

SPIVA[®] Canada Scorecard

Contributors

Aye M. Soe, CFA
 Managing Director
 Global Research & Design
aye.soe@spglobal.com

Hamish Preston
 Associate Director
 Global Research & Design
hamish.preston@spglobal.com

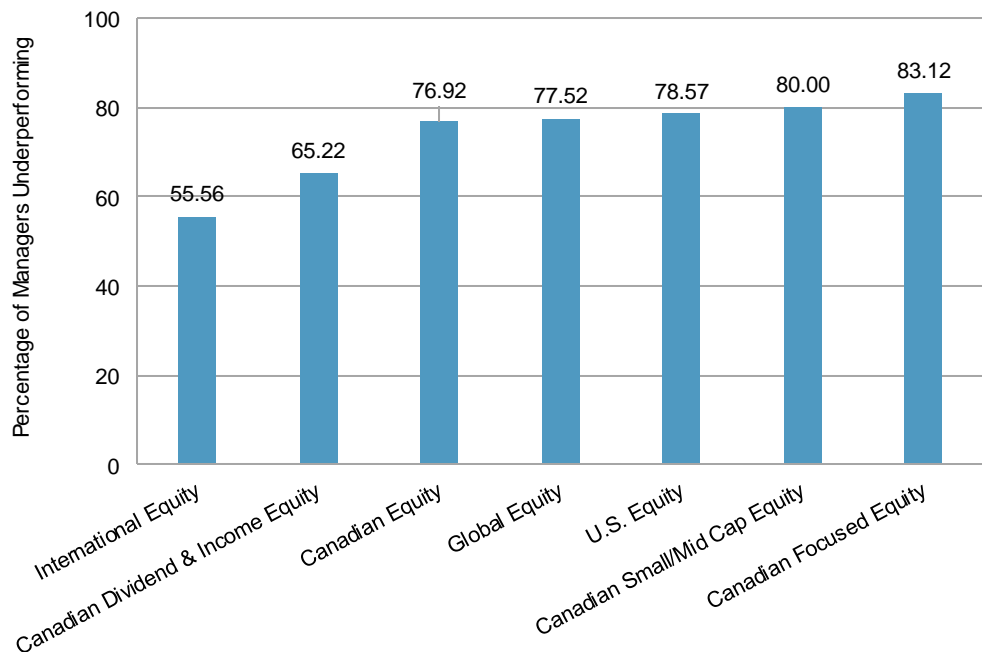
Berlinda Liu, CFA
 Director
 Global Research & Design
berlinda.liu@spglobal.com

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SUMMARY

- 2018 was a topsy-turvy year for global equity markets, and Canadian equities were no exception. After trade wars weighed on sentiment, sustained low unemployment and strong job creation initially drove a Canadian recovery. But YTD gains were wiped off many Canadian equity benchmarks in Q4 2018; renewed pessimism over the economy and declining oil prices provided headwinds.
- The [S&P/TSX Composite](#) (-8.89%) was led lower by smaller-cap names as the [S&P/TSX Completion](#) (-12.85%) declined. Both indices finished 2018 with their worst calendar-year performance since 2008. Canada's largest companies fared slightly better, but the [S&P/TSX 60](#) (-7.58%) still fell.
- Amid the market gyrations, **more than 75% of Canadian active equity managers underperformed their benchmarks across all categories in 2018**. This highlights the fact that heightened market volatility does not necessarily lead to outperformance by active managers.

Exhibit 1: The Majority of Active Managers Underperformed in All Categories in 2018



Source: S&P Dow Jones Indices LLC. Data as of Dec. 31, 2018. Past performance is no guarantee of future results. Chart is provided for illustrative purposes.

- **Canadian Small-/Mid-Cap Equity fund managers found it particularly difficult to navigate 2018's market turbulence**, as 80% of all small- and mid-cap managers lagged the S&P/TSX Completion's plunge.
- **Overall, roughly three in four Canadian Equity managers underperformed the S&P/TSX Composite**; the potential to select among Canadian large-cap stocks did not significantly improve relative performance figures.
- **2018 was a tough year for Canadian Dividend & Income Equity funds.** After the majority outperformed in 2017, 65.22% lagged the [S&P/TSX Canadian Dividend Aristocrats®](#) (-8.29%) in 2018. With long-term Canadian yields remaining below their long-term average, income-seeking investors may want to remember the long-term underperformance of active equity income funds as they formulate strategic asset allocation.
- **For the second consecutive year, Canadian Focused Equity funds posted the worst relative performance**; 83.12% lagged the blended benchmark, which comprises the S&P/TSX Composite (50%), the [S&P 500®](#) (25%), and the S&P EPAC LargeMidCap (25%).
- **International Equity funds provided the best relative performance over the 12-month period ending Dec. 31, 2018**; 44.44% of fund managers beat the S&P EPAC LargeMidCap, 18 percentage points higher than in 2017. However, the long-term picture remained largely unchanged; 95.24% lagged over the 10-year horizon.
- **U.S. equities continued to be a challenging asset class for managers to outperform**; 78.57% of them underperformed the S&P 500 (CAD)'s 4.23% gain. A depreciation in the Canadian dollar helped the benchmark to overcome declines in U.S. equities.
- **Larger funds appeared to have greater difficulty beating their benchmarks**; the asset-weighted returns were typically lower than the corresponding equal-weight returns. Canadian Dividend & Income Equity and U.S. Equity funds offered the exceptions across all time horizons.
- **The longer-term results continued to show that active equity funds found it difficult to beat their respective benchmarks.** More than 9 in every 10 funds underperformed their respective benchmark over the 10-year period, and a similar story was evident over the five-year horizon.
- **Fund survivorship (or the lack of) played a large role in the long-term figures**; more than half of all funds in the eligible universe 10 years ago have since been liquidated or merged.

INTRODUCTION

The SPIVA Canada Scorecard provides a semiannual update on the active versus index debate in Canada. The SPIVA Canada Scorecard shows the performance of actively managed Canadian mutual funds compared with S&P Dow Jones Indices in their respective categories. Although many such reports are available, the SPIVA Canada Scorecard is unique in that it offers the following characteristics.

- **Survivorship Bias Correction:** Many funds might be liquidated or merged during a period of study. However, for a market participant making a decision at the beginning of the period, these funds are part of the opportunity set. Unlike other commonly available comparison reports, SPIVA Canada Scorecards remove this survivorship bias.
- **Apples-to-Apples Comparison:** A fund's returns are often compared with a popular benchmark regardless of its investment category. SPIVA Canada Scorecards make 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 a CAD 10 billion fund affecting the average in the same manner as the returns of a CAD 10 million fund. The SPIVA Canada Scorecard shows both equal- and asset-weighted averages. Equal-weighted returns are a measure of average fund performance. Asset-weighted returns are a measure of the performance of the average invested Canadian dollar.

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 strategies. 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 Canada Scorecard simply provides quarterly statistics according to the SPIVA methodology and a brief analysis of those statistics. Further, S&P Dow Jones Indices does advise that anyone reading this report also read the SPIVA methodology at the end of the report in order to understand how the data was derived.

SPIVA METHODOLOGY

Data

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

- S&P Dow Jones Indices chooses funds that are actively managed, excluding index funds.

Fund Categories

S&P Dow Jones Indices chooses funds that have, at any point in the previous 120 months, been classified in at least one of the following seven Canadian Investment Funds Standards Committee (CIFSC)¹ categories.

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

The categories reviewed in this report represent the major areas of interest for Canadian market participants.

¹ Refer to www.cifsc.org for additional information regarding CIFSC and its categories.

The CIFSC governs the categorization of Canadian mutual funds. In August 2007, the CIFSC's fund categorization structure changed, posing some challenges for S&P Dow Jones Indices' reports. For example, the Canadian Equity (Pure) category was eliminated; the funds in that category were folded into the revised definition of Canadian Equity, which now encompasses funds primarily invested in Canadian securities. Also, the Canadian Small-Cap Equity category was expanded to the Canadian Small-/Mid-Cap Equity category. According to the CIFSC, "for each small-/mid-cap equity category there is a market capitalization threshold that determines whether a fund has a small enough market cap to meet that category. The threshold is determined by comparing the geometric mean market cap of a fund to that same measure for an appropriate benchmark index."² In this case, the benchmark index the CIFSC uses for the Canadian Small-/Mid-Cap Equity category is the S&P/TSX Completion.

In terms of the Canadian Equity category change, the Fundata file helps achieve comparability across history by backfilling the classifications before the classification system restructuring. S&P Dow Jones Indices realizes that this introduces a backward-looking bias, but fortunately the benchmark for both the Canadian Equity and Canadian Equity (Pure) categories is the S&P/TSX Composite.

The Canadian Small-Cap Equity category restructuring presented additional challenges. The backfilling of classifications resulted in small-cap funds being reclassified historically as small-cap or mid-cap equities, and these same funds were benchmarked to the S&P/TSX Completion rather than the [S&P/TSX SmallCap Index](#).

In addition, as a result of the elimination of the Canadian Small-Cap Equity category, S&P Dow Jones Indices can no longer compare small caps with the S&P/TSX SmallCap Index. If this category is reinstated, it will be added to our reports.

The Income Trust Equity category is no longer relevant for the Canadian investable universe, so it has been excluded from this report.

Benchmarks

The S&P/TSX Canadian Indices were subject to a number of additional changes in 2007. Following a consultation process with the indexing community, the S&P/TSX SmallCap Index's methodology was adjusted to create a more appropriate Canadian benchmark of small-cap equities. The S&P/TSX SmallCap Index is now separate from the S&P/TSX Composite Index Series. In addition, the S&P/TSX MidCap was renamed the S&P/TSX Completion and its methodology was revised. It includes the constituents of the S&P/TSX Composite that are not in the S&P/TSX 60. In 2011, the methodology for the S&P/TSX Canadian Dividend Aristocrats was revised to allow for one year of static dividend payments.

The benchmark indices used in the SPIVA Canada Scorecard are shown in Exhibit 1. All index returns are total returns (i.e., include dividend reinvestment) in Canadian dollars. **There has been no deduction of index returns to account for fund investment expenses.** Active fund returns are after expenses, but they do not include front- or back-end loads or other commissions that market participants might pay.

² Canadian Investment Funds Standards Committee—2007 Retail Investment Fund Category Definitions.

Exhibit 1: Fund Categories and Their Benchmarks

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

Source: S&P Dow Jones Indices LLC. Benchmarks shown are total return indices. Table is provided for illustrative purposes.

Previous SPIVA Canada Scorecards included a report (Report A2) that compared the Canadian Equity Fund category with a blended index of the S&P/TSX Composite (70%) and the S&P 500 (30%). As a result of the foreign content limit removal in 2005, increasing numbers of Canadian market participants started redeploying funds outside of Canada to gain international equity exposure. Funds in the Canadian Focused Equity category include non-Canadian equity exposure. This category is compared to a monthly returning series comprising the S&P/TSX Composite (50%), the S&P 500 (25%), and the S&P EPAC LargeMidCap (25%).

For additional information on any of the benchmark indices, please see the glossary at the end of this report, or visit our website at www.spindices.com.

REPORTS

Report 1: Percent of Active Funds Underperforming Index

This report shows the percentage of funds that have underperformed their comparable benchmarks over 1-, 3-, 5-, and 10-year periods. The comparison starts with the funds in a category at the beginning of the period. At the end of the period, the report shows what percentage of funds have underperformed their benchmark. The fund's category at the end of the period is not considered because the category at the beginning of the holding period is of interest.

Most reports that purport to show the percent of active funds underperforming an index work with the funds in a category at the end of the period and then compare their historical returns to the benchmark. The SPIVA Canada Scorecard corrects for this survivorship bias by starting with the funds at the beginning of the period.

Report 1: Percentage of Funds Underperforming the Index					
FUND CATEGORY	COMPARISON INDEX	1-YEAR (%)	3-YEAR (%)	5-YEAR (%)	10-YEAR (%)
Canadian Equity	S&P/TSX Composite	76.92	94.37	90.28	91.01
Canadian Small-/Mid-Cap Equity	S&P/TSX Completion	80.00	95.24	80.49	76.36
Canadian Dividend & Income Equity	S&P/TSX Canadian Dividend Aristocrats	65.22	79.59	71.74	100.00
U.S. Equity	S&P 500 (CAD)	78.57	91.92	96.00	97.41
International Equity	S&P EPAC LargeMidCap (CAD)	55.56	85.96	91.53	95.24
Global Equity	S&P Developed LargeMidCap (CAD)	77.52	93.24	95.07	93.83
Canadian Focused Equity	50% S&P/TSX Composite + 25% S&P 500 (CAD) + 25% S&P EPAC LargeMidCap	83.12	90.24	96.55	95.05

Source: S&P Dow Jones Indices LLC, Funddata. Data as of Dec. 31, 2018. CIFSC categorizations are used. Financial information provided by Fundata Canada Inc. Past performance is no guarantee of future results. Table is provided for illustrative purposes.

Report 2: Survivorship

This report shows the number of funds that existed in a particular category at the beginning of the 1-, 3-, 5-, and 10-year periods, and how many survived at the end of those periods. The fund's category at the end of the period is not considered because the category at the beginning of the holding period is of interest.

Report 2: Survivorship		
FUND CATEGORY	NO. OF FUNDS AT START	SURVIVORSHIP (%)
1-YEAR		
Canadian Equity	52	100.00
Canadian Small-/Mid-Cap Equity	35	97.14
Canadian Dividend & Income Equity	46	93.48
U.S. Equity	84	95.24
International Equity	45	95.56
Global Equity	129	96.90
Canadian Focused Equity	77	88.31
3-YEAR		
Canadian Equity	71	66.20
Canadian Small-/Mid-Cap Equity	42	76.19
Canadian Dividend & Income Equity	49	79.59
U.S. Equity	99	75.76
International Equity	57	59.65
Global Equity	148	73.65
Canadian Focused Equity	82	79.27
5-YEAR		
Canadian Equity	72	55.56
Canadian Small-/Mid-Cap Equity	41	68.29
Canadian Dividend & Income Equity	46	65.22
U.S. Equity	100	69.00
International Equity	59	57.63
Global Equity	142	66.90
Canadian Focused Equity	87	63.22
10-YEAR		
Canadian Equity	89	37.08
Canadian Small-/Mid-Cap Equity	55	49.09
Canadian Dividend & Income Equity	64	45.31
U.S. Equity	116	52.59
International Equity	63	49.21
Global Equity	162	51.23
Canadian Focused Equity	101	47.52

Source: S&P Dow Jones Indices LLC, Funddata. Data as of Dec. 31, 2018. CIFSC categorizations are used. Financial information provided by Fundata Canada Inc. Past performance is no guarantee of future results. Table is provided for illustrative purposes.

Report 3: Equal-Weighted Fund Returns

This report shows the equal-weighted average returns of funds in a particular category for the 1-, 3-, 5-, and 10-year periods. For every month in the time period, S&P Dow Jones Indices takes all funds from a particular category and calculates the simple average return. The returns from all months in the period are then compounded. These returns are compared with those of the benchmark. The funds used in the averaging process in one month might not be the same as those used in the next month because some funds may have been merged or liquidated, new funds may have been formed, and some may have had their categories changed.

This report essentially shows the equal-weighted performance of actively managed funds in a category over the time period, with a monthly level of granularity for determining the eligible population in that category.

Most reports that purport to show average active fund performance work with the funds in a category at the end of the period and then take the average of their historical returns. The SPIVA Canada Scorecard presents a more accurate picture of active fund performance in a category by calculating the average performance of the active funds in existence for a given category each month.

Report 3: Equal-Weighted Fund Returns				
CATEGORY	1-YEAR (ANNUALIZED, %)	3-YEAR (ANNUALIZED, %)	5-YEAR (ANNUALIZED, %)	10-YEAR (ANNUALIZED, %)
Canadian Equity	-7.02	4.91	3.03	6.77
S&P/TSX Composite	-8.89	6.37	4.06	7.92
Canadian Small-/Mid-Cap Equity	-13.60	1.16	-0.11	8.62
S&P/TSX Completion	-12.85	3.97	1.35	8.35
Canadian Dividend & Income Equity	-7.95	3.55	2.31	7.14
S&P/TSX Canadian Dividend Aristocrats	-8.29	5.76	3.74	11.39
U.S. Equity	-0.16	5.48	9.37	11.21
S&P 500 (CAD)	4.23	8.64	14.08	14.27
International Equity	-3.14	2.31	4.77	6.55
S&P EPAC LargeMidCap (CAD)	-5.60	3.14	6.40	8.16
Global Equity	-2.66	3.48	6.10	8.51
S&P Developed LargeMidCap (CAD)	-0.16	6.35	10.51	11.45
Canadian Focused Equity	-5.39	4.15	3.84	7.24
50% S&P/TSX Composite + 25% S&P 500 (CAD) + 25% S&P EPAC LargeMidCap	-4.83	6.25	7.23	9.71

Source: S&P Dow Jones Indices LLC, Fundata. Data as of Dec. 31, 2018. CIFSC categorizations are used. Financial information provided by Fundata Canada Inc. Past performance is no guarantee of future results. Table is provided for illustrative purposes.

Report 4: Asset-Weighted Fund Returns

This report shows the asset-weighted average returns of funds in a particular category for the 1-, 3-, 5-, and 10-year periods. For every month, S&P Dow Jones Indices takes all funds in a category and calculates the average return by weighing each fund's return by its month-end assets. The returns from all the months in the period are then compounded. These returns are compared with those of the benchmark. The funds used in the averaging process in one month might not be the same as those used the next month because some funds may have been merged or liquidated, new funds may have been formed, and some might have had their categories changed.

This report essentially shows asset-weighted performance of actively managed funds in a category over the time periods studied, with the level of granularity for determining the eligible population in that category being monthly.

Most fund reports do not show asset-weighted returns. The SPIVA Canada Scorecard presents an accurate picture of asset-weighted, active fund performance in a category by calculating the asset-weighted average performance of the active funds in existence in a category each month.

Report 4: Asset-Weighted Fund Returns				
CATEGORY	1-YEAR (ANNUALIZED, %)	3-YEAR (ANNUALIZED, %)	5-YEAR (ANNUALIZED, %)	10-YEAR (ANNUALIZED, %)
Canadian Equity	-10.06	4.47	3.01	6.73
S&P/TSX Composite	-8.89	6.37	4.06	7.92
Canadian Small-/Mid-Cap Equity	-16.39	-0.01	-0.62	8.03
S&P/TSX Completion	-12.85	3.97	1.35	8.35
Canadian Dividend & Income Equity	-7.87	5.63	4.17	8.00
S&P/TSX Canadian Dividend Aristocrats	-8.29	5.76	3.74	11.39
U.S. Equity	1.83	6.79	9.92	11.25
S&P 500 (CAD)	4.23	8.64	14.08	14.27
International Equity	-8.82	0.32	3.76	5.59
S&P EPAC LargeMidCap (CAD)	-5.60	3.14	6.40	8.16
Global Equity	-4.74	2.98	6.17	8.36
S&P Developed LargeMidCap (CAD)	-0.16	6.35	10.51	11.45
Canadian Focused Equity	-9.22	2.16	2.60	6.38
50% S&P/TSX Composite + 25% S&P 500 (CAD) + 25% S&P EPAC LargeMidCap	-4.83	6.25	7.23	9.71

Source: S&P Dow Jones Indices LLC, Funddata. Data as of Dec. 31, 2018. CIFSC categorizations are used. Financial information provided by Funddata Canada Inc. Past performance is no guarantee of future results. Table is provided for illustrative purposes.

APPENDIX: GLOSSARY

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 Canadian Dividend Aristocrats

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 captures 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 global [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 captures securities in the developed markets. The [S&P Developed LargeMidCap](#) constitutes the top 85% of the available market cap of the global [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.

S&P/TSX Completion

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

S&P/TSX Composite

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

For more information on SPIVA Scorecards, please [click here](#).

S&P DJI RESEARCH CONTRIBUTORS		
Sunjiv Mainie, CFA, CQF	Global Head	sunjiv.mainie@spglobal.com
Jake Vukelic	Business Manager	jake.vukelic@spglobal.com
GLOBAL RESEARCH & DESIGN		
AMERICAS		
Aye M. Soe, CFA	Americas Head	aye.soe@spglobal.com
Cristopher Anguiano, FRM	Analyst	cristopher.anguiano@spglobal.com
Phillip Brzenk, CFA	Senior Director	phillip.brzenk@spglobal.com
Smita Chirputkar	Director	smita.chirputkar@spglobal.com
Rachel Du	Senior Analyst	rachel.du@spglobal.com
Bill Hao	Director	wenli.hao@spglobal.com
Qing Li	Director	qing.li@spglobal.com
Berlinda Liu, CFA	Director	berlinda.liu@spglobal.com
Hamish Preston	Associate Director	hamish.preston@spglobal.com
Maria Sanchez	Associate Director	maria.sanchez@spglobal.com
Kunal Sharma	Senior Analyst	kunal.sharma@spglobal.com
Kelly Tang, CFA	Director	kelly.tang@spglobal.com
Hong Xie, CFA	Senior Director	hong.xie@spglobal.com
APAC		
Priscilla Luk	APAC Head	priscilla.luk@spglobal.com
Arpit Gupta	Senior Analyst	arpit.gupta1@spglobal.com
Akash Jain	Associate Director	akash.jain@spglobal.com
Anurag Kumar	Senior Analyst	anurag.kumar@spglobal.com
Xiaoya Qu	Senior Analyst	xiaoya.qu@spglobal.com
Yan Sun	Senior Analyst	yan.sun@spglobal.com
Liyu Zeng, CFA	Director	liyu.zeng@spglobal.com
EMEA		
Sunjiv Mainie, CFA, CQF	EMEA Head	sunjiv.mainie@spglobal.com
Leonardo Cabrer, PhD	Senior Analyst	leonardo.cabrer@spglobal.com
Andrew Cairns	Senior Analyst	andrew.cairns@spglobal.com
Andrew Innes	Associate Director	andrew.innes@spglobal.com
Jingwen Shi	Analyst	jingwen.shi@spglobal.com
INDEX INVESTMENT STRATEGY		
Craig J. Lazzara, CFA	Global Head	craig.lazzara@spglobal.com
Chris Bennett, CFA	Director	chris.bennett@spglobal.com
Fei Mei Chan	Director	feimei.chan@spglobal.com
Tim Edwards, PhD	Managing Director	tim.edwards@spglobal.com
Anu R. Ganti, CFA	Director	anu.ganti@spglobal.com
Sherifa Issifu	Analyst	sherifa.issifu@spglobal.com
Howard Silverblatt	Senior Index Analyst	howard.silverblatt@spglobal.com

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