

SPIVA[®] Japan Scorecard

Contributor

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Experience the
active vs. passive debate
on a global scale on
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SUMMARY

- S&P Dow Jones Indices has been the de facto scorekeeper of the ongoing active versus passive debate since the first publication of the SPIVA U.S. Scorecard in 2002. Over the years, we have built on our experience publishing the report by expanding scorecard coverage into Australia, Canada, Europe, India, South Africa, Latin America, and Japan. While this report will not end the debate on active versus passive investing in Japan, we hope to make a meaningful contribution by examining market segments in which one strategy works better than the other.
- The SPIVA Japan Scorecard reports on the performance of actively managed Japanese mutual funds against their respective benchmark indices over 1-, 3-, 5-, and 10-year investment horizons¹. In this scorecard, we evaluated returns of more than 815 Japanese large- and mid/small-cap equity funds, along with more than 678 international equity funds investing in global, international, and emerging markets, as well as U.S. equities.
- **Domestic Equity Funds:** In 2018, the [S&P/TOPIX 150](#) and the S&P Japan MidSmallCap suffered losses of 15.9% and 19.6%, respectively. Over the same period, 83.7% and 58.2% of large- and mid/small-cap equity funds underperformed their respective benchmarks, with average returns of -18.7% and -20.5%, respectively. The performance of domestic equity funds relative to their benchmark in 2018 was much worse than the observations in 2017, when the majority of funds outperformed the benchmark.

Over the 10-year horizon, 63.2% and 56.2% of large- and mid/small-cap funds underperformed their benchmarks, respectively. While the equal- and asset-weighted 10-year annualized returns for large-cap equity funds only differed by 0.14%, the equal-weighted 10-year annualized return of the mid/small-cap equity funds exceeded the asset-weighted return by 2.94%, indicating smaller funds in the mid/small-cap equity fund category delivered much better returns than the larger funds.

¹ The fund returns used are net of fees, excluding loads.

- **Foreign Equity Funds:** In 2018, apart from the emerging market equity fund category, the majority of foreign equity funds underperformed their respective benchmarks and posted lower equal- and asset-weighted returns than their respective benchmarks. The [S&P 500®](#) recorded a loss of 4.7%, while U.S. equity funds had equal- and asset-weighted returns of -11.4% and -9.5%, respectively. In contrast, the [S&P Emerging BMI](#) had a return of -19.5%, while emerging market equity funds posted a lower drawdown of 18.0% and 17.6% on an equal- and asset-weighted basis, respectively.

Over the 10-year period, the majority of foreign equity funds underperformed their respective benchmarks. More than 90% of global, international, and emerging equity funds were outperformed by their respective benchmarks on an absolute and risk-adjusted basis. U.S. and global equity funds underperformed their respective benchmarks the most over the 10-year period (more than 300 bps). Foreign equity funds had 5- and 10-year survivorship rates of 72.9% and 57.9%, respectively, which is slightly lower than the rates for the domestic equity funds, where the 5- and 10-year survivorship rates were 80.1% and 72.9%, respectively.

A UNIQUE SCORECARD FOR THE ACTIVE VERSUS PASSIVE DEBATE

There is nothing novel about the index versus active debate. It has been a contentious subject for decades, and there are few strong believers on both sides, with the vast majority of market participants falling somewhere in between. Since its first publication 16 years ago, the SPIVA Scorecard has served as the de facto scorekeeper of the active versus passive debate. For more than a decade, we have heard passionate arguments from believers in both camps when headline numbers have deviated from their beliefs.

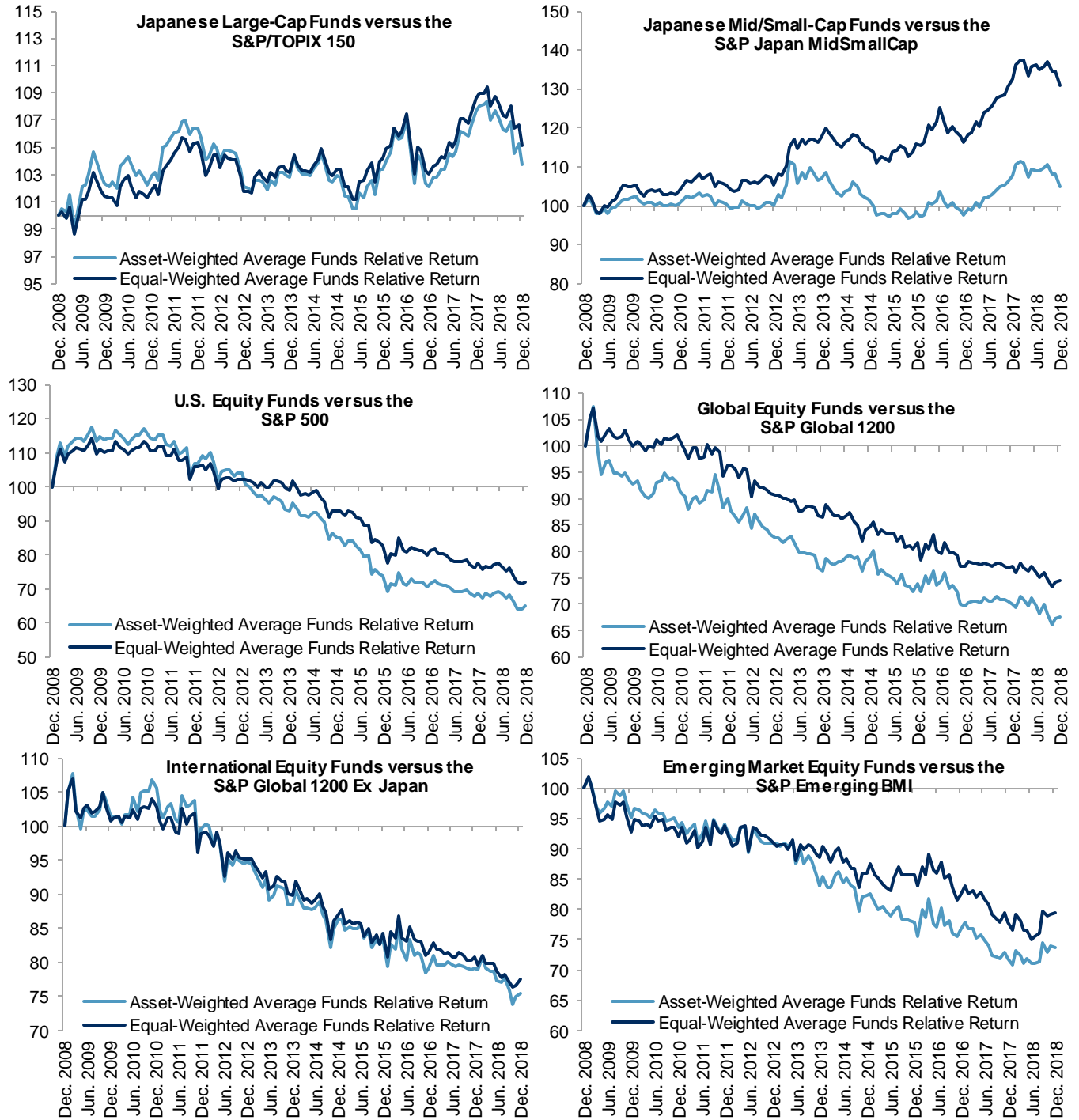
Beyond the SPIVA Scorecard's widely cited headline numbers is a rich data set that addresses issues related to measurement techniques, universe composition, and fund survivorship that are far less frequently discussed but are often far more fascinating. These data sets are rooted in the following fundamental principles of the SPIVA Scorecard, with which regular readers will be familiar.

- **Survivorship Bias Correction:** Many funds might be liquidated or merged during a period of study. However, for someone making an investment decision at the beginning of the period, these funds are part of the opportunity set. Unlike other commonly available comparison reports, SPIVA Scorecards account for the entire opportunity set—not just the survivors—thereby eliminating survivorship bias.
- **Apples-to-Apples Comparison:** Fund returns are often compared with a popular benchmark regardless of their investment category. The SPIVA Japan Scorecard makes an appropriate comparison by measuring a fund's returns against the returns of a benchmark that reflects the fund's investment category.
- **Asset-Weighted Returns:** Average returns for a fund group are often calculated using only equal weighting, which results in the returns of a JPY 10 billion fund affecting the average in the same manner as the returns of a JPY 10 million fund. However, the SPIVA Japan Scorecard shows both equal- and asset-weighted averages. Equal-weighted returns are a measure of average fund performance, while asset-weighted returns are a measure of the performance of the average invested dollar.

Data Cleaning: SPIVA Scorecards avoid double counting multiple share classes in all count-based calculations, using only the share class with longer history. Since this is meant to be a scorecard for active managers, index funds, leveraged and inverse funds, and other index-linked products are excluded.

Please note that neither S&P Dow Jones Indices, nor any of its affiliates make any assurance or provide any investment recommendation on the appropriateness of investing in either index or active investing. S&P Dow Jones Indices does not sponsor, endorse, sell, or promote any investment fund or other investment vehicle that is offered by third parties and that seeks to provide an investment return based on the performance of any index. The SPIVA Japan Scorecard simply provides semi-annual statistics according to the SPIVA methodology and a brief analysis of those statistics. Further, S&P Dow Jones Indices does advise that anyone reading this report also read the SPIVA methodology in the report in order to understand how the data was derived.

CUMULATIVE AVERAGE FUND RETURN RELATIVE TO BENCHMARK



Source: S&P Dow Jones Indices LLC, Morningstar. Data as of Dec. 31, 2018. All returns in JPY. Charts are provided for illustrative purposes. Past performance is no guarantee of future results.

REPORTS

Report 1a: Percentage of Funds Outperformed by the Index (Based on Absolute Return)

FUND CATEGORY	COMPARISON INDEX	ONE-YEAR (%)	THREE-YEAR (%)	FIVE-YEAR (%)	TEN-YEAR (%)
Japanese Large-Cap Funds	S&P/TOPIX 150	83.68	56.55	58.64	63.19
Japanese Mid/Small-Cap Funds	S&P Japan MidSmallCap	58.17	32.90	49.31	56.21
All Japanese Equity Funds	S&P Japan 500	76.55	48.25	56.84	64.01
U.S. Equity Funds	S&P 500	85.38	95.96	94.44	75.00
Global Equity Funds	S&P Global 1200	73.47	89.47	89.40	92.31
International Equity Funds	S&P Global 1200 Ex Japan	84.13	90.57	94.12	92.98
Emerging Equity Funds	S&P Emerging BMI	39.33	83.54	92.50	94.64

Source: S&P Dow Jones Indices LLC, Morningstar. Data as of Dec. 31, 2018. Table is provided for illustrative purposes. Past performance is no guarantee of future results.

Report 1b: Percentage of Funds Outperformed by the Index (Based on Risk-Adjusted Return)

FUND CATEGORY	COMPARISON INDEX	ONE-YEAR (%)	THREE-YEAR (%)	FIVE-YEAR (%)	TEN-YEAR (%)
Japanese Large-Cap Funds	S&P/TOPIX 150	64.47	55.71	58.02	62.61
Japanese Mid/Small-Cap Funds	S&P Japan MidSmallCap	31.37	32.90	56.94	64.50
All Japanese Equity Funds	S&P Japan 500	55.16	47.86	58.12	64.98
U.S. Equity Funds	S&P 500	84.62	95.96	94.44	79.17
Global Equity Funds	S&P Global 1200	74.49	88.89	89.40	94.02
International Equity Funds	S&P Global 1200 Ex Japan	87.30	94.34	94.12	92.98
Emerging Equity Funds	S&P Emerging BMI	33.71	83.54	92.50	92.86

Source: S&P Dow Jones Indices LLC, Morningstar. Data as of Dec. 31, 2018. Risk-adjusted return is computed as annualized average monthly return divided by annualized standard deviation of the monthly return for the measured periods. Table is provided for illustrative purposes. Past performance is no guarantee of future results.

Report 2: Survivorship of Funds		
FUND CATEGORY	NO. OF FUNDS AT START	SURVIVORSHIP (%)
ONE-YEAR		
Japanese Large-Cap Funds	380	93.95
Japanese Mid/Small-Cap Funds	153	96.73
All Japanese Equity Funds	533	94.75
U.S. Equity Funds	130	96.15
Global Equity Funds	196	96.43
International Equity Funds	63	95.24
Emerging Equity Funds	89	87.64
All Foreign Equity Funds	478	94.56
THREE-YEAR		
Japanese Large-Cap Funds	359	87.74
Japanese Mid/Small-Cap Funds	155	86.45
All Japanese Equity Funds	514	87.35
U.S. Equity Funds	99	89.90
Global Equity Funds	171	83.63
International Equity Funds	53	88.68
Emerging Equity Funds	79	75.95
All Foreign Equity Funds	402	84.33
FIVE-YEAR		
Japanese Large-Cap Funds	324	79.94
Japanese Mid/Small-Cap Funds	144	80.56
All Japanese Equity Funds	468	80.13
U.S. Equity Funds	72	80.56
Global Equity Funds	151	72.19
International Equity Funds	51	84.31
Emerging Equity Funds	80	60.00
All Foreign Equity Funds	354	72.88
TEN-YEAR		
Japanese Large-Cap Funds	345	62.61
Japanese Mid/Small-Cap Funds	169	56.80
All Japanese Equity Funds	514	60.70
U.S. Equity Funds	24	50.00
Global Equity Funds	117	57.26
International Equity Funds	57	66.67
Emerging Equity Funds	56	53.57
All Foreign Equity Funds	254	57.87

Source: S&P Dow Jones Indices LLC, Morningstar. Data as of Dec. 31, 2018. Table is provided for illustrative purposes. Past performance is no guarantee of future results.

Report 3: Average Fund Performance (Equal-Weighted)				
INDEX/PEER GROUP	ONE-YEAR (%)	THREE-YEAR ANNUALIZED (%)	FIVE-YEAR ANNUALIZED (%)	TEN-YEAR ANNUALIZED (%)
S&P/TOPIX 150	-15.94	-0.04	3.72	7.20
Japanese Large-Cap Funds	-18.66	0.27	4.12	7.74
S&P Japan MidSmallCap	-19.62	1.56	6.38	9.51
Japanese Mid/Small-Cap Funds	-20.48	5.86	8.72	12.52
S&P Japan 500	-16.81	0.14	4.28	7.64
All Japanese Equity Funds	-19.16	1.91	5.50	9.22
S&P 500	-4.68	6.19	9.58	15.38
U.S. Equity Funds	-11.38	1.48	2.83	11.65
S&P Global 1200	-10.37	3.87	6.02	12.36
Global Equity Funds	-13.39	0.73	2.91	9.11
S&P Global 1200 Ex Japan	-9.89	4.20	6.21	12.82
International Equity Funds	-13.54	1.34	3.14	9.98
S&P Emerging BMI	-19.49	4.86	2.80	10.63
Emerging Equity Funds	-18.02	2.25	0.56	8.10

Source: S&P Dow Jones Indices LLC, Morningstar. Data as Dec. 31, 2018. All returns in JPY. Table is provided for illustrative purposes. Past performance is no guarantee of future results.

Report 4: Average Fund Performance (Asset-Weighted)				
INDEX/PEER GROUP	ONE-YEAR (%)	THREE-YEAR ANNUALIZED (%)	FIVE-YEAR ANNUALIZED (%)	TEN-YEAR ANNUALIZED (%)
S&P/TOPIX 150	-15.94	-0.04	3.72	7.20
Japanese Large-Cap Funds	-19.07	0.07	3.90	7.60
S&P Japan MidSmallCap	-19.62	1.56	6.38	9.51
Japanese Mid/Small-Cap Funds	-21.67	3.79	5.92	10.03
S&P Japan 500	-16.81	0.14	4.28	7.64
All Japanese Equity Funds	-20.09	0.86	4.31	8.07
S&P 500	-4.68	6.19	9.58	15.38
U.S. Equity Funds	-9.52	1.81	2.07	10.52
S&P Global 1200	-10.37	3.87	6.02	12.36
Global Equity Funds	-13.73	0.75	3.44	8.03
S&P Global 1200 Ex Japan	-9.89	4.20	6.21	12.82
International Equity Funds	-14.27	0.66	2.90	9.68
S&P Emerging BMI	-19.49	4.86	2.80	10.63
Emerging Equity Funds	-17.55	2.92	0.13	7.29

Source: S&P Dow Jones Indices LLC, Morningstar. Data as of Dec. 31, 2018. All returns in JPY. Table is provided for illustrative purposes. Past performance is no guarantee of future results.

Report 5: Quartile Breakpoints of Fund Performance			
FUND CATEGORY	THIRD QUARTILE	SECOND QUARTILE	FIRST QUARTILE
ONE-YEAR			
Japanese Large-Cap Funds	-20.66	-18.45	-16.95
Japanese Mid/Small-Cap Funds	-25.00	-21.08	-16.54
All Japanese Equity Funds	-22.01	-18.89	-16.90
U.S. Equity Funds	-15.00	-10.51	-7.16
Global Equity Funds	-15.09	-13.29	-9.97
International Equity Funds	-15.15	-12.85	-11.20
Emerging Equity Funds	-20.91	-17.33	-14.52
THREE-YEAR			
Japanese Large-Cap Funds	-1.30	-0.06	1.46
Japanese Mid/Small-Cap Funds	1.76	3.98	8.60
All Japanese Equity Funds	-0.97	0.81	3.02
U.S. Equity Funds	-0.33	1.79	3.58
Global Equity Funds	-1.42	0.35	1.70
International Equity Funds	-0.48	0.33	1.72
Emerging Equity Funds	-0.78	2.50	4.47
FIVE-YEAR			
Japanese Large-Cap Funds	2.67	3.90	4.89
Japanese Mid/Small-Cap Funds	5.39	7.96	11.52
All Japanese Equity Funds	2.90	4.60	6.39
U.S. Equity Funds	0.50	4.20	6.04
Global Equity Funds	1.43	2.82	4.41
International Equity Funds	1.42	2.87	4.14
Emerging Equity Funds	-0.60	0.86	1.95
TEN-YEAR			
Japanese Large-Cap Funds	6.69	7.49	8.32
Japanese Mid/Small-Cap Funds	9.62	11.12	15.39
All Japanese Equity Funds	7.02	7.99	9.95
U.S. Equity Funds	14.09	15.43	16.42
Global Equity Funds	8.89	9.98	10.97
International Equity Funds	9.15	10.28	11.15
Emerging Equity Funds	7.49	8.82	9.50

Source: S&P Dow Jones Indices LLC, Morningstar. Data as of Dec. 31, 2018. All returns in JPY. Figures are computed from universe of funds survived for the entire measured periods. Table is provided for illustrative purposes. Past performance is no guarantee of future results.

APPENDIX A: GLOSSARY

SPIVA Styles and Morningstar Fund Classifications

Data from Morningstar is obtained for all managed funds domiciled in Japan for which month-end data is available during the performance period. The data includes the most comprehensive Japanese fund data on active and finalized (merged or liquidated) funds over the chosen period. Funds are classified based on the Morningstar fund classification system, and the SPIVA Japan Scorecard covers Japanese and international equity categories.

Japanese Equity Funds

The SPIVA Japan Scorecard covers major capitalization levels including large-, mid-, and small-cap funds. S&P Dow Jones Indices uses the Morningstar fund categories, which determine a fund portfolio’s capitalization assignments.

The Morningstar classification system produces narrow, style-based classifications for Japanese equities funds. S&P Dow Jones Indices has consolidated the style-based categories in order to generate a larger sample size and develop a broad-market comparison to market-based benchmarks. A narrow, style-based comparison would yield a limited sample size, given value and growth style segments are not consistently discernible over the past five years.

Morningstar categories have been mapped to SPIVA peer groups in the following manner.

Exhibit 1: Japanese Equity Funds: SPIVA and Morningstar Categories

SPIVA CATEGORY	MORNINGSTAR CATEGORY
Japanese Large-Cap Funds	Japan Fund Japan Large-Cap Value Equity
	Japan Fund Japan Large-Cap Growth Equity
	Japan Fund Japan Large-Cap Blend Equity
Japanese Mid/Small-Cap Funds	Japan Fund Japan Small/Mid-Cap Value Equity
	Japan Fund Japan Small/Mid-Cap Growth Equity
	Japan Fund Japan Small/Mid-Cap Blend Equity

Source: S&P Dow Jones Indices LLC, Morningstar. Table is provided for illustrative purposes.

International Equity Funds

For international equity, the SPIVA Japan Scorecard reports on four major categories (U.S., global, international, and emerging market funds) of interest to global asset allocators.

Morningstar categories have been mapped to SPIVA peer groups in the following manner.

Exhibit 2: International Equity Funds: SPIVA and Morningstar Categories

SPIVA CATEGORY	MORNINGSTAR CATEGORY
U.S. Equity Funds	Japan Fund North America Equity
Global Equity Funds	Japan Fund World Equity
International Equity Funds	Japan Fund World ex-Japan Equity
Emerging Equity Funds	Japan Fund Emerging Multiple Country/Area Equity

Source: S&P Dow Jones Indices LLC, Morningstar. Table is provided for illustrative purposes.

Benchmarks

The chosen benchmarks are shown in Exhibit 3. All index returns are total returns (i.e., include dividend reinvestment) in Japanese yen. There has been no deduction from index returns to account for fund investment expenses. It is important to note that active fund returns are after expenses, but they do not include loads and entry fees.

The benchmarks chosen are the most commonly adopted benchmarks for funds that fall into the respective fund peer groups. In some instances, a fund may not adopt the benchmarks stipulated in Exhibit 3. However, a vast majority do set their performance hurdle based on the assigned benchmarks in this report, ensuring that the study is robust and fair.

Exhibit 3: SPIVA Categories and Their Benchmarks	
SPIVA CATEGORY	BENCHMARK INDEX
Japanese Large-Cap Funds	S&P/TOPIX 150
Japanese Mid/Small-Cap Funds	S&P Japan MidSmallCap
All Japanese Equity Funds	S&P Japan 500
U.S. Equity Funds	S&P 500
Global Equity Funds	S&P Global 1200
International Equity Funds	S&P Global 1200 Ex Japan
Emerging Equity Funds	S&P Emerging BMI

Source: S&P Dow Jones Indices LLC, Morningstar. Table is provided for illustrative purposes.

APPENDIX B: GLOSSARY

Percentage of Funds Outperformed by the Index

To correct for survivorship bias, we use the opportunity set available at the beginning of the period as the denominator. We determine the count of funds that have survived and beat the index. We then report the index outperformance percentage.

Survivorship (%)

This measure represents the percentage of funds in existence at the beginning of the time period that is still active at the end of the time period.

Equal-Weighted Fund Performance

Equal-weighted returns for a particular style category are determined by calculating a simple average return of all active funds in that category in a particular month.

Asset-Weighted Fund Performance

Asset-weighted returns for a particular style category are determined by calculating a weighted average return of all funds in that category in a particular month, with each fund's return weighted by its total net assets. Asset-weighted returns are a better indicator of fund category performance because they more accurately reflect the returns of the total money invested in that particular style category.

Quartiles Breakpoints

The p^{th} percentile for a set of data is the value that is greater than or equal to $p\%$ of the data, but is less than or equal to $(100-p)\%$ of the data. In other words, it is a value that divides the data into two parts: the lower $p\%$ of the values and the upper $(100-p)\%$ of the values. The first quartile is the 75th percentile, the value separating the elements of a population into the lower 75% and the upper 25%. The second quartile is the 50th percentile and the third quartile is the 25th percentile. For fund category quartiles in a particular time horizon, the data used is the return of the largest share class of the fund net of fees, excluding loads.

Survivorship Bias

Many funds might liquidate or merge during a period of study. This usually occurs due to continued poor performance by the fund. Therefore, if index returns were compared to fund returns using only surviving funds, the comparison would be biased in favor of the fund category. These reports remove this bias by (a) using the entire investment opportunity set, made up of all funds in that particular category at the outset of the period, as the denominator for outperformance calculations, (b) explicitly showing the survivorship rate in each category, and (c) constructing peer average return series for each category based on all available funds at the outset of the period.

Fees

The fund returns used are net of fees, excluding loads.

Indices

A benchmark index provides an investment vehicle against which fund performance can be measured.

S&P/TOPIX 150

The S&P/TOPIX 150 is designed to represent the large-cap universe for Japan. It includes 150 highly liquid securities as leading, blue-chip companies from each of the Global Industry Classification Standard (GICS®) sectors of the Japanese market.

S&P JAPAN MIDSMALLCAP

The S&P Japan MidSmallCap combines the S&P Japan MidCap and S&P SmallCap indices and comprises the stocks representing the lowest 30% of float-adjusted market cap in Japan. It is a subset of the [S&P Japan BMI](#), comprehensive, rules-based index measuring Japanese stock market performance.

S&P JAPAN 500

The [S&P Japan 500](#) is designed to represent the Japanese investable market. Index constituents are drawn from eligible companies listed on the Tokyo, Osaka, or JASDAQ exchanges. Data is sourced from the comprehensive Toyo Keizai database. Constituents represent the large-, mid-, and small-cap components of the Japanese equity markets.

S&P 500

Widely regarded as the best single gauge of the U.S. equities market, this market-capitalization-weighted index includes a representative sample of the top 500 companies in the leading industries of the U.S. economy, and it provides over 80% coverage of U.S. equities.

S&P GLOBAL 1200

Capturing approximately 70% of the world's capital markets, the [S&P Global 1200](#) is a composite of seven headline indices, many of which are accepted leaders in their regions. It includes the S&P 500 (U.S.), [S&P Europe 350](#) (Europe), [S&P/TOPIX 150](#) (Japan), [S&P/TSX 60](#) (Canada), [S&P/ASX All Australian 50](#) (Australia), [S&P Asia 50](#) (Asia Ex-Japan), and [S&P Latin America 40](#) (Latin America).

S&P GLOBAL 1200 EX JAPAN

The S&P Global 1200 Ex Japan is a composite of six headline indices, many of which are accepted leaders in their regions. It includes the S&P 500 (U.S.), S&P Europe 350 (Europe), S&P/TSX 60 (Canada), S&P/ASX All Australian 50 (Australia), S&P Asia 50 (Asia Ex-Japan), and S&P Latin America 40 (Latin America).

S&P EMERGING BMI

The S&P Emerging BMI captures all companies domiciled in the emerging markets within the [S&P Global BMI](#) with a float-adjusted market capitalization of at least USD 100 million and a minimum annual trading liquidity of USD 50 million.

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