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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 2017.
- Foreign portfolio investors (FPIs) were bullish in India during the first half of 2017, gaining confidence from continued implementation of reforms such as the goods and services tax (GST) and a stronger Indian rupee. Indian markets witnessed strong inflows from FPIs, over the six-month period ending in June 2017, as FPIs added INR 533.54 billion to the Indian equity market and INR 941.99 billion to the Indian debt market.
- The <u>S&P BSE 100</u>, which seeks to measure the large-cap equity market in India, jumped 18.41% over the one-year period ending in June 2017. The mid-cap equity market, as measured by the <u>S&P BSE MidCap</u>, returned 26.55% over the same period. The <u>S&P BSE India</u> <u>Government Bond Index</u> delivered a total return of 11.19% over the one-year period ending in June 2017.
- Over the one-year period ending in June 2017, 73.83% of Indian Composite Bond funds underperformed their benchmark, whereas only 38.1% of the Indian ELSS funds underperformed their benchmark.
   Over the 10-year horizon, 93.33% Indian Government Bond funds and 41.38% of Indian ELSS funds underperformed their respective benchmarks.



• Indian Large-Cap Equity Funds: Over the 1-, 3-, 5-, and 10-year periods ending in June 2017, 52.87%, 34.19%, 50.93%, and 58.47% of large-cap equity funds in India underperformed the <u>S&P BSE 100</u>, respectively. Over the 10-year period studied, survivorship rate and style consistency were low, at 66.1% and 28.81%, respectively. Over the same horizon, the asset-weighted fund return was 79 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 3.11%.

- Indian Equity-Linked Saving Schemes (ELSS): In this category, most actively managed funds outperformed the <u>S&P BSE 200</u> across over the all observed time horizons. Over the 10-year period ending in June 2017, the survivorship rate was 96.55%, the asset-weighted fund return was 17 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 3.74%.
- Indian Mid-/Small-Cap Equity Funds: Over the three- and five-year periods ending in June 2017, the majority of the actively managed mid-/small-cap equity funds in India outperformed the <a href="S&P">S&P</a> BSE MidCap. Over the one-year period, however, 56.52% of the funds lagged the S&P BSE MidCap. Over the 10-year horizon, the survivorship rate and style consistency were low, at 60.61% and 27.27%, respectively. For the same period, the asset-weighted fund return was 5 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 4.17%.
- Indian Government Bond Funds: Over the 3-, 5-, and 10-year periods, 64.81%, 75.47%, and 93.33% of the actively managed funds in this peer group underperformed the <a href="S&P BSE Indian">S&P BSE Indian</a> Government Bond Index, respectively. Over the 10-year period ending in June 2017, survivorship rate and style consistency were at 45.00% and 43.33%, respectively. Over the same period, the asset-weighted fund return was 45 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 1.52%.
- Indian Composite Bond Funds: Over the 1-, 3-, 5-, and 10-year periods ending in June 2017, 73.83%, 93.65%, 96.91%, and 90.70% of the actively managed funds in this category lagged the S&P BSE India Bond Index. Over the 10-year period, the survivorship rate and style consistency were at 64.37% and 31.03%, respectively. For the same period, the asset-weighted fund return was 16 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 1.52%.
- **Fund Survivorship:** A large percentage (30% or more) of the funds in all other categories, except ELSS, were either merged or liquidated over the 10-year horizon. Over the same period, Indian Government Bond funds had the lowest survival rate, at 45.00%, while Indian ELSS funds had the highest survival rate, at 96.55%, followed by Indian Equity Large-Cap, at 66.1%.
- **Style Consistency:** Indian Equity Large-Cap and Indian Equity Mid-/Small-Cap categories were the least style consistent, at 28.81% and 27.27%, respectively, over the 10-year period ending in June 2017. Over the same horizon, only Indian ELSS funds were largely style consistent, at 96.55%. Both categories of bond funds witnessed low style consistency over the same period.
- Average Fund Returns: Over the one-year period ending in June 2017, both equal- and assetweighted returns of the Indian Equity Large-Cap, Indian ELSS, and Indian Government Bond categories were higher than their respective benchmarks. In contrast, Indian Equity Mid-/Small-Cap

and Indian Composite Bond categories delivered lower equal- and asset-weighted returns than their respective benchmarks over the same period. Over the 10-year period, the largest underperformance was seen in the Indian Equity Large-Cap fund category, where equal-weighted returns were 1.33% lower 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	52.87	34.19	50.93	58.47
Indian ELSS	S&P BSE 200	38.10	16.22	19.44	41.38
Indian Equity Mid-/Small- Cap	S&P BSE MidCap	56.52	43.94	37.31	50.00
Indian Government Bond	S&P BSE India Government Bond Index	37.21	64.81	75.47	93.33
Indian Composite Bond	S&P BSE India Bond Index	73.83	93.65	96.91	90.70

Source: S&P Dow Jones Indices LLC, Morningstar, and Association of Mutual Funds in India. Data as of June 30, 2017. 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	87	96.55	72.41
Indian ELSS	42	100.00	100.00
Indian Equity Mid-/Small-Cap	46	97.83	86.96
Indian Government Bond	43	97.67	97.67
Indian Composite Bond	107	97.20	66.36
THREE-YEAR			
Indian Equity Large-Cap	155	85.81	40.65
Indian ELSS	37	100.00	100.00
Indian Equity Mid-/Small-Cap	66	95.45	56.06
Indian Government Bond	54	70.37	70.37
Indian Composite Bond	127	88.19	45.67
FIVE-YEAR			
Indian Equity Large-Cap	161	78.88	36.65
Indian ELSS	36	100.00	100.00
Indian Equity Mid-/Small-Cap	67	85.07	49.25
Indian Government Bond	53	62.26	60.38
Indian Composite Bond	100	86.00	41.00
TEN-YEAR			
Indian Equity Large-Cap	118	66.10	28.81
Indian ELSS	29	96.55	96.55
Indian Equity Mid-/Small-Cap	66	60.61	27.27
Indian Government Bond	60	45.00	43.33
Indian Composite Bond	87	64.37	31.03

Source: S&P Dow Jones Indices LLC, Morningstar, and Association of Mutual Funds in India. Data as of June 30, 2017. 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	18.41	9.90	14.95	9.87
Indian Equity Large-Cap	18.72	11.34	15.56	8.54
S&P BSE 200	19.57	11.44	15.83	10.19
Indian ELSS	21.81	14.68	19.07	11.43
S&P BSE MidCap	26.55	17.52	20.67	9.95
Indian Equity Mid-/Small- Cap	25.46	19.70	23.64	11.59
S&P BSE India Government Bond Index	11.19	11.30	9.94	9.08
Indian Government Bond	12.49	10.93	9.47	8.06
S&P BSE India Bond Index	11.09	11.18	9.95	9.19
Indian Composite Bond	10.03	9.64	9.09	8.33

Source: S&P Dow Jones Indices LLC, Morningstar, and Association of Mutual Funds in India. Data as of June 30, 2017. 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	18.41	9.90	14.95	9.87
Indian Equity Large-Cap	19.48	11.29	16.21	9.34
S&P BSE 200	19.57	11.44	15.83	10.19
Indian ELSS	20.30	13.58	19.14	11.60
S&P BSE MidCap	26.55	17.52	20.67	9.95
Indian Equity Mid-/Small- Cap	23.98	19.52	23.02	11.65
S&P BSE India Government Bond Index	11.19	11.30	9.94	9.08
Indian Government Bond	13.55	11.92	9.78	8.52
S&P BSE India Bond Index	11.09	11.18	9.95	9.19
Indian Composite Bond	10.31	9.91	9.23	8.17

Source: S&P Dow Jones Indices LLC, Morningstar, and Association of Mutual Funds in India. Data as of June 30, 2017. 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	15.53	18.33	21.84
Indian ELSS	17.97	21.28	24.24
Indian Equity Mid-/Small-Cap	20.81	25.85	30.99
Indian Government Bond	10.60	11.85	14.97
Indian Composite Bond	8.85	9.60	11.21
THREE-YEAR			
Indian Equity Large-Cap	10.04	12.22	14.39
Indian ELSS	11.98	14.51	16.76
Indian Equity Mid-/Small-Cap	15.15	18.35	21.47
Indian Government Bond	10.08	11.35	12.46
Indian Composite Bond	8.83	9.56	10.37
FIVE-YEAR			
Indian Equity Large-Cap	14.06	16.01	18.48
Indian ELSS	16.19	18.42	20.07
Indian Equity Mid-/Small-Cap	20.14	23.70	26.29
Indian Government Bond	8.22	9.29	10.35
Indian Composite Bond	8.20	8.97	9.50
TEN-YEAR			
Indian Equity Large-Cap	9.19	10.86	12.30
Indian ELSS	9.11	11.53	12.85
Indian Equity Mid-/Small-Cap	10.46	12.70	14.63
Indian Government Bond	7.29	8.17	8.82
Indian Composite Bond	7.42	8.37	8.93

Source: S&P Dow Jones Indices LLC, Morningstar, and Association of Mutual Funds in India. Data as of June 30, 2017. 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)	
Indian Equity Mid-/Small-Cap	India Fund Small/Mid-Cap	
	India Fund Long-Term Government Bond	
Indian Government Bond	India Fund Intermediate Government Bond	
	India Fund Short-Term Government Bond	
Ladian Ocean adia Dand	India Fund Intermediate Bond	
Indian Composite Bond	India Fund Short-Term Bond	

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		
Indian Equity Mid-/Small-Cap	India OE Small/Mid Cap		
	India OE Small/Mid-Cap		
	India OE Long Government		
	India OE Long-Term Government Bond		
	India OE Intermediate Government Bond		
Indian Government Bond	India OE Intermediate Government		
	India OE Short Government		
	India OE Short-Term Government Bond		
	India OE Intermediate Bond		
	India OE Short-term Bond		
	India OE Long-Term Bond		
Indian Composite Bond	India OE Fixed Maturity Multisector Bond		
	India OE Fixed Maturity Short-term Bond		
	India OE FMP Multisector Bond		
	India OE Multisector Bond		

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	S&P BSE MidCap	
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.

# **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 MIDCAP

The S&P BSE MidCap seeks to measure the mid-cap segment of the Indian equity market.

## 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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