S&P Dow Jones Indices

A Division of S&P Global

SPIVA® India Scorecard

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Experience the active vs. passive debate on a global scale on INDEXOLOGY®.

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 S&P Indices Versus Active Funds (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, Japan, Latin America, and South Africa.
- The SPIVA India Scorecard compares the performance of actively managed Indian mutual funds with their respective benchmark indices over 1-, 3-, 5-, and 10-year investment horizons. In this scorecard, we studied the performance of three categories of actively managed equity funds and two categories of actively managed bond funds over the 1-, 3-, 5-, and 10-year periods ending in December 2018.
- In 2018, Indian Equity Large-Cap and Indian Equity-Linked Saving Schemes (ELSS) fund managers struggled to beat their respective benchmark, with more than 90% active funds underperforming their respective benchmarks in both categories. The S&P BSE 100, the benchmark for Indian Equity Large-Cap funds, returned 2.62% over the one-year period, whereas the S&P BSE 400 MidSmallCap Index, the benchmark for Indian Equity Mid-/Small-Cap funds, ended in the red, down 17.16% during the same period.
- Indian Equity Large-Cap Funds: Over the one-year period, the S&P BSE 100 ended in the black, returning 2.62%, with 91.94% of funds underperforming the benchmark. In fact, across all the periods studied, the majority of actively managed large-cap equity funds in India underperformed the S&P BSE 100. Large-cap funds witnessed a low style consistency of 41.94% over the one-year period and a low survivorship rate of 66.67% over the 10-year period. The asset-weighted fund return was 72 bps higher than the equal-weighted fund return over the 10-year period, and the return spread between the first and the third quartile break points of the fund performance was 3.39% for the same period.

• Indian ELSS: Over the one-year period ending December 2018, the <u>S&P BSE 200</u> remained flat, at 0.82%. Over the one- and three-year periods ending in December 2018, 95.45% and 88.10% of funds underperformed the benchmark. Over the 10-year horizon, the return spread between assetweighted and equal-weighted returns was only 7 bps, but the return spread between the first and the third quartile break points of the fund performance was 3.62%.

- Indian Mid-/Small-Cap Equity Funds: The benchmark for Indian Mid-/Small-Cap Equity Funds, the S&P BSE 400 MidSmallCap Index, was down 17.16% during the one-year period ending December 2018. Though this equity segment ended deeply in red, only 25.58% of the active funds underperformed the benchmark over the one-year period. Over the 10-year period, the survivorship rate and style consistency were low, at 67.11% and 26.32%, respectively. For the same period, the asset-weighted fund return was 27 bps higher than the equal-weighted fund return, and the return spread between the first and the third quartile break points of the fund performance was 5.28%.
- Indian Government Bond Funds: The S&P BSE Indian Government Bond Index returned 7.93% over the one-year period ending December 2018. Across all periods, a majority of funds underperformed the benchmark, with 81.58%, 71.43%, 88.00%, and 96.43% of actively managed funds in this peer group underperforming the benchmark over the 1-, 3-, 5-, and 10-year periods, respectively. Over the 10-year period ending in December 2018, survivorship rate and style consistency were at 37.50% and 33.93%, respectively. For the same period, the asset-weighted fund return was 14 bps higher than the equal-weighted fund return, and the return spread between the first and the third quartile break points of the fund performance was 90 bps.
- Indian Composite Bond Funds: In the 12-month period ending in December 2018, the <u>S&P BSE India Bond Index</u> closed in the black with a gain of 7.8%. Over the 1-, 3-, 5-, and 10-year periods ending in December 2018, 94.44%, 90.97%, 96.64%, and 83.33% of the actively managed funds in this category lagged the benchmark, respectively. Over the 10-year period, survivorship rate and style consistency were at 75.00% and 61.25%, respectively. For the same period, the asset-weighted fund return was 40 bps higher than the equal-weighted fund return, and the return spread between the first and the third quartile break points of the fund performance was 1.49%.
- Average Fund Returns: In the one-year period ending in December 2018, the equal- and asset-weighted returns of Indian Equity Large-Cap funds, Indian ELSS funds, and funds from both the bond categories were sharply lower than their respective benchmarks. In contrast, only the Indian Equity Mid-/Small-Cap category delivered higher equal- and asset-weighted average returns than its respective benchmark over the same period. Over the 10-year period, the largest outperformance relative to its benchmark was witnessed in the Indian Equity Mid-/Small-Cap fund category, as its asset-weighted return was 92 bps higher than its benchmark.

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. The SPIVA India Scorecard provides a semiannual update on the active versus index debate in India. It shows the performance of actively managed Indian mutual funds compared with S&P DJI indices in their respective categories.

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 much 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 India 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 an INR 10 billion fund affecting the average in the same
 manner as the returns of an INR 10 million fund. However, the SPIVA India 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.
- Style Consistency: SPIVA Scorecards measure consistency for each style category across
 different time horizons. Style consistency is an important metric, because style drift (the tendency
 of funds to diverge from their initial investment categorization) can have an impact on asset
 allocation decisions.
- Data Cleaning: SPIVA Scorecards avoid double counting multiple share classes in all countbased calculations, using only the share class with greater quarterly average assets at the start of the measurement period. Since this is meant to be a scorecard for active managers, index funds, leveraged and inverse funds, and other index-linked products are excluded.

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REPORTS

Report 1: Percentage of Funds Outperformed by the Index					
FUND CATEGORY	COMPARISON INDEX	1-YEAR (%)	3-YEAR (%)	5-YEAR (%)	10-YEAR (%)
Indian Equity Large-Cap	S&P BSE 100	91.94	90.59	57.55	64.23
Indian ELSS	S&P BSE 200	95.45	88.10	40.54	51.52
Indian Equity Mid-/Small-Cap	S&P BSE 400 MidSmallCap Index	25.58	56.52	39.68	55.26
Indian Government Bond	S&P BSE India Government Bond Index	81.58	71.43	88.00	96.43
Indian Composite Bond	S&P BSE India Bond Index	94.44	90.97	96.64	83.33

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

Report 2: Survivorship and Style Consistency of Indian Equity Funds			
FUND CATEGORY	NO. OF FUNDS AT START	SURVIVORSHIP (%)	STYLE CONSISTENCY (%)
1-YEAR			
Indian Equity Large-Cap	62	95.16	41.94
Indian ELSS	44	95.45	93.18
Indian Equity Mid-/Small-Cap	43	100.00	74.42
Indian Government Bond	39	71.79	66.67
Indian Composite Bond	144	94.44	90.97
3-YEAR			
Indian Equity Large-Cap	85	89.41	30.59
Indian ELSS	42	95.24	92.86
Indian Equity Mid-/Small-Cap	46	97.83	67.39
Indian Government Bond	43	62.79	58.14
Indian Composite Bond	144	88.19	83.33
5-YEAR			
Indian Equity Large-Cap	139	77.70	20.14
Indian ELSS	37	94.59	94.59
Indian Equity Mid-/Small-Cap	63	88.89	44.44
Indian Government Bond	51	49.02	45.10
Indian Composite Bond	119	81.51	76.47
10-YEAR			
Indian Equity Large-Cap	123	66.67	14.63
Indian ELSS	33	90.91	90.91
Indian Equity Mid-/Small-Cap	76	67.11	26.32
Indian Government Bond	56	37.50	33.93
Indian Composite Bond	80	75.00	61.25

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

Report 3: Average Fund Performance (Equal Weighted)				
INDEX/PEER GROUP	1-YEAR (%)	3-YEAR ANNUALIZED (%)	5-YEAR ANNUALIZED (%)	10-YEAR ANNUALIZED (%)
S&P BSE 100	2.62	12.83	13.58	16.08
Indian Equity Large-Cap	-3.19	10.09	13.75	15.08
S&P BSE 200	0.82	12.76	14.49	16.55
Indian ELSS	-6.60	10.49	15.74	16.82
S&P BSE 400 MidSmallCap Index	-17.16	10.47	18.76	18.40
Indian Equity Mid-/Small-Cap	-15.09	9.34	19.37	19.05
S&P BSE India Government Bond Index	7.93	8.34	9.78	7.40
Indian Government Bond	6.82	8.04	8.82	6.32
S&P BSE India Bond Index		8.35	9.74	7.61
Indian Composite Bond 5.79		7.41	8.37	7.14

Source: S&P Dow Jones Indices LLC, Morningstar, and Association of Mutual Funds in India. Data as of Dec. 31, 2018. Returns are shown in INR. Past performance is no guarantee of future results. Table is provided for illustrative purposes.

Report 4: Average Fund Performance (Asset Weighted)				
INDEX/PEER GROUP	1-YEAR (%)	3-YEAR ANNUALIZED (%)	5-YEAR ANNUALIZED (%)	10-YEAR ANNUALIZED (%)
S&P BSE 100	2.62	12.83	13.58	16.08
Indian Equity Large-Cap	-2.56	10.80	14.19	15.80
S&P BSE 200	0.82	12.76	14.49	16.55
Indian ELSS	-9.03	9.54	14.92	16.89
S&P BSE 400 MidSmallCap Index	-17.16	10.47	18.76	18.40
Indian Equity Mid-/Small-Cap	-14.09	9.20	18.66	19.31
S&P BSE India Government Bond Index	7.93	8.34	9.78	7.40
Indian Government Bond	6.79	8.51	9.57	6.46
S&P BSE India Bond Index	7.81	8.35	9.74	7.61
Indian Composite Bond	5.89	7.69	8.70	7.54

Source: S&P Dow Jones Indices LLC, Morningstar, and Association of Mutual Funds in India. Data as of Dec. 31, 2018. Returns are shown in INR. Past performance is no guarantee of future results. Table is provided for illustrative purposes.

Report 5: Quartile Breakpoints of Fund Performance			
FUND CATEGORY	THIRD QUARTILE	SECOND QUARTILE	FIRST QUARTILE
1-YEAR	•		
Indian Equity Large-Cap	-4.91	-2.91	-0.47
Indian ELSS	-9.00	-6.63	-3.83
Indian Equity Mid-/Small-Cap	-17.21	-14.55	-10.47
Indian Government Bond	5.26	6.31	7.99
Indian Composite Bond	5.08	6.14	6.75
3-YEAR			
Indian Equity Large-Cap	8.67	9.89	11.77
Indian ELSS	8.12	10.74	11.91
Indian Equity Mid-/Small-Cap	7.71	9.86	12.38
Indian Government Bond	7.28	8.02	8.89
Indian Composite Bond	6.83	7.42	7.87
5-YEAR			
Indian Equity Large-Cap	12.21	13.80	15.44
Indian ELSS	13.88	15.67	17.11
Indian Equity Mid-/Small-Cap	17.81	20.03	21.10
Indian Government Bond	8.40	9.07	9.77
Indian Composite Bond	7.87	8.38	8.76
10-YEAR			
Indian Equity Large-Cap	14.06	16.15	17.46
Indian ELSS	14.76	16.83	18.38
Indian Equity Mid-/Small-Cap	17.04	20.08	22.33
Indian Government Bond	5.59	6.11	6.50
Indian Composite Bond	6.00	6.52	7.49

Source: S&P Dow Jones Indices LLC, Morningstar, and Association of Mutual Funds in India. Data as of Dec. 31, 2018. Returns are shown in INR. Past performance is no guarantee of future results. Table is provided for illustrative purposes.

APPENDIX A: GLOSSARY

Data

Data from Morningstar is obtained for all managed funds domiciled in India for which month-end data is available during the performance period. The data includes the most comprehensive Indian fund data on active and finalized (merged or liquidated) funds over the chosen period.

Quarterly average assets for all managed funds are sourced from the Association of Mutual Funds in India for every quarter end during the performance period.

SPIVA Styles and Morningstar Fund Classifications

Funds are classified based on the Morningstar fund classification system, and the SPIVA India Scorecard covers Indian Equity Large-Cap, Indian ELSS, Indian Equity Mid-/Small-Cap, Indian Government Bond, and Indian Composite Bond categories.

The Morningstar classification system produces narrow, style-based classifications for Indian 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 that value and growth style segments are not consistently discernible over the previous five-year period.

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

Exhibit 1A: Indian Funds: SPIVA and Current Morningstar Categories			
SPIVA CATEGORY	MORNINGSTAR CATEGORY		
Indian Equity Large-Cap	India Fund Large-Cap		
Indian ELSS	India Fund ELSS (Tax Savings)		
hadian Franks Mid (Ornell Orn	India Fund Mid-Cap		
Indian Equity Mid-/Small-Cap	India Fund Small-Cap		
Indian Government Bond	India Fund Government Bond		
	India Fund 10 yr Government Bond		
	India Fund Short Duration		
	India Fund Medium Duration		
	India Fund Medium to Long Duration		
	India Fund Long Duration		
Indian Composite Bond	India Fund Dynamic Bond		
	India Fund Banking & PSU		
	India Fund Corporate Bond		
	India Fund Credit Risk		

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

Exhibit 1B: Indian Funds: SPIVA and Historical Morningstar Categories		
SPIVA CATEGORY	MORNINGSTAR CATEGORY	
Indian Equity Large-Cap	India CE Large Cap	
	India OE Large Cap	
	India OE Large-Cap	
Indian ELSS	India OE ELSS (Tax Saving)	
	India CE Small/Mid Cap	
Indian Equity Mid /Small Can	India OE Small/Mid Cap	
Indian Equity Mid-/Small-Cap	India OE Small/Mid-Cap	
	India Fund Small/Mid-Cap	
	India OE Long Government	
	India OE Long-Term Government Bond	
	India OE Intermediate Government Bond	
	India OE Intermediate Government	
Indian Government Bond	India OE Short Government	
	India OE Short-Term Government Bond	
	India Fund Long-Term Government Bond	
	India Fund Intermediate Government Bond	
	India Fund Short-Term Government Bond	
	India OE Intermediate Bond	
	India OE Short-term Bond	
	India OE Long-Term Bond	
	India OE Fixed Maturity Multisector Bond	
	India OE Fixed Maturity Short-term Bond	
	India OE FMP Multisector Bond	
Indian Composite Bond	India OE Multisector Bond	
	India OE Corporate Credit	
	India Fund Long-Term Bond	
	India Fund Intermediate Bond	
	India Fund Short-Term Bond	
	India Fund Corporate Credit	

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

Benchmarks

The chosen benchmarks are shown in Exhibit 2. All index returns are total returns (i.e., include dividend reinvestment) in Indian rupees. 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 below. 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 2: SPIVA Categories and Their Benchmarks		
SPIVA CATEGORY	BENCHMARK INDEX	
Indian Equity Large-Cap	S&P BSE 100	
Indian ELSS	S&P BSE 200	
Indian Equity Mid-/Small-Cap ¹	S&P BSE 400 MidSmallCap Index	
Indian Government Bond	S&P BSE India Government Bond Index	
Indian Composite Bond	S&P BSE India Bond Index	

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

The benchmark for the SPIVA category India Equity Mid-/Small-Cap in SPIVA India scorecards prior to the SPIVA India Mid-Year 2018 scorecard was the S&P BSE MidCap.

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 beaten 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.

Style Consistency (%)

This calculation shows the percentage of funds that had the same style classification at the end of the time period as at the beginning 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 latest quarterly average assets available as of that month from the Association of Mutual Funds in India. 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.

Quartile Breakpoints

The pth percentile for a set of data is the value that is greater than or equal to p% of the data, but it 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 BSE 100

The S&P BSE 100 is designed to measure the performance of the top 100 companies in India based on size and liquidity. It is a highly liquid and investable index that is designed to address investment managers' needs to benchmark against a large-cap equity portfolio.

S&P BSE 200

The S&P BSE 200 is designed to represent the top 200 large, liquid, well-established, and financially sound companies listed at BSE Ltd. across sectors.

S&P BSE 400 MIDSMALLCAP INDEX

The S&P BSE 400 MidSmallCap Index is designed to track the performance of the 400 companies within the S&P BSE 500 that are not part of S&P BSE 100.

S&P BSE INDIA GOVERNMENT BOND INDEX

The <u>S&P BSE India Government Bond Index</u> is designed to track the performance of local-currency-denominated government bonds from India.

S&P BSE INDIA BOND INDEX

The S&P BSE India Bond Index is designed to track the performance of local-currency-denominated government and corporate bonds from India.

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