

## SPIVA<sup>®</sup> Canada

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

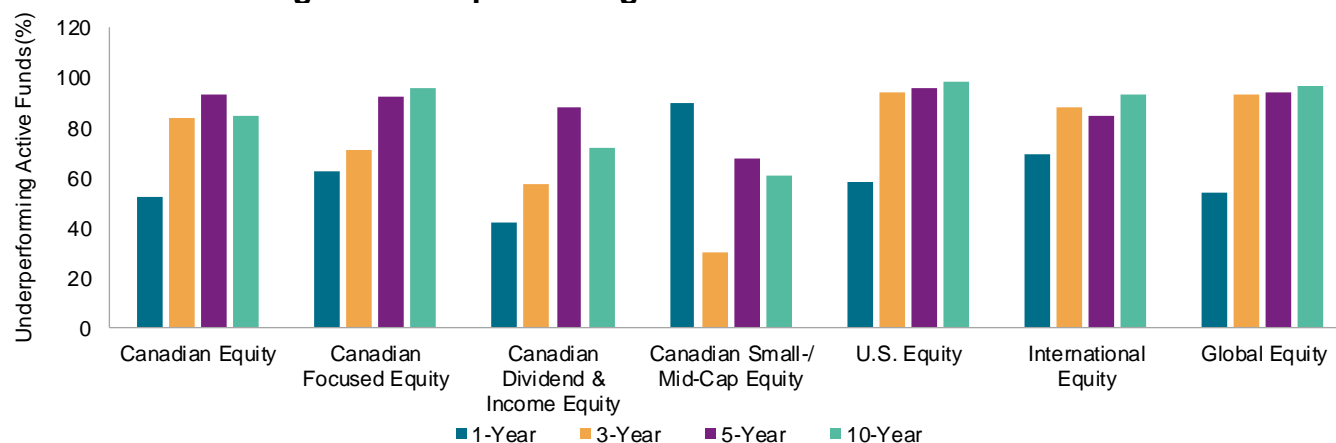
Since the first publication of the S&P Indices Versus Active Funds (SPIVA) U.S. Scorecard in 2002, S&P Dow Jones Indices has been the de facto scorekeeper of the ongoing active versus passive debate.

The SPIVA Canada Scorecard measures the performance of Canadian actively managed funds against their respective benchmarks over various time horizons, covering large-, mid- and small-cap segments, as well as international and global equity funds.

### Year-End 2022 Highlights

2022 was a relatively less challenging year for most actively managed funds in Canada. A little over one-half of active funds underperformed their benchmarks in several categories, including Canadian Equity at 52%, Canadian Focused Equity at 63%, U.S. Equity at 58% and Global Equity at 54% (see Exhibit 1 and Report 1). Canadian Dividend & Income Equity funds posted the lowest one-year underperformance, with just 42% lagging the benchmark. Underperformance rates generally increased with time horizons.

**Exhibit 1: Percentage of Underperforming Active Canadian Funds**



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

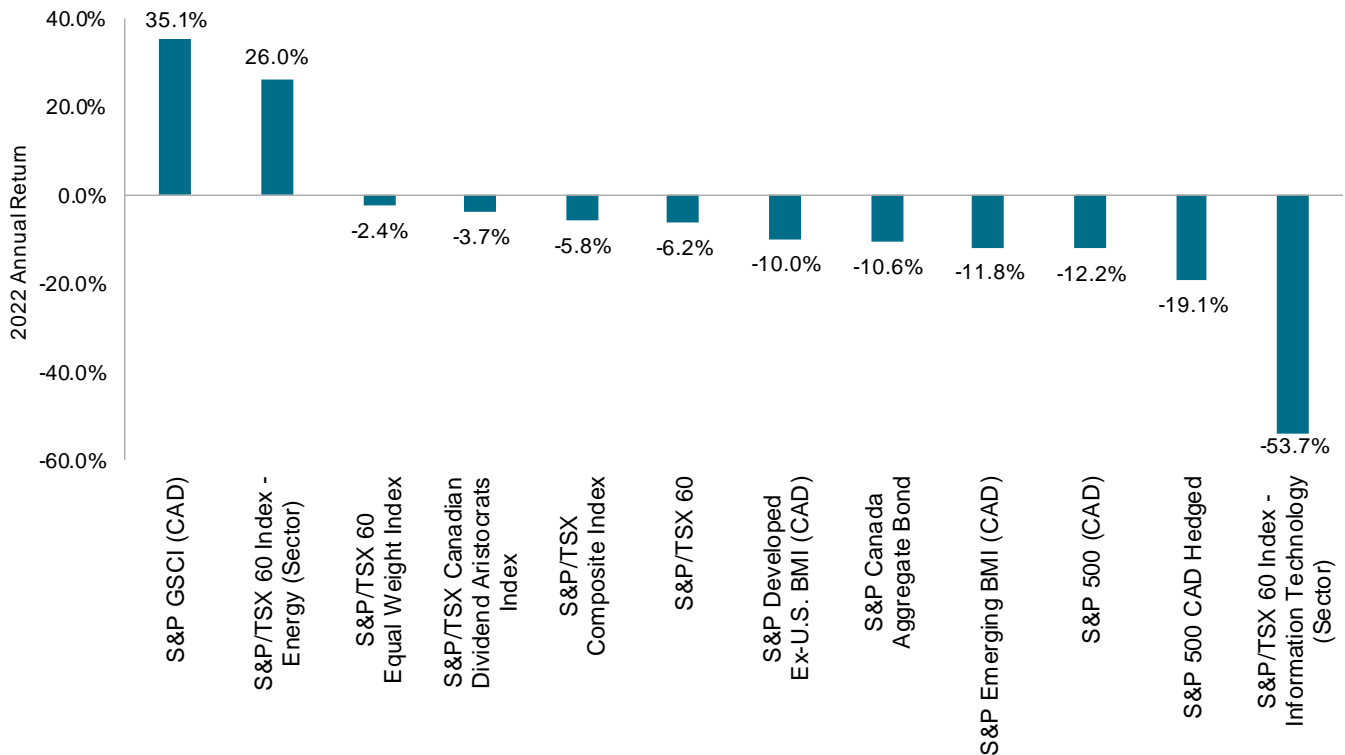
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- **Canadian Equity Funds:** The [S&P/TSX Composite Index](#) fell 5.8% in 2022, while Canadian Equity funds dropped 5.8% and 5.5% on equal- and asset-weighted bases, respectively. Underperformance rates hit 52% for the one-year period, climbing to 84%, 93% and 85% over the 3-, 5- and 10-year horizons, respectively.
- **Canadian Focused Equity Funds:** The blended benchmark of 50% S&P/TSX Composite Index + 25% [S&P 500®](#) + 25% [S&P EPAC LargeMidCap](#) fell 8.2% in 2022, outperforming 63% of Canadian Focused Equity funds. This rose to 71%, 92% and 96% over the 3-, 5- and 10-year horizons, respectively.
- **Canadian Dividend & Income Equity Funds:** The [S&P/TSX Canadian Dividend Aristocrats® Index](#) fell 3.7% during 2022, while Canadian Dividend & Income Equity funds lost 4.4% and 3.7% on equal- and asset-weighted bases, respectively. Underperformance rates reached 42% over the one-year period, rising to 57%, 88% and 72% over the 3-, 5- and 10-year horizons, respectively.
- **Canadian Small-/Mid-Cap Equity Funds:** The [S&P/TSX Completion Index](#) dipped 4.2% in 2022, and 90% of Canadian Equity Small-Mid-Cap funds underperformed the index. Funds in this category lost 11.5% and 11.4% on equal- and asset-weighted bases, respectively, over the one-year period.
- **U.S. Equity Funds:** The S&P 500 shed 12.2% in 2022, and 58% of U.S. Equity funds underperformed the index. Few funds in the U.S. Equity category outperformed over the long term, with 94%, 96% and 98% underperforming over 3-, 5- and 10-year horizons, respectively.
- **International Equity Funds:** 69% of International Equity funds trailed the [S&P EPAC LargeMidCap](#), and 84% and 93% underperformed over the 5- and 10-year periods, respectively.
- **Global Equity Funds:** The [S&P Developed LargeMidCap](#) fell 12.3% in 2022 and Global Equity funds sank 14.7% and 14.4% on equal- and asset-weighted bases, respectively. Over the one-year period, 54% of funds in the category trailed the benchmark. Over the 3-, 5- and 10-year periods, 93%, 94% and 97% of funds underperformed, respectively.
- **Fund Survivorship:** Liquidation rates for all categories were in single digits for the one-year period ending Dec. 30, 2022. Over the 10-year period, 45% of Canadian Equity funds merged or liquidated and 37% of funds disappeared across all categories (see Report 2).

# Market Context

2022 was a volatile year for Canadian investors, characterized by rate hikes and inflation concerns across the world, accompanied by significant losses in most major asset classes. Canada was no exception, with the Bank of Canada raising interest rates seven times to combat inflation. Exhibit 2 illustrates that, except for commodities and the Energy sector, losses were widespread, particularly in the Canadian large-cap Information Technology sector.

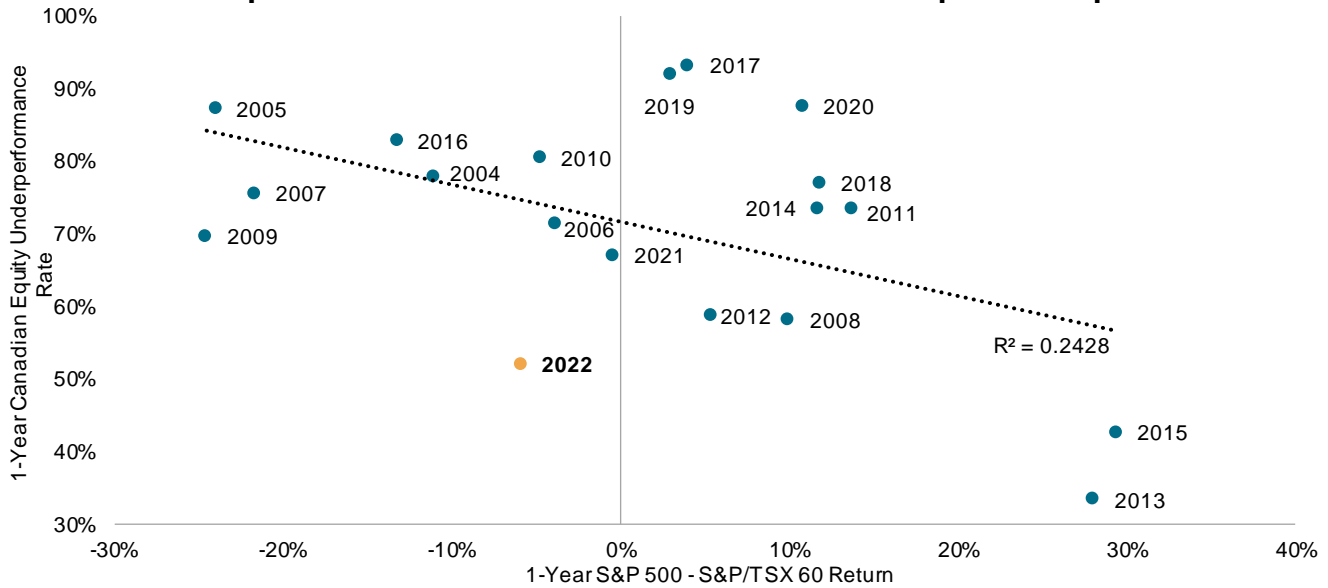
**Exhibit 2: Losses Were Widespread across Most Asset Classes for Canadian Investors**



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

One well-known source of potential outperformance for Canadian managers has been tilting toward large-cap U.S. equities. Exhibit 3 shows that during years in which U.S. large caps outperformed relative to Canadian large caps, the underperformance rates of actively managed Canadian equity funds tended to improve; 2013 and 2015 are prime examples, with the lowest annual underperformance rates in our records coinciding with S&P 500 outperformance of almost 30% relative to the S&P/TSX 60. In 2022, the S&P 500 underperformed by 6%—which would have created a headwind for active managers looking south of the border for excess returns.

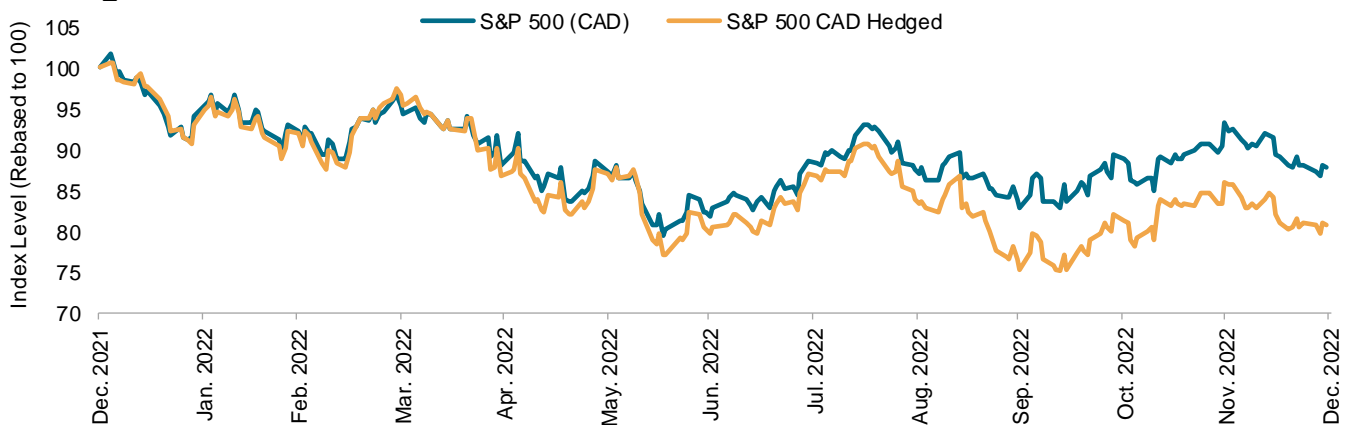
**Exhibit 3: Underperformance Rates Were Lower When U.S. Equities Outperformed**



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

Despite the underperformance of U.S. equities relative to their Canadian counterparts, Canadian managers who did not hedge their foreign equity exposures may have faced a currency tailwind from the weakening Canadian dollar, which fell by 7% relative to the U.S. dollar over 2022. Exhibit 4 shows the divergence between the S&P 500 CAD versus the S&P 500 CAD Hedged Index that began at the end of the second quarter and widened through the end of the year.

**Exhibit 4: Weakness in the Canadian Dollar Relative to U.S. Dollar Aided Canadian Unhedged Performance**

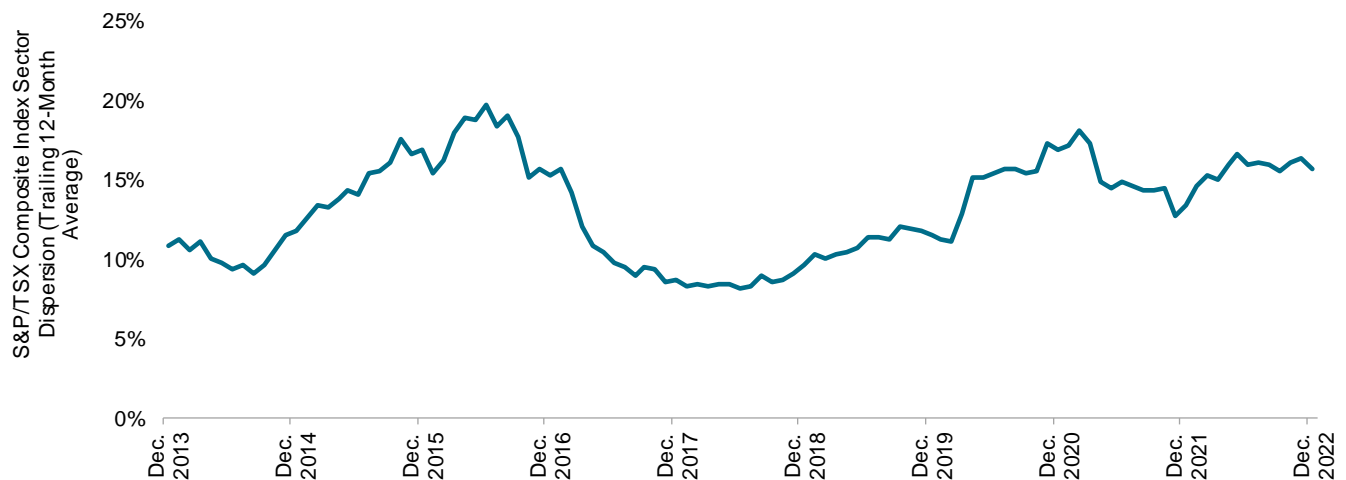
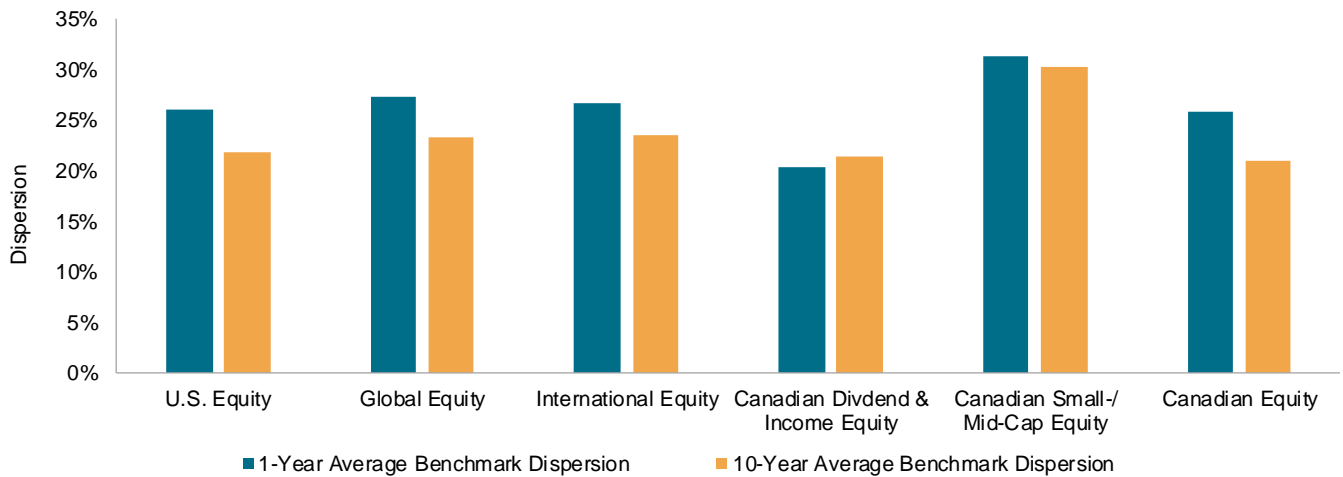


Source: S&P Dow Jones Indices LLC. Data as of Dec. 30, 2022. Index performance based on total returns in CAD. Past performance is no guarantee of future results. Chart is provided for illustrative purposes.

In addition to a potentially favorable currency trend, there were plenty of opportunities to find excess returns. Exhibit 5 shows that dispersion—a measure of the difference in performance

between index constituents and an indication of the opportunity set for stock picking—rose to above-average levels in benchmarks across most categories, indicating greater opportunity to add value from stock selection skill.<sup>1</sup> Opportunities to showcase skillful sector allocation were also rewarded, as demonstrated by last year’s trend upwards in sector dispersion levels within the S&P/TSX Composite.

**Exhibit 5: 12-Month Benchmark Dispersion across Most Categories Was above Average while Sector Dispersion Trended Upward**



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

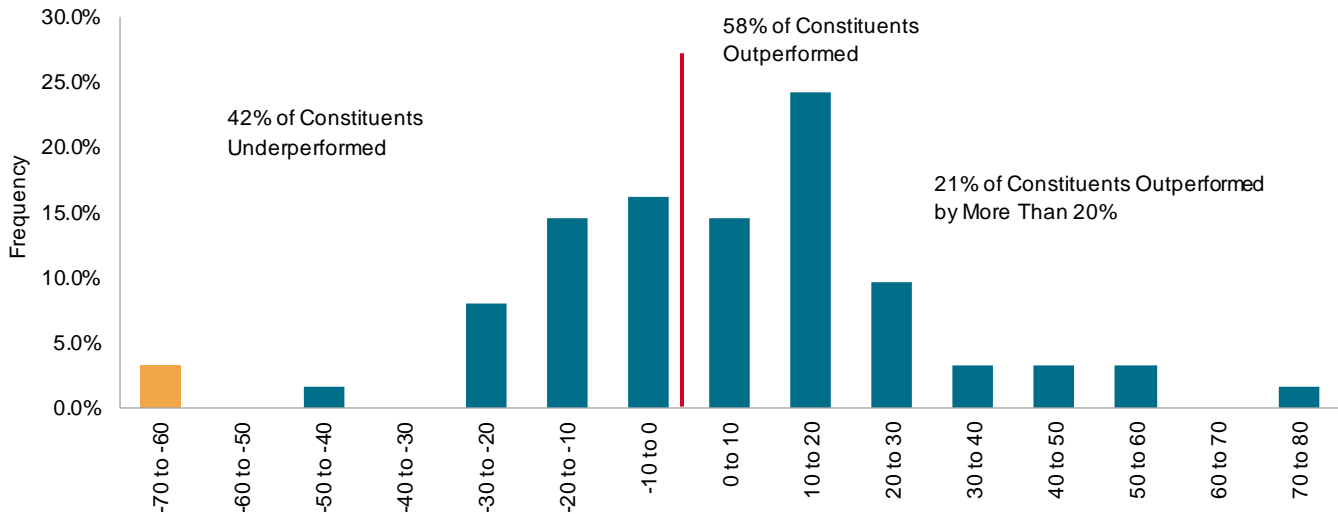
Consistent with the sectoral themes we saw in Exhibit 2 and during the first half of 2022,<sup>2</sup> avoidance of Information Technology and, in particular, one large-cap stock (highlighted in Exhibit 6), along with exposure to Energy, was one way of achieving outperformance among

<sup>1</sup> Edwards, Tim, and Craig J. Lazzara, “Dispersion: Measuring Market Opportunity.” S&P Dow Jones Indices LLC (2013).

<sup>2</sup> Edwards, Tim, Ganti, Anu, Di Gioia, Davide, and Joseph Nelesen, “SPIVA Canada Mid-Year 2022 Scorecard.” S&P Dow Jones Indices LLC (2022).

large caps.<sup>3</sup> But even a random selection among S&P/TSX 60 constituents would have had a decent chance of success: almost three-fifths of constituents outperformed the S&P/TSX 60, and a little over one-fifth outperformed by more than 20%.

**Exhibit 6: 2022 Frequency Distribution of S&P/TSX 60 Constituent Excess Returns**



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

Overall, a series of headwinds and tailwinds may have offset each other, leading to a relatively balanced set of results compared to most prior years, with an average of 61% of funds across categories underperforming their respective benchmarks in 2022. Whether these trends will persist over the long term, however, is another story, as our statistics show that the average underperformance increased to 86% over a 10-year horizon.

<sup>3</sup> As of Dec. 31, 2021, Shopify was the largest weight in the S&P/TSX 60, at 8%. Over the course of 2022, this stock had a total return of -73% and ended with a 2.5% weight in the S&P/TSX 60.

## 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 Canada 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 CAD 10 billion fund affect the average in the same manner as the returns of a CAD 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 Underperforming Their Benchmarks (Based on Absolute Return)

Fund Category	Comparison Index	1-Year (%)	3-Year (%)	5-Year (%)	10-Year (%)
Canadian Equity	S&P/TSX Composite Index	51.9	83.8	93.2	84.9
Canadian Focused Equity	50% S&P/TSX Composite Index + 25% S&P 500 (CAD) + 25% S&P EPAC LargeMidCap (CAD)	62.7	71.0	91.9	95.5
Canadian Dividend & Income Equity	S&P/TSX Canadian Dividend Aristocrats Index	41.8	57.4	88.1	71.6
Canadian Small-/Mid-Cap Equity	S&P/TSX Completion Index	90.0	30.0	67.6	61.0
U.S. Equity	S&P 500 (CAD)	58.3	93.9	95.9	98.2
International Equity	S&P EPAC LargeMidCap (CAD)	69.3	88.2	84.3	93.0
Global Equity	S&P Developed LargeMidCap (CAD)	53.5	93.0	93.7	96.6

Source: S&P Dow Jones Indices LLC, Funddata. Data for periods ending Dec. 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 Underperforming Their Benchmarks (Based on Risk-Adjusted Return)

Fund Category	Comparison Index	3-Year (%)	5-Year (%)	10-Year (%)
Canadian Equity	S&P/TSX Composite Index	79.4	93.2	73.6
Canadian Focused Equity	50% S&P/TSX Composite Index + 25% S&P 500 (CAD) + 25% S&P EPAC LargeMidCap (CAD)	79.7	92.9	94.2
Canadian Dividend & Income Equity	S&P/TSX Canadian Dividend Aristocrats Index	42.6	68.7	50.0
Canadian Small-/Mid-Cap Equity	S&P/TSX Completion Index	30.0	73.0	58.1
U.S. Equity	S&P 500 (CAD)	93.2	95.2	98.9
International Equity	S&P EPAC LargeMidCap (CAD)	91.2	88.6	92.0
Global Equity	S&P Developed LargeMidCap (CAD)	92.2	93.7	97.9

Source: S&P Dow Jones Indices LLC, Funddata. Results shown for all time horizons over which the comparison index total return was positive. Data for periods ending Dec. 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**

<b>Fund Category</b>	<b>Number of Funds at Start</b>	<b>Survivorship (%)</b>
<b>1-Year</b>		
Canadian Equity	79	94.9
Canadian Focused Equity	67	92.5
Canadian Dividend & Income Equity	55	98.2
Canadian Small-/Mid-Cap Equity	30	96.7
U.S. Equity	151	96.0
International Equity	75	97.3
Global Equity	269	96.7
<b>All Categories</b>	<b>726</b>	<b>96.1</b>
<b>3-Year</b>		
Canadian Equity	68	89.7
Canadian Focused Equity	69	88.4
Canadian Dividend & Income Equity	61	91.8
Canadian Small-/Mid-Cap Equity	30	96.7
U.S. Equity	148	90.5
International Equity	68	91.2
Global Equity	243	92.2
<b>All Categories</b>	<b>687</b>	<b>91.3</b>

Source: S&P Dow Jones Indices LLC, Fundata. Data for periods ending Dec. 30, 2022. Past performance is no guarantee of future results. Table is provided for illustrative purposes.

**Report 2: Survivorship of Funds (cont.)**

Fund Category	Number of Funds at Start	Survivorship (%)
<b>5-Year</b>		
Canadian Equity	73	76.7
Canadian Focused Equity	99	58.6
Canadian Dividend & Income Equity	67	80.6
Canadian Small-/Mid-Cap Equity	37	81.1
U.S. Equity	146	79.5
International Equity	70	77.1
Global Equity	239	81.2
<b>All Categories</b>	<b>731</b>	<b>76.9</b>
<b>10-Year</b>		
Canadian Equity	93	54.8
Canadian Focused Equity	111	46.8
Canadian Dividend & Income Equity	67	68.7
Canadian Small-/Mid-Cap Equity	41	65.9
U.S. Equity	110	71.8
International Equity	71	60.6
Global Equity	204	68.1
<b>All Categories</b>	<b>697</b>	<b>62.7</b>

Source: S&P Dow Jones Indices LLC, Funddata. Data for periods ending Dec. 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	1-Year (%)	3-Year (%)	5-Year (%)	10-Year (%)
S&P/TSX Composite Index	-5.8	7.5	6.8	7.7
Canadian Equity	-5.8	5.4	4.4	6.4
S&P 500 (CAD)	-12.2	9.2	11.2	16.1
U.S. Equity	-14.7	5.5	6.9	11.9
S&P EPAC LargeMidCap (CAD)	-9.3	2.6	3.4	8.3
International Equity	-13.0	0.4	1.3	6.0
S&P Developed LargeMidCap (CAD)	-12.3	6.7	8.0	12.6
Global Equity	-14.7	3.5	4.4	8.2

Source: S&P Dow Jones Indices LLC, Funddata. Data for periods ending Dec. 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 3: Average Fund Performance (Equal-Weighted) (cont.)**

Index/Fund Category	1-Year (%)	3-Year (%)	5-Year (%)	10-Year (%)
S&P/TSX Completion Index	-4.2	5.2	5.1	5.8
Canadian Small-/Mid-Cap Equity	-11.5	7.7	4.2	5.9
S&P/TSX Canadian Dividend Aristocrats Index	-3.7	5.8	6.5	7.5
Canadian Dividend & Income Equity	-4.4	5.1	4.7	6.1
50% S&P/TSX Composite Index + 25% S&P 500 (CAD) + 25% S&P EPAC LargeMidCap (CAD)	-8.2	6.9	7.2	10.1
Canadian Focused Equity	-9.3	6.0	5.1	6.9

Source: S&P Dow Jones Indices LLC, Funddata. Data for periods ending Dec. 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	1-Year (%)	3-Year (%)	5-Year (%)	10-Year (%)
S&P/TSX Composite Index	-5.8	7.5	6.8	7.7
Canadian Equity	-5.5	5.8	4.8	7.0
S&P 500 (CAD)	-12.2	9.2	11.2	16.1
U.S. Equity	-16.9	5.0	7.3	12.2
S&P EPAC LargeMidCap (CAD)	-9.3	2.6	3.4	8.3
International Equity	-12.9	1.2	2.3	6.8
S&P Developed LargeMidCap (CAD)	-12.3	6.7	8.0	12.6
Global Equity	-14.4	2.8	4.1	8.5
S&P/TSX Completion Index	-4.2	5.2	5.1	5.8
Canadian Small-/Mid-Cap Equity	-11.4	6.4	3.7	5.5
S&P/TSX Canadian Dividend Aristocrats Index	-3.7	5.8	6.5	7.5
Canadian Dividend & Income Equity	-3.7	6.2	5.8	7.3
50% S&P/TSX Composite Index + 25% S&P 500 (CAD) + 25% S&P EPAC LargeMidCap (CAD)	-8.2	6.9	7.2	10.1
Canadian Focused Equity	-9.3	5.8	5.0	6.8

Source: S&P Dow Jones Indices LLC, Funddata. Data for periods ending Dec. 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>1-Year</b>			
Canadian Equity	-8.4	-5.7	-3.0
Canadian Focused Equity	-12.4	-9.3	-5.0
Canadian Dividend & Income Equity	-5.7	-3.3	-2.1
Canadian Small-/Mid-Cap Equity	-16.3	-12.0	-7.2
U.S. Equity	-20.5	-14.6	-6.4
International Equity	-16.7	-14.6	-8.3
Global Equity	-18.0	-12.6	-9.0
<b>3-Year</b>			
Canadian Equity	4.4	6.0	7.2
Canadian Focused Equity	4.8	5.9	7.3
Canadian Dividend & Income Equity	4.0	5.7	6.8
Canadian Small-/Mid-Cap Equity	5.2	7.8	8.3
U.S. Equity	4.1	5.8	7.5
International Equity	-0.8	0.3	1.6
Global Equity	2.3	3.8	5.2
<b>5-Year</b>			
Canadian Equity	3.5	5.1	5.6
Canadian Focused Equity	4.0	5.2	6.5
Canadian Dividend & Income Equity	4.2	5.1	6.1
Canadian Small-/Mid-Cap Equity	2.2	4.8	5.4
U.S. Equity	5.8	7.3	9.0
International Equity	0.3	1.0	2.6
Global Equity	3.4	4.5	6.0
<b>10-Year</b>			
Canadian Equity	5.6	6.5	7.8
Canadian Focused Equity	6.2	7.1	8.7
Canadian Dividend & Income Equity	5.3	7.1	7.9
Canadian Small-/Mid-Cap Equity	4.1	6.6	8.1
U.S. Equity	11.0	12.1	13.7
International Equity	5.5	6.2	7.2
Global Equity	6.8	8.0	10.0

Source: S&P Dow Jones Indices LLC, Fundata. Data for periods ending Dec. 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

S&P Dow Jones Indices obtains a custom feed of monthly return data from Fundata Canada for all equity mutual funds in its database. The feed includes data on funds that have merged or liquidated. Fundata applies the following filters to the file S&P DJI receives.

- All non-equity funds are excluded
- All pooled funds, segregated funds or other specialized categories that do not qualify as retail mutual funds are excluded
- Multiple occurrences of the same fund's portfolio reporting in two or more currencies are also excluded, as S&P DJI only uses the Canadian dollar version
- Only a single share class is included

The file contains the following data fields on a monthly basis.

- Fund name
- Fund identifier
- Month and year
- Fund returns for the month, after management and other costs, including distributions
- Fund assets under management in that month
- Fund categorization in that month
- Management type (i.e., whether the fund is indexed or actively managed)

S&P DJI then excludes index funds, limiting the data to funds that are actively managed.

## Fund Categories

S&P Dow Jones Indices chooses funds that, at any point in the previous 120 months, were classified in at least one of the following seven Canadian Investment Funds Standards Committee (CIFSC)<sup>4</sup> categories.

- Canadian Equity
- Canadian Small-/Mid-Cap Equity
- Canadian Dividend & Income Equity
- U.S. Equity
- International Equity

<sup>4</sup> Please refer to [www.cifsc.org](http://www.cifsc.org) for additional information regarding CIFSC and its categories.

- Global Equity
- Canadian Focused Equity

The categories reviewed in this report represent the major areas of interest for Canadian market participants. The CIFSC governs the categorization of Canadian mutual funds.

## Benchmarks

The chosen benchmarks are shown in Exhibit 7. All index returns are total returns (i.e., include dividend reinvestment) in Canadian dollars. 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

SPIVA Category	Benchmark Index
Canadian Equity	S&P/TSX Composite Index
U.S. Equity	S&P 500 (CAD)
International Equity	S&P EPAC LargeMidCap (CAD)
Global Equity	S&P Developed LargeMidCap (CAD)
Canadian Small-/Mid-Cap Equity	S&P/TSX Completion Index
Canadian Dividend & Income Equity	S&P/TSX Canadian Dividend Aristocrats Index
Canadian Focused Equity	50% S&P/TSX Composite Index + 25% S&P 500 (CAD) + 25% S&P EPAC LargeMidCap (CAD)

Source: S&P Dow Jones Indices LLC, Fundata. 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 500

Widely regarded as the best single gauge of the U.S. equities market, this index includes a representative sample of 500 leading companies in leading industries of the U.S. economy and provides over 80% market coverage of the U.S. equities market.

### S&P/TSX Composite Index

This is the headline index and the principal broad market measure for Canadian equity markets. The S&P/TSX Composite Index is the basis for numerous subindices, which break down the Canadian market by different factors, including size, liquidity and Global Industry Classification Standard (GICS®).

### S&P/TSX Completion Index

This is a modular component of the S&P/TSX Composite Index. This index comprises constituents of the S&P/TSX Composite Index that are not in the S&P/TSX 60.

### S&P/TSX Canadian Dividend Aristocrats Index

This index is designed to measure the performance of Canadian securities that have followed a managed dividends policy of consistently increasing dividends every year for at least five years.



## S&P EPAC LargeMidCap

This index is a float-weighted, rules-based benchmark that is designed to measure the universe of securities in the developed markets, excluding North America. The S&P EPAC LargeMidCap constitutes the top 85% of the available market capitalization of the [S&P EPAC BMI](#). The S&P EPAC LargeMidCap was previously named the S&P/Citigroup EPAC PMI Index and represented 80% of the available market cap. On Oct. 1, 2008, the new size divisions and name change took effect.

## S&P Developed LargeMidCap

This index is a float-weighted, rules-based benchmark that is designed to measure securities in the developed markets. The [S&P Developed LargeMidCap](#) constitutes the top 85% of the available market cap of the S&P Developed BMI. The S&P Developed LargeMidCap was previously named the S&P/Citigroup World PMI Index and represented 80% of the available market capitalization. On Oct. 1, 2008, the new size divisions and name change took effect.

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