

# SPIVA<sup>®</sup> South Africa

## Contributors

**Joseph Nelesen, PhD**  
Senior Director  
Index Investment Strategy  
[joseph.nelesen@spglobal.com](mailto:joseph.nelesen@spglobal.com)

**Tim Edwards, PhD**  
Managing Director  
Index Investment Strategy  
[tim.edwards@spglobal.com](mailto:tim.edwards@spglobal.com)

**Davide Di Gioia**  
Chief SPIVA Engineer  
Index Investment Strategy  
[davide.di.gioia@spglobal.com](mailto:davide.di.gioia@spglobal.com)

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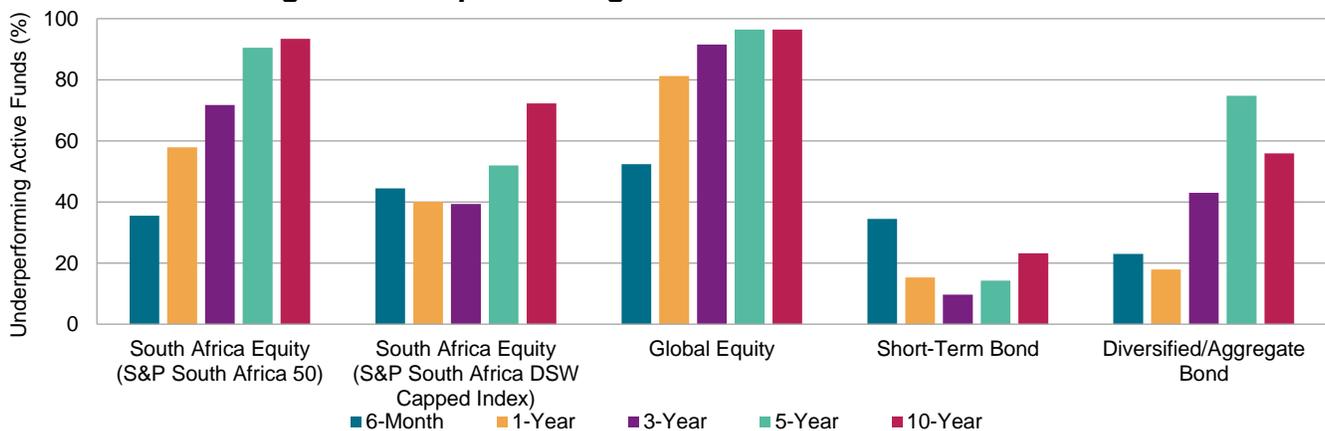
S&P Dow Jones Indices has been the de facto scorekeeper of the ongoing active versus passive debate since the first publication of the S&P Indices Versus Active (SPIVA) U.S. Scorecard in 2002.

The SPIVA South Africa Scorecard measures the performance of actively managed South African equity, global equity and fixed income funds denominated in South African rand (ZAR) against their respective benchmark indices over various time horizons.

## Mid-Year 2022 Highlights

In a tumultuous first half of 2022, many actively managed funds in South Africa deftly navigated falling markets. Less than one-half of active South African funds underperformed in each of the South Africa Equity (36% and 45% for large caps and the broad market, respectively), Short-Term Bond (34%) and Diversified/Aggregate Bond (23%) categories, while slightly more than one-half underperformed in the Global Equity category (52%) (see Exhibit 1 and Report 1). Underperformance rates generally increased with measurement horizons, with a cross-category average of 75% of active funds underperforming over the past 10 years.

**Exhibit 1: Percentage of Underperforming Active South African Funds**



Source: S&P Dow Jones Indices LLC, Morningstar. Data as of June 30, 2022. Past performance is no guarantee of future results. Chart is provided for illustrative purposes.

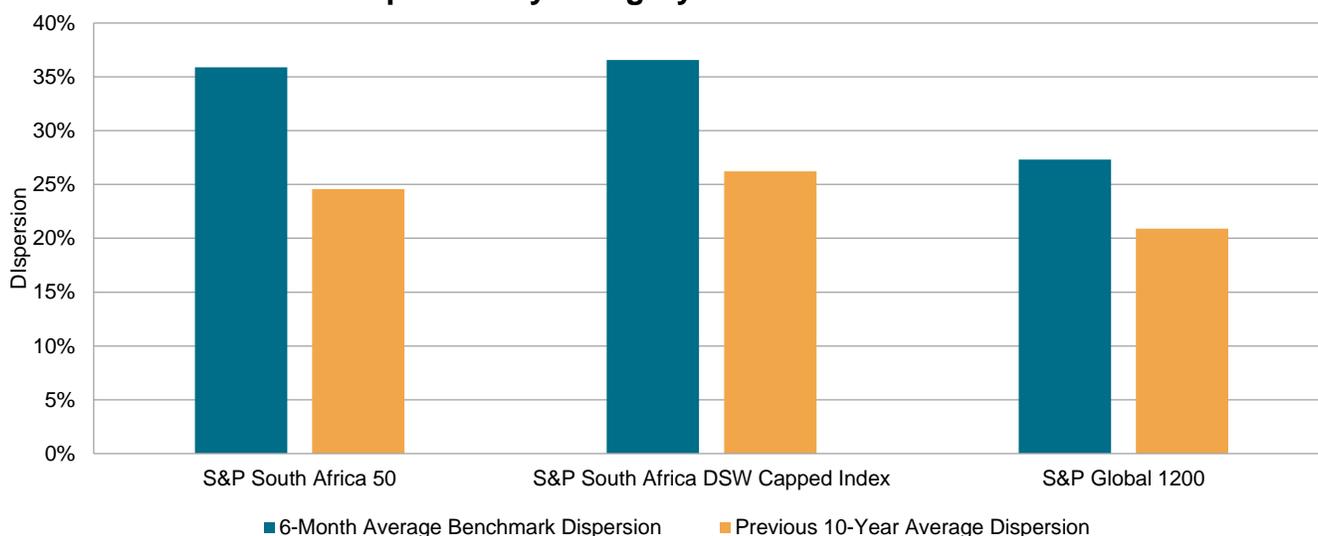
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- **South Africa Equity Funds:** The [S&P South Africa 50](#) fell 6.3% in H1 2022, while South Africa Equity funds lost 5.2% and 4.0% on equal- and asset-weighted bases, respectively, and 36% of funds underperformed the benchmark. Underperformance rates rose to 72%, 90% and 93% over the 3-, 5- and 10-year horizons, respectively. Compared to the [S&P South Africa Domestic Shareholder Weighted \(DSW\) Capped Index](#), which dropped 5.3% in H1 2022, 45% of South Africa Equity funds underperformed. Over the 3-, 5- and 10-year horizons, underperformance rates climbed to 39%, 52% and 72%, respectively.
- **Global Equity Funds:** The [S&P Global 1200](#) declined 17.2% during H1 2022, and Global Equity funds fell 18.1% and 17.9% on equal- and asset-weighted bases, respectively. Over the six-month period, 52% of funds in the category underperformed the benchmark. Over the 3-, 5- and 10-year periods, 92%, 96% and 96% of funds underperformed, respectively.
- **Short-Term Bond Funds:** The STeFI Composite climbed 2.2% in H1 2022, and 34% of Short-Term Bond funds underperformed the index. Funds in this category gained 2.2% and 2.1% on equal- and asset-weighted bases, respectively, over six months. Over the 3-, 5- and 10-year periods, 10%, 14% and 23% of funds underperformed, respectively. On a risk-adjusted basis, however, underperformance rates rose to 83%, 82% and 98% over the 3-, 5- and 10-year periods, respectively.
- **Diversified/Aggregate Bond Funds:** The [S&P South Africa Sovereign Bond 1+ Year Index](#) dropped 1.9% in the first six months of 2022, and 23% of Diversified/Aggregate Bond funds underperformed the index. Over the long term, 43%, 75% and 56% of funds underperformed over 3-, 5- and 10-year horizons, respectively.
- **Fund Survivorship:** Liquidation rates for all categories were in single digits for the one-year period ending June 30, 2022. The South Africa Equity fund category had the highest attrition rate, at 3.0%. Over the 10-year period, 39% of South Africa Equity funds merged or liquidated, and 31% of funds disappeared across all categories (see Report 2).

# Market Context

Ballooning inflation, rising commodity prices and spiking interest rates challenged investors and threatened economic recovery around the globe during the first six months of 2022. In South Africa, as well as the rest of the world, bonds and stocks declined. Volatility and dispersion—a measure of the difference in performance between index constituents and an indication of the opportunity set for stock picking—were both elevated to above-average levels in South African and global equities (Exhibit 2 shows dispersion as measured over the trailing six-month period).

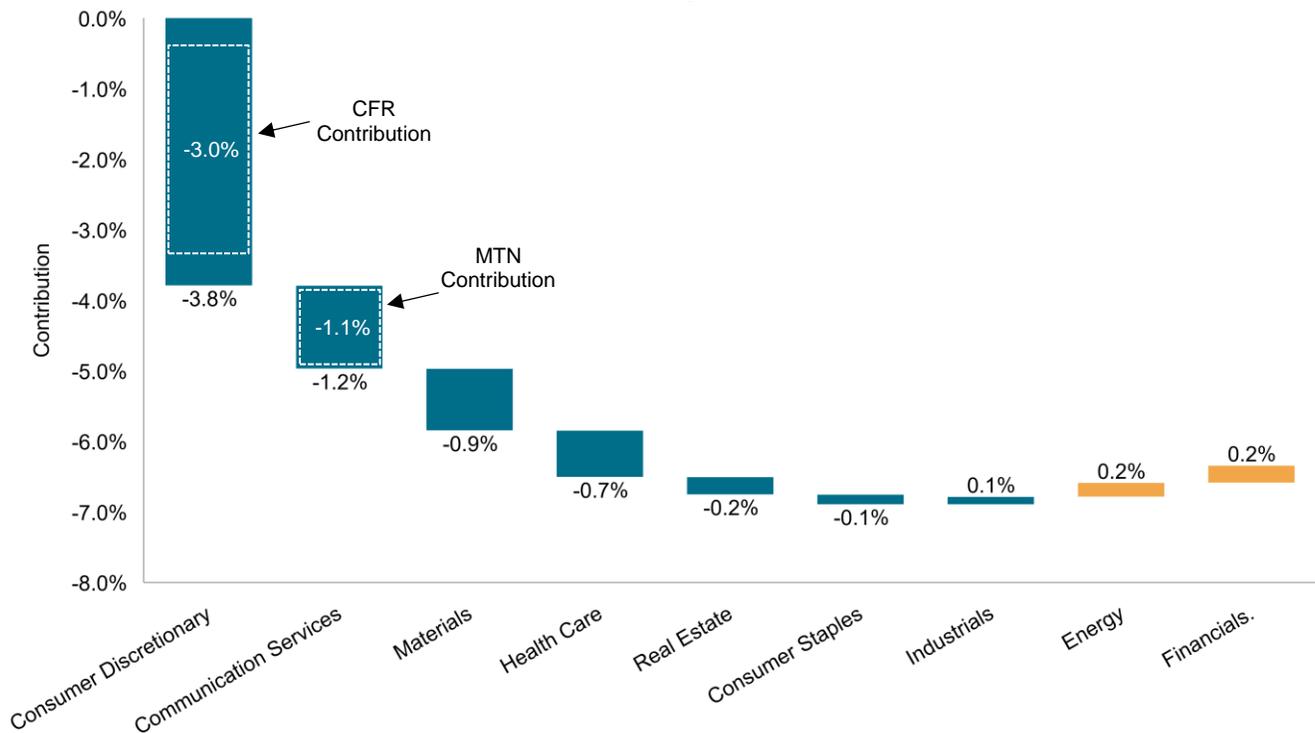
**Exhibit 2: Benchmark Dispersion by Category**



Source: S&P Dow Jones Indices LLC. Data as of June 30, 2022. Past performance is no guarantee of future results. Chart is provided for illustrative purposes.

**Avoidance of a few significant decliners presented one avenue for outperformance in H1 2022.** Overall, across the S&P South Africa 50, 49% of stocks underperformed the benchmark and 51% outperformed, but only a few stocks contributed to the majority of the index’s -6.3% H1 2022 performance. Luxury goods firm Compagnie Financiere Richemont SA (CFR) and communications company MTN Group combined to account for two-thirds of the total index decline. CFR made a significant impact as the largest weight in the index and the second-worst performer in H1 2022. Among sectors, only Energy and Financials exhibited net positive contributions (see Exhibit 3).

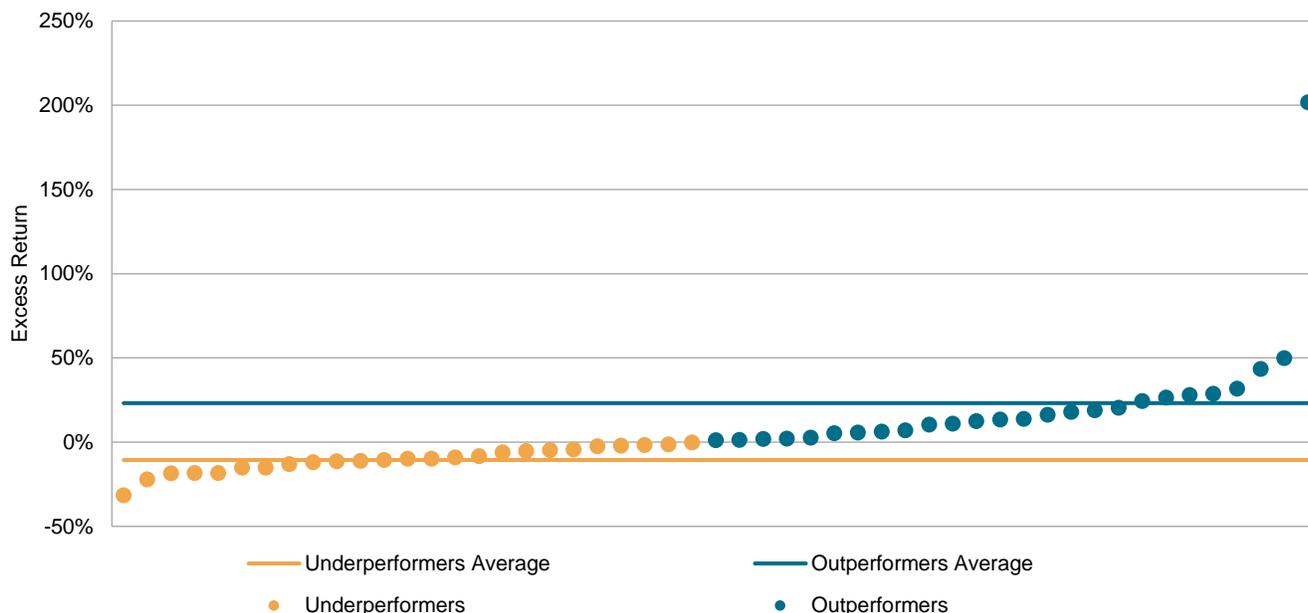
### Exhibit 3: S&P South Africa 50 Contribution by Sector



Source: S&P Dow Jones Indices LLC. Data as of June 30, 2022. Index performance based on S&P South Africa 50 sector total returns in ZAR. Past performance is no guarantee of future results. Chart is provided for illustrative purposes.

There was a **positive skew visible in the cross section of stock returns**; during the first six months of 2022, the median S&P South Africa 50 stock was -5.1%, while the average stock return was 0.3%. The distribution of stock returns underscored the presence of skew, as outperformers averaged 23% excess return while underperformers, on average, returned -11%. Even when excluding an outlier with more than 200% excess return during H1 2022 (and a weight in the index of less than 1%), the average excess return of remaining outperformers was 16%. **A manager’s chances of picking an underperforming or outperforming stock were nearly equal, but outperforming stocks were disproportionately rewarding for performance.**

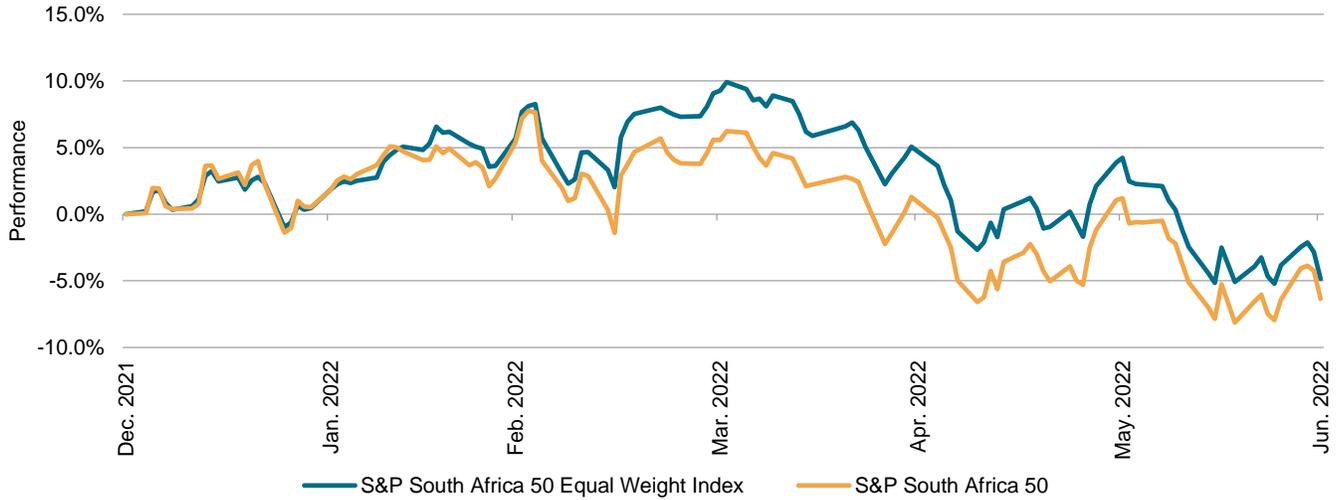
### Exhibit 4: S&P South Africa 50 Constituent H1 2022 Excess Returns



Source: S&P Dow Jones Indices LLC. Data as of June 30, 2022. Points represent single-stock excess returns relative to the S&P South Africa 50 in ZAR during the first six months of 2022. Constituents number more than 50 due to additions to and deletions from the index during H1 2022. Past performance is no guarantee of future results. Chart is provided for illustrative purposes.

Reducing the weights of the largest stocks in the benchmark remains a prevalent active management strategy. Tilting away from mega-cap names may have been a successful approach in H1 2022, based on the relative performance of the [S&P South Africa 50 Equal Weight Index](#), which outperformed the S&P South Africa 50 by 1.5% (see Exhibit 5). As noted previously, the largest stock in the benchmark (CFR; with nearly 10% weight) was the second-worst performer, while one of the smallest stocks (with a weight of less than 1%) had an excess return of close to 200%. Equal weighting would have de-emphasized the largest constituents, which underperformed on average and shifted weight toward smaller and better-performing constituents.

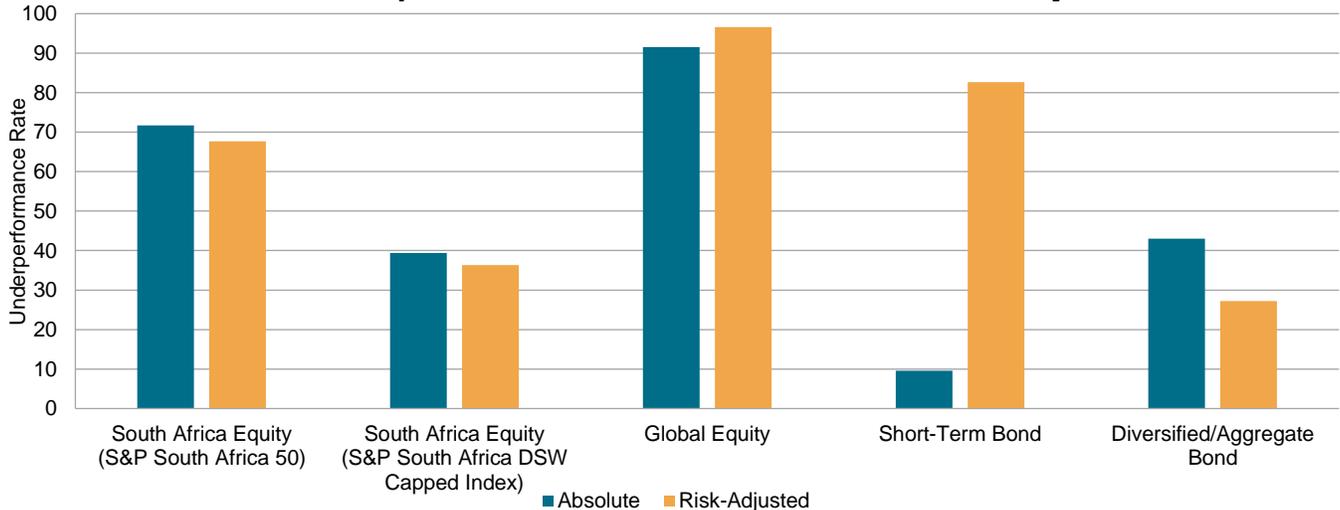
### Exhibit 5: S&P South Africa 50 and S&P South Africa 50 Equal Weight Index 6-Month Performance



Source: S&P Dow Jones Indices LLC. Data as of June 30, 2022. Index performance based on excess total return in ZAR. Past performance is no guarantee of future results. Chart is provided for illustrative purposes.

Some active category underperformance rates differed when looking through the lens of risk-adjusted returns. Over the past five years, for example, funds in the South Africa Equity and Diversified/Aggregate Bond categories exhibited slightly lower underperformance rates on a risk-adjusted basis than on an absolute return basis. In contrast, underperformance rates on risk-adjusted returns were slightly higher in the Global Equity category and dramatically higher in the Short-Term Bond category (see Exhibit 6). In the latter category, a risk-adjusted underperformance rate of 83% versus a non-adjusted underperformance rate of 10% suggests Short-Term Bond funds took on significantly more risk per unit of return in their successful efforts to outperform the benchmark.

### Exhibit 6: Five-Year Underperformance Rates – Absolute and Risk-Adjusted Returns



Source: S&P Dow Jones Indices LLC. Data as of June 30, 2022. Index performance based on excess total returns in ZAR. 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 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 South Africa 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 means the returns of a ZAR 10 billion fund affect the average in the same manner as the returns of a ZAR 10 million fund. An accurate representation of how market participants fared in a particular period can be ascertained by calculating weighted average returns, where each fund's return is weighted by net assets. SPIVA Scorecards show both equal- and asset-weighted averages.
- **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 (%)
South Africa Equity	S&P South Africa 50	35.50	57.92	71.72	90.48	93.43
	S&P South Africa DSW Capped Index	44.50	40.10	39.39	51.90	72.26
Global Equity	S&P Global 1200	52.38	81.25	91.53	96.43	96.43
Short-Term Bond	STeFI Composite	34.48	15.25	9.62	14.29	23.26
Diversified/Aggregate Bond	S&P South Africa Sovereign Bond 1+ Year Index	22.96	17.91	42.98	74.76	55.93

Source: S&P Dow Jones Indices LLC, Morningstar. Data for periods ending June 30, 2022. Outperformance is based on equal-weighted fund counts. Index performance based on total return. Past performance is no guarantee of future results. Table is provided for illustrative purposes.

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

Fund Category	Comparison Index	3-Year (%)	5-Year (%)	10-Year (%)
South Africa Equity	S&P South Africa 50	67.68	90.95	90.51
	S&P South Africa DSW Capped Index	36.36	49.52	67.15
Global Equity	S&P Global 1200	96.61	96.43	100.00
Short-Term Bond	STeFI Composite	82.69	81.63	97.67
Diversified/Aggregate Bond	S&P South Africa Sovereign Bond 1+ Year Index	27.19	39.81	33.90

Source: S&P Dow Jones Indices LLC, Morningstar. Results shown for all time horizons over which the comparison index total return was positive. Data for periods ending June 30, 2022. Risk-adjusted return is computed as the annualized average monthly return divided by the annualized standard deviation of the monthly return for the measured periods. Past performance is no guarantee of future results. Table is provided for illustrative purposes.

**Report 2: Survivorship of Funds**

Fund Category	Number of Funds at Start	Survivorship (%)
<b>YTD</b>		
South Africa Equity	200	99.50
Global Equity	84	100.00
Short-Term Bond	58	100.00
Diversified/Aggregate Bond	135	100.00
<b>All Categories</b>	<b>477</b>	<b>99.79</b>
<b>1-Year</b>		
South Africa Equity	202	97.03
Global Equity	80	98.75
Short-Term Bond	59	98.31
Diversified/Aggregate Bond	134	99.25
<b>All Categories</b>	<b>475</b>	<b>98.11</b>
<b>3-Year</b>		
South Africa Equity	198	87.37
Global Equity	59	96.61
Short-Term Bond	52	94.23
Diversified/Aggregate Bond	114	94.74
<b>All Categories</b>	<b>423</b>	<b>91.49</b>
<b>5-Year</b>		
South Africa Equity	210	72.86
Global Equity	56	83.93
Short-Term Bond	49	89.80
Diversified/Aggregate Bond	103	78.64
<b>All Categories</b>	<b>418</b>	<b>77.75</b>
<b>10-Year</b>		
South Africa Equity	137	60.58
Global Equity	28	78.57
Short-Term Bond	43	81.40
Diversified/Aggregate Bond	59	74.58
<b>All Categories</b>	<b>267</b>	<b>68.91</b>

Source: S&P Dow Jones Indices LLC, Morningstar. Data for periods ending June 30, 2022. 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 South Africa 50	-6.34	7.47	9.23	10.02	11.36
South Africa Equity	-5.20	6.94	7.61	6.05	8.03
S&P South Africa DSW Capped Index	-5.30	5.70	6.43	5.71	8.97
South Africa Equity	-5.20	6.94	7.61	6.05	8.03
S&P Global 1200	-17.22	-0.68	13.01	13.15	17.94
Global Equity	-18.11	-7.52	8.77	8.91	13.69
STeFI Composite	2.19	4.18	5.01	5.93	6.11
Short-Term Bond	2.17	4.81	5.83	6.80	6.82
S&P South Africa Sovereign Bond 1+ Year Index	-1.93	1.19	5.78	7.71	7.22
Diversified/Aggregate Bond	-0.14	3.31	5.90	6.92	6.99

Source: S&P Dow Jones Indices LLC, Morningstar. Data for periods ending June 30, 2022. Returns for periods greater than one year are annualized. Index performance based on total return. Funds are equal weighted, but indices are not. Past performance is no guarantee of future results. Table is provided for illustrative purposes.

**Report 4: Average Fund Performance (Asset-Weighted)**

Index/Fund Category	YTD (%)	1-Year (%)	3-Year (%)	5-Year (%)	10-Year (%)
S&P South Africa 50	-6.34	7.47	9.23	10.02	11.36
South Africa Equity	-4.03	7.92	9.01	7.05	9.06
S&P South Africa DSW Capped Index	-5.30	5.70	6.43	5.71	8.97
South Africa Equity	-4.03	7.92	9.01	7.05	9.06
S&P Global 1200	-17.22	-0.68	13.01	13.15	17.94
Global Equity	-17.87	-6.34	10.26	9.76	15.86
STeFI Composite	2.19	4.18	5.01	5.93	6.11
Short-Term Bond	2.09	4.82	5.80	6.84	7.02
S&P South Africa Sovereign Bond 1+ Year Index	-1.93	1.19	5.78	7.71	7.22
Diversified/Aggregate Bond	-0.04	3.62	6.32	7.68	7.56

Source: S&P Dow Jones Indices LLC, Morningstar. Data for periods ending June 30, 2022. Index performance based on total returns. Returns for periods greater than one year are annualized. Past performance is no guarantee of future results. Table is provided for illustrative purposes.

**Report 5: Quartile Breakpoints of Fund Performance**

<b>Fund Category</b>	<b>Third Quartile</b>	<b>Second Quartile</b>	<b>First Quartile</b>
<b>YTD</b>			
South Africa Equity	-7.13	-4.89	-2.76
Global Equity	-20.37	-17.47	-14.43
Short-Term Bond	1.81	2.35	2.62
Diversified/Aggregate Bond	-1.85	0.70	1.61
<b>1-Year</b>			
South Africa Equity	4.04	6.74	9.48
Global Equity	-9.84	-5.77	-1.97
Short-Term Bond	4.39	4.88	5.26
Diversified/Aggregate Bond	1.69	4.19	4.98
<b>3 Year</b>			
South Africa Equity	5.84	7.81	9.88
Global Equity	8.51	9.75	11.25
Short-Term Bond	5.62	5.84	6.15
Diversified/Aggregate Bond	5.45	6.04	6.53
<b>5-Year</b>			
South Africa Equity	4.52	6.98	8.75
Global Equity	7.98	9.55	11.29
Short-Term Bond	6.68	6.87	7.32
Diversified/Aggregate Bond	6.72	7.38	7.95
<b>10-Year</b>			
South Africa Equity	7.08	8.65	10.29
Global Equity	13.94	14.80	15.74
Short-Term Bond	6.56	6.79	7.04
Diversified/Aggregate Bond	6.87	7.37	7.76

Source: S&P Dow Jones Indices LLC, Morningstar. Data for periods ending June 30, 2022. Index performance based on total returns. Past performance is no guarantee of future results. Table is provided for illustrative purposes.

# Appendix A: SPIVA Methodology

## Data

Data from Morningstar are obtained for all managed funds domiciled in South Africa for which month-end data are available during the performance period. The data include the most comprehensive South African fund data on active and finalized (merged or liquidated) funds over the chosen period. Funds are classified based on the Morningstar fund classification system, and the SPIVA South Africa Scorecard covers South African and international equity and fixed income categories.

## Benchmarks

The chosen benchmarks are shown in Exhibit 7. All index returns are total returns (i.e., include dividend reinvestment) in South African rand (ZAR). 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 7: SPIVA Categories and Their Benchmarks

Morningstar Category	SPIVA Category	Comparison Index
EAA Fund South Africa & Namibia Equity	South Africa Equity	S&P South Africa DSW Capped Index Gross Total Return (ZAR)
EAA Fund South Africa & Namibia Small-Cap Equity		S&P South Africa 50 Gross TR ZAR
EAA Fund Global Large-Cap Blend Equity	Global Equity	S&P Global 1200 Gross Total Return (ZAR)
EAA Fund Global Large-Cap Growth Equity		
EAA Fund Global Large-Cap Value Equity		
EAA Fund Global Flex-Cap Equity		
EAA Fund ZAR/NAD-Short Term Bonds	Short-Term Bond	South Africa Short Term Fixed Interest (STeFI) Composite Total Return (ZAR)
EAA Fund ZAR/NAD-Ultra Short Term Bonds		
EAA Fund ZAR/NAD-Diversified Bonds	Diversified/Aggregate Bond	S&P South Africa Sovereign Bond 1+ Year Total Return Index (ZAR)
EAA Fund ZAR/NAD-Flexible Bonds		

Source: S&P Dow Jones Indices LLC, 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 beat the index. We then report the percentage of funds that did not survive and beat the index.

### Survivorship (%)

The survivorship measure 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 and time horizon are determined by compounding the simple average of the monthly returns of all active funds that were available at the start of the period.

### Asset-Weighted Fund Performance

Asset-weighted returns for a particular style category are calculated similarly, except based on a weighted average return of fund returns each month, with each fund's return weighted by its total net assets. Asset-weighted returns can be a better indicator of category performances because they reflect the returns of the total money invested across the sample of funds.

### 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 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, which is 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 surviving 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. 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 explicitly to show 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 vehicle against which fund performance can be measured.

### S&P South Africa Domestic Shareholder Weighted (DSW) Capped Index

The S&P South Africa DSW Capped Index modifies the [S&P South Africa DSW Index](#) to ensure that no single stock weighs more than 10% of the index at each rebalancing. The S&P South Africa DSW Index adjusts the weights of companies in the [S&P South Africa Composite](#) in order to reflect the level of ownership by South African investors. The S&P South Africa Composite is a float-adjusted, market-cap-weighted index that measures the performance of large-, mid- and small-cap companies listed on the Johannesburg Stock Exchange.

### S&P South Africa 50

The S&P South Africa 50 comprises the largest 50 companies by float-adjusted market cap from the S&P South Africa Composite. Eligibility includes all companies listed on the Johannesburg Stock Exchange, including both South African and foreign-domiciled companies as defined by S&P Dow Jones Indices.

### S&P Global 1200

Capturing approximately 70% of the world's capital markets, the S&P Global 1200 is a composite of seven headline indices, many of which are accepted leaders in their regions. It includes the [S&P 500<sup>®</sup>](#) (U.S.), [S&P Europe 350<sup>®</sup>](#) (Europe), [S&P/TOPIX 150](#) (Japan),

[S&P/TSX 60](#) (Canada), [S&P/ASX All Australian 50](#) (Australia), [S&P Asia 50](#) (Asia Ex-Japan), and [S&P Latin America 40](#) (Latin America).

### South Africa Short Term Fixed Interest (STeFI) Composite

The South Africa Short Term Fixed Interest (STeFI) Composite Index approximates the performance of money market instruments in the market. Instruments such as call deposits and negotiable certificates of deposits (NCDs) represent common, liquid instruments and provide a good proxy of short-term markets.

### S&P South Africa Sovereign Bond 1+ Year

The S&P South Africa Sovereign Bond 1+ Year Index seeks to track the performance of local-currency-denominated sovereign debt publicly issued by the government of South Africa in its domestic market, with maturities of one year or more.

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