

## SPIVA<sup>®</sup> India Scorecard

### Contributors

#### Akash Jain

Associate Director  
Global Research & Design  
[akash.jain@spglobal.com](mailto:akash.jain@spglobal.com)

#### Arpit Gupta

Senior Analyst  
Global Research & Design  
[arpit.gupta@spglobal.com](mailto:arpit.gupta@spglobal.com)

Experience the active vs. passive debate on a global scale on [INDEXOLOGY<sup>®</sup>](#).

### 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 2019.
- The divergence between the performance of the Indian Equity Large-Cap and Indian Equity Mid-/Small-Cap fund categories continued into 2019, with the large-cap benchmark, the [S&P BSE 100](#), returning 10.9% and the mid-/small-cap benchmark, the [S&P BSE 400 MidSmallCap Index](#), closing in the red, at -2.1%, during the one-year period ending in December 2019.
- Bonds offered strong performance in 2019, aided by the softening of policy rates by the Reserve Bank of India. The [S&P BSE India Government Bond Index](#) and the [S&P BSE India Bond Index](#) returned 11.10% and 10.84%, respectively, during the one-year period ending in December 2019.
- **Indian Equity Large-Cap Funds:** Over the one-year period ending December 2019, the S&P BSE 100 surged 10.92%, with 40% of funds underperforming the benchmark. Over longer horizons, the majority of the actively managed large-cap equity funds in India underperformed the S&P BSE 100, with 64.80% large-cap funds underperforming over the 10-year period ending in December 2019. During this period, the large-cap funds witnessed a low survivorship rate of 68.80%. The asset-weighted fund return was 36 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 2.99% for the same period.

- **Indian ELSS:** Over the one-year period, the [S&P BSE 200](#) ended in the black, returning 10.38%, with 70.73% of funds underperforming the benchmark. Over the 3-, 5-, and 10-year periods ending in December 2019, 88.37%, 78.38%, and 47.22% of funds underperformed the benchmark, respectively. Over the 10-year horizon, the return spread between asset-weighted and equal-weighted returns was -43 bps. The return spread between the first and the third quartile break points of the fund performance was 2.53%.
- **Indian Mid-/Small-Cap Equity Funds:** The benchmark for Indian Mid-/Small-Cap Equity Funds, the S&P BSE 400 MidSmallCap Index, was down 2.10% during the one-year period ending December 2019. Among all the categories evaluated in the SPIVA India Scorecard, the Mid-/Small-Cap category fared the best for active funds with the majority of them managing to beat the S&P BSE 400 MidSmallCap across the different time horizons studied in the report. Over the 10-year period, the survivorship rate was low and measured at 64.04%. For the same period, the asset-weighted fund return was 26 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 3.64%.
- **Indian Government Bond Funds:** The [S&P BSE Indian Government Bond Index](#) returned 11.10% over the one-year period ending December 2019. Over the 1-, 3-, 5-, and 10-year periods ending in December 2019, 57.69%, 83.33%, 84.91%, and 90.38% of the actively managed funds in this category lagged the benchmark, respectively. Over the 10-year period ending in December 2019, survivorship rate was 32.69%. For the same period, the asset-weighted fund return was 90 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 1.27%.
- **Indian Composite Bond Funds:** In the 12-month period ending in December 2019, the [S&P BSE India Bond Index](#) closed in the black with a gain of 10.84%. Across all the observed periods, more than three-quarters of the funds underperformed the benchmark. Over the 10-year period, survivorship rate was 74.07%. For the same period, the asset-weighted fund return was 96 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 1.44%.
- **Average Fund Returns:** In the one-year period ending in December 2019, the equal- and asset-weighted returns for the Indian ELSS and Indian Composite Bond fund 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 over its 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 equal-weighted return was 286 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 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.

*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 India 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 anyone reading this report to also read the SPIVA methodology in the report to understand how the data was derived.*

## 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	40.00	84.38	82.29	64.80
Indian ELSS	S&P BSE 200	70.73	88.37	78.38	47.22
Indian Equity Mid-/Small-Cap	S&P BSE 400 MidSmallCap Index	27.91	37.21	40.91	44.94
Indian Government Bond	S&P BSE India Government Bond Index	57.69	83.33	84.91	90.38
Indian Composite Bond	S&P BSE India Bond Index	82.76	78.26	97.78	95.06

Source: S&P Dow Jones Indices LLC, Morningstar, and Association of Mutual Funds in India. Data as of Dec. 31, 2019. Past performance is no guarantee of future results. Table is provided for illustrative purposes.

### Report 2: Survivorship of Indian Equity Funds

FUND CATEGORY	NO. OF FUNDS AT START	SURVIVORSHIP (%)
<b>1-YEAR</b>		
Indian Equity Large-Cap	30	100.00
Indian ELSS	41	97.56
Indian Equity Mid-/Small-Cap	43	100.00
Indian Government Bond	26	96.15
Indian Composite Bond	145	96.55
<b>3-YEAR</b>		
Indian Equity Large-Cap	64	92.19
Indian ELSS	43	93.02
Indian Equity Mid-/Small-Cap	43	100.00
Indian Government Bond	42	61.90
Indian Composite Bond	138	91.30
<b>5-YEAR</b>		
Indian Equity Large-Cap	96	80.21
Indian ELSS	37	91.89
Indian Equity Mid-/Small-Cap	44	97.73
Indian Government Bond	53	49.06
Indian Composite Bond	135	84.44
<b>10-YEAR</b>		
Indian Equity Large-Cap	125	68.80
Indian ELSS	36	88.89
Indian Equity Mid-/Small-Cap	89	64.04
Indian Government Bond	52	32.69
Indian Composite Bond	81	74.07

Source: S&P Dow Jones Indices LLC, Morningstar, and Association of Mutual Funds in India. Data as of Dec. 31, 2019. 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	10.92	14.90	9.33	10.15
Indian Equity Large-Cap	11.47	12.85	8.47	10.06
S&P BSE 200	10.38	14.52	9.58	10.34
Indian ELSS	8.19	12.00	8.84	11.38
S&P BSE 400 MidSmallCap Index	-2.10	7.70	7.69	9.34
Indian Equity Mid-/Small-Cap	0.97	8.30	7.95	12.19
S&P BSE India Government Bond Index	11.10	7.57	8.89	8.70
Indian Government Bond	9.30	5.65	7.08	7.08
S&P BSE India Bond Index	10.84	7.59	8.86	8.74
Indian Composite Bond	3.86	4.35	5.84	6.69

Source: S&P Dow Jones Indices LLC, Morningstar, and Association of Mutual Funds in India. Data as of Dec. 31, 2019. 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)**

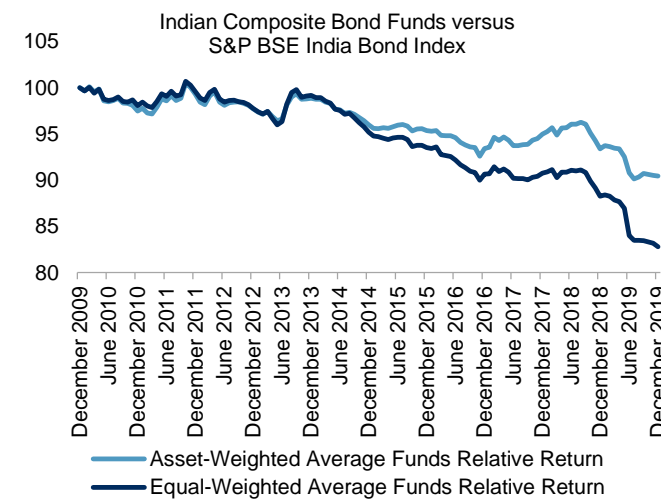
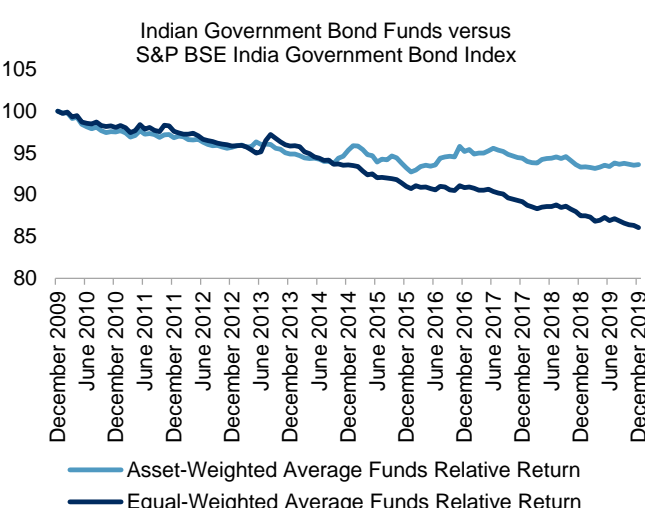
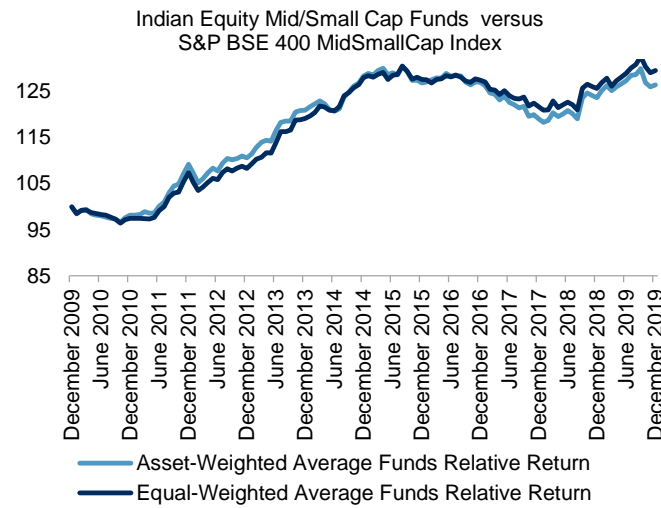
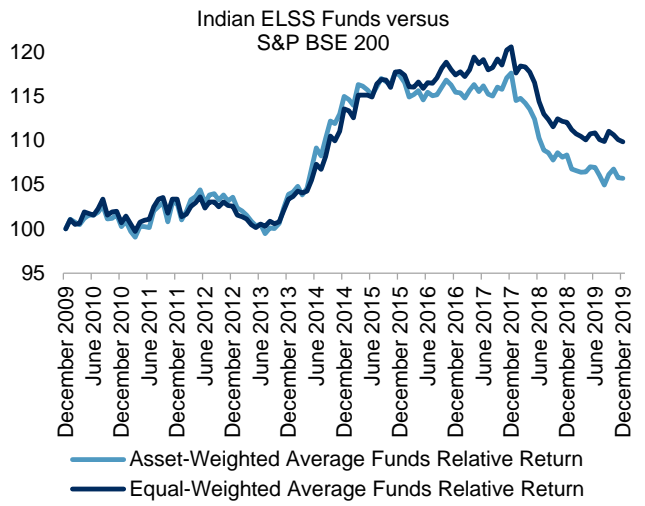
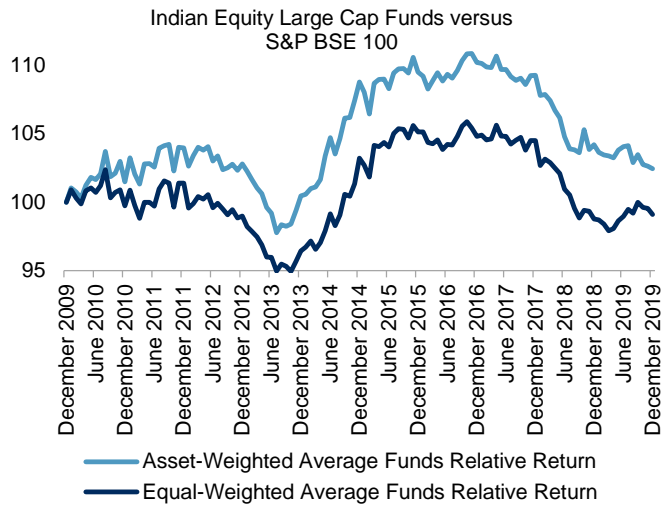
INDEX/PEER GROUP	1-YEAR (%)	3-YEAR ANNUALIZED (%)	5-YEAR ANNUALIZED (%)	10-YEAR ANNUALIZED (%)
S&P BSE 100	10.92	14.90	9.33	10.15
Indian Equity Large-Cap	9.06	12.15	8.03	10.42
S&P BSE 200	10.38	14.52	9.58	10.34
Indian ELSS	7.67	11.20	7.75	10.95
S&P BSE 400 MidSmallCap Index	-2.10	7.70	7.69	9.34
Indian Equity Mid-/Small-Cap	0.11	7.53	7.36	11.93
S&P BSE India Government Bond Index	11.10	7.57	8.89	8.70
Indian Government Bond	11.44	6.97	8.48	7.98
S&P BSE India Bond Index	10.84	7.59	8.86	8.74
Indian Composite Bond	7.36	6.43	7.58	7.65

Source: S&P Dow Jones Indices LLC, Morningstar, and Association of Mutual Funds in India. Data as of Dec. 31, 2019. Returns are shown in INR. Past performance is no guarantee of future results. Table is provided for illustrative purposes.

<b>Report 5: Quartile Breakpoints of Fund Performance</b>			
<b>FUND CATEGORY</b>	<b>THIRD QUARTILE</b>	<b>SECOND QUARTILE</b>	<b>FIRST QUARTILE</b>
<b>1-YEAR</b>			
Indian Equity Large-Cap	8.82	11.74	13.96
Indian ELSS	4.45	8.34	11.02
Indian Equity Mid-/Small-Cap	-2.53	2.41	5.73
Indian Government Bond	9.80	10.82	12.23
Indian Composite Bond	3.80	9.13	10.34
<b>3-YEAR</b>			
Indian Equity Large-Cap	10.37	12.26	14.02
Indian ELSS	9.69	11.37	13.60
Indian Equity Mid-/Small-Cap	5.93	9.26	10.59
Indian Government Bond	5.77	6.66	7.73
Indian Composite Bond	4.65	6.66	7.54
<b>5-YEAR</b>			
Indian Equity Large-Cap	6.17	7.90	9.07
Indian ELSS	7.17	8.47	9.32
Indian Equity Mid-/Small-Cap	6.32	8.05	9.53
Indian Government Bond	7.58	8.24	9.06
Indian Composite Bond	6.02	7.35	8.09
<b>10-YEAR</b>			
Indian Equity Large-Cap	8.30	10.15	11.30
Indian ELSS	9.49	10.99	12.02
Indian Equity Mid-/Small-Cap	10.67	12.51	14.31
Indian Government Bond	7.56	8.20	8.84
Indian Composite Bond	6.33	7.32	7.77

Source: S&P Dow Jones Indices LLC, Morningstar, and Association of Mutual Funds in India. Data as of Dec. 31, 2019. Returns are shown in INR. Past performance is no guarantee of future results. Table is provided for illustrative purposes.

### CUMULATIVE AVERAGE FUND RETURN RELATIVE TO BENCHMARK



Source: S&P Dow Jones Indices LLC, Morningstar, and Association of Mutual Funds in India. Returns are shown in INR. Data as of Dec. 31, 2019. Past performance is no guarantee of future results. Charts are provided for illustrative purposes and reflect hypothetical historical performance. Please see Performance Disclosure at the end of this document for more information regarding the inherent limitations associated with back-tested performance.

## 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)
Indian Equity Mid-/Small-Cap	India Fund Mid-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
Indian Composite Bond	India Fund Long Duration
	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.



<b>Exhibit 1B: Indian Funds: SPIVA and Historical Morningstar Categories</b>	
<b>SPIVA CATEGORY</b>	<b>MORNINGSTAR CATEGORY</b>
Indian Equity Large-Cap	India CE Large Cap
	India OE Large Cap
	India OE Large-Cap
Indian ELSS	India OE ELSS (Tax Saving)
Indian Equity Mid-/Small-Cap	India CE Small/Mid Cap
	India OE Small/Mid Cap
	India OE Small/Mid-Cap
	India Fund Small/Mid-Cap
Indian Government Bond	India OE Long Government
	India OE Long-Term Government Bond
	India OE Intermediate Government Bond
	India OE Intermediate Government
	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
Indian Composite 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
	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 in Exhibit 2. 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 <sup>1</sup>	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.

<sup>1</sup> 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.

### 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  $p^{\text{th}}$  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 75<sup>th</sup> percentile, the value separating the elements of a population into the lower 75% and the upper 25%. The second quartile is the 50<sup>th</sup> percentile and the third quartile is the 25<sup>th</sup> 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 MIDS SMALLCAP 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 [S&P BSE India Government Bond Index](#) 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.

<b>S&amp;P DJI RESEARCH CONTRIBUTORS</b>		
Sunjiv Mainie, CFA, CQF	Global Head	<a href="mailto:sunjiv.mainie@spglobal.com">sunjiv.mainie@spglobal.com</a>
Jake Vukelic	Business Manager	<a href="mailto:jake.vukelic@spglobal.com">jake.vukelic@spglobal.com</a>
<b>GLOBAL RESEARCH &amp; DESIGN</b>		
<b>AMERICAS</b>		
Gaurav Sinha	Americas Head	<a href="mailto:gaurav.sinha@spglobal.com">gaurav.sinha@spglobal.com</a>
Laura Assis	Analyst	<a href="mailto:laura.assis@spglobal.com">laura.assis@spglobal.com</a>
Cristopher Anguiano, FRM	Analyst	<a href="mailto:cristopher.anguiano@spglobal.com">cristopher.anguiano@spglobal.com</a>
Smita Chirputkar	Director	<a href="mailto:smita.chirputkar@spglobal.com">smita.chirputkar@spglobal.com</a>
Rachel Du	Senior Analyst	<a href="mailto:rachel.du@spglobal.com">rachel.du@spglobal.com</a>
Bill Hao	Director	<a href="mailto:wenli.hao@spglobal.com">wenli.hao@spglobal.com</a>
Qing Li	Director	<a href="mailto:qing.li@spglobal.com">qing.li@spglobal.com</a>
Berlinda Liu, CFA	Director	<a href="mailto:berlinda.liu@spglobal.com">berlinda.liu@spglobal.com</a>
Lalit Ponnala, PhD	Director	<a href="mailto:lalit.ponnala@spglobal.com">lalit.ponnala@spglobal.com</a>
Maria Sanchez, CIPM	Associate Director	<a href="mailto:maria.sanchez@spglobal.com">maria.sanchez@spglobal.com</a>
Hong Xie, CFA	Senior Director	<a href="mailto:hong.xie@spglobal.com">hong.xie@spglobal.com</a>
<b>APAC</b>		
Priscilla Luk	APAC Head	<a href="mailto:priscilla.luk@spglobal.com">priscilla.luk@spglobal.com</a>
Arpit Gupta	Senior Analyst	<a href="mailto:arpit.gupta1@spglobal.com">arpit.gupta1@spglobal.com</a>
Akash Jain	Associate Director	<a href="mailto:akash.jain@spglobal.com">akash.jain@spglobal.com</a>
Anurag Kumar	Senior Analyst	<a href="mailto:anurag.kumar@spglobal.com">anurag.kumar@spglobal.com</a>
Xiaoya Qu	Senior Analyst	<a href="mailto:xiaoya.qu@spglobal.com">xiaoya.qu@spglobal.com</a>
Yan Sun	Senior Analyst	<a href="mailto:yan.sun@spglobal.com">yan.sun@spglobal.com</a>
Tim Wang	Senior Analyst	<a href="mailto:tim.wang@spglobal.com">tim.wang@spglobal.com</a>
Liyu Zeng, CFA	Director	<a href="mailto:liyu.zeng@spglobal.com">liyu.zeng@spglobal.com</a>
<b>EMEA</b>		
Andrew Innes	EMEA Head	<a href="mailto:andrew.innes@spglobal.com">andrew.innes@spglobal.com</a>
Leonardo Cabrer, PhD	Senior Analyst	<a href="mailto:leonardo.cabrer@spglobal.com">leonardo.cabrer@spglobal.com</a>
Andrew Cairns, CFA	Senior Analyst	<a href="mailto:andrew.cairns@spglobal.com">andrew.cairns@spglobal.com</a>
Jingwen Shi	Analyst	<a href="mailto:jingwen.shi@spglobal.com">jingwen.shi@spglobal.com</a>
<b>INDEX INVESTMENT STRATEGY</b>		
Craig J. Lazzara, CFA	Global Head	<a href="mailto:craig.lazzara@spglobal.com">craig.lazzara@spglobal.com</a>
Chris Bennett, CFA	Director	<a href="mailto:chris.bennett@spglobal.com">chris.bennett@spglobal.com</a>
Fei Mei Chan	Director	<a href="mailto:feimei.chan@spglobal.com">feimei.chan@spglobal.com</a>
Tim Edwards, PhD	Managing Director	<a href="mailto:tim.edwards@spglobal.com">tim.edwards@spglobal.com</a>
Anu R. Ganti, CFA	Director	<a href="mailto:anu.ganti@spglobal.com">anu.ganti@spglobal.com</a>
Sherifa Issifu	Analyst	<a href="mailto:sherifa.issifu@spglobal.com">sherifa.issifu@spglobal.com</a>

## ABOUT ASIA INDEX PRIVATE LIMITED

Asia Index Pvt. Ltd is a 50-50 partnership between S&P Dow Jones Indices LLC, the world's largest provider of financial market indices, and BSE Ltd, Asia's oldest stock exchange and home to the iconic SENSEX index - a leading indicator of Indian equity market performance. Asia Index Pvt. Ltd, which combines the benchmarks, market intelligence, and insights of both parent companies, each established more than 115 years ago, aims to provide a full array of indices enabling global and domestic investors to participate in South Asia's vibrant economies. The Company is best known for calculating, publishing, and maintaining a diverse family of Asian indices under the umbrella brand, S&P BSE Indices. To learn more about our company, please visit [www.asiaindex.co.in](http://www.asiaindex.co.in).

## PERFORMANCE DISCLOSURE

The S&P BSE 400 MidSmallCap Index was launched November 30, 2017. The S&P BSE India Government Bond Index and the S&P BSE India Bond Index were launched December 31, 2013. All information presented prior to an index's Launch Date is hypothetical (back-tested), not actual performance. The back-test calculations are based on the same methodology that was in effect on the index Launch Date. However, when creating back-tested history for periods of market anomalies or other periods that do not reflect the general current market environment, index methodology rules may be relaxed to capture a large enough universe of securities to simulate the target market the index is designed to measure or strategy the index is designed to capture. For example, market capitalization and liquidity thresholds may be reduced. Complete index methodology details are available at [www.spdji.com](http://www.spdji.com). Past performance of the Index is not an indication of future results. Prospective application of the methodology used to construct the Index may not result in performance commensurate with the back-test returns shown.

S&P Dow Jones Indices defines various dates to assist our clients in providing transparency. The First Value Date is the first day for which there is a calculated value (either live or back-tested) for a given index. The Base Date is the date at which the Index is set at a fixed value for calculation purposes. The Launch Date designates the date upon which the values of an index are first considered live: index values provided for any date or time period prior to the index's Launch Date are considered back-tested. S&P Dow Jones Indices defines the Launch Date as the date by which the values of an index are known to have been released to the public, for example via the company's public website or its datafeed to external parties. For Dow Jones-branded indices introduced prior to May 31, 2013, the Launch Date (which prior to May 31, 2013, was termed "Date of introduction") is set at a date upon which no further changes were permitted to be made to the index methodology, but that may have been prior to the Index's public release date.

The back-test period does not necessarily correspond to the entire available history of the Index. Please refer to the methodology paper for the Index, available at [www.spdji.com](http://www.spdji.com) for more details about the index, including the manner in which it is rebalanced, the timing of such rebalancing, criteria for additions and deletions, as well as all index calculations.

Another limitation of using back-tested information is that the back-tested calculation is generally prepared with the benefit of hindsight. Back-tested information reflects the application of the index methodology and selection of index constituents in hindsight. No hypothetical record can completely account for the impact of financial risk in actual trading. For example, there are numerous factors related to the equities, fixed income, or commodities markets in general which cannot be, and have not been accounted for in the preparation of the index information set forth, all of which can affect actual performance.

The Index returns shown do not represent the results of actual trading of investable assets/securities. S&P Dow Jones Indices LLC maintains the Index and calculates the Index levels and performance shown or discussed, but does not manage actual assets. Index returns do not reflect payment of any sales charges or fees an investor may pay to purchase the securities underlying the Index or investment funds that are intended to track the performance of the Index. The imposition of these fees and charges would cause actual and back-tested performance of the securities/fund to be lower than the Index performance shown. As a simple example, if an index returned 10% on a US \$100,000 investment for a 12-month period (or US \$10,000) and an actual asset-based fee of 1.5% was imposed at the end of the period on the investment plus accrued interest (or US \$1,650), the net return would be 8.35% (or US \$8,350) for the year. Over a three year period, an annual 1.5% fee taken at year end with an assumed 10% return per year would result in a cumulative gross return of 33.10%, a total fee of US \$5,375, and a cumulative net return of 27.2% (or US \$27,200).

## GENERAL DISCLAIMER

Copyright © 2020 S&P Dow Jones Indices LLC. All rights reserved. STANDARD & POOR'S, S&P, S&P 500, S&P 500 LOW VOLATILITY INDEX, S&P 100, S&P COMPOSITE 1500, S&P MIDCAP 400, S&P SMALLCAP 600, S&P GIVI, GLOBAL TITANS, DIVIDEND ARISTOCRATS, S&P TARGET DATE INDICES, GICS, SPIVA, SPDR and INDEXOLOGY are registered trademarks of Standard & Poor's Financial Services LLC, a division of S&P Global ("S&P"). DOW JONES, DJ, DJIA and DOW JONES INDUSTRIAL AVERAGE are registered trademarks of Dow Jones Trademark Holdings LLC ("Dow Jones"). These trademarks together with others have been licensed to S&P Dow Jones Indices LLC. Redistribution or reproduction in whole or in part are prohibited without written permission of S&P Dow Jones Indices LLC. This document does not constitute an offer of services in jurisdictions where S&P Dow Jones Indices LLC, S&P, Dow Jones or their respective affiliates (collectively "S&P Dow Jones Indices") do not have the necessary licenses. Except for certain custom index calculation services, all information provided by S&P Dow Jones Indices is impersonal and not tailored to the needs of any person, entity or group of persons. S&P Dow Jones Indices receives compensation in connection with licensing its indices to third parties and providing custom calculation services. Past performance of an index is not an indication or guarantee of future results.

It is not possible to invest directly in an index. Exposure to an asset class represented by an index may be available through investable instruments based on that index. S&P Dow Jones Indices does not sponsor, endorse, sell, promote or manage 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. S&P Dow Jones Indices makes no assurance that investment products based on the index will accurately track index performance or provide positive investment returns. S&P Dow Jones Indices LLC is not an investment advisor, and S&P Dow Jones Indices makes no representation regarding the advisability of investing in any such investment fund or other investment vehicle. A decision to invest in any such investment fund or other investment vehicle should not be made in reliance on any of the statements set forth in this document. Prospective investors are advised to make an investment in any such fund or other vehicle only after carefully considering the risks associated with investing in such funds, as detailed in an offering memorandum or similar document that is prepared by or on behalf of the issuer of the investment fund or other investment product or vehicle. S&P Dow Jones Indices LLC is not a tax advisor. A tax advisor should be consulted to evaluate the impact of any tax-exempt securities on portfolios and the tax consequences of making any particular investment decision. Inclusion of a security within an index is not a recommendation by S&P Dow Jones Indices to buy, sell, or hold such security, nor is it considered to be investment advice.

These materials have been prepared solely for informational purposes based upon information generally available to the public and from sources believed to be reliable. No content contained in these materials (including index data, ratings, credit-related analyses and data, research, valuations, model, software or other application or output therefrom) or any part thereof ("Content") may be modified, reverse-engineered, reproduced or distributed in any form or by any means, or stored in a database or retrieval system, without the prior written permission of S&P Dow Jones Indices. The Content shall not be used for any unlawful or unauthorized purposes. S&P Dow Jones Indices and its third-party data providers and licensors (collectively "S&P Dow Jones Indices Parties") do not guarantee the accuracy, completeness, timeliness or availability of the Content. S&P Dow Jones Indices Parties are not responsible for any errors or omissions, regardless of the cause, for the results obtained from the use of the Content. THE CONTENT IS PROVIDED ON AN "AS IS" BASIS. S&P DOW JONES INDICES PARTIES DISCLAIM ANY AND ALL EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, ANY WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR USE, FREEDOM FROM BUGS, SOFTWARE ERRORS OR DEFECTS, THAT THE CONTENT'S FUNCTIONING WILL BE UNINTERRUPTED OR THAT THE CONTENT WILL OPERATE WITH ANY SOFTWARE OR HARDWARE CONFIGURATION. In no event shall S&P Dow Jones Indices Parties be liable to any party for any direct, indirect, incidental, exemplary, compensatory, punitive, special or consequential damages, costs, expenses, legal fees, or losses (including, without limitation, lost income or lost profits and opportunity costs) in connection with any use of the Content even if advised of the possibility of such damages.

S&P Global keeps certain activities of its various divisions and business units separate from each other in order to preserve the independence and objectivity of their respective activities. As a result, certain divisions and business units of S&P Global may have information that is not available to other business units. S&P Global has established policies and procedures to maintain the confidentiality of certain non-public information received in connection with each analytical process.

In addition, S&P Dow Jones Indices provides a wide range of services to, or relating to, many organizations, including issuers of securities, investment advisers, broker-dealers, investment banks, other financial institutions and financial intermediaries, and accordingly may receive fees or other economic benefits from those organizations, including organizations whose securities or services they may recommend, rate, include in model portfolios, evaluate or otherwise address.