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SPIVA® India Scorecard

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 June 2018.
- Since the turn of the year, the Indian market has weathered headwinds, tackling a depreciating Indian rupee and a deteriorating current account deficit partially on account of sticky oil prices. It also witnessed notable developments such as the introduction of the long-term capital gains tax in the last annual budget and the style recategorization mandates for funds domiciled in India.
- The first half of 2018 witnessed a stark spread in the performance of size indices, with a higher proportion of capital chasing large-cap stocks. The <u>S&P BSE 100</u>, the benchmark for Indian Equity Large-Cap funds, ended flat at 0.34% during this period, whereas the <u>S&P BSE 400 MidSmallCap Index</u>, the benchmark for Indian Equity Mid-/Small-Cap funds, was down 12.74% during the same period.
- Indian Equity Large-Cap Funds: The S&P BSE 100 ended in the one-year period in black, returning 12.94%, with 88% of funds underperforming the benchmark. Over the 3-, and 10-year periods ending in June 2018, 78% and 63% of large-cap equity funds underperformed the S&P BSE 100, respectively. Large-cap funds witnessed low style consistency over the 1-year period, at 42%, and a low survivorship rate of 68% over the 10-year period. The asset-weighted fund return was 51 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 3.62% for the same period.



• Indian Equity-Linked Saving Schemes (ELSS): Over the one-year period ending June 2018, the S&P BSE 200 returned 12.43%. Over the 5- and 10-year periods ending in June 2018, the majority of funds outperformed the benchmark, but over the 1- and 3-year periods, 84% and 62% of the funds underperformed the benchmark. 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 3.8%.

- Indian Mid-/Small-Cap Equity Funds: To align more closely with the style reclassification, the benchmark in this category was changed to the S&P BSE 400 MidSmallCap Index. The benchmark gained 6.08% in the one-year period ending June 2018. Across all the periods studied, the majority of the actively managed mid-/small-cap equity funds in India underperformed the benchmark. Over the 10-year period studied, the survivorship rate and style consistency were low, at 67% and 27%, respectively. For the same period, the asset-weighted fund return was 30 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 5.10%.
- Indian Government Bond Funds: The <u>S&P BSE Indian Government Bond Index</u> returned 1.18% over the one-year period ending June 2018. Over the 1-, 3-, 5-, and 10-year periods, 83%, 75%, 82%, and 95% of the actively managed funds in this peer group underperformed the benchmark, respectively. Over the 10-year period ending in June 2018, survivorship rate and style consistency were at 32% and 29%, respectively. For the same period, the asset-weighted fund return was 50 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 1.29%.
- Indian Composite Bond Funds: In the 12 months leading up to June 2018, the <u>S&P BSE India Bond Index</u> closed in the black, with a gain of 1.71%. Over the 1-, 3-, 5-, and 10-year periods ending in June 2018, 30%, 60%, 69%, and 95% of the actively managed funds in this category lagged the benchmark, respectively. Over the 10-year period, survivorship rate and style consistency were at 67% and 54%, respectively. For the same period, the asset-weighted fund return was 2 bps lower than the equal-weighted fund return, and the return spread between the first and the third quartile break points of the fund performance was 1.47%.
- Average Fund Returns: In the one-year period ending in June 2018, both equal- and asset-weighted returns of all the equity categories and Indian Government Bond category were sharply lower than their respective benchmarks. In contrast, only the Indian Composite Bond category delivered higher returns, in terms of 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 ELSS fund category, where asset-weighted returns were 1.35% higher than the 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 count-based 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	ONE-YEAR (%)	THREE-YEAR (%)	FIVE-YEAR (%)	TEN-YEAR (%)
Indian Equity Large-Cap	S&P BSE 100	87.88	78.35	48.08	62.77
Indian ELSS	S&P BSE 200	83.72	61.54	27.78	43.33
Indian Equity Mid-/Small-Cap	S&P BSE 400 MidSmallCap Index	62.22	78.26	53.03	50.67
Indian Government Bond	S&P BSE India Government Bond Index	82.93	75.47	82.35	94.92
Indian Composite Bond	S&P BSE India Bond Index	30.00	60.42	68.70	95.45

Source: S&P Dow Jones Indices LLC, Morningstar, and Association of Mutual Funds in India. Data as of June 30, 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 (%)
ONE-YEAR	·		
Indian Equity Large-Cap	66	95.45	42.42
Indian ELSS	43	95.35	95.35
Indian Equity Mid-/Small-Cap	45	100.00	73.33
Indian Government Bond	41	70.73	65.85
Indian Composite Bond	140	95.71	91.43
THREE-YEAR			
Indian Equity Large-Cap	97	85.57	26.80
Indian ELSS	39	94.87	94.87
Indian Equity Mid-/Small-Cap	46	97.83	67.39
Indian Government Bond	53	52.83	49.06
Indian Composite Bond	144	88.19	83.33
FIVE-YEAR			
Indian Equity Large-Cap	156	80.77	17.95
Indian ELSS	36	94.44	94.44
Indian Equity Mid-/Small-Cap	66	84.85	39.39
Indian Government Bond	52	50.00	46.15
Indian Composite Bond	116	85.34	81.03
TEN-YEAR			
Indian Equity Large-Cap	137	67.88	13.14
Indian ELSS	30	90.00	90.00
Indian Equity Mid-/Small-Cap	75	66.67	26.67
Indian Government Bond	59	32.20	28.81
Indian Composite Bond	90	66.67	54.44

Source: S&P Dow Jones Indices LLC, Morningstar, and Association of Mutual Funds in India. Data as of June 30, 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	ONE-YEAR (%)	THREE-YEAR ANNUALIZED (%)	FIVE-YEAR ANNUALIZED (%)	TEN-YEAR ANNUALIZED (%)
S&P BSE 100	12.94	10.58	15.21	12.00
Indian Equity Large-Cap	8.84	9.23	16.26	11.35
S&P BSE 200	12.43	11.07	16.24	12.43
Indian ELSS	7.64	10.49	18.68	13.38
S&P BSE 400 MidSmallCap Index	6.08	14.40	22.62	13.44
Indian Equity Mid-/Small-Cap	3.94	11.80	23.67	14.47
S&P BSE India Government Bond Index	1.18	7.59	7.68	8.69
Indian Government Bond	-0.17	7.28	7.09	7.46
S&P BSE India Bond Index	1.71	7.71	7.82	8.84
Indian Composite Bond	3.42	7.60	7.71	7.86

Source: S&P Dow Jones Indices LLC, Morningstar, and Association of Mutual Funds in India. Data as of June 30, 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	ONE-YEAR (%)	THREE-YEAR ANNUALIZED (%)	FIVE-YEAR ANNUALIZED (%)	TEN-YEAR ANNUALIZED (%)
S&P BSE 100	12.94	10.58	15.21	12.00
Indian Equity Large-Cap	7.78	9.24	16.31	11.86
S&P BSE 200	12.43	11.07	16.24	12.43
Indian ELSS	7.63	9.75	18.56	13.78
S&P BSE 400 MidSmallCap Index	6.08	14.40	22.62	13.44
Indian Equity Mid-/Small-Cap	4.09	11.32	22.68	14.77
S&P BSE India Government Bond Index	1.18	7.59	7.68	8.69
Indian Government Bond	0.20	7.92	7.34	7.96
S&P BSE India Bond Index	1.71	7.71	7.82	8.84
Indian Composite Bond	4.29	8.13	7.96	7.84

Source: S&P Dow Jones Indices LLC, Morningstar, and Association of Mutual Funds in India. Data as of June 30, 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
ONE-YEAR	·	·	
Indian Equity Large-Cap	5.49	7.58	10.44
Indian ELSS	4.18	7.56	10.40
Indian Equity Mid-/Small-Cap	1.46	4.98	8.75
Indian Government Bond	-1.64	-0.56	1.12
Indian Composite Bond	1.26	4.35	5.16
THREE-YEAR			
Indian Equity Large-Cap	7.77	9.19	10.52
Indian ELSS	8.14	10.43	12.01
Indian Equity Mid-/Small-Cap	9.40	12.20	14.31
Indian Government Bond	6.63	7.47	8.40
Indian Composite Bond	6.82	7.61	8.06
FIVE-YEAR			
Indian Equity Large-Cap	14.50	15.94	18.47
Indian ELSS	16.38	17.60	19.86
Indian Equity Mid-/Small-Cap	20.31	23.16	26.07
Indian Government Bond	6.38	7.37	8.09
Indian Composite Bond	6.86	7.58	8.19
TEN-YEAR			
Indian Equity Large-Cap	10.47	12.40	14.09
Indian ELSS	10.99	13.15	14.80
Indian Equity Mid-/Small-Cap	13.44	16.02	18.54
Indian Government Bond	7.26	7.65	8.55
Indian Composite Bond	6.81	7.70	8.28

Source: S&P Dow Jones Indices LLC, Morningstar, and Association of Mutual Funds in India. Data as of June 30, 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 Equity-Linked Saving Schemes (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)		
	India Fund Mid-Cap		
Indian Equity Mid-/Small-Cap	India Fund Small-Cap		
	India Fund Government Bond		
Indian 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.

SPIVA CATEGORY	MORNINGSTAR CATEGORY		
	India CE Large Cap		
Indian Equity Large-Cap	India OE Large Cap		
	India OE Large-Cap		
Indian ELSS	India OE ELSS (Tax Saving)		
	India CE Small/Mid Cap		
Ladian Facilia Mid (Occall Occ	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		
Indian Composite Bond	India OE FMP Multisector Bond		
	India OE Multisector Bond		
	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.

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.

¹ 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 <u>S&P BSE MidCap</u>.

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 <u>S&P BSE 100</u> 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 <u>S&P BSE 200</u> 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 <u>S&P BSE 400 MidSmallCap Index</u> 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 <u>S&P BSE India Bond Index</u> is designed to track the performance of local-currency-denominated government and corporate bonds from India.

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