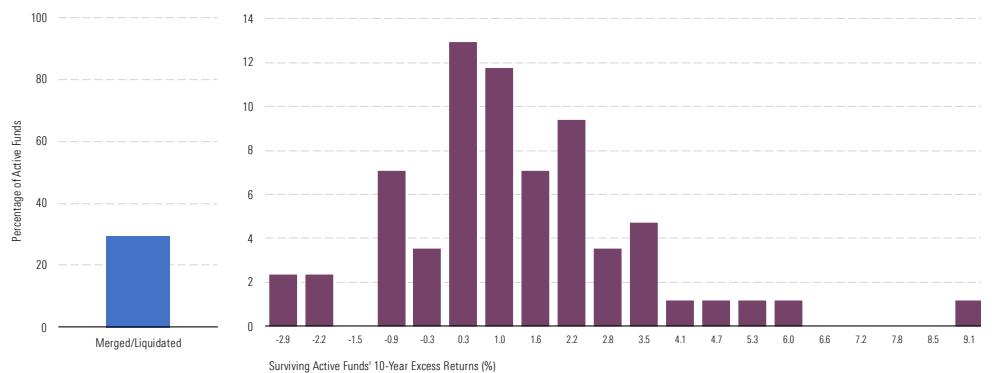
Source: Morningstar Direct. Data as of Dec. 31, 2024.

**Exhibit 69** Rolling Success Rates for Surviving Active India Equity Funds (%)



Source: Morningstar Direct. Data as of Dec. 31, 2024.

**Exhibit 70** Mortality and Distribution of 10-Year Annualized Excess Returns for Surviving Active India Equity Funds (%)



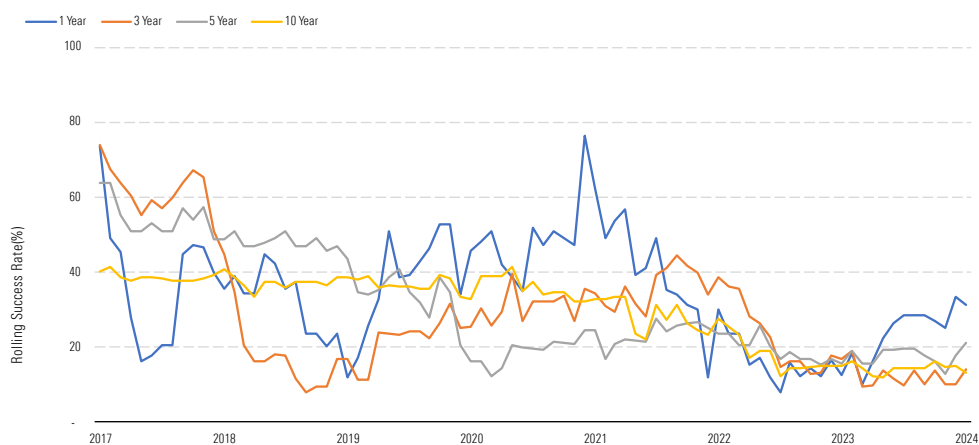
Source: Morningstar Direct. Data as of Dec. 31, 2024.

**Exhibit 71** Italy Equity

	Active Funds		Passive Funds		Asset-Weighted Performance		Active Success Rate (%)
	# at Beginning of Period	Survivorship Rate (%)	# at Beginning of Period	Survivorship Rate (%)	Active (%)	Passive (%)	
<b>Trailing Total Return</b>							
1-Year	48	97.9	10	80.0	13.1	16.8	31.3
3-year	50	88.0	9	77.8	6.0	10.4	14.0
5-Year	57	73.7	11	63.6	8.3	10.0	21.1
10-Year	46	56.5	10	60.0	7.8	9.4	13.0

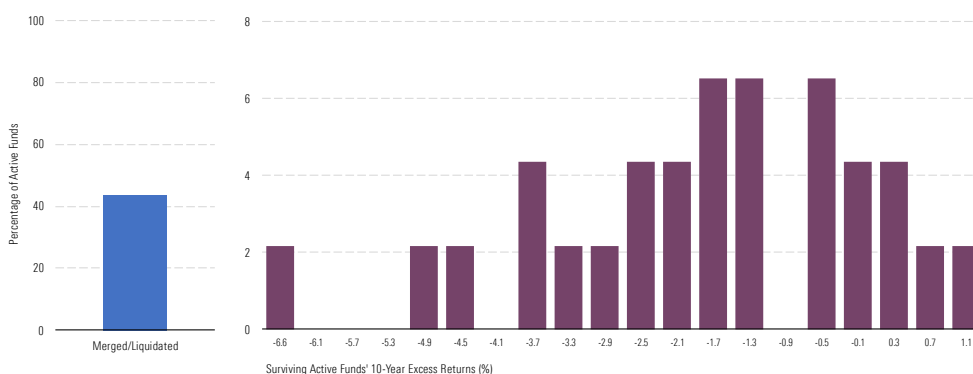
Source: Morningstar Direct. Data as of Dec. 31, 2024.

**Exhibit 72** Rolling Success Rates for Surviving Active Italy Equity Funds (%)



Source: Morningstar Direct. Data as of Dec. 31, 2024.

**Exhibit 73** Mortality and Distribution of 10-Year Annualized Excess Returns for Surviving Active Italy Equity Funds (%)



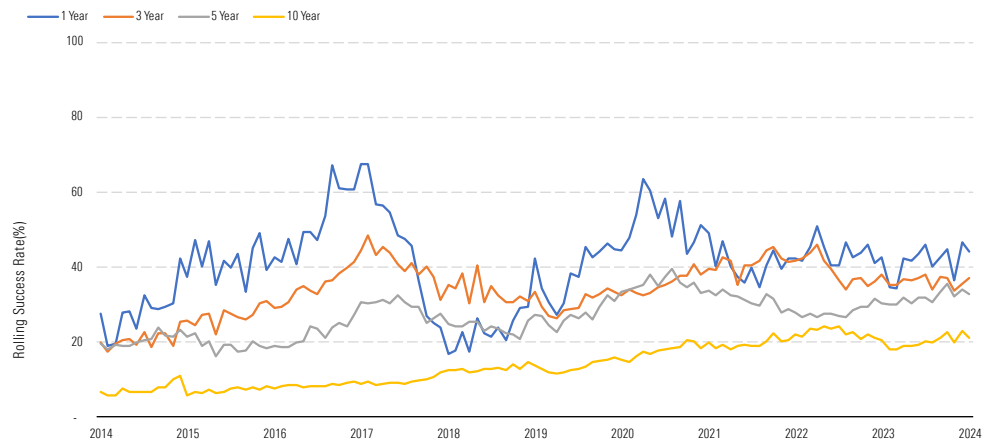
Source: Morningstar Direct. Data as of Dec. 31, 2024.

**Exhibit 74** Japan Large-Cap Equity

	Active Funds		Passive Funds		Asset-Weighted Performance		Active Success Rate (%)
	# at Beginning of Period	Survivorship Rate (%)	# at Beginning of Period	Survivorship Rate (%)	Active (%)	Passive (%)	
<b>Trailing Total Return</b>							
1-Year	194	89.2	101	97.0	15.1	14.8	44.3
3-year	200	78.5	96	90.6	3.0	5.4	37.0
5-Year	214	69.2	91	85.7	5.6	6.2	32.7
10-Year	230	50.0	64	67.2	7.8	7.7	21.3

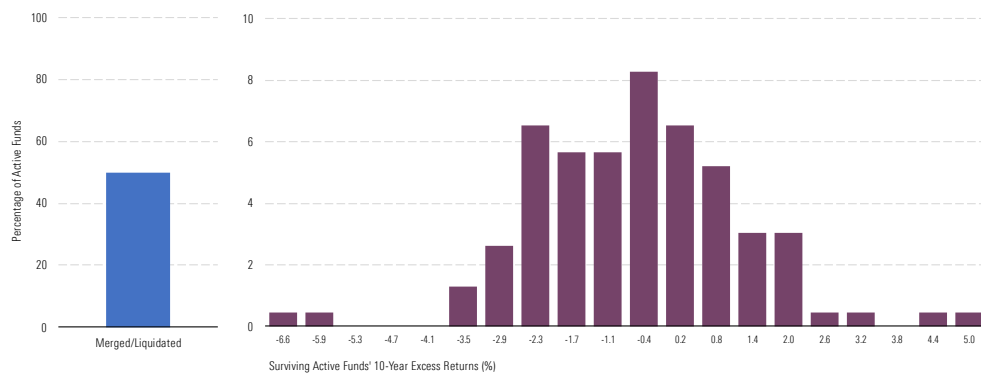
Source: Morningstar Direct. Data as of Dec. 31, 2024.

**Exhibit 75** Rolling Success Rates for Surviving Active Japan Large-Cap Equity Funds (%)



Source: Morningstar Direct. Data as of Dec. 31, 2024.

**Exhibit 76** Mortality and Distribution of 10-Year Annualized Excess Returns for Surviving Active Japan Large-Cap Equity Funds (%)



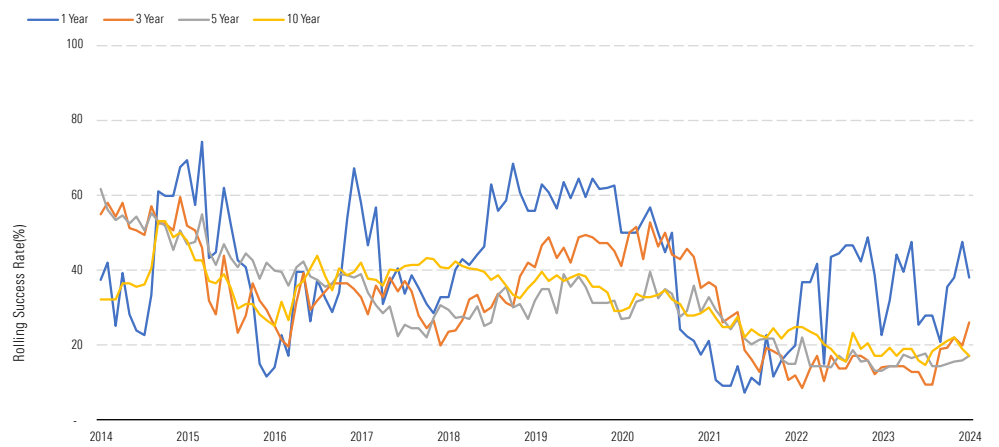
Source: Morningstar Direct. Data as of Dec. 31, 2024.

**Exhibit 77** Latin America Equity

	Active Funds		Passive Funds		Asset-Weighted Performance		Active Success Rate (%)
	# at Beginning of Period	Survivorship Rate (%)	# at Beginning of Period	Survivorship Rate (%)	Active (%)	Passive (%)	
<b>Trailing Total Return</b>							
1-Year	42	90.5	5	80.0	-21.9	-22.3	38.1
3-year	50	76.0	7	57.1	2.6	4.2	26.0
5-Year	58	65.5	7	57.1	-4.9	-2.8	17.2
10-Year	88	31.8	11	18.2	0.4	0.4	17.0

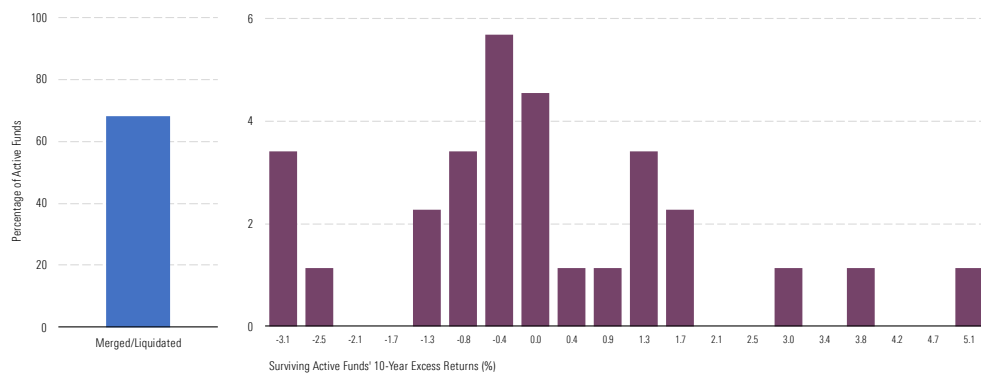
Source: Morningstar Direct. Data as of Dec. 31, 2024.

**Exhibit 78** Rolling Success Rates for Surviving Active Latin America Equity Funds (%)



Source: Morningstar Direct. Data as of Dec. 31, 2024.

**Exhibit 79** Mortality and Distribution of 10-Year Annualized Excess Returns for Surviving Latin America Equity Funds (%)



Source: Morningstar Direct. Data as of Dec. 31, 2024.

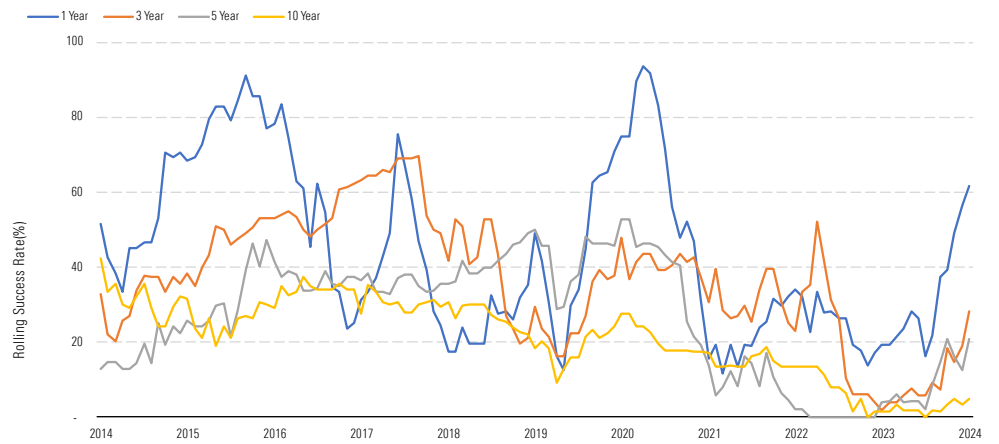


**Exhibit 80** Nordic Equity

	Active Funds		Passive Funds		Asset-Weighted Performance		Active Success Rate (%)
	# at Beginning of Period	Survivorship Rate (%)	# at Beginning of Period	Survivorship Rate (%)	Active (%)	Passive (%)	
<b>Trailing Total Return</b>							
1-Year	55	96.4	14	100.0	5.5	3.1	61.8
3-year	53	92.5	12	100.0	-1.8	0.0	28.3
5-Year	48	89.6	11	100.0	6.8	8.7	20.8
10-Year	60	53.3	7	71.4	7.6	8.9	5.0

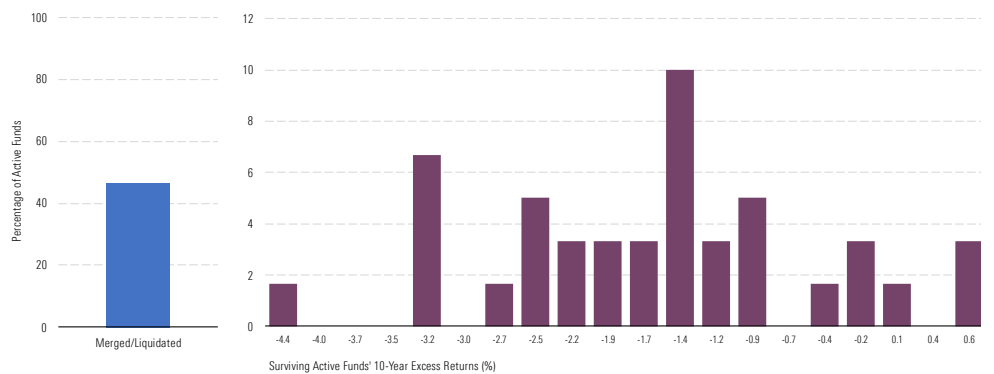
Source: Morningstar Direct. Data as of Dec. 31, 2024.

**Exhibit 81** Rolling Success Rates for Surviving Active Nordic Equity Funds (%)



Source: Morningstar Direct. Data as of Dec. 31, 2024.

**Exhibit 82** Mortality and Distribution of 10-Year Annualized Excess Returns for Surviving Nordic Equity Funds (%)



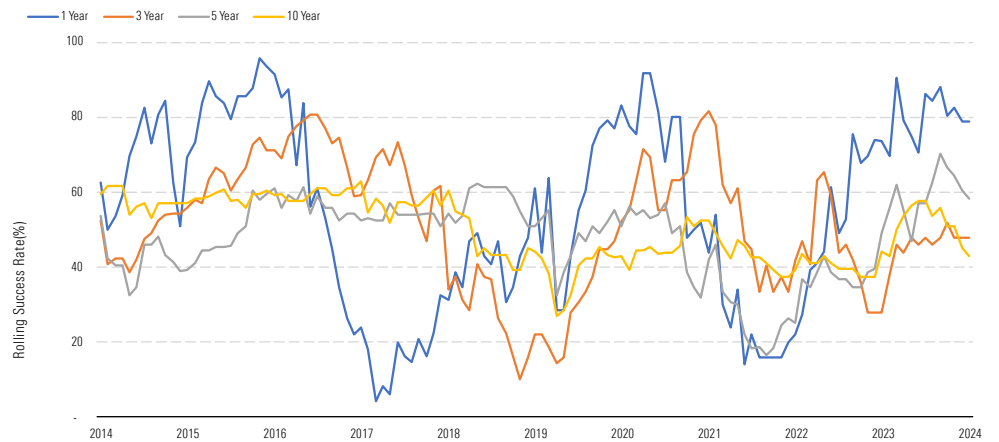
Source: Morningstar Direct. Data as of Dec. 31, 2024.

**Exhibit 83** Norway Equity

	Active Funds		Passive Funds		Asset-Weighted Performance		Active Success Rate (%)
	# at Beginning of Period	Survivorship Rate (%)	# at Beginning of Period	Survivorship Rate (%)	Active (%)	Passive (%)	
<b>Trailing Total Return</b>							
1-Year	52	88.5	8	100.0	9.8	4.0	78.8
3-year	50	86.0	8	100.0	1.1	0.0	48.0
5-Year	48	85.4	10	80.0	6.2	4.8	58.3
10-Year	49	71.4	11	63.6	7.5	6.7	42.9

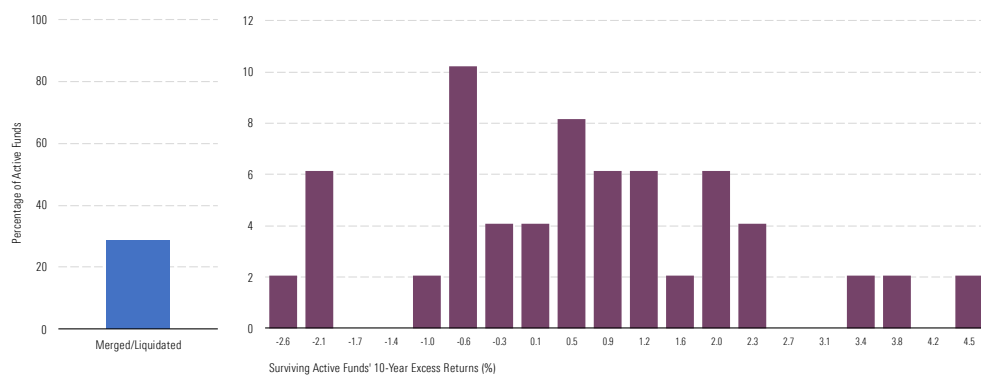
Source: Morningstar Direct. Data as of Dec. 31, 2024.

**Exhibit 84** Rolling Success Rates for Surviving Active Norway Equity Funds (%)



Source: Morningstar Direct. Data as of Dec. 31, 2024.

**Exhibit 85** Mortality and Distribution of 10-Year Annualized Excess Returns for Surviving Norway Equity Funds (%)



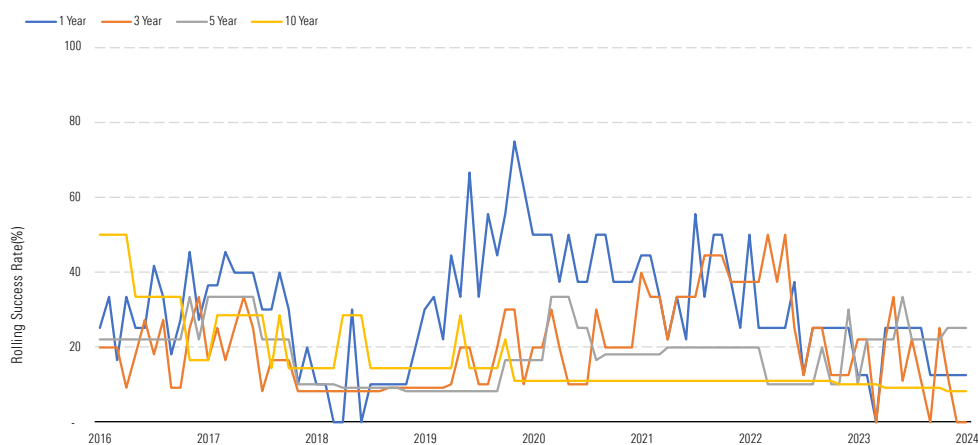
Source: Morningstar Direct. Data as of Dec. 31, 2024.

**Exhibit 86** Pacific ex-Japan Equity

	Active Funds		Passive Funds		Asset-Weighted Performance		Active Success Rate (%)
	# at Beginning of Period	Survivorship Rate (%)	# at Beginning of Period	Survivorship Rate (%)	Active (%)	Passive (%)	
<b>Trailing Total Return</b>							
1-Year	8	100.0	28	100.0	11.0	11.2	12.5
3-year	8	100.0	28	96.4	3.8	4.4	0.0
5-Year	8	87.5	26	92.3	4.9	4.6	25.0
10-Year	12	58.3	19	89.5	5.4	5.9	8.3

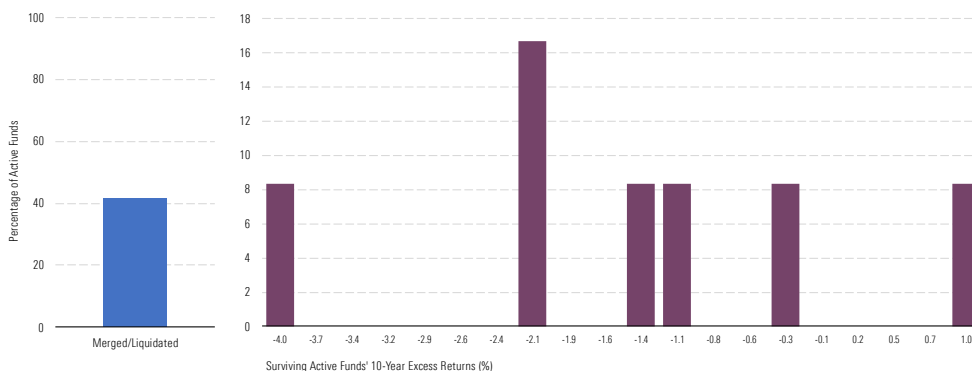
Source: Morningstar Direct. Data as of Dec. 31, 2024.

**Exhibit 87** Rolling Success Rates for Surviving Active Pacific ex-Japan Equity Funds (%)



Source: Morningstar Direct. Data as of Dec. 31, 2024.

**Exhibit 88** Mortality and Distribution of 10-Year Annualized Excess Returns for Surviving Pacific ex-Japan Equity Funds (%)



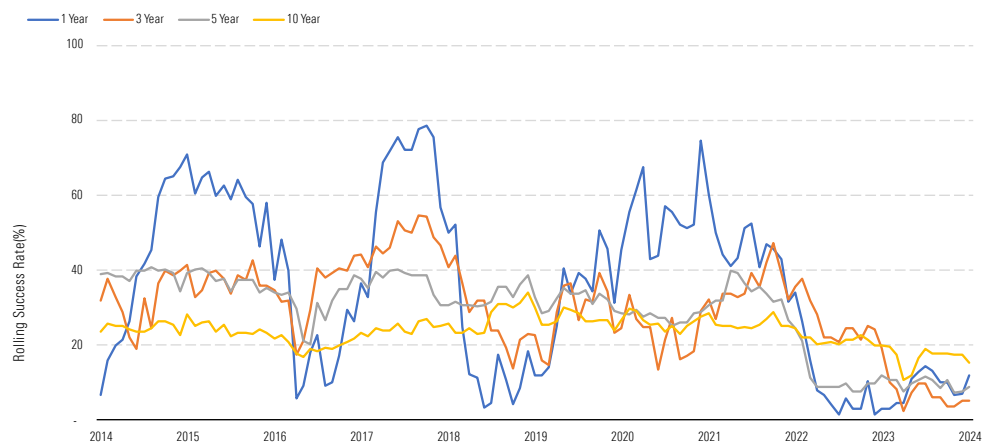
Source: Morningstar Direct. Data as of Dec. 31, 2024.

**Exhibit 89** Spain Equity

	Active Funds		Passive Funds		Asset-Weighted Performance		Active Success Rate (%)
	# at Beginning of Period	Survivorship Rate (%)	# at Beginning of Period	Survivorship Rate (%)	Active (%)	Passive (%)	
<b>Trailing Total Return</b>							
1-Year	58	87.9	10	80.0	11.5	18.9	12.1
3-year	76	68.4	10	80.0	9.0	13.8	5.3
5-Year	90	56.7	11	72.7	4.7	7.1	8.9
10-Year	79	46.8	14	57.1	3.8	4.5	15.2

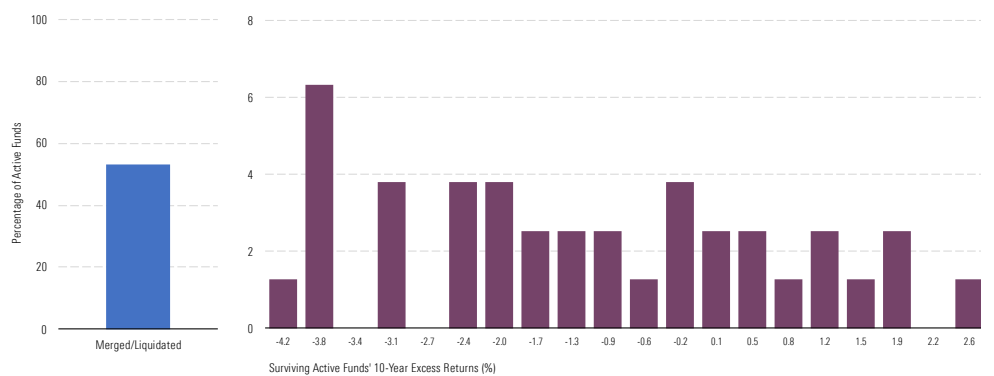
Source: Morningstar Direct. Data as of Dec. 31, 2024.

**Exhibit 90** Rolling Success Rates for Surviving Active Spain Equity Funds (%)



Source: Morningstar Direct. Data as of Dec. 31, 2024.

**Exhibit 91** Mortality and Distribution of 10-Year Annualized Excess Returns for Surviving Spain Equity Funds (%)



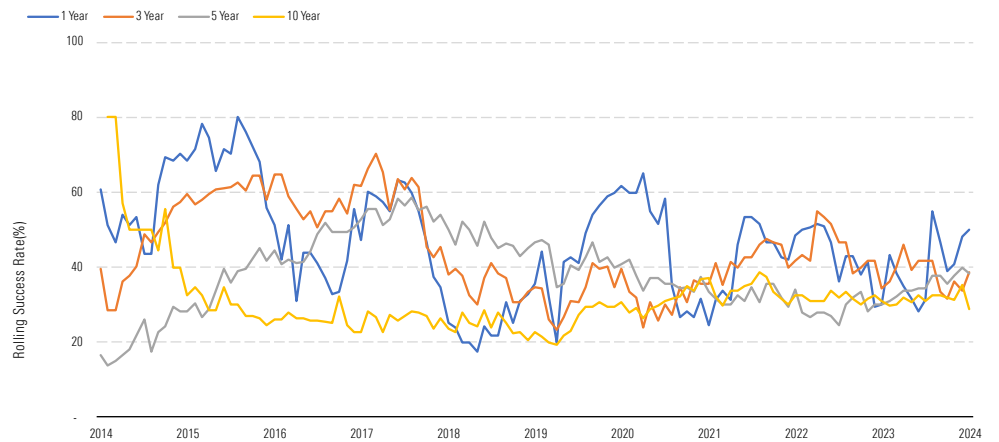
Source: Morningstar Direct. Data as of Dec. 31, 2024.

**Exhibit 92** Sweden Equity

	Active Funds		Passive Funds		Asset-Weighted Performance		Active Success Rate (%)
	# at Beginning of Period	Survivorship Rate (%)	# at Beginning of Period	Survivorship Rate (%)	Active (%)	Passive (%)	
<b>Trailing Total Return</b>							
1-Year	58	93.1	26	100.0	5.2	5.1	50.0
3-year	62	83.9	26	100.0	-4.1	-3.4	38.7
5-Year	60	83.3	23	100.0	6.2	6.8	38.3
10-Year	73	56.2	26	61.5	6.8	7.2	28.8

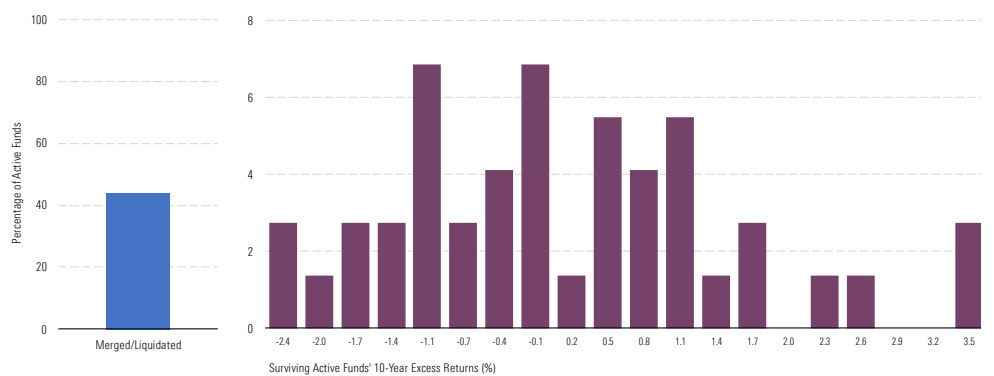
Source: Morningstar Direct. Data as of Dec. 31, 2024.

**Exhibit 93** Rolling Success Rates for Surviving Active Sweden Equity Funds (%)



Source: Morningstar Direct. Data as of Dec. 31, 2024.

**Exhibit 94** Mortality and Distribution of 10-Year Annualized Excess Returns for Surviving Sweden Equity Funds (%)



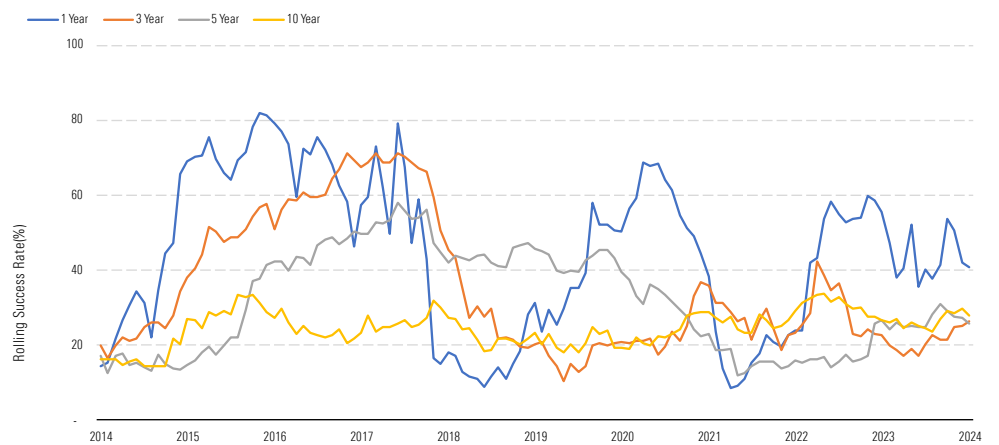
Source: Morningstar Direct. Data as of Dec. 31, 2024.

**Exhibit 95** Switzerland Equity

	Active Funds		Passive Funds		Asset-Weighted Performance		Active Success Rate (%)
	# at Beginning of Period	Survivorship Rate (%)	# at Beginning of Period	Survivorship Rate (%)	Active (%)	Passive (%)	
<b>Trailing Total Return</b>							
1-Year	172	95.9	60	98.3	5.2	5.5	40.7
3-year	163	90.2	57	94.7	0.9	1.6	26.4
5-Year	155	83.9	51	94.1	6.6	7.1	25.8
10-Year	133	64.7	48	70.8	8.2	8.3	27.8

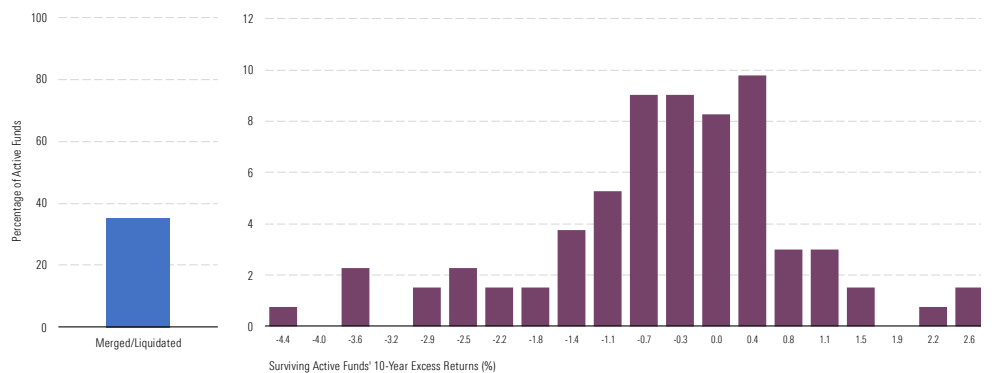
Source: Morningstar Direct. Data as of Dec. 31, 2024.

**Exhibit 96** Rolling Success Rates for Surviving Active Switzerland Equity Funds (%)



Source: Morningstar Direct. Data as of Dec. 31, 2024.

**Exhibit 97** Mortality and Distribution of 10-Year Annualized Excess Returns for Surviving Switzerland Equity Funds (%)



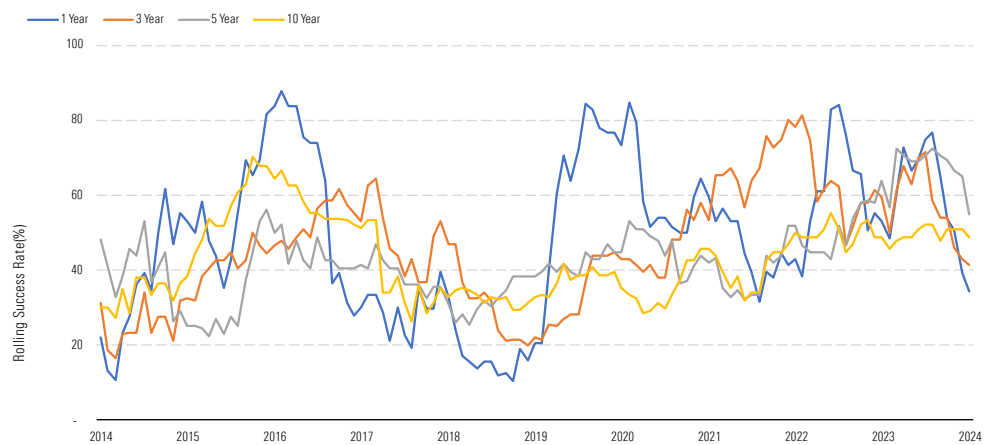
Source: Morningstar Direct. Data as of Dec. 31, 2024.

**Exhibit 98** Switzerland Small/Mid-Cap Equity

	Active Funds		Passive Funds		Asset-Weighted Performance		Active Success Rate (%)
	# at Beginning of Period	Survivorship Rate (%)	# at Beginning of Period	Survivorship Rate (%)	Active (%)	Passive (%)	
<b>Trailing Total Return</b>							
1-Year	70	97.1	6	100.0	-0.8	2.8	34.3
3-year	65	93.8	6	100.0	-3.9	-2.9	41.5
5-Year	60	91.7	7	85.7	5.1	4.5	55.0
10-Year	47	78.7	7	71.4	9.6	8.7	48.9

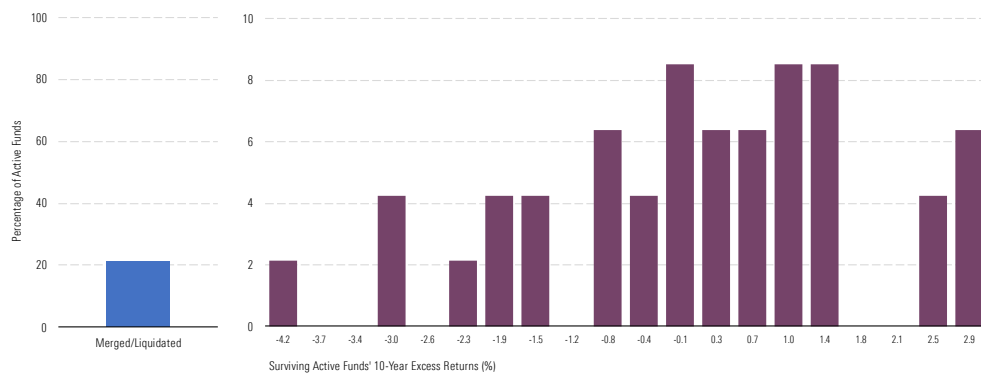
Source: Morningstar Direct. Data as of Dec. 31, 2024.

**Exhibit 99** Rolling Success Rates for Surviving Active Switzerland Small/Mid-Cap Equity Funds (%)



Source: Morningstar Direct. Data as of Dec. 31, 2024.

**Exhibit 100** Mortality and Distribution of 10-Year Annualized Excess Returns for Surviving Switzerland Small/Mid-Cap Equity Funds (%)



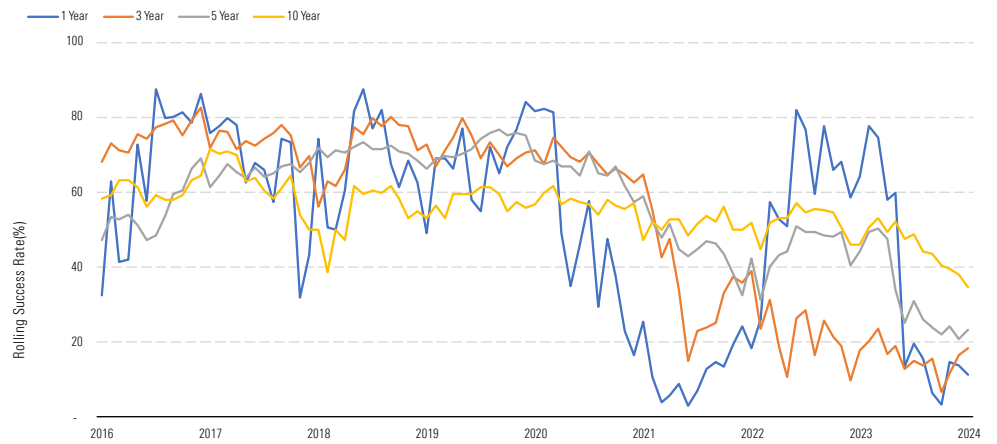
Source: Morningstar Direct. Data as of Dec. 31, 2024.

**Exhibit 101** UK Equity Income

	Active Funds		Passive Funds		Asset-Weighted Performance		Active Success Rate (%)
	# at Beginning of Period	Survivorship Rate (%)	# at Beginning of Period	Survivorship Rate (%)	Active (%)	Passive (%)	
<b>Trailing Total Return</b>							
1-Year	89	87.6	5	80.0	15.0	17.8	11.2
3-year	104	75.0	4	75.0	5.1	7.4	18.3
5-Year	103	67.0	4	75.0	3.1	4.9	23.3
10-Year	92	47.8	4	75.0	4.0	3.7	34.8

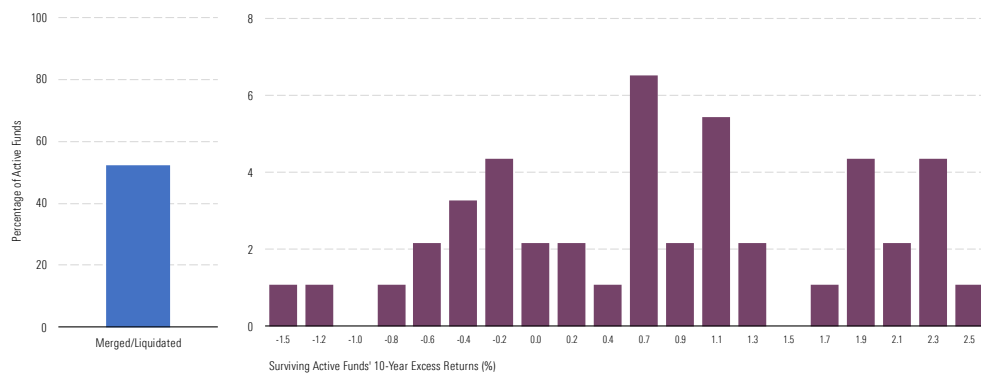
Source: Morningstar Direct. Data as of Dec. 31, 2024.

**Exhibit 102** Rolling Success Rates for Surviving Active UK Equity Income Funds (%)



Source: Morningstar Direct. Data as of Dec. 31, 2024.

**Exhibit 103** Mortality and Distribution of 10-Year Annualized Excess Returns for Surviving UK Equity Income Funds (%)



Source: Morningstar Direct. Data as of Dec. 31, 2024.

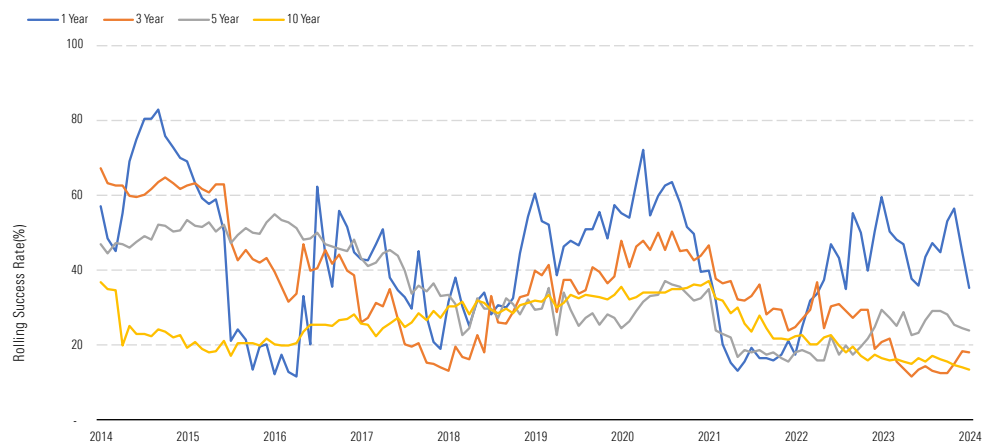


**Exhibit 104** UK Large-Cap Equity

	Active Funds		Passive Funds		Asset-Weighted Performance		Active Success Rate (%)
	# at Beginning of Period	Survivorship Rate (%)	# at Beginning of Period	Survivorship Rate (%)	Active (%)	Passive (%)	
<b>Trailing Total Return</b>							
1-Year	96	94.8	65	96.9	13.0	14.5	35.4
3-year	121	81.0	70	90.0	4.7	6.6	18.2
5-Year	125	72.0	63	85.7	4.7	5.2	24.0
10-Year	126	42.9	67	56.7	4.4	5.2	13.5

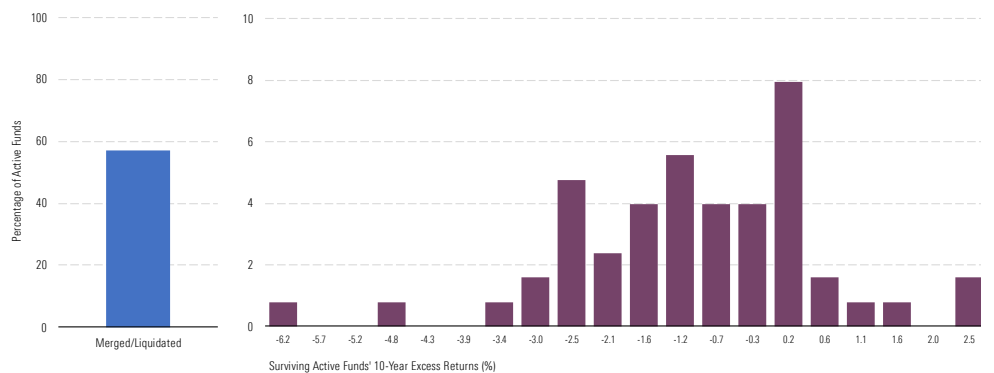
Source: Morningstar Direct. Data as of Dec. 31, 2024.

**Exhibit 105** Rolling Success Rates for Surviving Active UK Large-Cap Equity Funds (%)



Source: Morningstar Direct. Data as of Dec. 31, 2024.

**Exhibit 106** Mortality and Distribution of 10-Year Annualized Excess Returns for Surviving UK Large-Cap Equity Funds (%)



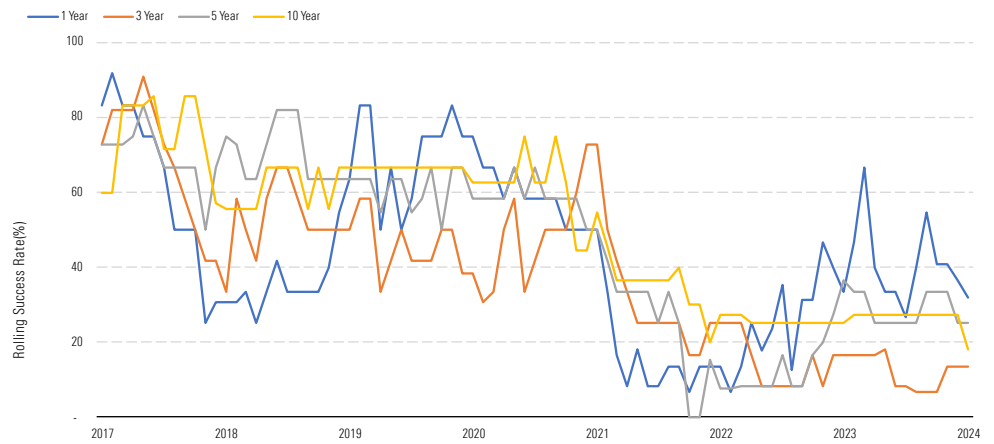
Source: Morningstar Direct. Data as of Dec. 31, 2024.

**Exhibit 107** UK Mid-Cap Equity

	Active Funds		Passive Funds		Asset-Weighted Performance		Active Success Rate (%)
	# at Beginning of Period	Survivorship Rate (%)	# at Beginning of Period	Survivorship Rate (%)	Active (%)	Passive (%)	
<b>Trailing Total Return</b>							
1-Year	22	95.5	9	100.0	12.9	12.9	31.8
3-year	15	80.0	9	100.0	-6.8	-0.9	13.3
5-Year	12	75.0	6	100.0	-1.9	1.7	25.0
10-Year	11	63.6	7	85.7	3.3	4.3	18.2

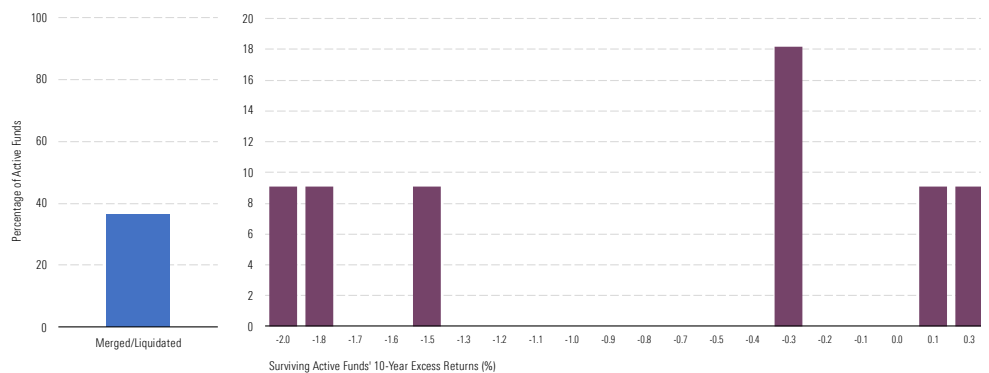
Source: Morningstar Direct. Data as of Dec. 31, 2024.

**Exhibit 108** Rolling Success Rates for Surviving Active UK Mid-Cap Equity Funds (%)



Source: Morningstar Direct. Data as of Dec. 31, 2024.

**Exhibit 109** Mortality and Distribution of 10-Year Annualized Excess Returns for Surviving UK Mid-Cap Equity Funds (%)



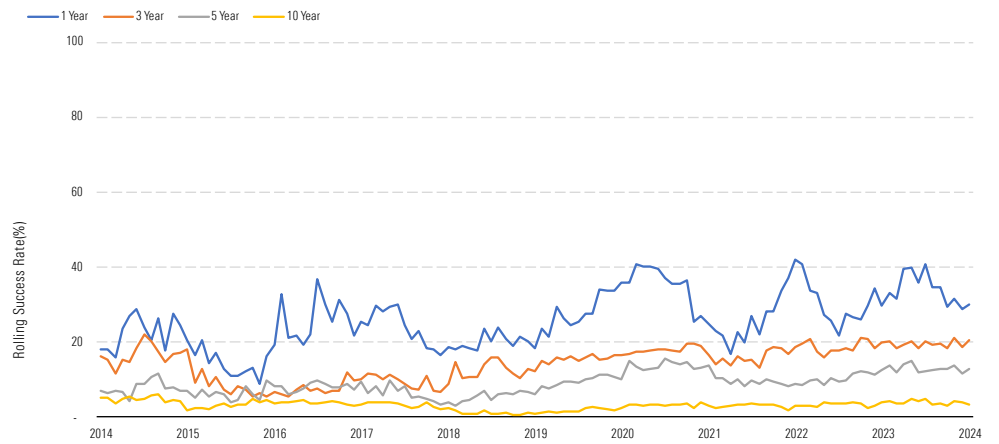
Source: Morningstar Direct. Data as of Dec. 31, 2024.

**Exhibit 110** US Large-Cap Blend Equity

	Active Funds		Passive Funds		Asset-Weighted Performance		Active Success Rate (%)
	# at Beginning of Period	Survivorship Rate (%)	# at Beginning of Period	Survivorship Rate (%)	Active (%)	Passive (%)	
<b>Trailing Total Return</b>							
1-Year	406	94.6	221	97.7	29.7	31.9	30.0
3-year	388	84.5	205	91.7	9.9	11.5	20.6
5-Year	381	73.8	193	80.8	14.3	15.9	12.9
10-Year	374	52.7	128	65.6	12.3	14.2	3.5

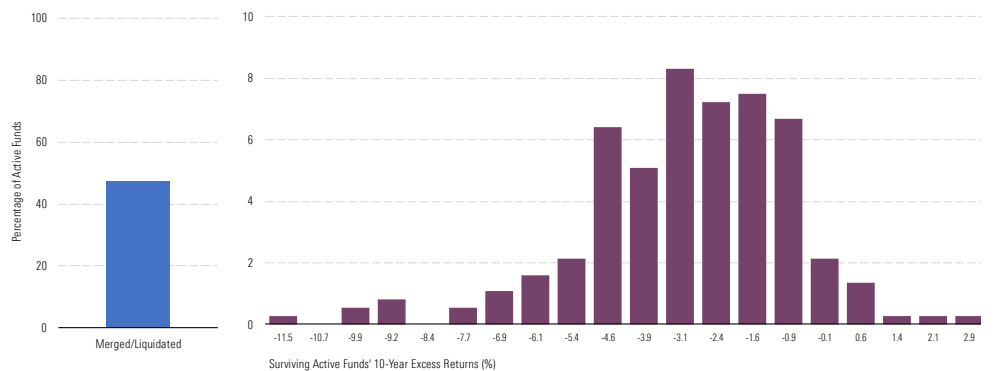
Source: Morningstar Direct. Data as of Dec. 31, 2024.

**Exhibit 111** Rolling Success Rates for Surviving Active US Large-Cap Blend Equity Funds (%)



Source: Morningstar Direct. Data as of Dec. 31, 2024.

**Exhibit 112** Mortality and Distribution of 10-Year Annualized Excess Returns for US Large-Cap Blend Equity Funds (%)



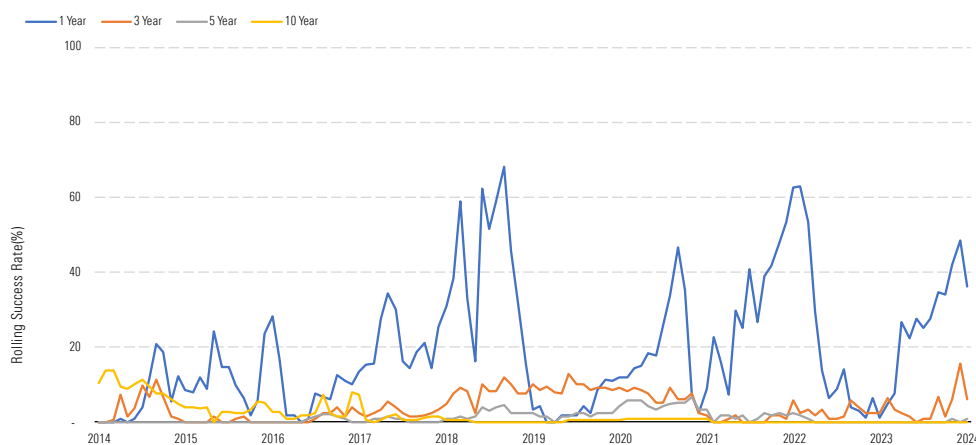
Source: Morningstar Direct. Data as of Dec. 31, 2024.

**Exhibit 113 US Large-Cap Growth Equity**

	Active Funds		Passive Funds		Asset-Weighted Performance		Active Success Rate (%)
	# at Beginning of Period	Survivorship Rate (%)	# at Beginning of Period	Survivorship Rate (%)	Active (%)	Passive (%)	
<b>Trailing Total Return</b>							
1-Year	158	95.6	24	95.8	32.3	34.1	36.1
3-year	145	87.6	19	94.7	6.1	12.4	6.2
5-Year	118	79.7	14	85.7	14.6	21.6	0.8
10-Year	127	55.1	10	50.0	13.8	19.7	0.0

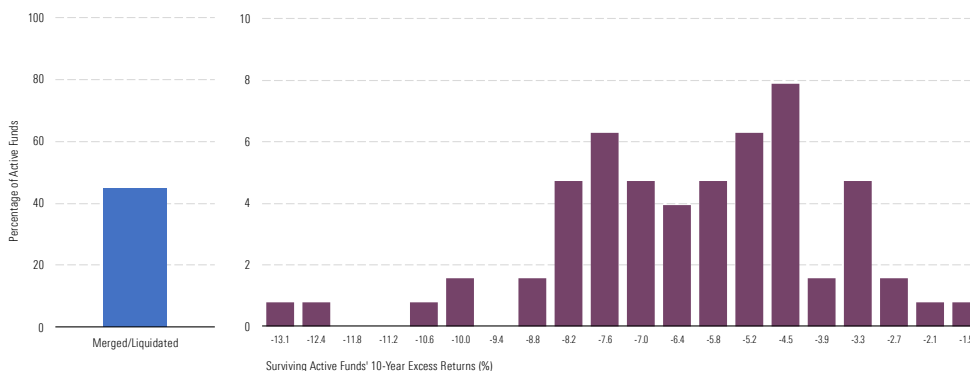
Source: Morningstar Direct. Data as of Dec. 31, 2024.

**Exhibit 114 Rolling Success Rates for Surviving Active US Large-Cap Growth Equity Funds (%)**



Source: Morningstar Direct. Data as of Dec. 31, 2024.

**Exhibit 115 Mortality and Distribution of 10-Year Annualized Excess Returns for US Large-Cap Growth Equity Funds (%)**



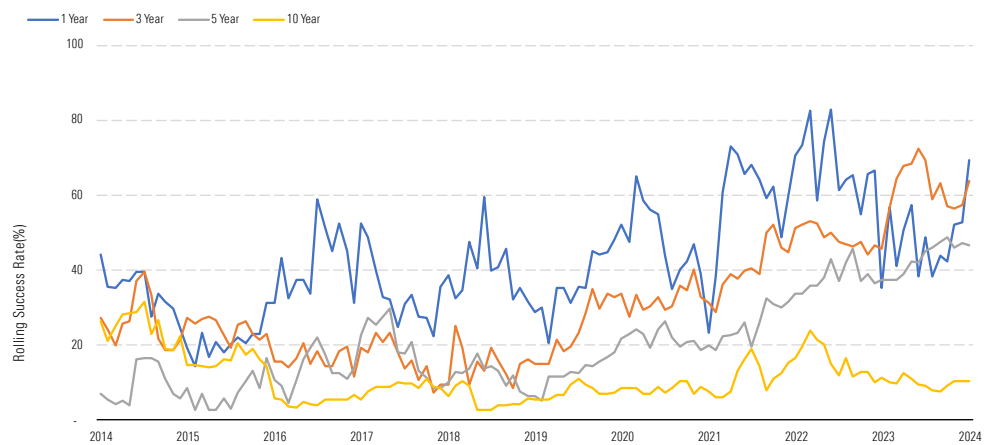
Source: Morningstar Direct. Data as of Dec. 31, 2024.

**Exhibit 116** US Large-Cap Value Equity

	Active Funds		Passive Funds		Asset-Weighted Performance		Active Success Rate (%)
	# at Beginning of Period	Survivorship Rate (%)	# at Beginning of Period	Survivorship Rate (%)	Active (%)	Passive (%)	
<b>Trailing Total Return</b>							
1-Year	72	97.2	11	100.0	18.9	17.1	69.4
3-year	75	85.3	11	100.0	8.4	6.3	64.0
5-Year	86	64.0	13	76.9	10.4	9.4	46.5
10-Year	78	47.4	11	63.6	9.2	11.2	10.3

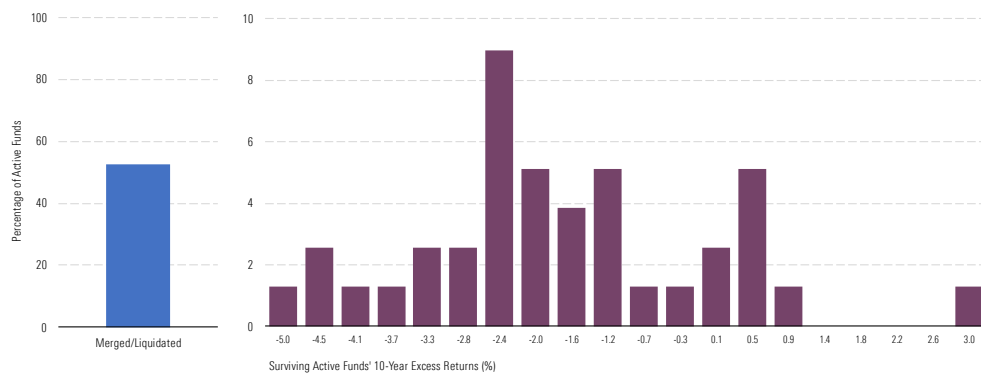
Source: Morningstar Direct. Data as of Dec. 31, 2024.

**Exhibit 117** Rolling Success Rates for Surviving Active US Large-Cap Value Equity Funds (%)



Source: Morningstar Direct. Data as of Dec. 31, 2024.

**Exhibit 118** Mortality and Distribution of 10-Year Annualized Excess Returns for US Large-Cap Value Equity Funds (%)



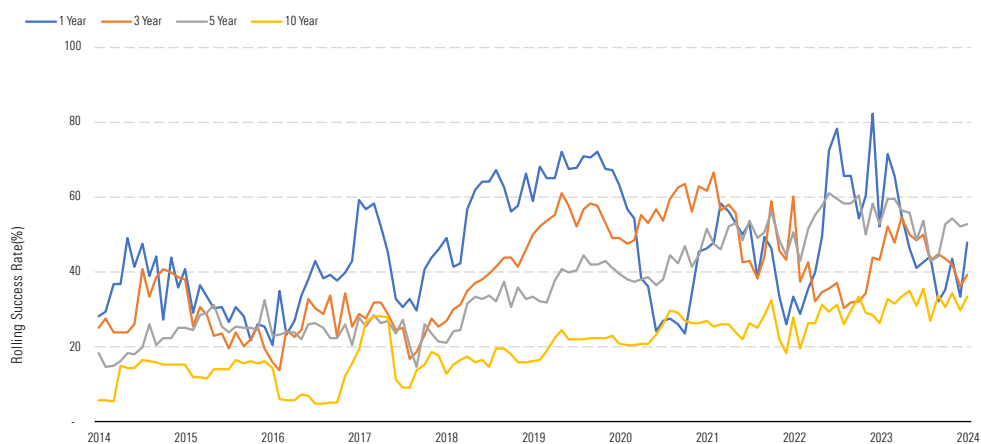
Source: Morningstar Direct. Data as of Dec. 31, 2024.

**Exhibit 119** US Small-Cap Equity

	Active Funds		Passive Funds		Asset-Weighted Performance		Active Success Rate (%)
	# at Beginning of Period	Survivorship Rate (%)	# at Beginning of Period	Survivorship Rate (%)	Active (%)	Passive (%)	
<b>Trailing Total Return</b>							
1-Year	69	94.2	13	92.3	19.1	17.6	47.8
3-year	69	87.0	13	76.9	3.0	4.6	39.1
5-Year	68	80.9	14	78.6	9.9	9.3	52.9
10-Year	66	56.1	12	50.0	10.2	10.0	33.3

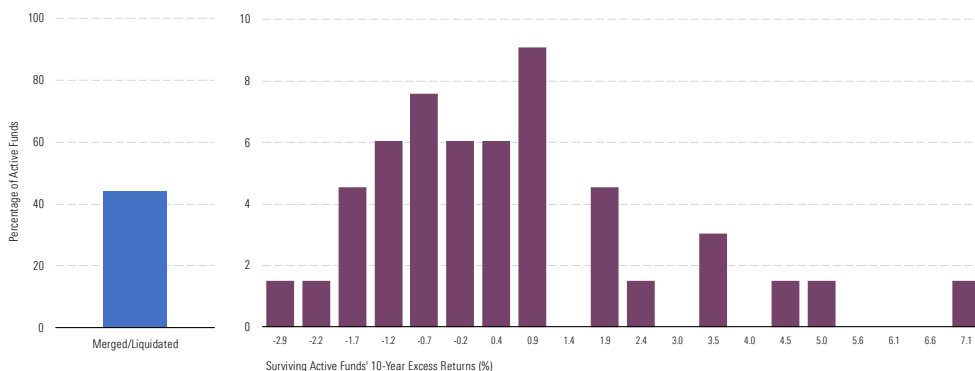
Source: Morningstar Direct. Data as of Dec. 31, 2024.

**Exhibit 120** Rolling Success Rates for Surviving Active US Small-Cap Equity Funds (%)



Source: Morningstar Direct. Data as of Dec. 31, 2024.

**Exhibit 121** Mortality and Distribution of 10-Year Annualized Excess Returns for US Small-Cap Equity Funds (%)



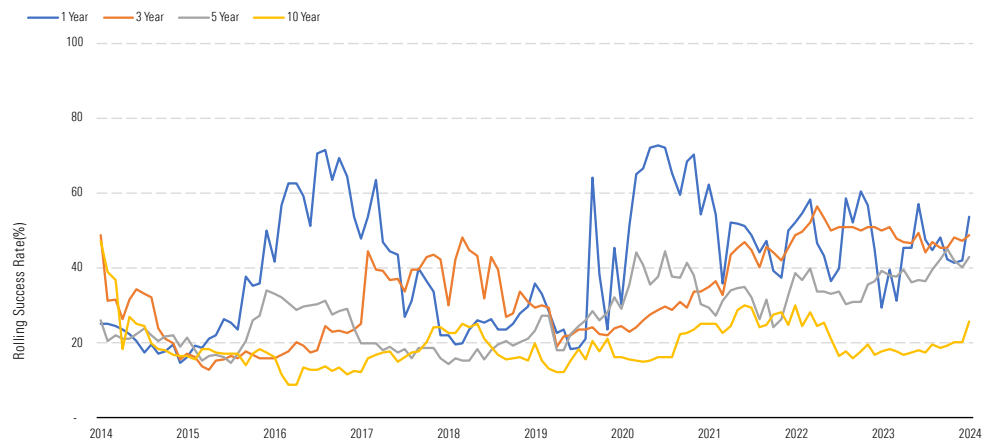
Source: Morningstar Direct. Data as of Dec. 31, 2024.

**Exhibit 122** CHF Bond

	Active Funds		Passive Funds		Asset-Weighted Performance		Active Success Rate (%)
	# at Beginning of Period	Survivorship Rate (%)	# at Beginning of Period	Survivorship Rate (%)	Active (%)	Passive (%)	
<b>Trailing Total Return</b>							
1-Year	106	97.2	43	95.3	4.5	4.3	53.8
3-year	113	87.6	39	94.9	3.1	3.4	48.7
5-Year	119	79.0	34	94.1	2.7	2.8	42.9
10-Year	124	58.9	36	80.6	2.8	3.0	25.8

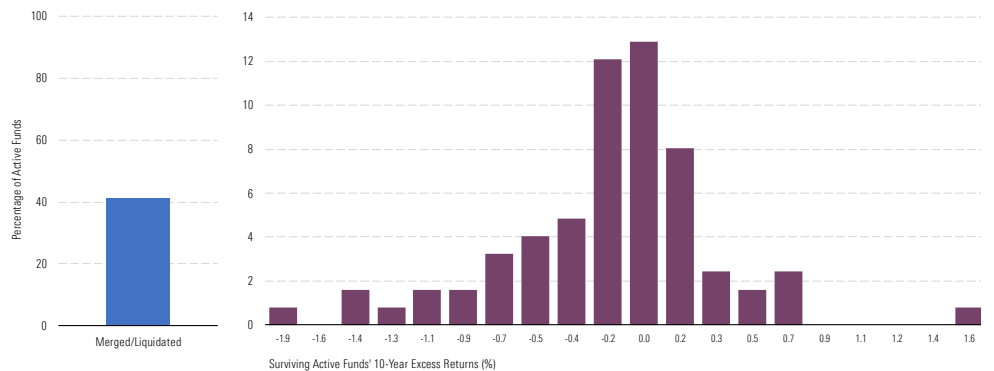
Source: Morningstar Direct. Data as of Dec. 31, 2024.

**Exhibit 123** Rolling Success Rates for Surviving Active CHF Bond Funds (%)



Source: Morningstar Direct. Data as of Dec. 31, 2024.

**Exhibit 124** Mortality and Distribution of 10-Year Annualized Excess Returns for CHF Bond Funds (%)



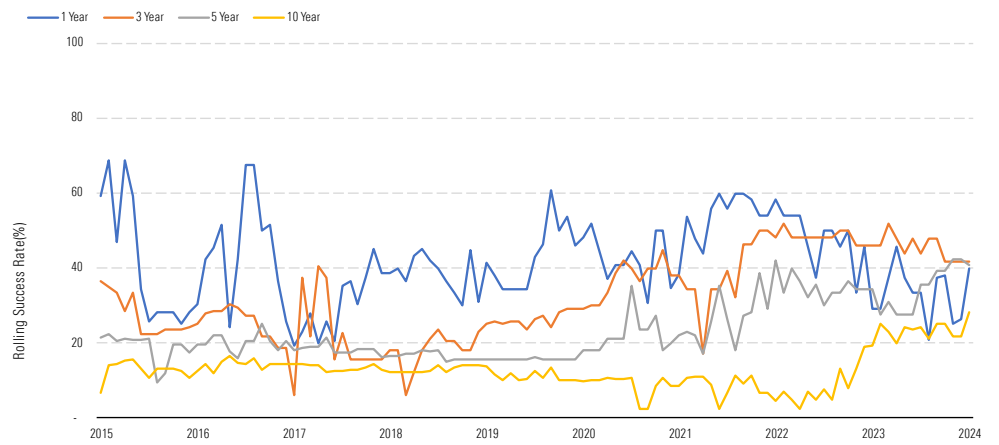
Source: Morningstar Direct. Data as of Dec. 31, 2024.

**Exhibit 125** EUR Bond—Long Term

	Active Funds		Passive Funds		Asset-Weighted Performance		Active Success Rate (%)
	# at Beginning of Period	Survivorship Rate (%)	# at Beginning of Period	Survivorship Rate (%)	Active (%)	Passive (%)	
<b>Trailing Total Return</b>							
1-Year	20	70.0	19	89.5	0.0	-1.1	40.0
3-year	24	66.7	19	84.2	-9.5	-12.2	41.7
5-Year	27	63.0	23	65.2	-5.9	-6.7	40.7
10-Year	32	37.5	18	44.4	-0.3	-1.1	28.1

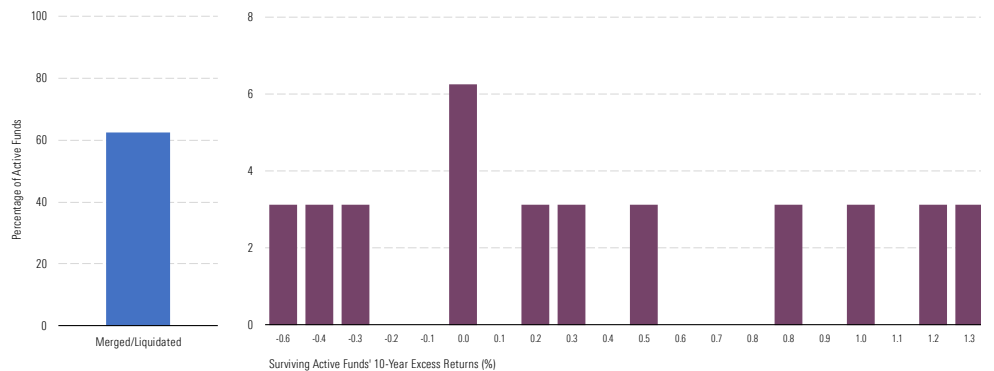
Source: Morningstar Direct. Data as of Dec. 31, 2024.

**Exhibit 126** Rolling Success Rates for Surviving Active EUR Bond—Long Term Funds (%)



Source: Morningstar Direct. Data as of Dec. 31, 2024.

**Exhibit 127** Mortality and Distribution of 10-Year Annualized Excess Returns for EUR Bond—Long Term Funds (%)



Source: Morningstar Direct. Data as of Dec. 31, 2024.

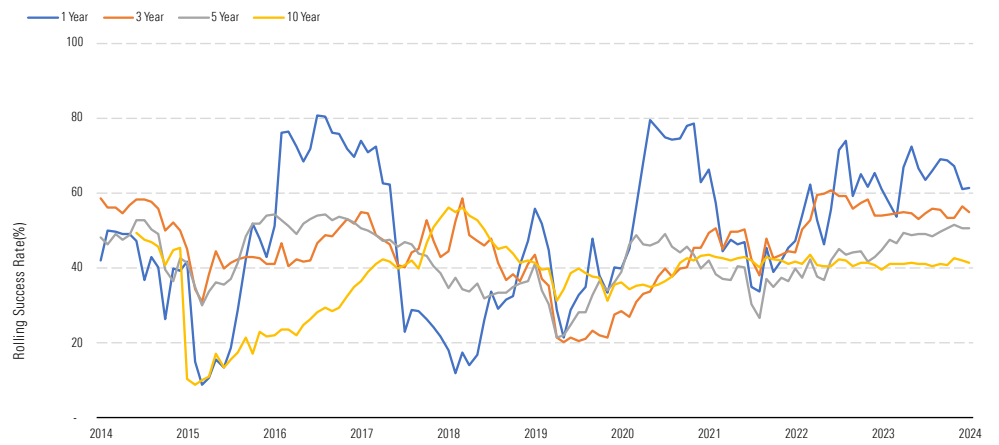


**Exhibit 128** EUR Corporate Bond

	Active Funds		Passive Funds		Asset-Weighted Performance		Active Success Rate (%)
	# at Beginning of Period	Survivorship Rate (%)	# at Beginning of Period	Survivorship Rate (%)	Active (%)	Passive (%)	
<b>Trailing Total Return</b>							
1-Year	354	96.3	54	100.0	5.0	4.5	61.3
3-year	359	86.6	61	80.3	-0.7	-1.0	54.9
5-Year	352	77.6	59	72.9	0.0	-0.4	50.6
10-Year	313	57.8	37	56.8	1.0	0.7	41.5

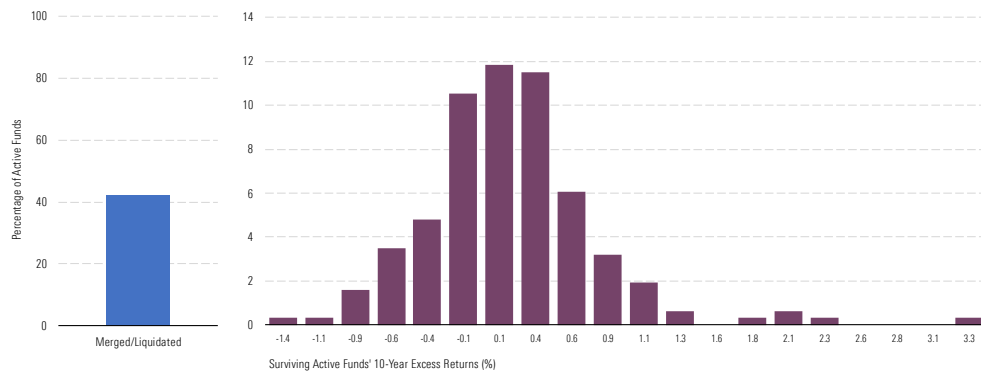
Source: Morningstar Direct. Data as of Dec. 31, 2024.

**Exhibit 129** Rolling Success Rates for Surviving Active EUR Corporate Bond Funds (%)



Source: Morningstar Direct. Data as of Dec. 31, 2024.

**Exhibit 130** Mortality and Distribution of 10-Year Annualized Excess Returns for EUR Corporate Bond Funds (%)



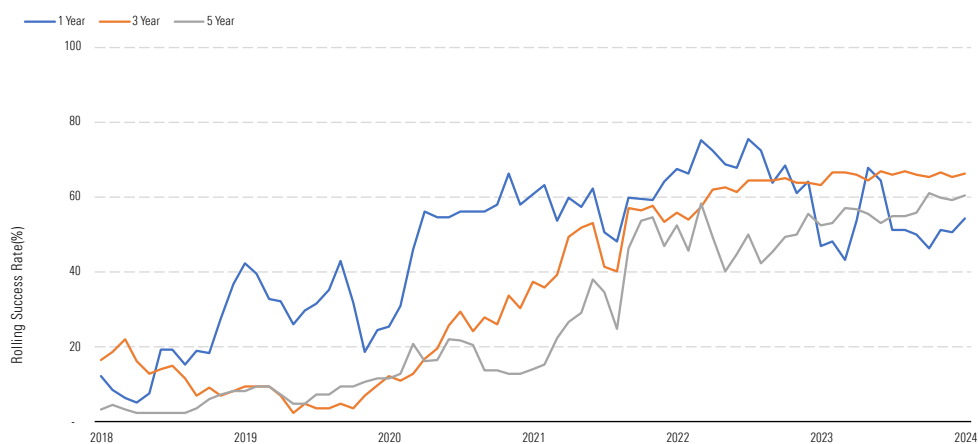
Source: Morningstar Direct. Data as of Dec. 31, 2024.

**Exhibit 131** EUR Corporate Bond—Short Term

	Active Funds		Passive Funds		Asset-Weighted Performance		Active Success Rate (%)
	# at Beginning of Period	Survivorship Rate (%)	# at Beginning of Period	Survivorship Rate (%)	Active (%)	Passive (%)	
<b>Trailing Total Return</b>							
1-Year	83	97.6	14	100.0	4.6	4.4	54.2
3-year	80	86.3	11	100.0	1.7	1.1	66.3
5-Year	86	73.3	10	100.0	1.1	0.7	60.5
10-Year	84	61.9	6	66.7	0.7	0.8	28.6

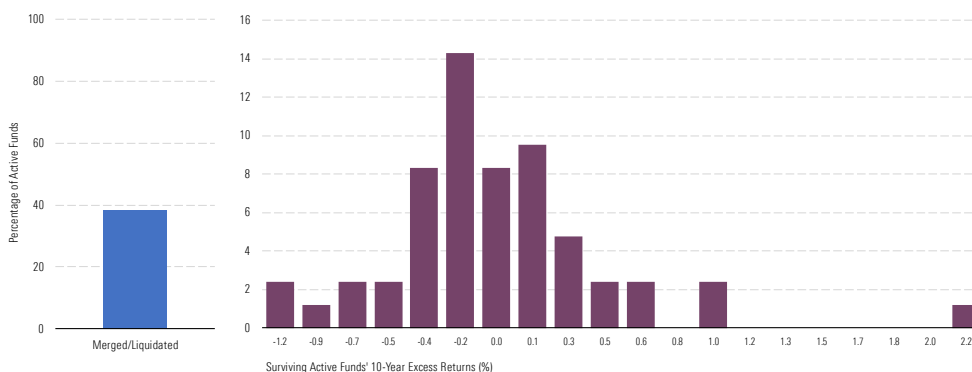
Source: Morningstar Direct. Data as of Dec. 31, 2024.

**Exhibit 132** Rolling Success Rates for Surviving Active EUR Corporate Bond—Short-Term Funds (%)



Source: Morningstar Direct. Data as of Dec. 31, 2024.

**Exhibit 133** Mortality and Distribution of 10-Year Annualized Excess Returns for EUR Corporate Bond—Short-Term Funds (%)



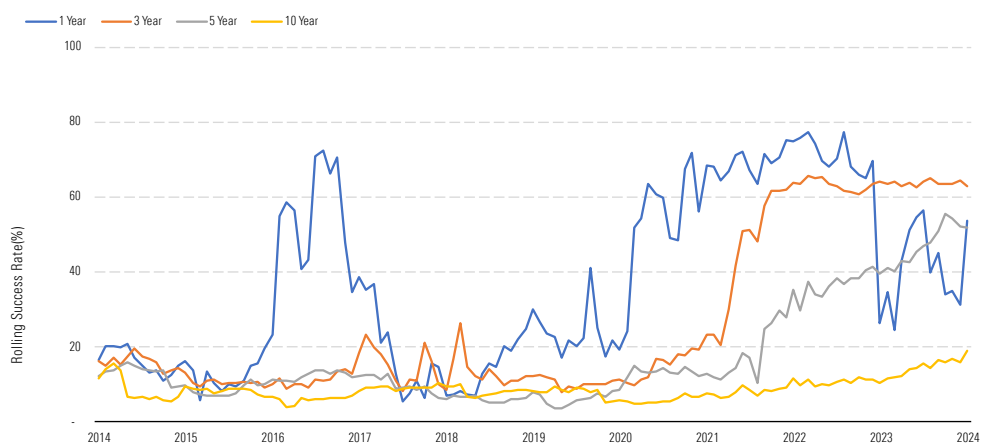
Source: Morningstar Direct. Data as of Dec. 31, 2024.

**Exhibit 134** EUR Diversified Bond

	Active Funds		Passive Funds		Asset-Weighted Performance		Active Success Rate (%)
	# at Beginning of Period	Survivorship Rate (%)	# at Beginning of Period	Survivorship Rate (%)	Active (%)	Passive (%)	
<b>Trailing Total Return</b>							
1-Year	513	94.3	11	100.0	2.9	2.6	53.6
3-year	519	87.3	12	83.3	-2.0	-2.9	62.8
5-Year	549	76.5	10	70.0	-1.2	-1.6	51.7
10-Year	660	55.6	4	75.0	0.1	0.3	19.1

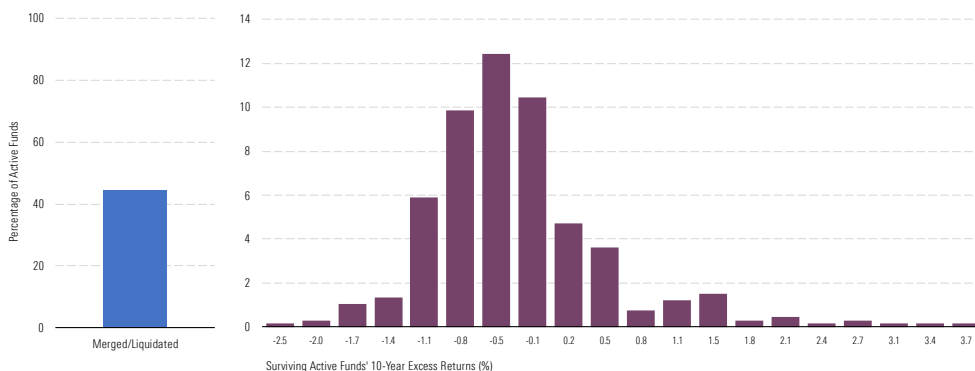
Source: Morningstar Direct. Data as of Dec. 31, 2024.

**Exhibit 135** Rolling Success Rates for Surviving Active EUR Diversified Bond Funds (%)



Source: Morningstar Direct. Data as of Dec. 31, 2024.

**Exhibit 136** Mortality and Distribution of 10-Year Annualized Excess Returns for EUR Diversified Bond Funds (%)



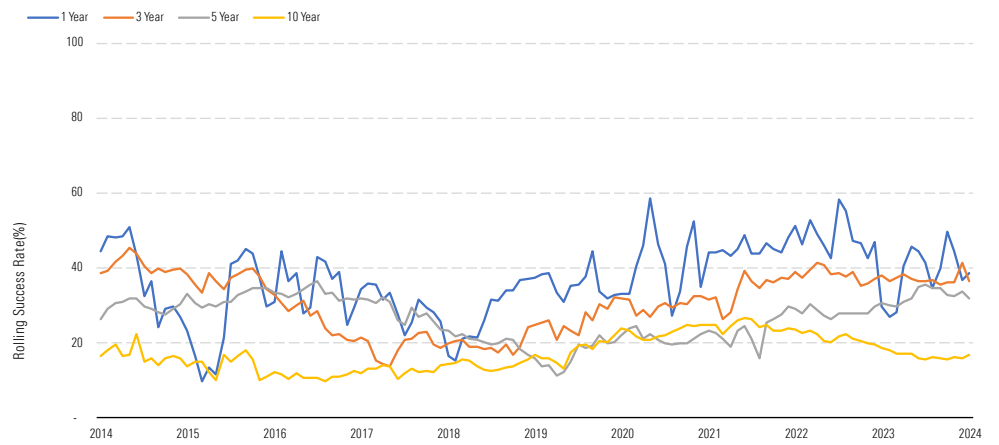
Source: Morningstar Direct. Data as of Dec. 31, 2024.

**Exhibit 137** EUR Government Bond

	Active Funds		Passive Funds		Asset-Weighted Performance		Active Success Rate (%)
	# at Beginning of Period	Survivorship Rate (%)	# at Beginning of Period	Survivorship Rate (%)	Active (%)	Passive (%)	
<b>Trailing Total Return</b>							
1-Year	155	94.2	92	94.6	1.7	1.8	38.7
3-year	172	79.7	101	79.2	-2.6	-3.4	36.6
5-Year	203	64.0	106	71.7	-1.4	-1.9	32.0
10-Year	237	42.2	103	44.7	-0.2	0.1	16.9

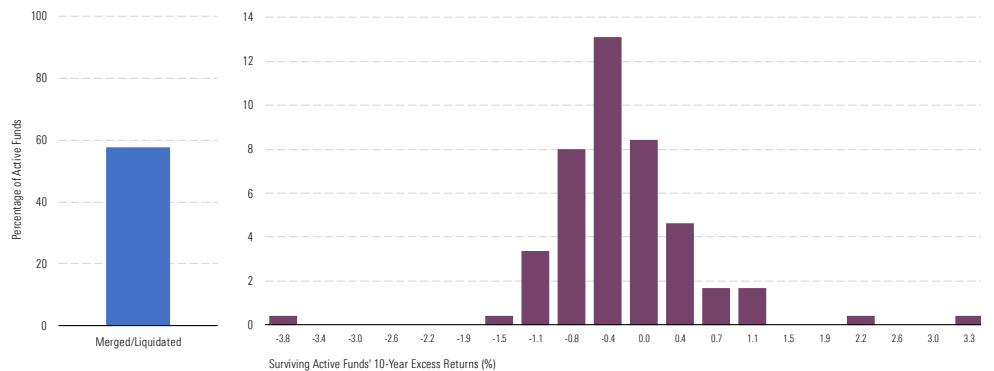
Source: Morningstar Direct. Data as of Dec. 31, 2024.

**Exhibit 138** Rolling Success Rates for Surviving Active EUR Government Bond Funds (%)



Source: Morningstar Direct. Data as of Dec. 31, 2024.

**Exhibit 139** Mortality and Distribution of 10-Year Annualized Excess Returns for EUR Government Bond Funds (%)



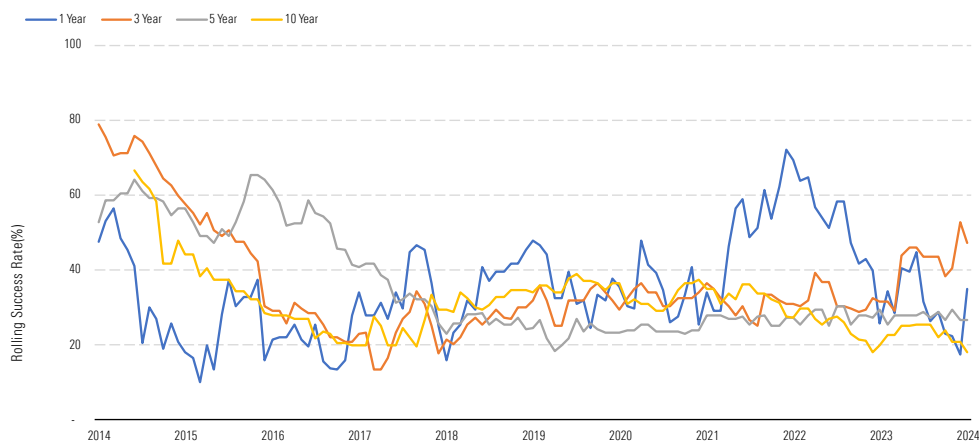
Source: Morningstar Direct. Data as of Dec. 31, 2024.

**Exhibit 140** EUR Government Bond— Short Term

	Active Funds		Passive Funds		Asset-Weighted Performance		Active Success Rate (%)
	# at Beginning of Period	Survivorship Rate (%)	# at Beginning of Period	Survivorship Rate (%)	Active (%)	Passive (%)	
<b>Trailing Total Return</b>							
1-Year	40	87.5	23	91.3	3.6	3.1	35.0
3-year	36	80.6	19	89.5	-2.3	0.3	47.2
5-Year	45	62.2	22	68.2	-1.6	0.1	26.7
10-Year	61	44.3	26	34.6	-0.1	0.1	18.0

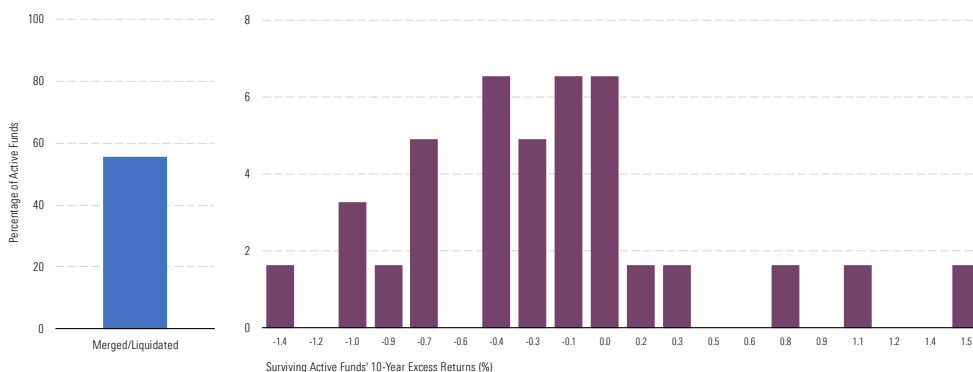
Source: Morningstar Direct. Data as of Dec. 31, 2024.

**Exhibit 141** Rolling Success Rates for Surviving Active EUR Government Bond— Short-Term Funds (%)



Source: Morningstar Direct. Data as of Dec. 31, 2024.

**Exhibit 142** Mortality and Distribution of 10-Year Annualized Excess Returns for EUR Government Bond— Short-Term Funds (%)



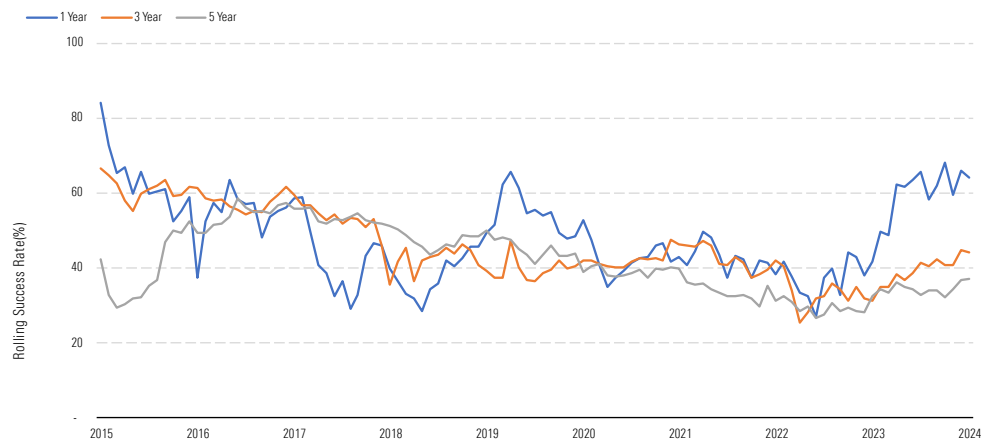
Source: Morningstar Direct. Data as of Dec. 31, 2024.

**Exhibit 143** EUR High-Yield Bond

	Active Funds		Passive Funds		Asset-Weighted Performance		Active Success Rate (%)
	# at Beginning of Period	Survivorship Rate (%)	# at Beginning of Period	Survivorship Rate (%)	Active (%)	Passive (%)	
<b>Trailing Total Return</b>							
1-Year	181	95.6	16	81.3	7.8	6.8	64.1
3-year	174	88.5	11	72.7	2.3	2.2	44.3
5-Year	169	78.1	11	63.6	2.3	2.1	37.3
10-Year	138	67.4	4	50.0	3.0	2.8	37.7

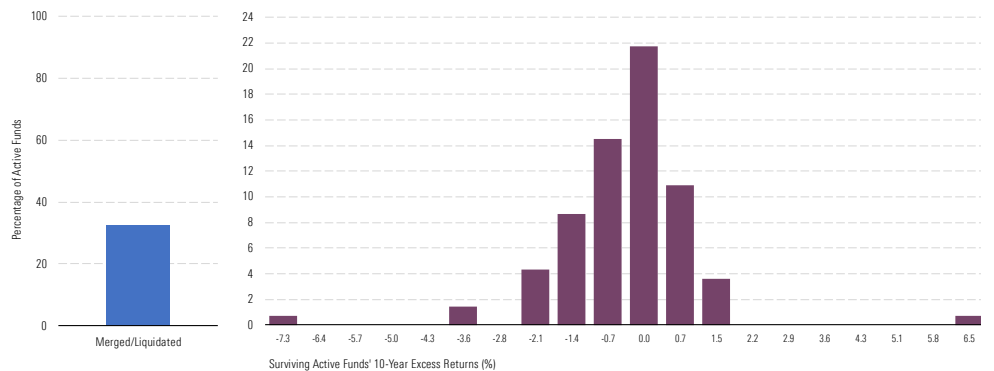
Source: Morningstar Direct. Data as of Dec. 31, 2024.

**Exhibit 144** Rolling Success Rates for Surviving Active EUR High-Yield Bond Funds (%)



Source: Morningstar Direct. Data as of Dec. 31, 2024.

**Exhibit 145** Mortality and Distribution of 10-Year Annualized Excess Returns for EUR High-Yield Bond Funds (%)



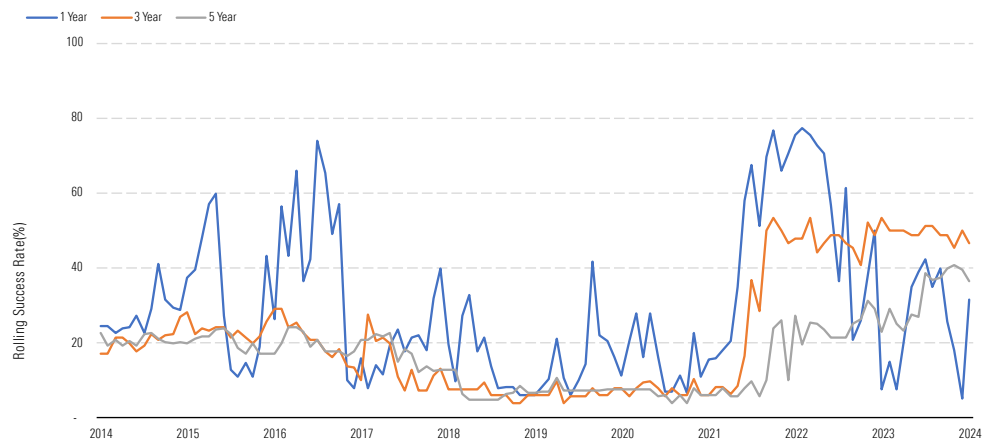
Source: Morningstar Direct. Data as of Dec. 31, 2024.

**Exhibit 146** EUR Inflation-Linked Bond

	Active Funds		Passive Funds		Asset-Weighted Performance		Active Success Rate (%)
	# at Beginning of Period	Survivorship Rate (%)	# at Beginning of Period	Survivorship Rate (%)	Active (%)	Passive (%)	
<b>Trailing Total Return</b>							
1-Year	38	92.1	13	100.0	-2.1	0.0	31.6
3-year	45	77.8	13	92.3	-2.1	-1.6	46.7
5-Year	44	72.7	14	85.7	0.4	0.8	36.4
10-Year	59	47.5	14	57.1	1.0	1.3	8.5

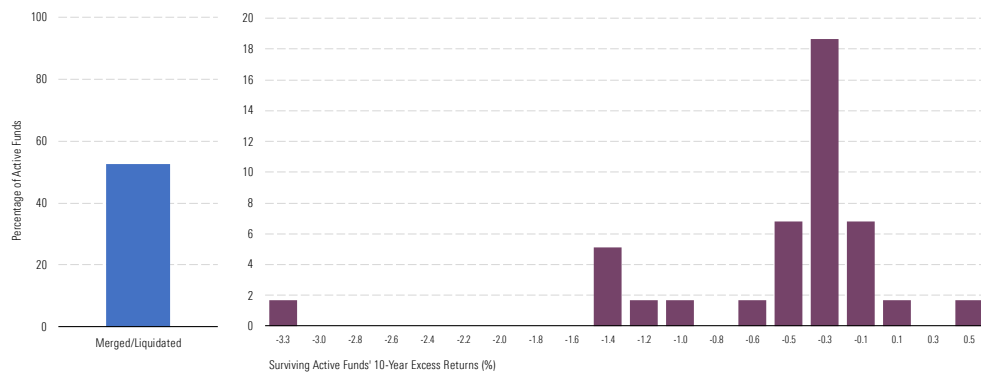
Source: Morningstar Direct. Data as of Dec. 31, 2024.

**Exhibit 147** Rolling Success Rates for Surviving Active EUR Inflation-Linked Bond Funds (%)



Source: Morningstar Direct. Data as of Dec. 31, 2024.

**Exhibit 148** Mortality and Distribution of 10-Year Annualized Excess Returns for EUR Inflation-Linked Bond Funds (%)



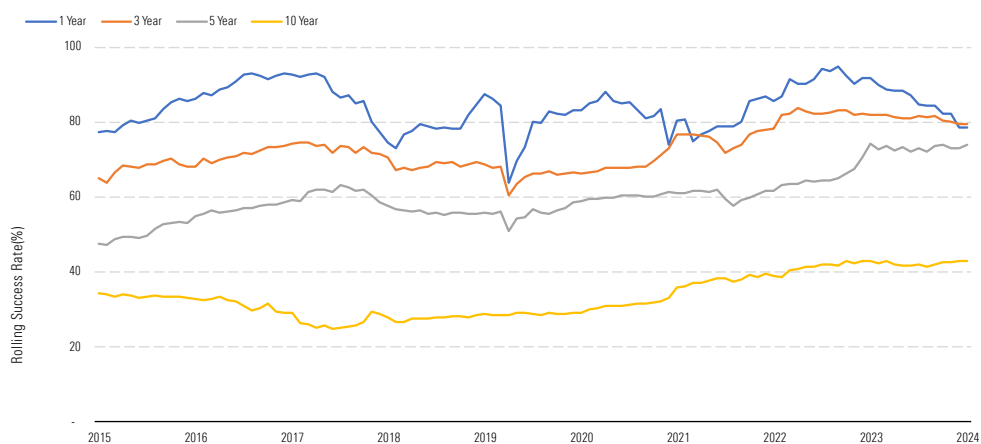
Source: Morningstar Direct. Data as of Dec. 31, 2024.

**Exhibit 149** EUR Money Market

	Active Funds		Passive Funds		Asset-Weighted Performance		Active Success Rate (%)
	# at Beginning of Period	Survivorship Rate (%)	# at Beginning of Period	Survivorship Rate (%)	Active (%)	Passive (%)	
<b>Trailing Total Return</b>							
1-Year	169	97.0	3	100.0	3.8	3.4	78.7
3-year	176	88.6	3	100.0	2.4	1.6	79.5
5-Year	189	81.0	3	100.0	1.2	0.6	74.1
10-Year	324	45.7	3	100.0	0.5	0.0	42.9

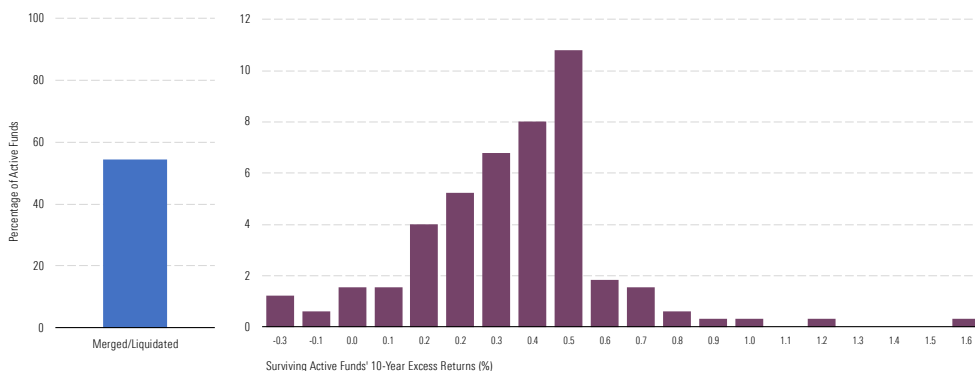
Source: Morningstar Direct. Data as of Dec. 31, 2024.

**Exhibit 150** Rolling Success Rates for Surviving Active EUR Money Market Funds (%)



Source: Morningstar Direct. Data as of Dec. 31, 2024.

**Exhibit 151** Mortality and Distribution of 10-Year Annualized Excess Returns for EUR Money Market Funds (%)



Source: Morningstar Direct. Data as of Dec. 31, 2024.

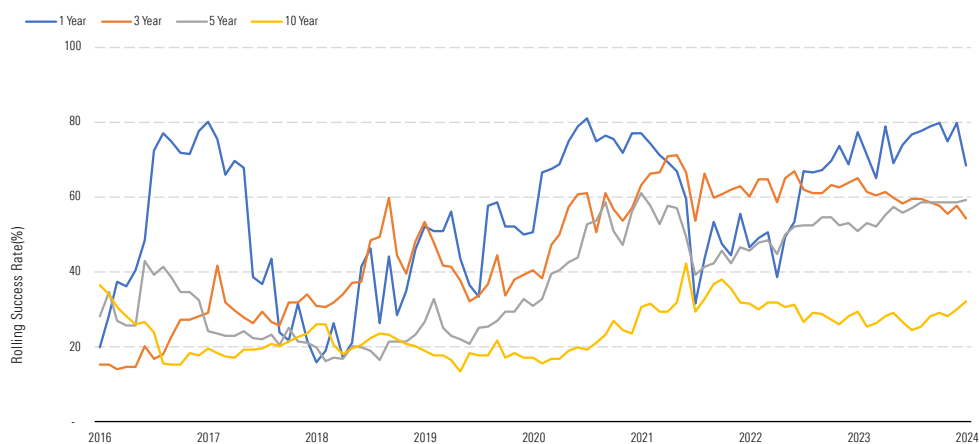


**Exhibit 152** GBP Corporate Bond

	Active Funds		Passive Funds		Asset-Weighted Performance		Active Success Rate (%)
	# at Beginning of Period	Survivorship Rate (%)	# at Beginning of Period	Survivorship Rate (%)	Active (%)	Passive (%)	
<b>Trailing Total Return</b>							
1-Year	98	89.8	18	100.0	7.6	6.4	68.4
3-year	101	81.2	19	100.0	-2.2	-2.8	54.5
5-Year	93	77.4	13	100.0	0.0	-0.6	59.1
10-Year	90	55.6	10	80.0	1.3	1.2	32.2

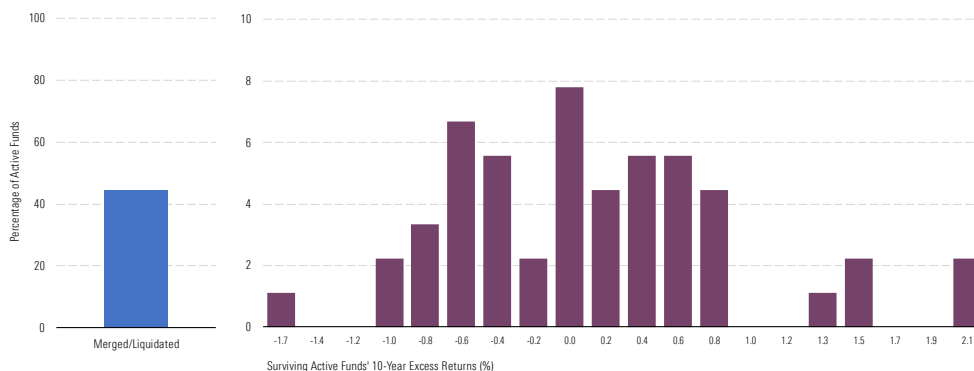
Source: Morningstar Direct. Data as of Dec. 31, 2024.

**Exhibit 153** Rolling Success Rates for Surviving Active GBP Corporate Bond Funds (%)



Source: Morningstar Direct. Data as of Dec. 31, 2024.

**Exhibit 154** Mortality and Distribution of 10-Year Annualized Excess Returns for GBP Corporate Bond Funds (%)



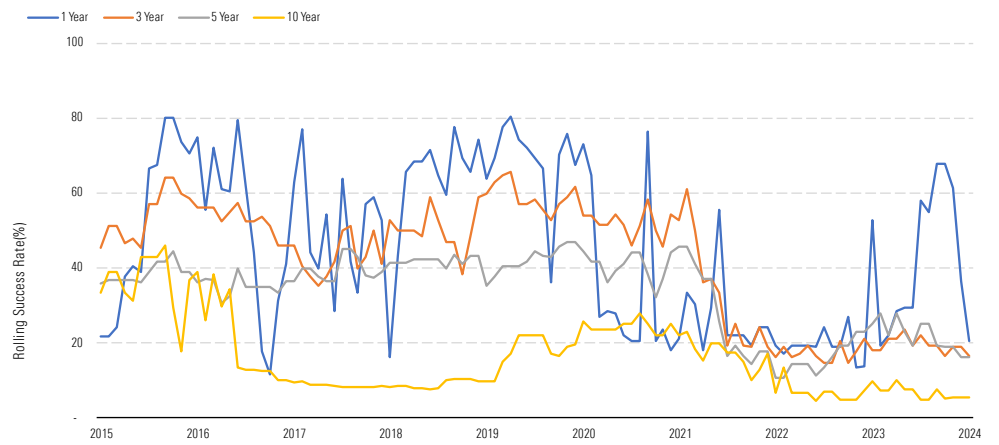
Source: Morningstar Direct. Data as of Dec. 31, 2024.

**Exhibit 155** GBP Government Bond

	Active Funds		Passive Funds		Asset-Weighted Performance		Active Success Rate (%)
	# at Beginning of Period	Survivorship Rate (%)	# at Beginning of Period	Survivorship Rate (%)	Active (%)	Passive (%)	
<b>Trailing Total Return</b>							
1-Year	34	82.4	27	92.6	2.4	2.3	20.6
3-year	36	63.9	27	88.9	-7.2	-6.9	16.7
5-Year	37	56.8	23	87.0	-3.4	-3.7	16.2
10-Year	37	27.0	20	60.0	-1.4	-1.0	5.4

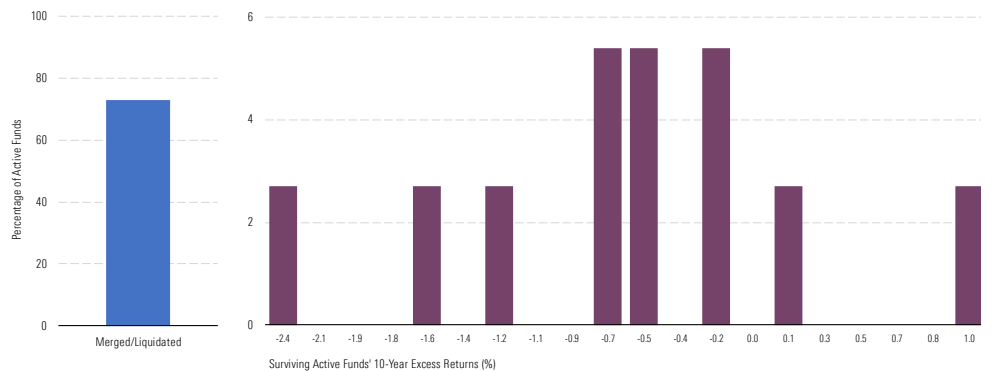
Source: Morningstar Direct. Data as of Dec. 31, 2024.

**Exhibit 156** Rolling Success Rates for Surviving Active GBP Government Bond Funds (%)



Source: Morningstar Direct. Data as of Dec. 31, 2024.

**Exhibit 157** Mortality and Distribution of 10-Year Annualized Excess Returns for GBP Government Bond Funds (%)



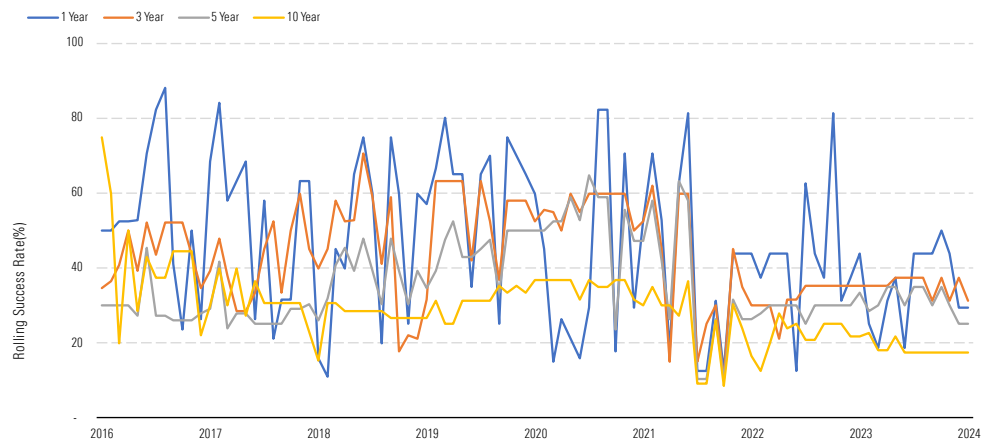
Source: Morningstar Direct. Data as of Dec. 31, 2024.

**Exhibit 158** GBP Inflation-Linked Bond

	Active Funds		Passive Funds		Asset-Weighted Performance		Active Success Rate (%)
	# at Beginning of Period	Survivorship Rate (%)	# at Beginning of Period	Survivorship Rate (%)	Active (%)	Passive (%)	
<b>Trailing Total Return</b>							
1-Year	17	76.5	6	100.0	-2.6	-4.2	29.4
3-year	16	75.0	6	100.0	-11.3	-15.4	31.3
5-Year	20	60.0	5	100.0	-5.0	-6.7	25.0
10-Year	23	39.1	9	44.4	-1.1	-1.4	17.4

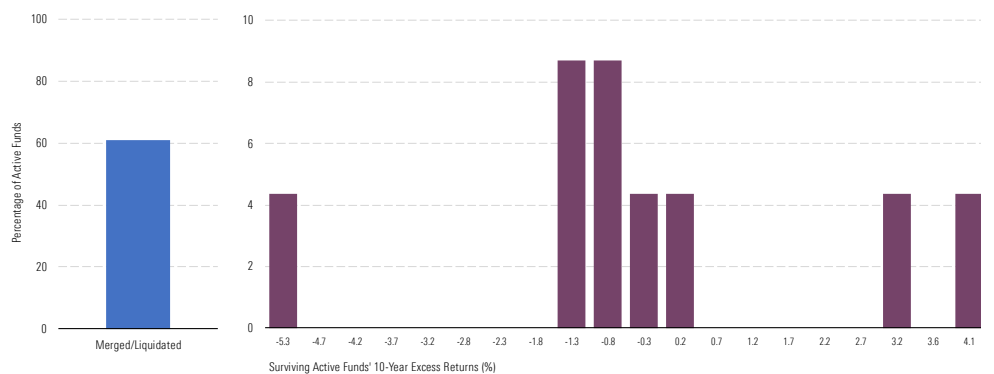
Source: Morningstar Direct. Data as of Dec. 31,

**Exhibit 159** Rolling Success Rates for Surviving Active GBP Inflation-Linked Bond Funds (%)



Source: Morningstar Direct. Data as of Dec. 31, 2024.

**Exhibit 160** Mortality and Distribution of 10-Year Annualized Excess Returns for GBP Inflation-Linked Bond Funds (%)



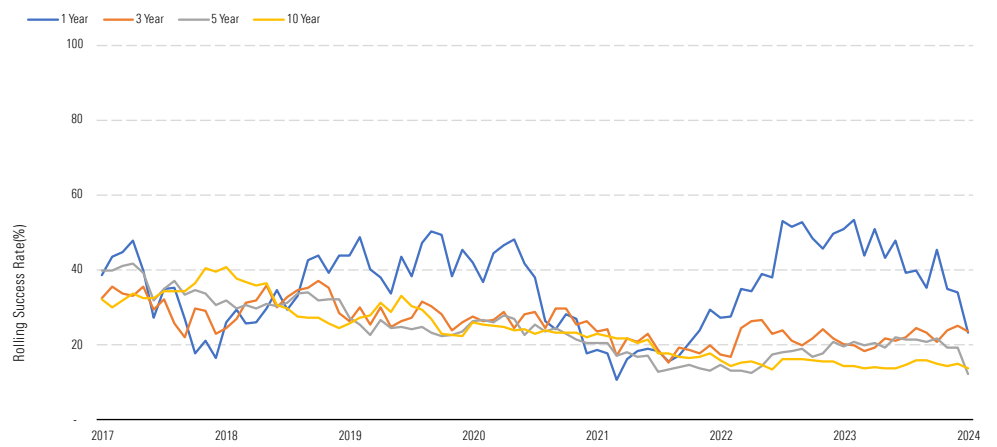
Source: Morningstar Direct. Data as of Dec. 31, 2024.

**Exhibit 161** Global Diversified Bond

	Active Funds		Passive Funds		Asset-Weighted Performance		Active Success Rate (%)
	# at Beginning of Period	Survivorship Rate (%)	# at Beginning of Period	Survivorship Rate (%)	Active (%)	Passive (%)	
<b>Trailing Total Return</b>							
1-Year	167	92.8	20	100.0	3.3	5.4	23.4
3-year	183	71.0	15	100.0	-1.7	-0.8	23.5
5-Year	202	57.9	15	80.0	-0.6	0.2	12.4
10-Year	237	43.0	13	46.2	0.0	1.7	13.9

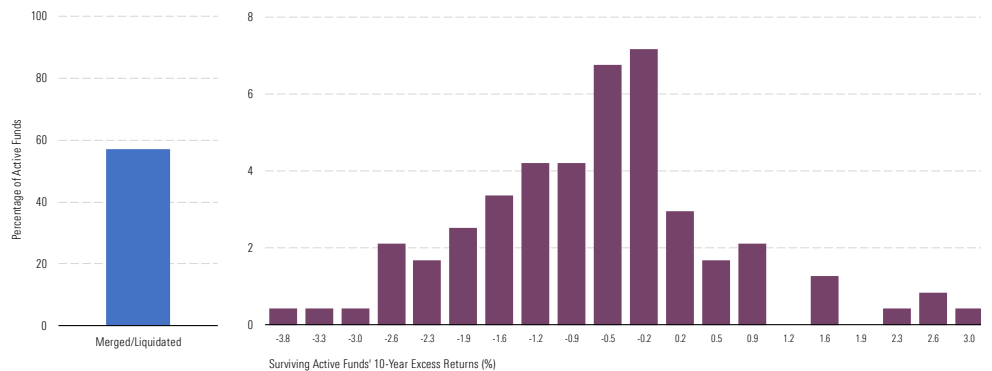
Source: Morningstar Direct. Data as of Dec. 31, 2024.

**Exhibit 162** Rolling Success Rates for Surviving Active Global Diversified Bond Funds (%)



Source: Morningstar Direct. Data as of Dec. 31, 2024.

**Exhibit 163** Mortality and Distribution of 10-Year Annualized Excess Returns for Global Diversified Bond Funds (%)



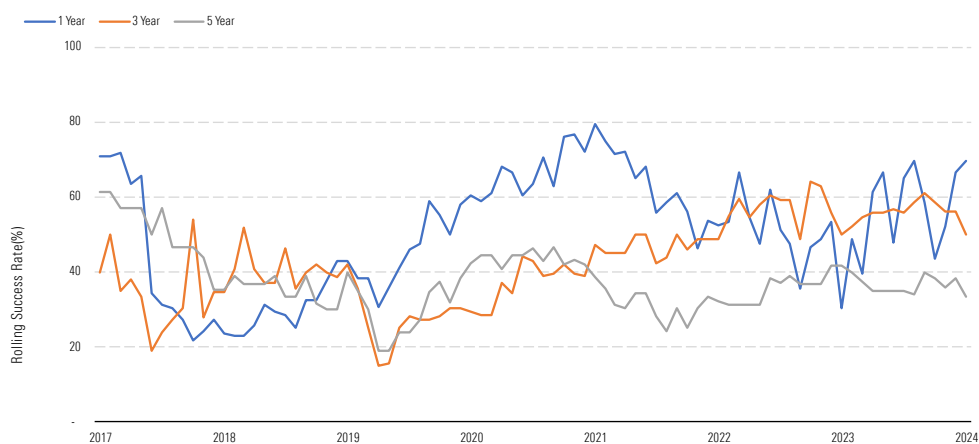
Source: Morningstar Direct. Data as of Dec. 31, 2024.

**Exhibit 164** Global Corporate Bond

	Active Funds		Passive Funds		Asset-Weighted Performance		Active Success Rate (%)
	# at Beginning of Period	Survivorship Rate (%)	# at Beginning of Period	Survivorship Rate (%)	Active (%)	Passive (%)	
<b>Trailing Total Return</b>							
1-Year	46	95.7	15	93.3	7.5	6.5	69.6
3-year	42	88.1	12	91.7	0.4	0.1	50.0
5-Year	39	74.4	7	85.7	1.3	1.2	33.3
10-Year	20	60.0	3	66.7	3.2	3.1	40.0

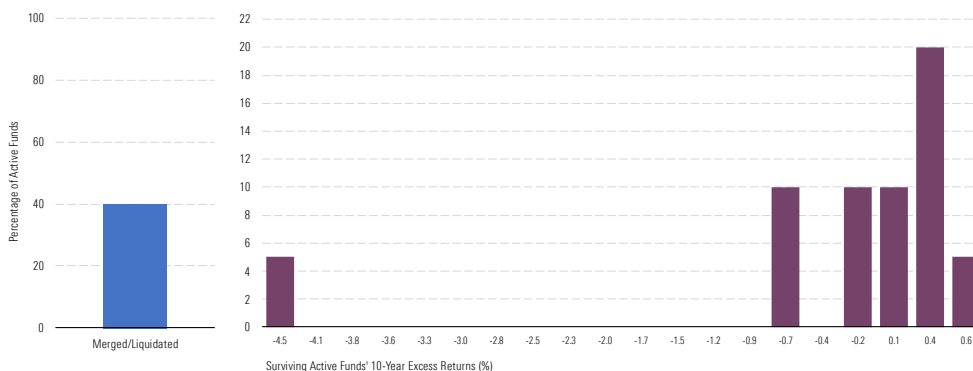
Source: Morningstar Direct. Data as of Dec. 31, 2024.

**Exhibit 165** Rolling Success Rates for Surviving Active Global Corporate Bond Funds (%)



Source: Morningstar Direct. Data as of Dec. 31, 2024.

**Exhibit 166** Mortality and Distribution of 10-Year Annualized Excess Returns for Global Corporate Bond Funds (%)



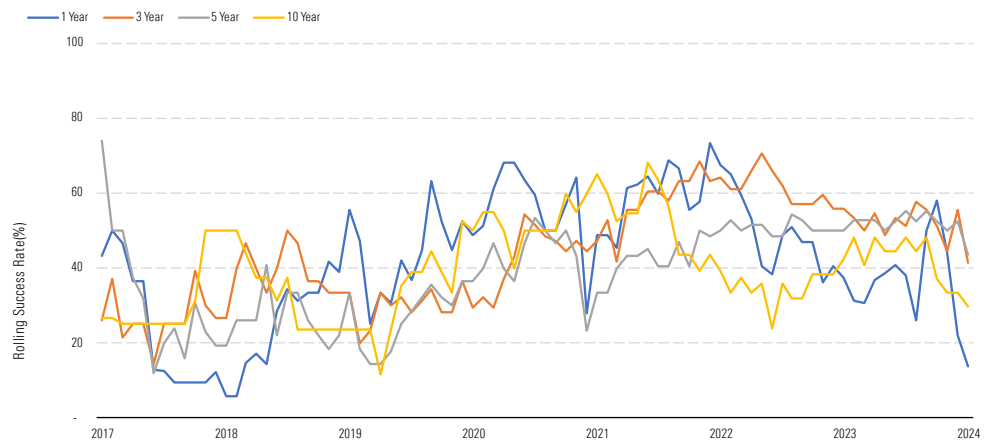
Source: Morningstar Direct. Data as of Dec. 31, 2024.

**Exhibit 167** Global Government Bond

	Active Funds		Passive Funds		Asset-Weighted Performance		Active Success Rate (%)
	# at Beginning of Period	Survivorship Rate (%)	# at Beginning of Period	Survivorship Rate (%)	Active (%)	Passive (%)	
<b>Trailing Total Return</b>							
1-Year	51	100.0	22	100.0	3.3	3.0	13.7
3-year	46	100.0	18	100.0	-2.6	-3.0	41.3
5-Year	39	100.0	15	100.0	-1.5	-1.6	43.6
10-Year	27	100.0	11	100.0	0.7	0.9	29.6

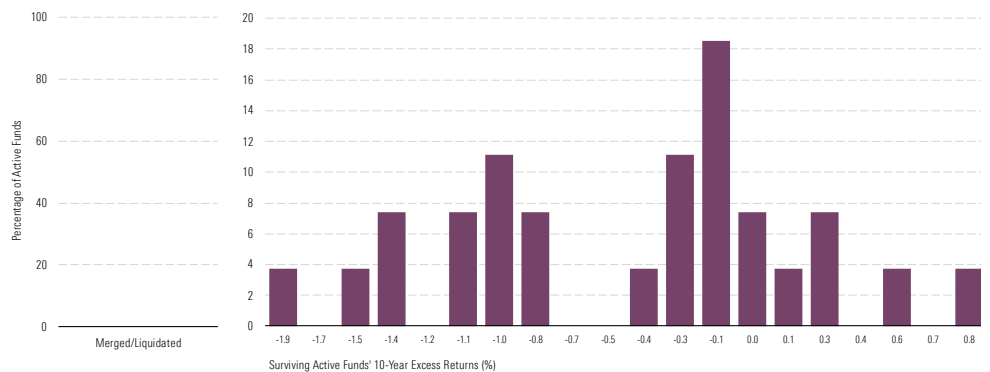
Source: Morningstar Direct. Data as of Dec. 31, 2024.

**Exhibit 168** Rolling Success Rates for Surviving Active Global Government Bond Funds (%)



Source: Morningstar Direct. Data as of Dec. 31, 2024.

**Exhibit 169** Mortality and Distribution of 10-Year Annualized Excess Returns for Global Government Bond Funds (%)



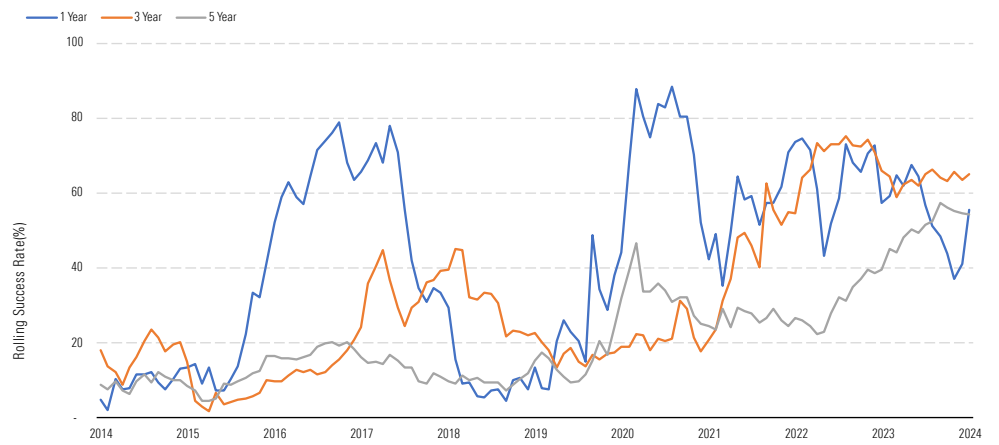
Source: Morningstar Direct. Data as of Dec. 31, 2024.

**Exhibit 170** Global Emerging-Markets Bond

	Active Funds		Passive Funds		Asset-Weighted Performance		Active Success Rate (%)
	# at Beginning of Period	Survivorship Rate (%)	# at Beginning of Period	Survivorship Rate (%)	Active (%)	Passive (%)	
<b>Trailing Total Return</b>							
1-Year	272	89.3	42	95.2	13.8	11.1	55.5
3-year	271	78.2	36	91.7	2.9	0.6	64.9
5-Year	237	71.7	32	90.6	1.6	0.9	54.4
10-Year	195	53.3	8	62.5	3.6	4.3	21.0

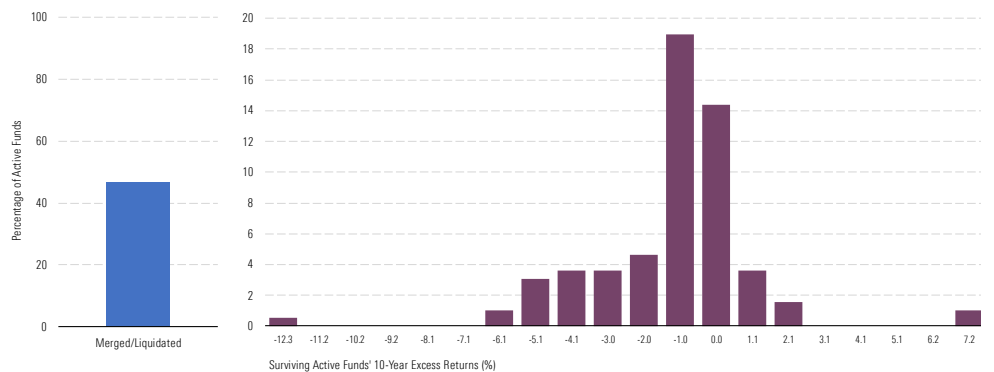
Source: Morningstar Direct. Data as of Dec. 31, 2024.

**Exhibit 171** Rolling Success Rates for Surviving Active Global Emerging-Markets Bond Funds (%)



Source: Morningstar Direct. Data as of Dec. 31, 2024.

**Exhibit 172** Mortality and Distribution of 10-Year Annualized Excess Returns for Global Emerging-Markets Bond Funds (%)



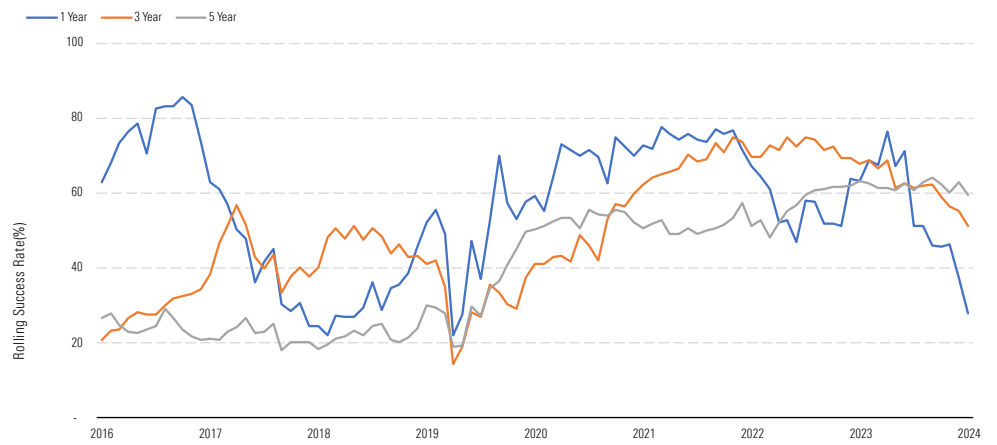
Source: Morningstar Direct. Data as of Dec. 31, 2024.

**Exhibit 173** Global Emerging-Markets Bond—Local Currency

	Active Funds		Passive Funds		Asset-Weighted Performance		Active Success Rate (%)
	# at Beginning of Period	Survivorship Rate (%)	# at Beginning of Period	Survivorship Rate (%)	Active (%)	Passive (%)	
<b>Trailing Total Return</b>							
1-Year	125	90.4	16	100.0	3.8	3.5	28.0
3-year	131	77.1	14	100.0	3.1	2.1	51.1
5-Year	129	74.4	13	92.3	0.4	-0.6	59.7
10-Year	134	51.5	5	80.0	2.0	1.5	38.1

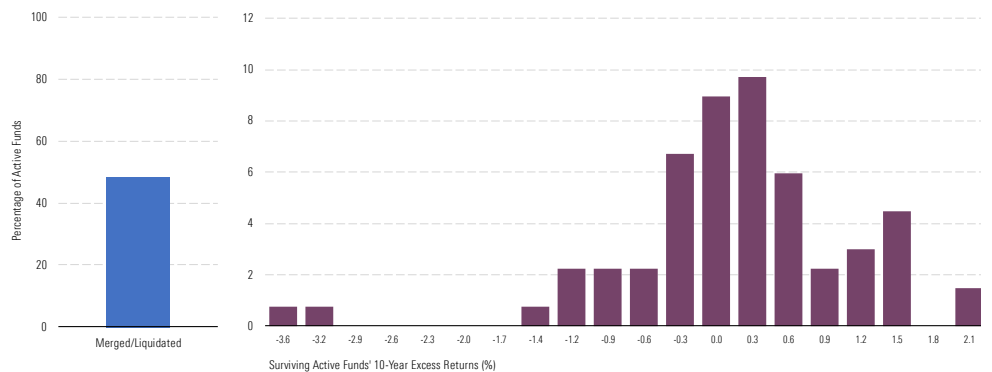
Source: Morningstar Direct. Data as of Dec. 31, 2024.

**Exhibit 174** Rolling Success Rates for Surviving Active Global Emerging-Markets Bond—Local Currency Funds (%)



Source: Morningstar Direct. Data as of Dec. 31, 2024.

**Exhibit 175** Mortality and Distribution of 10-Year Annualized Excess Returns for Global Emerging-Markets Bond—Local Currency Funds (%)



Source: Morningstar Direct. Data as of Dec. 31, 2024.

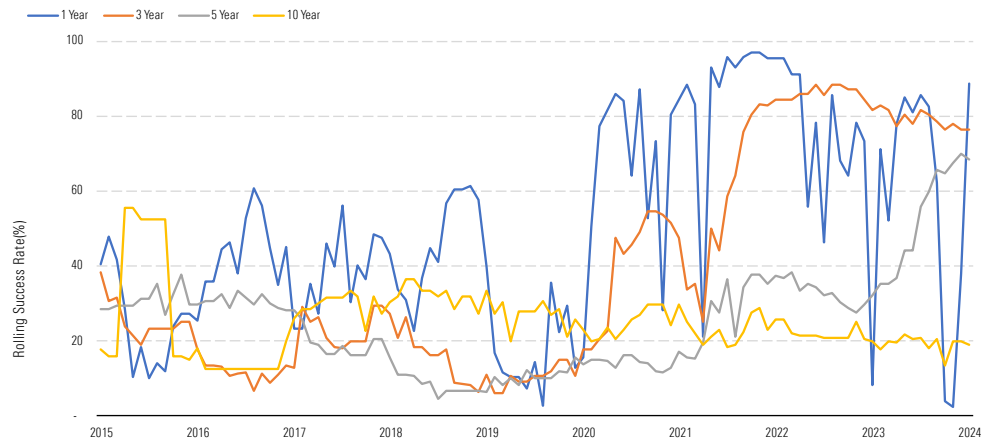


**Exhibit 176** USD Corporate Bond

	Active Funds		Passive Funds		Asset-Weighted Performance		Active Success Rate (%)
	# at Beginning of Period	Survivorship Rate (%)	# at Beginning of Period	Survivorship Rate (%)	Active (%)	Passive (%)	
<b>Trailing Total Return</b>							
1-Year	79	93.7	50	98.0	8.9	5.9	88.6
3-year	68	80.9	47	93.6	1.5	-0.7	76.5
5-Year	70	74.3	45	82.2	2.1	0.7	68.6
10-Year	47	57.4	8	75.0	3.6	4.0	19.1

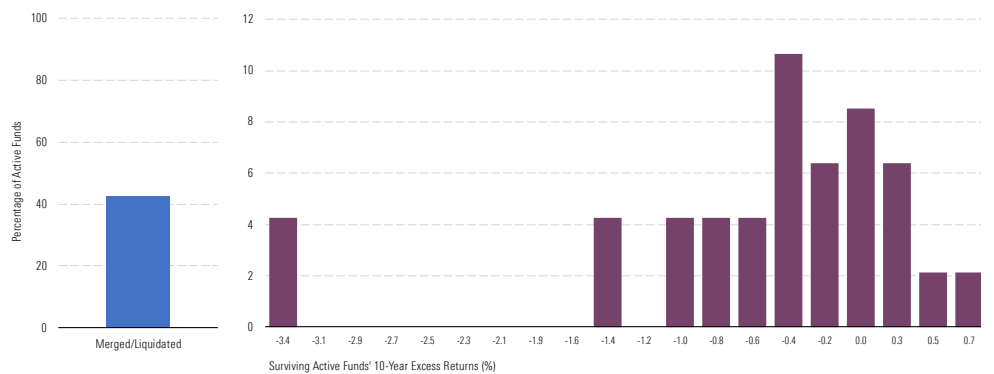
Source: Morningstar Direct. Data as of Dec. 31, 2024.

**Exhibit 177** Rolling Success Rates for Surviving Active USD Corporate Bond Funds (%)



Source: Morningstar Direct. Data as of Dec. 31, 2024.

**Exhibit 178** Mortality and Distribution of 10-Year Annualized Excess Returns for USD Corporate Bond Funds (%)



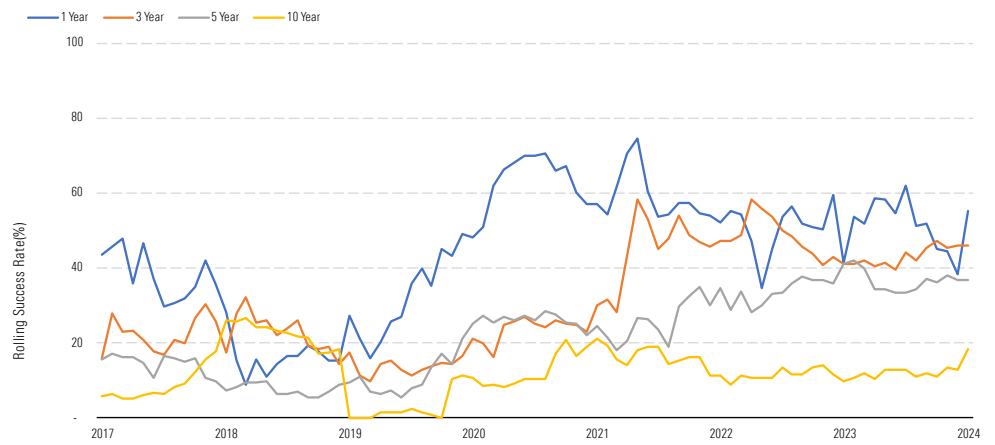
Source: Morningstar Direct. Data as of Dec. 31, 2024.

**Exhibit 179** USD Diversified Bond

	Active Funds		Passive Funds		Asset-Weighted Performance		Active Success Rate (%)
	# at Beginning of Period	Survivorship Rate (%)	# at Beginning of Period	Survivorship Rate (%)	Active (%)	Passive (%)	
<b>Trailing Total Return</b>							
1-Year	105	94.3	8	100.0	8.5	8.2	55.2
3-year	111	82.9	6	83.3	1.3	0.9	45.9
5-Year	114	71.9	7	71.4	1.5	1.5	36.8
10-Year	126	50.8	5	60.0	2.8	3.0	18.3

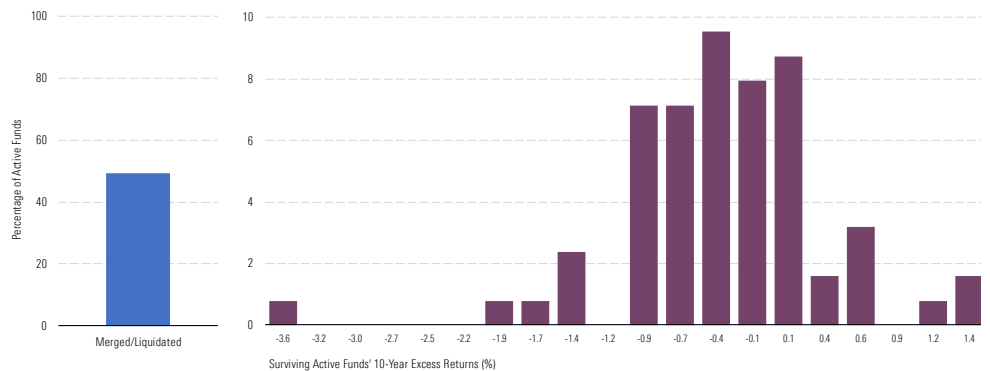
Source: Morningstar Direct. Data as of Dec. 31, 2024.

**Exhibit 180** Rolling Success Rates for Surviving Active USD Diversified Bond Funds (%)



Source: Morningstar Direct. Data as of Dec. 31, 2024.

**Exhibit 181** Mortality and Distribution of 10-Year Annualized Excess Returns for USD Diversified Bond Funds (%)



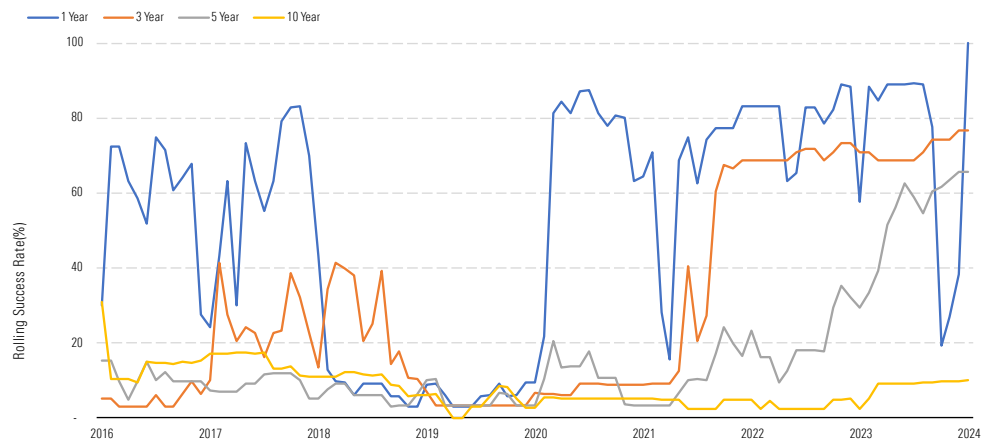
Source: Morningstar Direct. Data as of Dec. 31, 2024.

**Exhibit 182** USD Government Bond

	Active Funds		Passive Funds		Asset-Weighted Performance		Active Success Rate (%)
	# at Beginning of Period	Survivorship Rate (%)	# at Beginning of Period	Survivorship Rate (%)	Active (%)	Passive (%)	
<b>Trailing Total Return</b>							
1-Year	26	96.2	47	100.0	7.5	4.0	100.0
3-year	30	73.3	44	93.2	0.0	-2.1	76.7
5-Year	32	62.5	49	79.6	0.4	-0.8	65.6
10-Year	30	46.7	18	55.6	1.7	2.4	10.0

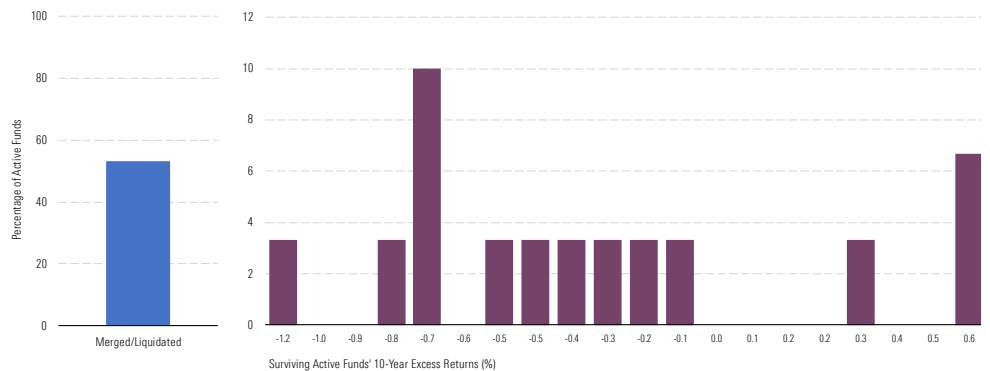
Source: Morningstar Direct. Data as of Dec. 31, 2024.

**Exhibit 183** Rolling Success Rates for Surviving Active USD Government-Bond Funds (%)



Source: Morningstar Direct. Data as of Dec. 31, 2024.

**Exhibit 184** Mortality and Distribution of 10-Year Annualized Excess Returns for USD Government-Bond Funds (%)



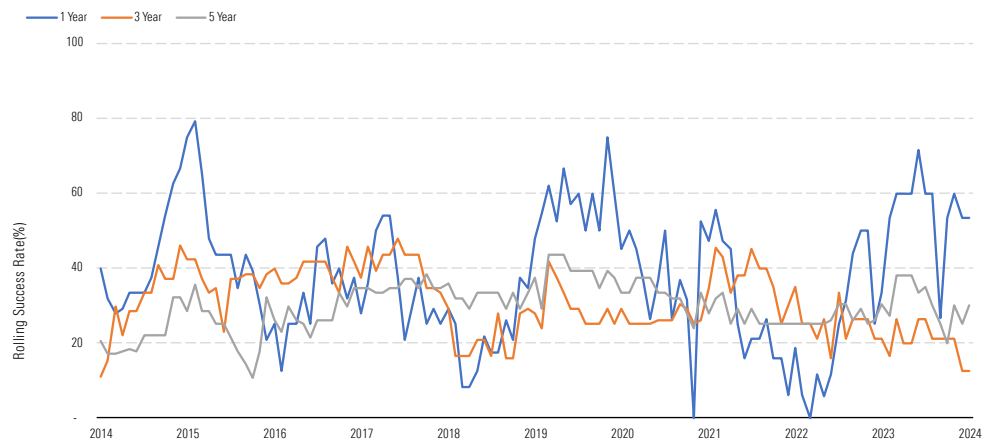
Source: Morningstar Direct. Data as of Dec. 31, 2024.

**Exhibit 185** Property—Indirect Asia

	Active Funds		Passive Funds		Asset-Weighted Performance		Active Success Rate (%)
	# at Beginning of Period	Survivorship Rate (%)	# at Beginning of Period	Survivorship Rate (%)	Active (%)	Passive (%)	
<b>Trailing Total Return</b>							
1-Year	15	73.3	7	100.0	-2.9	-3.3	53.3
3-year	16	56.3	9	77.8	-6.3	-4.7	12.5
5-Year	20	35.0	8	62.5	-4.1	-3.9	30.0
10-Year	24	25.0	9	33.3	2.0	1.4	29.2

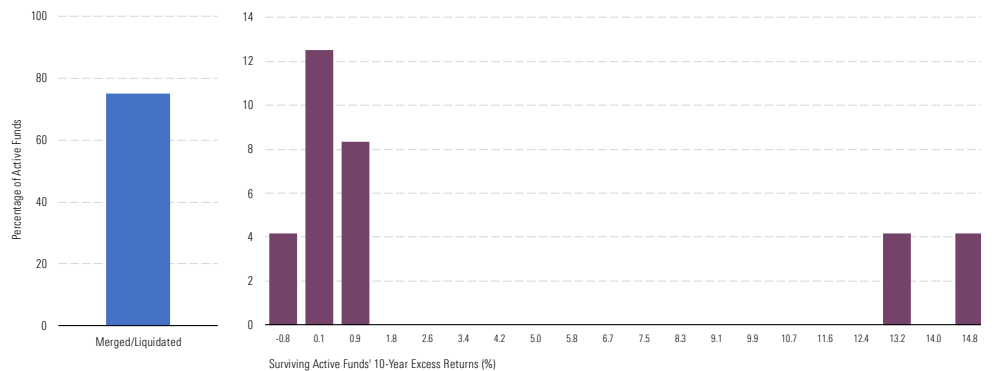
Source: Morningstar Direct. Data as of Dec. 31, 2024.

**Exhibit 186** Rolling Success Rates for Surviving Active Property—Indirect Asia Funds (%)



Source: Morningstar Direct. Data as of Dec. 31, 2024.

**Exhibit 187** Mortality and Distribution of 10-Year Annualized Excess Returns for Property—Indirect Asia Funds (%)



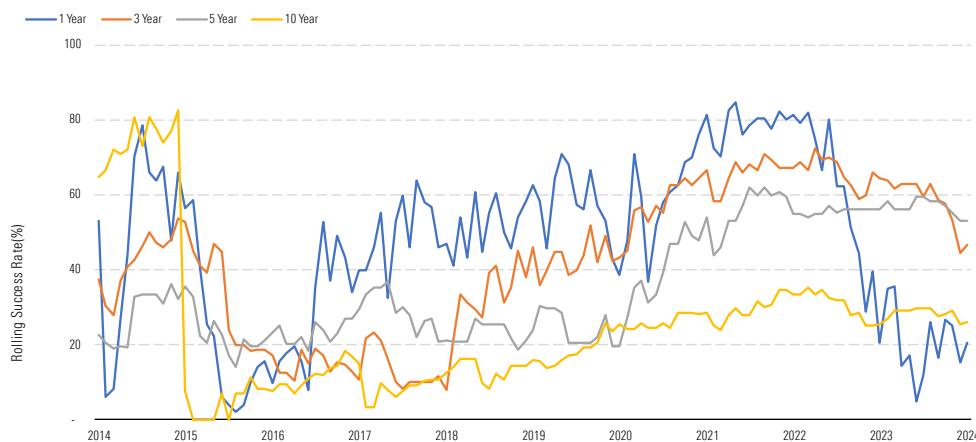
Source: Morningstar Direct. Data as of Dec. 31, 2024.

**Exhibit 188** Property—Indirect Europe

	Active Funds		Passive Funds		Asset-Weighted Performance		Active Success Rate (%)
	# at Beginning of Period	Survivorship Rate (%)	# at Beginning of Period	Survivorship Rate (%)	Active (%)	Passive (%)	
<b>Trailing Total Return</b>							
1-Year	39	92.3	13	92.3	-3.5	-2.6	20.5
3-year	43	76.7	15	80.0	-9.4	-10.7	46.5
5-Year	49	63.3	16	75.0	-3.8	-6.0	53.1
10-Year	46	45.7	16	43.8	1.8	1.6	26.1

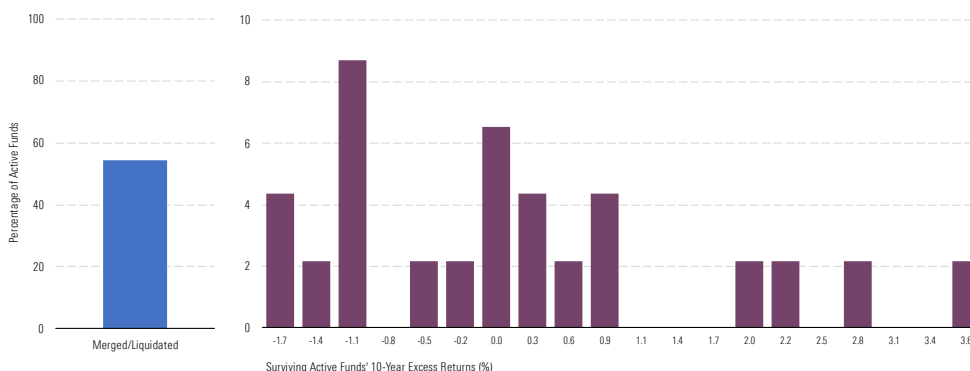
Source: Morningstar Direct. Data as of Dec. 31, 2024.

**Exhibit 189** Rolling Success Rates for Surviving Property—Indirect Europe Funds (%)



Source: Morningstar Direct. Data as of Dec. 31, 2024.

**Exhibit 190** Mortality and Distribution of 10-Year Annualized Excess Returns for Property—Indirect Europe Funds (%)



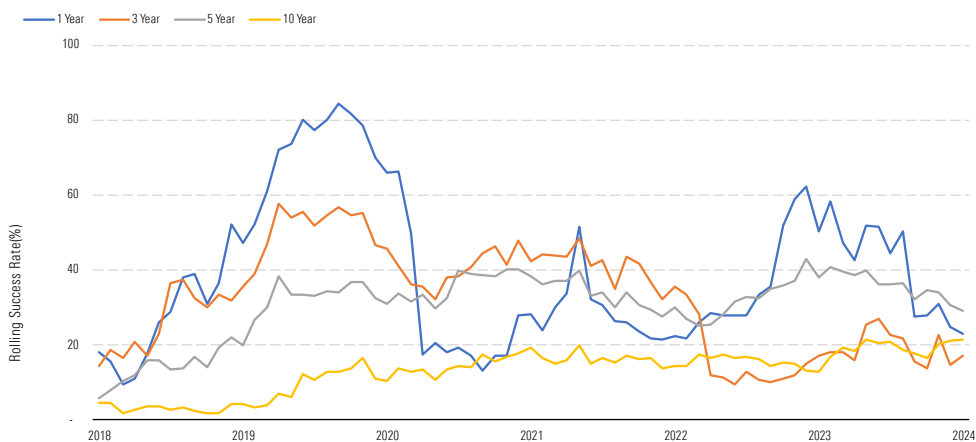
Source: Morningstar Direct. Data as of Dec. 31, 2024.

**Exhibit 191** Property—Indirect Global

	Active Funds		Passive Funds		Asset-Weighted Performance		Active Success Rate (%)
	# at Beginning of Period	Survivorship Rate (%)	# at Beginning of Period	Survivorship Rate (%)	Active (%)	Passive (%)	
<b>Trailing Total Return</b>							
1-Year	126	86.5	30	90.0	6.4	7.8	23.0
3-year	129	79.1	30	70.0	-4.1	-2.8	17.1
5-Year	141	68.8	21	81.0	0.7	0.9	29.1
10-Year	125	53.6	11	63.6	3.7	3.9	21.6

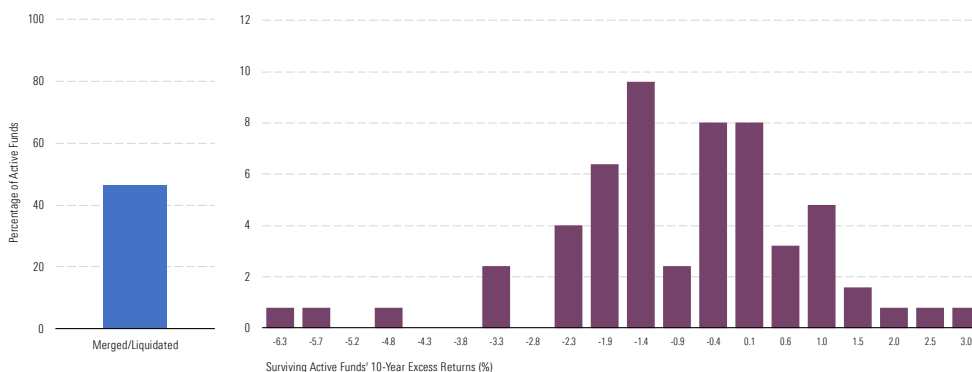
Source: Morningstar Direct. Data as of Dec. 31, 2024.

**Exhibit 192** Rolling Success Rates for Surviving Property—Indirect Global Funds (%)



Source: Morningstar Direct. Data as of Dec. 31, 2024.

**Exhibit 193** Mortality and Distribution of 10-Year Annualized Excess Returns for Property—Indirect Global Funds (%)



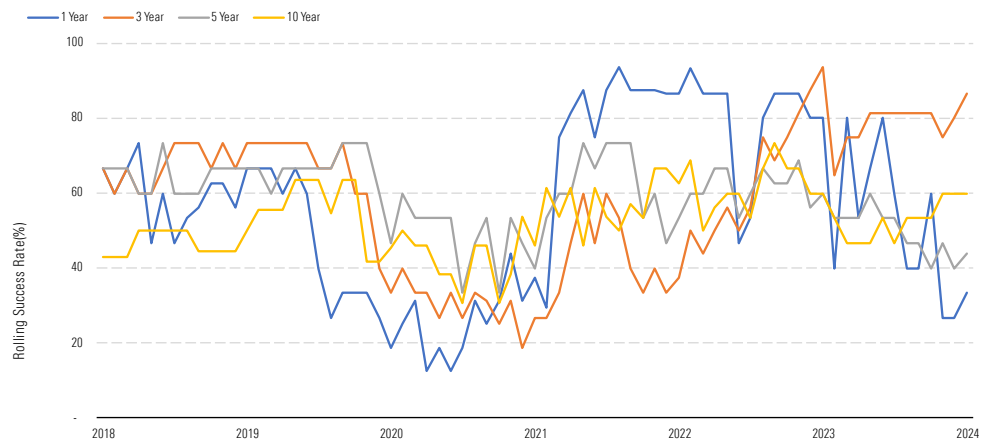
Source: Morningstar Direct. Data as of Dec. 31, 2024.

**Exhibit 194** Property—Indirect Switzerland

	Active Funds		Passive Funds		Asset-Weighted Performance		Active Success Rate (%)
	# at Beginning of Period	Survivorship Rate (%)	# at Beginning of Period	Survivorship Rate (%)	Active (%)	Passive (%)	
<b>Trailing Total Return</b>							
1-Year	15	100.0	6	100.0	15.9	16.2	33.3
3-year	15	100.0	6	100.0	5.5	4.8	86.7
5-Year	16	87.5	6	100.0	7.6	7.5	43.8
10-Year	15	93.3	6	100.0	8.2	8.0	60.0

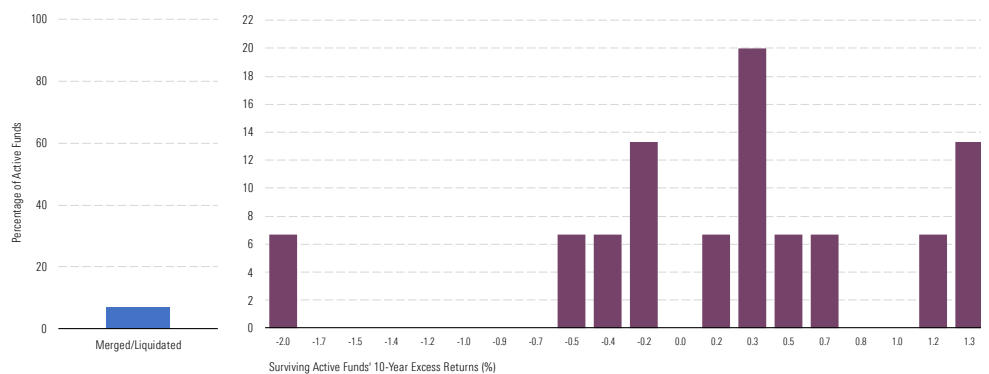
Source: Morningstar Direct. Data as of Dec. 31, 2024.

**Exhibit 195** Rolling Success Rates for Surviving Property—Indirect Switzerland Funds (%)



Source: Morningstar Direct. Data as of Dec. 31, 2024.

**Exhibit 196** Mortality and Distribution of 10-Year Annualized Excess Returns for Property—Indirect Switzerland Funds (%)



Source: Morningstar Direct. Data as of Dec. 31, 2024.

## Appendix — Morningstar Categories Base Currencies

### Exhibit 197 Morningstar Equity Categories Base Currencies

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

Source: Morningstar Direct. Data as of Dec. 31, 2024.



**Exhibit 198** Morningstar Fixed-Income Categories Base Currencies

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

Source: Morningstar Direct. Data as of Dec. 31, 2024.

**Exhibit 199** Morningstar Property Categories Base Currencies

<b>Morningstar Category</b>	<b>Base Currency</b>
Property - Indirect Asia	USD
Property - Indirect Europe	EUR
Property - Indirect Global	USD
Property - Indirect Switzerland	CHF

Source: Morningstar Direct. Data as of Dec. 31, 2024.

## Appendix—Methodology

### Data Source

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

### Sample

All ETFs and open-end mutual funds in each Morningstar Category that exist in the beginning of the relevant periods (including funds that did not survive to the end of the period) define 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. The fund must also have available return data either for the entire period or up until its obsolescence. In addition, each fund must have available size data<sup>4</sup> 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. Finally, we do not consider currency hedged share classes in the study.

### Aggregation from Share Class to Fund Level

To derive a single return figure for funds (identified by FundId) that have multiple share classes (identified by SecId), we compute the asset-weighted average of all share class returns. Before aggregation, all returns and asset sizes are converted to euros.<sup>5</sup>

### Passive Composite: Asset-Weighted Returns

The passive composite return series represents the returns of an asset-weighted, buy-and-hold portfolio comprising all passive funds within the category at the start of the sample period. Weighting is based on fund assets as recorded in the end of the month preceding the sample period. If a fund becomes obsolete during the sample period, its assets are redistributed among the remaining funds according to their initial weights.

### Survivorship

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

### 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 Passive Composite return over the period. This approach differs from the convention of using a single representative index to gauge success. The magnitude of outperformance is not considered—a fund that marginally exceeds the benchmark is treated the same as one that significantly outperforms. Notably, any fund that closes during the event study window is automatically classified as “underperformed,” regardless of whether its cumulative return was higher than the Passive Composite.

<sup>4</sup> The study is conducted monthly; however, some funds only report size data quarterly. When monthly size data is unavailable, the size from the previous calendar quarter-end is used as a proxy.

<sup>5</sup> If size data is unavailable for certain share classes, we first compute an equal-weighted return for those classes. Then, we incorporate available fund size data to aggregate returns at the fund level.

For example, suppose a fund has a total size of 100 euros, with Class A accounting for 60 euros, while size data for Classes B and C is missing. If the return for Class A is 0.10, for Class B is 0.11, and for Class C is 0.12, the aggregated fund return is calculated as:  $[60 \cdot 0.10 + (100 - 60) \cdot (0.11 + 0.12) / 2] / 100 = 0.106$

### **Appendix—Category Updates**

In this edition of the report, we have made the following adjustments to the categories covered:

(1) The EUR cautious allocation category has been removed, as it contains only two live passive funds with available data as of December 2024;

(2) The global inflation-linked bond category has been removed, as it contains only two live passive funds with available data as of December 2014, when the study horizon starts;

(3) The global bond category is no longer reported. Instead, we have introduced three more-specific categories: global diversified bond, global government bond, and global corporate bond. This change reflects the restructuring of the global bond category that took place in October 2024.

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