

SPIVA[®] India Scorecard

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

Summary

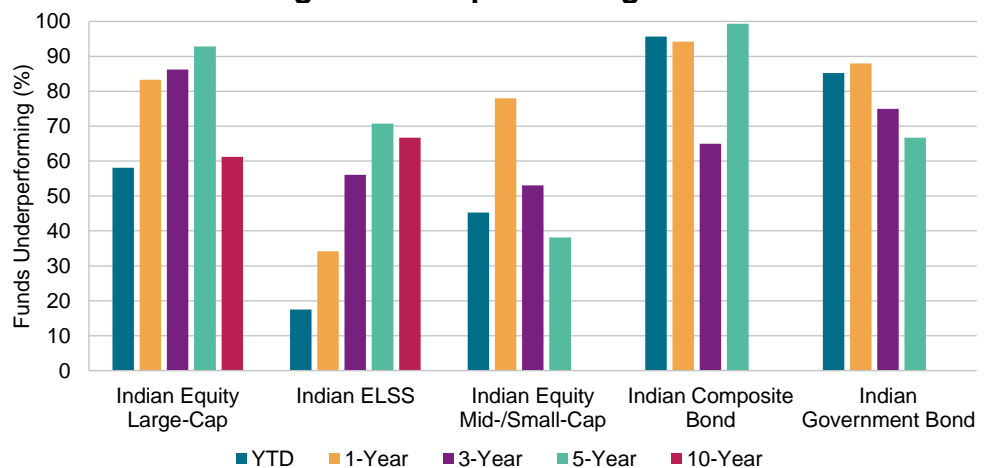
Since the first publication of the S&P Indices versus Active (SPIVA) U.S. Scorecard in 2002, S&P Dow Jones Indices has been the de facto scorekeeper of the ongoing active versus passive debate.

The SPIVA India Scorecard compares the performance of actively managed Indian equity and bond mutual funds with their respective benchmark indices over 1-, 3-, 5- and 10-year investment horizons.

Mid-Year 2023 Highlights

In the first half of 2023, performance among Indian active managers varied across categories. The majority of Indian Equity Large-Cap funds failed to beat their benchmark, with 58% of actively managed funds underperforming the [S&P BSE 100](#). Indian ELSS funds, on the other hand, had an excellent start to the year, with only 18% underperforming the [S&P BSE 200](#).

Exhibit 1: Percentage of Underperforming Indian Active Funds



Source: S&P Dow Jones Indices LLC, Morningstar, Association of Mutual Funds in India. Data as of June 30, 2023. Outperformance is based on equal-weighted fund counts. Index performance based on total returns in INR. Underperformance rates for the Indian Equity Mid-/Small-Cap, Indian Composite Bond and Indian Government Bond categories are shown for time horizons over which the respective benchmark indices were live. Past performance is no guarantee of future results. Chart is provided for illustrative purposes.

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Indian Equity Large-Cap Funds

- The S&P BSE 100 gained 7.1% in H1 2023, and 58.1% of active managers underperformed the benchmark over that period.
- Underperformance rates remained high over three- and five-year periods, at 86.2% and 92.9%, respectively.
- Active managers produced relatively better results over the 10-year period, with the underperformance rate dropping to 61.2%.

Indian ELSS Funds

- The S&P BSE 200 was up 6.2% in the first six months of 2023, and just 17.5% of Indian ELSS funds underperformed the index. Over the longer term, the underperformance rate rose, with 66.7% of funds underperforming the benchmark over the 10-year period.
- Indian ELSS funds achieved the second-highest long-term survival rate across all categories in our SPIVA India Scorecard, with 75.0% of them still surviving after 10 years.

Indian Equity Mid-/Small-Cap Funds

- The benchmark for Indian Equity Mid-/Small-Cap funds, the [S&P BSE 400 MidSmallCap Index](#), rose 12.4% in H1 2023, and 45.3% of active managers underperformed the index over that period.
- Among all the categories included in the SPIVA India Scorecard, Indian Equity Mid-/Small-Cap funds fared the best by far over a five-year horizon, with only 38.1% of funds underperforming the S&P BSE 400 MidSmallCap Index.

Indian Government Bond Funds

- The [S&P BSE India Government Bond Index](#) increased 4.7% in the first half of 2023. Fewer than one-sixth of active managers beat the benchmark over the period, with an underperformance rate of 85.2%.
- Fewer funds underperformed as time horizons extended, with underperformance rates over the three- and five-year periods falling to 75.0% and 66.7%, respectively.

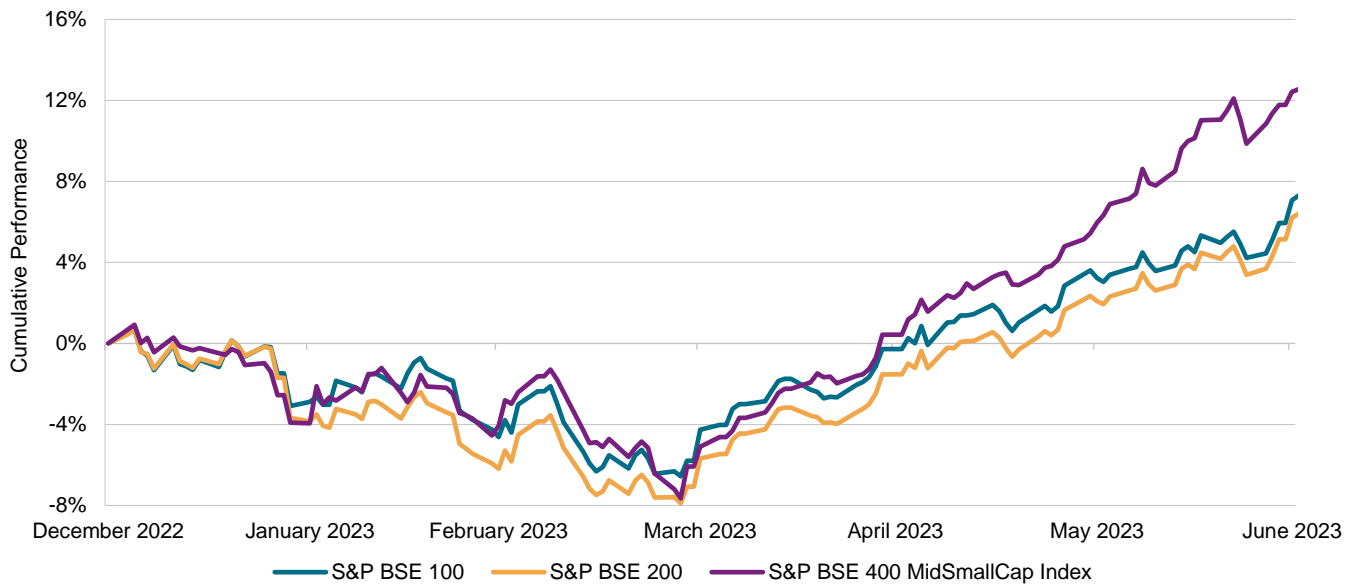
Indian Composite Bond Funds

- For the first half of 2023, the [S&P BSE India Bond Index](#) rose 4.6%. The H1 2023 underperformance of Indian Composite Bond fund managers was the highest across all categories in the SPIVA India Scorecard, at 95.7%.
- Perhaps not coincidentally, Indian Composite Bond funds had the lowest survival rate across all categories over the one-, three-, and five-year horizons, with one-fifth of the category’s funds closing or merging over the five-year period.

Market Context

Indian equities began 2023 on an upswing, with indices across the capitalization spectrum exhibiting respectable gains in local currency terms over the first six months of the year (see Exhibit 2). The performance of the S&P BSE 400 MidSmallCap Index stood out in particular, as it delivered twice the total return of the S&P BSE 200 and outperformed the S&P BSE 100 by over 5%.

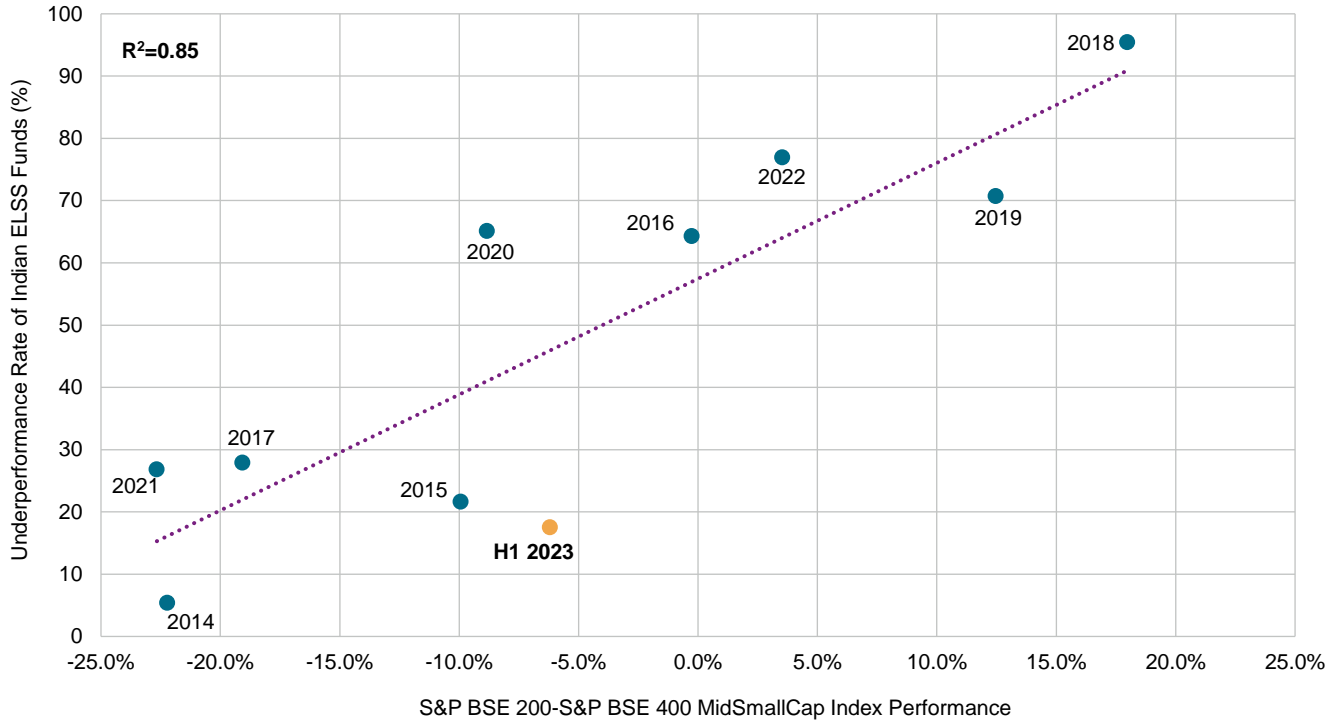
Exhibit 2: Cumulative Performance of SPIVA India Scorecard Equity Comparison Indices



Source: S&P Dow Jones Indices LLC. Data as of June 30, 2023. Index performance based on total returns in INR. Past performance is no guarantee of future results. Chart is provided for illustrative purposes.

In fact, Indian ELSS managers tilting down the capitalization range and venturing into the mid- and small-cap space might have been among the sources of their outperformance (or underperformance) historically. As Exhibit 3 highlights, the ELSS fund category has historically tended to have lower underperformance rates in periods when the S&P BSE 400 MidSmallCap Index outperformed the S&P BSE 200 and vice versa.

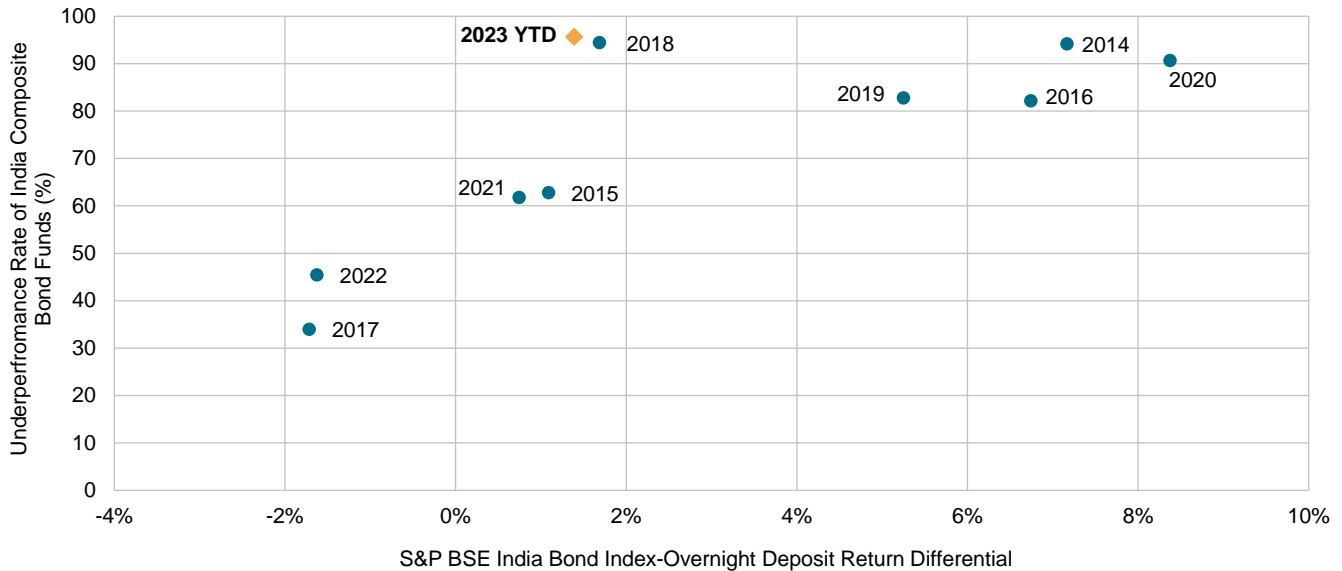
Exhibit 3: S&P BSE 200-S&P BSE 400 Performance Differentials and ELSS Funds' Underperformance Rates



Source: S&P Dow Jones Indices LLC, Morningstar, Association of Mutual Funds in India. Data as of June 30, 2023. Index performance based on total returns in INR. The S&P BSE 400 MidSmallCap Index was launched Nov. 30, 2017. All data prior to index launch date is back-tested hypothetical data. Past performance is no guarantee of future results. Chart is provided for illustrative purposes and reflects hypothetical historical performance. Please see the Performance Disclosure linked at the end of this post for more information regarding the inherent limitations associated with back-tested performance.

While active funds' underperformance rates across our reported equity categories ranged from average to much lower than average in H1 2023, active managers in our two bond categories had a much more challenging time. Indian Composite Bond fund managers stood out in particular: 132 of the 138 funds in the category underperformed the S&P BSE India Bond Index, corresponding to an underperformance rate of 95.7%. Among the culprits for bond managers' plight might have been a cautious stance on duration risk, which, at least based on historical data, may be a feature, not a bug. As Exhibit 4 illustrates, the underperformance rate in the category has historically tended to be higher when the return of the S&P BSE India Bond Index over a certain period exceeded that available on overnight deposits (as proxied by the average Clearing Corporation of India overnight repo rate over the corresponding period) and, vice versa, fewer funds underperformed when a defensive approach would have been rewarded.

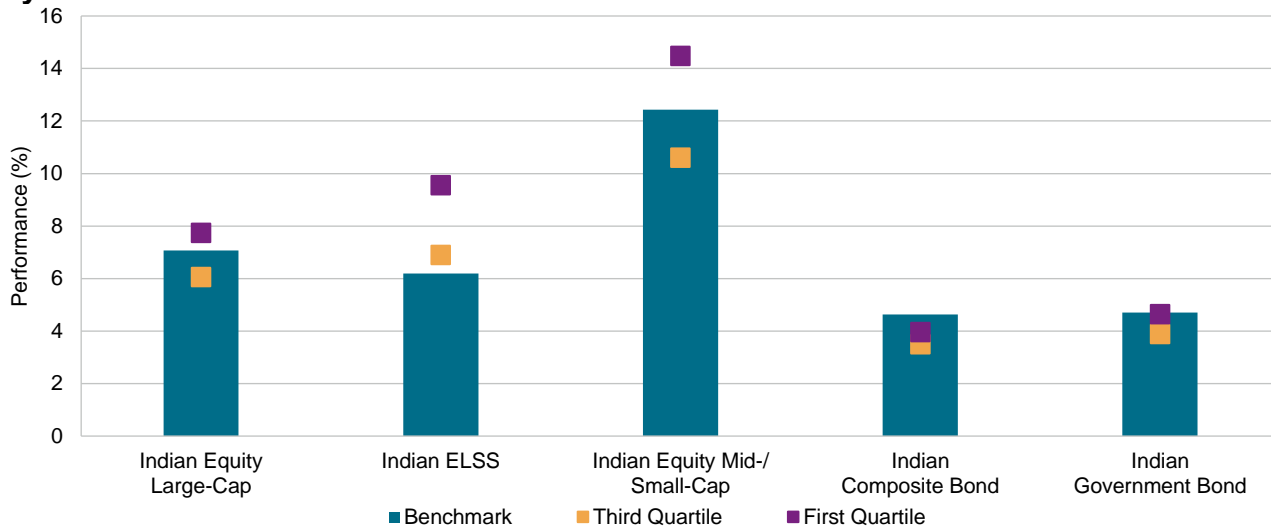
Exhibit 4: S&P India Bond Index – Overnight Repo Return Differential versus Underperformance Rate of Indian Composite Bond Funds



Source: S&P Dow Jones Indices LLC, Morningstar, Association of Mutual Funds in India. Data as of June 30, 2023. Index performance based on total returns in INR. The S&P BSE India Bond Index was launched March 12, 2014. All data prior to index launch date is back-tested hypothetical data. Past performance is no guarantee of future results. Chart is provided for illustrative purposes and reflects hypothetical historical performance. Please see the Performance Disclosure linked at the end of this post for more information regarding the inherent limitations associated with back-tested performance.

Exhibit 5 and Report 5 serve as reminders of the significant “fund section risk” that asset allocators have been exposed to when selecting active managers in H1 2023. As the chart illustrates, bottom-quartile funds underperformed their respective benchmarks in four of the five reported categories, while in the two bond categories, even top-quartile funds underperformed their respective benchmarks.

Exhibit 5: H1 2023 Category Benchmark Performance versus Active Fund Performance by Quartile



Source: S&P Dow Jones Indices LLC, Morningstar, Association of Mutual Funds in India. Data as of June 30, 2023. Index performance based on total returns in INR. Past performance is no guarantee of future results. Chart is provided for illustrative purposes.

A Unique Scorecard For The Active Versus Passive Debate

Since its first publication over 20 years ago, the SPIVA Scorecard has served as the de facto scorekeeper of the active versus passive debate. For two decades, we have heard passionate arguments from believers in both camps when headline numbers have deviated from their beliefs.

Beyond the SPIVA Scorecard's widely cited headline numbers is a rich data set that addresses issues related to measurement techniques, universe composition and fund survivorship that are far less frequently discussed but are often 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:** 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.
- **Data Cleaning:** SPIVA Scorecards avoid double-counting multiple share classes in all count-based calculations by using only the share class with greater assets. Index, leveraged and inverse funds, along with other index-linked products, are excluded because this is meant to be a scorecard for active managers.

Reports

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

Fund Category	Comparison Index	YTD (%)	1-Year (%)	3-Year (%)	5-Year (%)	10-Year (%)
Indian Equity Large-Cap	S&P BSE 100	58.06	83.33	86.21	92.86	61.24
Indian ELSS	S&P BSE 200	17.50	34.21	56.10	70.73	66.67
Indian Equity Mid-/Small-Cap	S&P BSE 400 MidSmallCap Index	45.28	78.00	53.06	38.10	-
Indian Composite Bond	S&P BSE India Bond Index	95.65	94.24	65.00	99.30	-
Indian Government Bond	S&P BSE India Government Bond Index	85.19	88.00	75.00	66.67	-

Source: S&P Dow Jones Indices LLC, Morningstar, Association of Mutual Funds in India. Data as of June 30, 2023. Index performance based on total returns in INR. Past performance is no guarantee of future results. Table is provided for illustrative purposes. Underperformance rates for the Indian Equity Mid-/Small-Cap, Indian Composite Bond and Indian Government Bond categories are reported for time horizons over which the respective benchmark indices were live.

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

Fund Category	Comparison Index	3-Year (%)	5-Year (%)	10-Year (%)
Indian Equity Large-Cap	S&P BSE 100	82.76	78.57	60.47
Indian ELSS	S&P BSE 200	48.78	70.73	63.89
Indian Equity Mid-/Small-Cap	S&P BSE 400 MidSmallCap Index	46.94	33.33	-
Indian Composite Bond	S&P BSE India Bond Index	47.14	62.94	-
Indian Government Bond	S&P BSE India Government Bond Index	75.00	92.59	-

Source: S&P Dow Jones Indices LLC, Morningstar, Association of Mutual Funds in India. Data as of June 30, 2023. Index performance based on total returns in INR. Past performance is no guarantee of future results. Table is provided for illustrative purposes. Results shown for all time horizons over which the comparison index total return was positive. Underperformance rates for the Indian Equity Mid-/Small-Cap, Indian Composite Bond and Indian Government Bond categories are reported for time horizons over which the respective benchmark indices were live.

Report 2: Survivorship of Funds

Fund Category	Number of Funds at Start	Survivorship (%)
YTD		
Indian Equity Large-Cap	31	100.00
Indian ELSS	40	97.50
Indian Equity Mid-/Small-Cap	53	100.00
Indian Composite Bond	138	100.00
Indian Government Bond	27	100.00
1-Year		
Indian Equity Large-Cap	30	96.67
Indian ELSS	38	97.37
Indian Equity Mid-/Small-Cap	50	96.00
Indian Composite Bond	139	94.96
Indian Government Bond	25	96.00
3-Year		
Indian Equity Large-Cap	29	89.66
Indian ELSS	41	90.24
Indian Equity Mid-/Small-Cap	49	91.84
Indian Composite Bond	140	87.14
Indian Government Bond	24	95.83
5-Year		
Indian Equity Large-Cap	28	85.71
Indian ELSS	41	82.93
Indian Equity Mid-/Small-Cap	42	90.48
Indian Composite Bond	143	80.42
Indian Government Bond	27	88.89
10-Year		
Indian Equity Large-Cap	129	70.54
Indian ELSS	36	75.00
Indian Equity Mid-/Small-Cap	60	78.33
Indian Composite Bond	114	63.16
Indian Government Bond	50	42.00

Source: S&P Dow Jones Indices LLC, Morningstar, Association of Mutual Funds in India. Data as of June 30, 2023. Past performance is no guarantee of future results. Table is provided for illustrative purposes.

Report 3: Average Fund Performance (Equal-Weighted)

Index/Fund Category	YTD (%)	1-Year (%)	3-Year (%)	5-Year (%)	10-Year (%)
S&P BSE 100	7.07	23.98	25.16	13.75	14.48
Indian Equity Large-Cap	6.80	22.40	22.31	11.92	14.16
S&P BSE 200	6.20	23.18	25.55	13.90	15.07
Indian ELSS	8.15	24.54	25.18	12.93	16.04
S&P BSE 400 MidSmallCap Index	12.43	33.08	35.43	15.48	-
Indian Equity Mid-/Small-Cap	12.25	30.36	35.91	17.71	20.93
S&P BSE India Bond Index	4.63	9.09	5.21	8.20	-
Indian Composite Bond	3.51	6.89	5.48	5.62	6.08
S&P BSE India Government Bond Index	4.70	9.24	4.96	8.21	-
Indian Government Bond	3.81	7.38	3.86	6.88	6.49

Source: S&P Dow Jones Indices LLC, Morningstar, Association of Mutual Funds in India. Data as of June 30, 2023. Index performance based on total returns in INR. Returns shown are annualized for periods greater than one year. Past performance is no guarantee of future results. Table is provided for illustrative purposes. Index returns for the S&P BSE 400 MidSmallCap Index, S&P BSE India Bond Index and S&P BSE India Government Bond Index are reported for time horizons over which the indices were live.

Report 4: Average Fund Performance (Asset-Weighted)

Index/Fund Category	YTD (%)	1-Year (%)	3-Year (%)	5-Year (%)	10-Year (%)
S&P BSE 100	7.07	23.98	25.16	13.75	14.48
Indian Equity Large-Cap	7.46	22.75	23.65	12.15	14.36
S&P BSE 200	6.20	23.18	25.55	13.90	15.07
Indian ELSS	7.97	23.51	22.82	11.28	14.84
S&P BSE 400 MidSmallCap Index	12.43	33.08	35.43	15.48	-
Indian Equity Mid-/Small-Cap	12.88	31.83	34.79	15.98	19.62
S&P BSE India Bond Index	4.63	9.09	5.21	8.20	-
Indian Composite Bond	3.80	7.29	5.33	6.45	7.06
S&P BSE India Government Bond Index	4.70	9.24	4.96	8.21	-
Indian Government Bond	4.42	8.44	4.65	8.00	7.65

Source: S&P Dow Jones Indices LLC, Morningstar, Association of Mutual Funds in India. Data as of June 30, 2023. Index performance based on total returns in INR. Returns shown are annualized for periods greater than one year. Past performance is no guarantee of future results. Table is provided for illustrative purposes. Index returns for the S&P BSE 400 MidSmallCap Index, S&P BSE India Bond Index and S&P BSE India Government Bond Index are reported for time horizons over which the indices were live.

Report 5: Quartile Breakpoints of Fund Performance

Fund Category	Third Quartile (%)	Second Quartile (%)	First Quartile (%)
YTD			
Indian Equity Large-Cap	6.05	6.94	7.74
Indian ELSS	6.90	8.13	9.56
Indian Equity Mid-/Small-Cap	10.61	12.47	14.48
Indian Composite Bond	3.50	3.72	3.96
Indian Government Bond	3.89	4.37	4.64
1-Year			
Indian Equity Large-Cap	21.09	22.82	23.62
Indian ELSS	22.77	23.89	25.91
Indian Equity Mid-/Small-Cap	26.17	28.84	32.57
Indian Composite Bond	6.46	6.87	7.56
Indian Government Bond	7.13	7.71	8.95
3-Year			
Indian Equity Large-Cap	20.86	22.15	23.81
Indian ELSS	22.16	25.38	27.42
Indian Equity Mid-/Small-Cap	29.65	35.64	40.68
Indian Composite Bond	4.23	4.96	5.84
Indian Government Bond	3.58	4.25	4.93
5-Year			
Indian Equity Large-Cap	10.85	12.01	13.21
Indian ELSS	10.96	12.32	14.79
Indian Equity Mid-/Small-Cap	14.59	16.75	18.45
Indian Composite Bond	5.86	6.85	7.42
Indian Government Bond	6.85	7.95	8.71
10-Year			
Indian Equity Large-Cap	13.21	14.71	15.89
Indian ELSS	14.06	14.78	16.56
Indian Equity Mid-/Small-Cap	17.21	18.97	20.59
Indian Composite Bond	6.55	7.05	7.46
Indian Government Bond	6.82	7.24	7.85

Source: S&P Dow Jones Indices LLC, Morningstar, Association of Mutual Funds in India. Data as of June 30, 2023. Returns shown are annualized for periods greater than one year. Index performance based on total returns in INR. Past performance is no guarantee of future results. Table is provided for illustrative purposes.

Appendix A: Glossary

Data

Data from Morningstar are obtained for all managed funds domiciled in India for which month-end data are available during the performance period. The data include 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 7a: 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-Year Government Bond
	India Fund Short Duration
	India Fund Medium Duration
Indian Composite Bond	India Fund Medium to Long Duration
	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, Morningstar. Table is provided for illustrative purposes.

Exhibit 7b: 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)
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
Indian Composite 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
	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, Morningstar. Table is provided for illustrative purposes.

Benchmarks

The chosen benchmarks are shown in Exhibit 8. 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. To ensure the study is robust and fair, representative benchmarks were selected for each fund category, but not all funds adopt the benchmarks stipulated. However, a vast majority do set their performance hurdle based on either the assigned benchmarks in this report, or a similar alternative.

Exhibit 8: 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, Morningstar. Table is provided for illustrative purposes.

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 [S&P BSE MidCap](#).

Appendix B: Glossary – Reports

Percentage of Funds Outperformed by The Index

We use funds with returns available for the entire period as the denominator. We determine the count of funds that have survived and beat the index and then report the index outperformance percentage.

Survivorship (%)

The survivorship metric represents the percentage of funds in existence at the beginning of the time period that are still active at the end of the time period.

Equal-Weighted Fund Performance

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

Asset-Weighted Fund Performance

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

Quartile Breakpoints

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

Survivorship Bias

Some funds 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. The SPIVA reports remove this bias in three ways. The first method to remove the bias is to use 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. The second is to show explicitly the survivorship rate in each category. The final way is to construct a 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 reference 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 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.

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.

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.

Performance Disclosure/Back-Tested Data

The S&P BSE 400 MidSmallCap Index was launched November 30, 2017. The S&P BSE India Bond Index was launched March 12, 2014. All information presented prior to an index's Launch Date is hypothetical (back-tested), not actual performance, and is based on the index methodology 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. In addition, forks have not been factored into the back-test data with respect to the S&P Cryptocurrency Indices. For the S&P Cryptocurrency Top 5 & 10 Equal Weight Indices, the custody element of the methodology was not considered; the back-test history is based on the index constituents that meet the custody element as of the Launch Date. Complete index methodology details are available at www.spglobal.com/spdji. Back-tested performance reflects application of an index methodology and selection of index constituents with the benefit of hindsight and knowledge of factors that may have positively affected its performance, cannot account for all financial risk that may affect results and may be considered to reflect survivor/look ahead bias. Actual returns may differ significantly from, and be lower than, back-tested returns. Past performance is not an indication or guarantee of future results.

Please refer to the methodology for the Index 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. Back-tested performance is for use with institutions only; not for use with retail investors.

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 to a fixed value for calculation purposes. The Launch Date designates the date when 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 data feed 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.

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