

## SPIVA<sup>®</sup> Europe Scorecard

### Contributors

#### Andrew Innes

EMEA Head  
Global Research & Design  
[andrew.innes@spglobal.com](mailto:andrew.innes@spglobal.com)

#### Andrew Cairns

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

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

S&P Dow Jones Indices has been the de facto scorekeeper of the ongoing active versus passive debate since the first publication of the S&P Indices Versus Active Funds (SPIVA) U.S. Scorecard in 2002. The SPIVA Europe Scorecard measures the performance of actively managed European equity funds denominated in euro (EUR), British pound sterling (GBP), and other European local currencies against the performance of their respective S&P DJI benchmark indices over 1-, 3-, 5-, and 10-year investment horizons.

### MID-YEAR 2019 HIGHLIGHTS

- Over the one-year period ending June 30, 2019, 90% of active pan-European equity funds underperformed their passive benchmarks.
  - The group's asset-weighted return for the period was negative, while the [S&P Europe 350<sup>®</sup>](#) benchmark was up 5.3%.
- Emerging market equity funds domiciled in Europe bucked the trend over the one-year period compared with other active fund categories, with 52% of GBP- and 42% of EUR-denominated funds outperforming their benchmark.
  - Despite their notable performance over the one-year period, 87% of GBP- and 95% of EUR-denominated emerging market equity funds underperformed their benchmark over the 10-year period ending June 30, 2019.
  - Additionally, on an asset-weighted basis, the EUR-denominated emerging market equity fund category underperformed its benchmark by over 2% annually over the same 10-year period.
- Markets continued to contend with global trade tensions that have contributed to an economic slowdown in Germany, Europe's largest exporter. German equity was the only euro-denominated fund category in which the benchmark, the S&P Germany BMI, experienced negative returns over the one-year period, at -1.2%.
  - Active funds investing in Germany were largely unable to outmaneuver the downtrend and delivered a return of -4.4% on an asset-weighted basis over the same period.

- The steep declines seen across equity markets in late 2018 were accompanied by near-ubiquitous underperformance across the fund categories' asset-weighted returns. As markets improved in the first half of 2019, active managers were generally not able to make up for lost ground. Among the 23 categories of active funds domiciled in Europe, all but three underperformed over the one-year period ending June 30, 2019.
  - Most notably, active funds over the one-year period in:
    - French equities were down 2.6% (8.8% below the S&P France BMI); and
    - Spanish equities were down 7.1% (8.0% below the S&P Spain BMI).
- It has been over three years since the Brexit referendum was held on June 23, 2016. In the three-year period from mid 2016, UK small-cap equity funds outperformed the [S&P United Kingdom SmallCap](#) by 3.4% per year on an asset-weighted basis. The past year, however, marked a stark reversal, with the same category underperforming the benchmark by 3.7% on the same basis.
  - Over the three-year period, 70% of UK small-cap funds outperformed their benchmark, which was the highest rate among all fund categories. Other active UK equity categories also fared well over the period.
  - Over the more recent one-year period, fund managers were largely unable to capitalize on the looming Brexit uncertainty, with 80% of all UK-focused funds underperforming their benchmarks.
- From the perspective of a European investor, U.S. and global equity markets significantly outperformed the local markets. A strong U.S. dollar persisted over the one-year period and contributed to the [S&P 500®](#) and [S&P Global 1200](#) increasing 13.2% and 9.9% in euro terms, respectively.
  - Of those active funds domiciled in Europe, fewer than 16% covering U.S. equities or 13% covering global equities were able to outperform their benchmark over the one-year period.
  - These figures declined to fewer than 3% and 2%, respectively, over the 10-year period.

## UNIQUE SCORECARD FOR THE ACTIVE VERSUS PASSIVE DEBATE

Since its first publication 17 years ago, the SPIVA Scorecard has served as the de facto scorekeeper of the active versus passive debate. For more than a decade, we have heard passionate arguments from believers in both camps when headline numbers have deviated from their beliefs.

Over the years, we have built on more than a decade of experience publishing the report by expanding coverage into Canada, India, Japan, Australia, Latin America, and South Africa. While the report will not end the debate on active versus passive investing, we hope to make a meaningful contribution by examining market segments in which one strategy might work better than the other.

In 2015, the range of fund categories covered in the SPIVA Europe Scorecard was expanded to include domestic equity funds from Italy, the Netherlands, Poland, Spain, Switzerland, and the Nordic region, with specific data for Denmark and Sweden.

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 less frequently discussed, but are often more fascinating. These data sets are rooted in the fundamental principles of the SPIVA Scorecard that regular readers will be familiar with, including the following.

- **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.
- **Asset-Weighted Returns:** Average returns for a fund group are often calculated using only equal weighting, which means the returns of a EUR 10 billion fund affect the average in the same manner as the returns of a EUR 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

<b>Report 1: Percentage of European Equity Funds Outperformed by Benchmarks</b>					
<b>FUND CATEGORY</b>	<b>COMPARISON INDEX</b>	<b>1-YEAR</b>	<b>3-YEAR</b>	<b>5-YEAR</b>	<b>10-YEAR</b>
<b>EURO-DENOMINATED FUNDS (EUR)</b>					
Europe Equity	S&P Europe 350	90.23	82.63	77.53	88.15
Eurozone Equity	S&P Eurozone BMI	72.61	91.21	88.24	91.99
Nordic Equity	S&P Nordic BMI	60.87	85.19	79.31	96.15
Global Equity	S&P Global 1200	87.19	90.61	94.93	98.64
Emerging Markets Equity	S&P/IFCI Composite	58.28	82.59	91.28	95.09
U.S. Equity	S&P 500	84.28	86.18	91.91	97.67
France Equity	S&P France BMI	96.38	99.10	90.31	89.17
Germany Equity	S&P Germany BMI	83.16	78.26	79.17	85.19
Italy Equity	S&P Italy BMI	81.03	82.35	54.00	69.86
Spain Equity	S&P Spain BMI	100.00	81.61	70.51	80.91
Netherlands Equity	S&P Netherlands BMI	100.00	100.00	90.00	100.00
<b>POUND STERLING-DENOMINATED FUNDS (GBP)</b>					
Europe Equity	S&P Europe 350	87.62	73.79	65.59	79.55
Europe Ex-UK Equity	S&P Europe Ex-UK BMI	84.78	78.29	76.03	82.48
UK Equity	S&P United Kingdom BMI	81.49	52.79	63.86	74.33
UK Large-/Mid-Cap Equity	S&P United Kingdom LargeMidCap	83.83	63.10	66.29	74.33
UK Small-Cap Equity	S&P United Kingdom SmallCap	79.75	30.14	56.41	74.42
Global Equity	S&P Global 1200	77.14	78.14	86.24	93.97
Emerging Markets Equity	S&P/IFCI Composite	48.11	71.08	83.33	86.96
U.S. Equity	S&P 500	78.17	71.04	88.06	94.58
<b>FUNDS DENOMINATED IN OTHER EUROPEAN LOCAL CURRENCIES</b>					
Denmark Equity	S&P Denmark BMI	91.67	30.30	39.39	88.24
Poland Equity	S&P Poland BMI	97.78	93.33	84.78	92.68
Switzerland Equity	S&P Switzerland BMI	92.50	72.16	66.09	75.74
Sweden Equity	S&P Sweden BMI	67.57	64.86	64.55	79.71

Source: S&P Dow Jones Indices LLC, Morningstar. Data for periods ending June 30, 2019. 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.

<b>Report 2: Survivorship Consistency of European Equity Funds</b>		
<b>FUND CATEGORY</b>	<b>NO. OF FUNDS AT START</b>	<b>SURVIVORSHIP (%)</b>
<b>1-YEAR (EUR)</b>		
Europe Equity	1119	95.08
Eurozone Equity	570	97.72
Nordic Equity	23	86.96
Global Equity	1340	95.00
Emerging Markets Equity	349	94.84
U.S. Equity	406	92.12
France Equity	221	96.38
Germany Equity	96	94.79
Italy Equity	58	96.55
Spain Equity	88	98.86
Netherlands Equity	6	83.33
<b>1-YEAR (GBP)</b>		
Europe Equity	114	91.23
Europe Ex-UK Equity	145	95.86
UK Equity	371	94.34
UK Large-/Mid-Cap Equity	173	91.91
UK Small-Cap Equity	80	98.75
Global Equity	501	95.01
Emerging Markets Equity	190	94.21
U.S. Equity	241	95.02
<b>1-YEAR (OTHER EUROPEAN LOCAL CURRENCIES)</b>		
Denmark Equity	36	97.22
Poland Equity	63	93.65
Switzerland Equity	206	96.12
Sweden Equity	111	85.59
<b>3-YEAR (EUR)</b>		
Europe Equity	1076	85.41
Eurozone Equity	575	89.39
Nordic Equity	28	71.43
Global Equity	1244	83.92
Emerging Markets Equity	328	86.59
U.S. Equity	382	80.63
France Equity	224	87.95
Germany Equity	94	87.23
Italy Equity	51	86.27
Spain Equity	87	90.80
Netherlands Equity	8	62.50

Source: S&P Dow Jones Indices LLC, Morningstar. Data for periods ending June 30, 2019. Past performance is no guarantee of future results. Table is provided for illustrative purposes.

<b>Report 2: Survivorship Consistency of European Equity Funds (cont.)</b>		
<b>FUND CATEGORY</b>	<b>NO. OF FUNDS AT START</b>	<b>SURVIVORSHIP (%)</b>
<b>3-YEAR (GBP)</b>		
Europe Equity	109	79.82
Europe Ex-UK Equity	135	86.67
UK Equity	369	85.09
UK Large-/Mid-Cap Equity	175	80.00
UK Small-Cap Equity	75	93.33
Global Equity	423	87.94
Emerging Markets Equity	173	85.55
U.S. Equity	230	81.74
<b>3-YEAR (OTHER EUROPEAN LOCAL CURRENCIES)</b>		
Denmark Equity	33	93.94
Poland Equity	63	93.65
Switzerland Equity	180	88.33
Sweden Equity	112	75.00
<b>5-YEAR (EUR)</b>		
Europe Equity	1051	76.12
Eurozone Equity	588	79.59
Nordic Equity	31	48.39
Global Equity	1184	72.55
Emerging Markets Equity	336	72.32
U.S. Equity	364	73.35
France Equity	227	81.50
Germany Equity	98	77.55
Italy Equity	50	78.00
Spain Equity	80	83.75
Netherlands Equity	10	50.00
<b>5-YEAR (GBP)</b>		
Europe Equity	98	71.43
Europe Ex-UK Equity	128	75.78
UK Equity	378	75.13
UK Large-/Mid-Cap Equity	182	70.33
UK Small-Cap Equity	79	79.75
Global Equity	387	74.16
Emerging Markets Equity	162	75.93
U.S. Equity	212	71.23
<b>5-YEAR (OTHER EUROPEAN LOCAL CURRENCIES)</b>		
Denmark Equity	33	90.91
Poland Equity	64	92.19
Switzerland Equity	177	81.36
Sweden Equity	112	67.86

Source: S&P Dow Jones Indices LLC, Morningstar. Data for periods ending June 30, 2019. Past performance is no guarantee of future results. Table is provided for illustrative purposes.

<b>Report 2: Survivorship Consistency of European Equity Funds (cont.)</b>		
<b>FUND CATEGORY</b>	<b>NO. OF FUNDS AT START</b>	<b>SURVIVORSHIP (%)</b>
<b>10-YEAR (EUR)</b>		
Europe Equity	1322	47.88
Eurozone Equity	762	50.66
Nordic Equity	28	46.43
Global Equity	1374	45.85
Emerging Markets Equity	239	59.00
U.S. Equity	438	45.21
France Equity	279	54.48
Germany Equity	112	57.14
Italy Equity	74	45.95
Spain Equity	116	50.86
Netherlands Equity	27	18.52
<b>10-YEAR (GBP)</b>		
Europe Equity	93	36.56
Europe Ex-UK Equity	146	55.48
UK Equity	509	44.20
UK Large-/Mid-Cap Equity	277	37.18
UK Small-Cap Equity	90	54.44
Global Equity	348	46.84
Emerging Markets Equity	77	62.34
U.S. Equity	181	43.65
<b>10-YEAR (OTHER EUROPEAN LOCAL CURRENCIES)</b>		
Denmark Equity	34	70.59
Poland Equity	54	81.48
Switzerland Equity	172	63.95
Sweden Equity	140	45.71

Source: S&P Dow Jones Indices LLC, Morningstar. Data for periods ending June 30, 2019. Past performance is no guarantee of future results. Table is provided for illustrative purposes.

<b>Report 3: Average European Equity Fund Performance (Equal Weighted)</b>				
<b>CATEGORY</b>	<b>1-YEAR (%)</b>	<b>3-YEAR (ANNUALIZED %)</b>	<b>5-YEAR (ANNUALIZED %)</b>	<b>10-YEAR (ANNUALIZED %)</b>
<b>EURO-DENOMINATED FUNDS (EUR)</b>				
Europe Equity	-1.31	6.84	4.59	8.24
S&P Europe 350	5.31	8.91	5.73	9.95
Eurozone Equity	-1.77	7.57	4.32	7.15
S&P Eurozone BMI	1.95	10.48	6.40	9.39
Nordic Equity	3.18	6.89	5.85	10.72
S&P Nordic BMI	4.22	8.11	7.02	12.80
Global Equity	3.87	8.19	7.07	8.83
S&P Global 1200	9.90	11.67	11.33	13.66
Emerging Markets Equity	3.29	7.74	4.84	6.17
S&P/IFCI Composite	3.72	10.01	7.14	8.89
U.S. Equity	8.35	10.84	11.07	13.32
S&P 500	13.21	13.25	14.87	17.12
France Equity	-6.09	7.44	5.64	8.48
S&P France BMI	6.17	12.93	8.60	10.96
Germany Equity	-4.77	6.93	4.29	9.56
S&P Germany BMI	-1.16	8.68	5.47	10.76
Italy Equity	-2.60	10.41	3.59	5.29
S&P Italy BMI	0.64	12.67	3.41	4.96
Spain Equity	-7.51	6.18	-0.05	3.67
S&P Spain BMI	0.88	8.73	0.73	4.19
Netherlands Equity	3.50	11.07	8.82	10.15
S&P Netherlands BMI	8.56	14.33	12.23	13.91
<b>POUND STERLING-DENOMINATED FUNDS (GBP)</b>				
Europe Equity	1.61	11.04	8.69	11.06
S&P Europe 350	6.56	11.61	8.12	10.51
Europe Ex-UK Equity	2.47	11.11	8.75	10.71
S&P Europe Ex-UK BMI	6.99	12.87	9.49	11.25
UK Equity	-2.82	9.85	6.45	11.01
S&P United Kingdom BMI	1.20	9.06	6.29	10.45
UK Large-/Mid-Cap Equity	-1.13	8.53	5.74	10.05
S&P United Kingdom LargeMidCap	1.75	8.75	5.72	9.52
UK Small-Cap Equity	-5.97	13.96	8.76	13.97
S&P United Kingdom SmallCap	-1.98	10.68	8.64	14.99
Global Equity	7.65	12.96	11.44	11.77
S&P Global 1200	11.24	14.42	13.86	14.22
Emerging Markets Equity	5.52	11.61	8.39	8.10
S&P/IFCI Composite	4.95	12.75	9.55	9.43
U.S. Equity	10.38	15.42	14.95	15.60
S&P 500	14.54	16.07	17.45	17.70
<b>FUNDS DENOMINATED IN OTHER EUROPEAN LOCAL CURRENCIES</b>				
Denmark Equity	0.62	6.07	9.93	15.12
S&P Denmark BMI	6.15	5.45	9.66	15.90
Poland Equity	1.71	5.53	-1.01	1.47
S&P Poland BMI	9.60	12.65	3.58	7.78
Switzerland Equity	5.17	10.33	7.08	9.11
S&P Switzerland BMI	16.76	11.52	7.50	10.18
Sweden Equity	9.59	13.13	10.68	13.53
S&P Sweden BMI	10.32	13.09	10.00	13.54

Source: S&P Dow Jones Indices LLC, Morningstar. Data for periods ending June 30, 2019. 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.

<b>Report 4: Average European Equity Fund Performance (Asset Weighted)</b>				
<b>CATEGORY</b>	<b>1-YEAR (%)</b>	<b>3-YEAR (ANNUALIZED %)</b>	<b>5-YEAR (ANNUALIZED %)</b>	<b>10-YEAR (ANNUALIZED %)</b>
<b>EURO-DENOMINATED FUNDS (EUR)</b>				
Europe Equity	-0.12	6.96	4.94	8.95
S&P Europe 350	5.31	8.91	5.73	9.95
Eurozone Equity	-1.41	7.85	4.62	7.55
S&P Eurozone BMI	1.95	10.48	6.40	9.39
Nordic Equity	4.80	6.48	6.22	10.74
S&P Nordic BMI	4.22	8.11	7.02	12.80
Global Equity	5.18	8.59	7.93	9.73
S&P Global 1200	9.90	11.67	11.33	13.66
Emerging Markets Equity	4.09	8.18	5.41	6.79
S&P/IFCI Composite	3.72	10.01	7.14	8.89
U.S. Equity	9.38	10.53	11.16	13.40
S&P 500	13.21	13.25	14.87	17.12
France Equity	-2.58	8.19	5.62	8.33
S&P France BMI	6.17	12.93	8.60	10.96
Germany Equity	-4.40	7.80	4.93	10.37
S&P Germany BMI	-1.16	8.68	5.47	10.76
Italy Equity	-2.89	9.97	2.92	5.24
S&P Italy BMI	0.64	12.67	3.41	4.96
Spain Equity	-7.07	6.88	0.64	4.44
S&P Spain BMI	0.88	8.73	0.73	4.19
Netherlands Equity	2.08	10.12	7.86	9.45
S&P Netherlands BMI	8.56	14.33	12.23	13.91
<b>POUND STERLING-DENOMINATED FUNDS (GBP)</b>				
Europe Equity	3.15	13.08	10.31	12.38
S&P Europe 350	6.56	11.61	8.12	10.51
Europe Ex-UK Equity	3.85	11.88	9.76	11.17
S&P Europe Ex-UK BMI	6.99	12.87	9.49	11.25
UK Equity	-2.04	10.19	6.47	10.62
S&P United Kingdom BMI	1.20	9.06	6.29	10.45
UK Large-/Mid-Cap Equity	-1.84	9.10	6.05	10.24
S&P United Kingdom LargeMidCap	1.75	8.75	5.72	9.52
UK Small-Cap Equity	-5.65	14.12	9.25	14.87
S&P United Kingdom SmallCap	-1.98	10.68	8.64	14.99
Global Equity	9.84	14.87	13.24	13.19
S&P Global 1200	11.24	14.42	13.86	14.22
Emerging Markets Equity	5.95	11.32	8.39	9.04
S&P/IFCI Composite	4.95	12.75	9.55	9.43
U.S. Equity	10.88	15.61	15.18	15.37
S&P 500	14.54	16.07	17.45	17.70
<b>FUNDS DENOMINATED IN OTHER EUROPEAN LOCAL CURRENCIES</b>				
Denmark Equity	2.17	6.41	10.04	14.98
S&P Denmark BMI	6.15	5.45	9.66	15.90
Poland Equity	2.15	5.45	-1.42	-0.83
S&P Poland BMI	9.60	12.65	3.58	7.78
Switzerland Equity	7.12	11.40	7.88	9.96
S&P Switzerland BMI	16.76	11.52	7.50	10.18
Sweden Equity	8.04	12.92	10.36	13.43
S&P Sweden BMI	10.32	13.09	10.00	13.54

Source: S&P Dow Jones Indices LLC, Morningstar. Data for periods ending June 30, 2019. Index performance based on total returns. Past performance is no guarantee of future results. Table is provided for illustrative purposes.

<b>Report 5: Quartile Breakpoints of European Equity Funds</b>			
<b>FUND CATEGORY</b>	<b>THIRD QUARTILE (ANNUALIZED, %)</b>	<b>SECOND QUARTILE (ANNUALIZED, %)</b>	<b>FIRST QUARTILE (ANNUALIZED, %)</b>
<b>1-YEAR (EUR)</b>			
Europe Equity	-4.40	-0.87	2.85
Eurozone Equity	-4.50	-0.64	2.20
Nordic Equity	1.55	3.86	5.43
Global Equity	0.98	3.99	7.43
Emerging Markets Equity	1.39	3.43	5.60
U.S. Equity	5.91	8.87	11.96
France Equity	-13.21	-4.53	1.19
Germany Equity	-7.34	-4.47	-1.85
Italy Equity	-4.26	-2.08	-0.06
Spain Equity	-9.69	-7.59	-3.50
Netherlands Equity	0.00	2.55	2.80
<b>1-YEAR (GBP)</b>			
Europe Equity	-2.07	1.11	4.40
Europe Ex-UK Equity	-0.66	2.18	5.19
UK Equity	-6.26	-2.65	0.54
UK Large-/Mid-Cap Equity	-3.80	-0.91	0.92
UK Small-Cap Equity	-9.18	-5.82	-3.02
Global Equity	3.57	7.55	11.23
Emerging Markets Equity	3.39	5.59	7.95
U.S. Equity	7.57	10.79	14.22
<b>1-YEAR (OTHER EUROPEAN LOCAL CURRENCIES)</b>			
Denmark Equity	0.38	1.99	3.50
Poland Equity	-5.65	0.16	2.94
Switzerland Equity	-2.34	6.91	13.57
Sweden Equity	5.47	8.91	13.44
<b>3-YEAR (EUR)</b>			
Europe Equity	5.35	6.85	8.53
Eurozone Equity	5.99	7.68	9.23
Nordic Equity	6.30	7.19	7.69
Global Equity	6.61	8.19	9.82
Emerging Markets Equity	6.13	7.59	9.49
U.S. Equity	8.69	10.29	12.37
France Equity	5.75	7.82	9.87
Germany Equity	5.52	7.02	8.62
Italy Equity	9.19	11.06	12.42
Spain Equity	4.55	6.56	7.58
Netherlands Equity	9.42	11.55	12.23
<b>3-YEAR (GBP)</b>			
Europe Equity	9.18	10.94	12.38
Europe Ex-UK Equity	9.68	11.26	12.93
UK Equity	7.20	9.43	12.29
UK Large-/Mid-Cap Equity	6.70	8.55	9.72
UK Small-Cap Equity	11.05	14.35	17.52
Global Equity	10.66	12.39	14.43
Emerging Markets Equity	9.44	11.74	13.45
U.S. Equity	12.68	14.83	17.42
<b>3-YEAR (OTHER EUROPEAN LOCAL CURRENCIES)</b>			
Denmark Equity	5.39	6.47	7.80
Poland Equity	-0.12	5.67	7.61
Switzerland Equity	9.01	10.77	12.02
Sweden Equity	11.31	12.97	15.21

Source: S&P Dow Jones Indices LLC, Morningstar. Data for periods ending June 30, 2019. Index performance based on total returns. Past performance is no guarantee of future results. Table is provided for illustrative purposes.

<b>Report 5: Quartile Breakpoints of European Equity Funds (cont.)</b>			
<b>FUND CATEGORY</b>	<b>THIRD QUARTILE (ANNUALIZED, %)</b>	<b>SECOND QUARTILE (ANNUALIZED, %)</b>	<b>FIRST QUARTILE (ANNUALIZED, %)</b>
<b>5-YEAR (EUR)</b>			
Europe Equity	2.91	4.27	6.24
Eurozone Equity	2.92	4.19	5.52
Nordic Equity	5.35	6.59	7.55
Global Equity	5.72	7.34	9.04
Emerging Markets Equity	3.71	4.80	6.04
U.S. Equity	9.29	11.15	12.99
France Equity	4.39	5.87	7.42
Germany Equity	2.64	3.70	5.64
Italy Equity	1.63	3.88	4.60
Spain Equity	-2.06	-0.67	1.70
Netherlands Equity	8.51	8.52	11.06
<b>5-YEAR (GBP)</b>			
Europe Equity	6.16	8.10	10.85
Europe Ex-UK Equity	6.99	8.37	9.92
UK Equity	4.59	6.12	8.31
UK Large-/Mid-Cap Equity	4.44	5.61	6.61
UK Small-Cap Equity	7.10	9.02	11.18
Global Equity	9.27	11.16	13.29
Emerging Markets Equity	7.09	8.29	9.46
U.S. Equity	13.10	14.57	16.48
<b>5-YEAR (OTHER EUROPEAN LOCAL CURRENCIES)</b>			
Denmark Equity	9.43	10.10	10.89
Poland Equity	-2.74	0.27	2.84
Switzerland Equity	5.74	7.20	8.93
Sweden Equity	8.83	10.27	14.10
<b>10-YEAR (EUR)</b>			
Europe Equity	6.72	8.08	9.83
Eurozone Equity	5.84	7.14	8.39
Nordic Equity	10.26	10.72	11.89
Global Equity	7.89	9.38	10.80
Emerging Markets Equity	5.34	6.23	7.30
U.S. Equity	11.99	13.39	14.71
France Equity	7.33	8.58	9.60
Germany Equity	7.83	9.27	10.63
Italy Equity	4.51	5.67	6.97
Spain Equity	1.82	3.33	5.05
Netherlands Equity	9.79	9.85	13.23
<b>10-YEAR (GBP)</b>			
Europe Equity	9.29	10.74	13.05
Europe Ex-UK Equity	9.53	10.51	11.77
UK Equity	9.54	10.82	13.28
UK Large-/Mid-Cap Equity	9.27	9.97	10.88
UK Small-Cap Equity	13.13	14.72	16.48
Global Equity	10.39	11.55	13.42
Emerging Markets Equity	7.27	8.67	9.34
U.S. Equity	14.57	15.39	16.80
<b>10-YEAR (OTHER EUROPEAN LOCAL CURRENCIES)</b>			
Denmark Equity	14.29	14.69	15.21
Poland Equity	2.20	4.14	6.31
Switzerland Equity	8.26	9.40	10.65
Sweden Equity	12.04	13.05	17.33

Source: S&P Dow Jones Indices LLC, Morningstar. Data for periods ending June 30, 2019. Index performance based on total returns. Past performance is no guarantee of future results. Table is provided for illustrative purposes.

## APPENDIX A

### SPIVA Styles and Morningstar Fund Classifications

Data from Morningstar Europe is obtained for all managed funds for which month-end data is available during the performance period. The data includes funds domiciled in European markets. Offshore European equity funds are excluded. Funds are classified based on the Morningstar fund classification system, and the SPIVA Scorecard covers European and global equity categories.

### European Equity Funds Denominated in EUR, GBP, and Other European Local Currencies

The SPIVA Europe Scorecard covers both regional and country-specific funds that are denominated in EUR, GBP, and other European local currencies, and they have been mapped to the relevant Morningstar fund categories as we indicate here. The Morningstar classification system produces narrow, style-based classifications for funds, particularly in relation to European and international equities. 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 past five years.

Morningstar categories have been mapped to SPIVA peer groups in the following manner.

<b>Exhibit 1: Morningstar Categories and SPIVA Peer Groups for European Equity Funds</b>	
<b>EUROPEAN FUNDS DENOMINATED IN EUROS (EUR)</b>	
<b>MORNINGSTAR CATEGORY</b>	<b>SPIVA CATEGORY</b>
EAA Fund Europe Flex-Cap Equity	Europe Equity
EAA Fund Europe Large-Cap Blend Equity	
EAA Fund Europe Large-Cap Growth Equity	
EAA Fund Europe Large-Cap Value Equity	
EAA Fund Europe Mid-Cap Equity	
EAA Fund Europe Small-Cap Equity	Eurozone Equity
EAA Fund Eurozone Flex-Cap Equity	
EAA Fund Eurozone Large-Cap Equity	
EAA Fund Eurozone Mid-Cap Equity	
EAA Fund Eurozone Small-Cap Equity	France Equity
EAA Fund France Large-Cap Equity	
EAA Fund France Small/Mid-Cap Equity	Germany Equity
EAA Fund Germany Large-Cap Equity	
EAA Fund Germany Small/Mid-Cap Equity	Italy Equity
EAA Fund Italy Equity	
EAA Fund Netherlands Equity	Netherlands Equity
EAA Fund Nordic Equity	Nordic Equity
EAA Fund Spain Equity	Spain Equity

Source: S&P Dow Jones Indices LLC and Morningstar. Table is provided for illustrative purposes.

<b>Exhibit 1: Morningstar Categories and SPIVA Peer Groups for European Equity Funds (cont.)</b>	
<b>EUROPEAN FUNDS DENOMINATED IN POUND STERLING (GBP)</b>	
<b>MORNINGSTAR CATEGORY</b>	<b>SPIVA CATEGORY</b>
EAA Fund Europe Flex-Cap Equity	Europe Equity
EAA Fund Europe Large-Cap Blend Equity	
EAA Fund Europe Large-Cap Growth Equity	
EAA Fund Europe Large-Cap Value Equity	
EAA Fund Europe Mid-Cap Equity	
EAA Fund Europe Small-Cap Equity	Europe Ex-UK Equity
EAA Fund Europe Ex-UK Large-Cap Equity	
EAA Fund Europe Ex-UK Small/Mid-Cap Equity	UK Large-/Mid-Cap Equity
EAA Fund UK Large-Cap Equity	
EAA Fund UK Large-Cap Growth Equity	
EAA Fund UK Large-Cap Value Equity	
EAA Fund UK Mid-Cap Equity	UK Small-Cap Equity
EAA Fund UK Small-Cap Equity	
EAA Fund UK Large-Cap Equity	UK Equity
EAA Fund UK Large-Cap Growth Equity	
EAA Fund UK Large-Cap Value Equity	
EAA Fund UK Mid-Cap Equity	
EAA Fund UK Small-Cap Equity	
EAA Fund UK Flex-Cap Equity	
<b>EUROPEAN FUNDS DENOMINATED IN OTHER EUROPEAN LOCAL CURRENCIES</b>	
EAA Fund Denmark Equity	Denmark Equity
EAA Fund Poland Equity	Poland Equity
EAA Fund Sweden Equity	Sweden Equity
EAA Fund Sweden Small/Mid-Cap Equity	
EAA Fund Switzerland Small/Mid-Cap Equity	Switzerland Equity
EAA Fund Switzerland Large-Cap Equity	

Source: S&P Dow Jones Indices LLC and Morningstar. Table is provided for illustrative purposes.

### **International Funds Denominated in EUR and GBP**

For international equities, the SPIVA Europe Scorecard reports on three major categories (U.S., global, and global emerging markets) in both EUR and GBP. These categories also include multiple Morningstar classifications.

**Exhibit 2: Morningstar Categories and SPIVA Peer Groups for International Equity Funds**

**EUR- and GBP-DENOMINATED INTERNATIONAL FUNDS**

MORNINGSTAR CATEGORY	SPIVA CATEGORY
EAA Fund Global Large-Cap Blend Equity	
EAA Fund Global Large-Cap Growth Equity	Global Equity
EAA Fund Global Large-Cap Value Equity	
EAA Fund Global Small-Cap Equity	
EAA Fund US Large-Cap Blend Equity	
EAA Fund US Large-Cap Growth Equity	
EAA Fund US Large-Cap Value Equity	U.S. Equity
EAA Fund US Mid-Cap Equity	
EAA Fund US Flex-Cap Equity	
EAA Fund US Small-Cap Equity	
EAA Fund Global Emerging Markets Equity	Emerging Markets Equity

Source: S&P Dow Jones Indices LLC and Morningstar. Table is provided for illustrative purposes.

## APPENDIX B

### Glossary—Reports

#### 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 index outperformance percentage.

#### 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 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  $p^{\text{th}}$  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 market-capitalization-weighted index includes a representative sample of the 500 leading companies in the leading industries of the U.S. economy and provides over 80% coverage of U.S. equities.

### S&P/IFCI COMPOSITE

The [S&P/IFCI Composite](#) is widely recognized as a comprehensive and reliable measure of the world's emerging markets. It measures the returns of stocks that are legally and practically available to foreign investors.

### S&P DENMARK BMI

The S&P Denmark BMI, a subset of the [S&P Global BMI](#), is an equity index that is designed to represent the Danish stock market. The S&P Global BMI is a comprehensive, rules-based index designed to measure global stock market performance.

### S&P EUROPE 350

Covering approximately 70% of the region's market capitalization, the S&P Europe 350 is an equity index drawn from 17 major European markets.

### S&P EUROPE EX-UK BMI

The S&P Europe ex-UK BMI, a subset of the S&P Global BMI, is designed to represent the stock markets of Europe, excluding the UK. The S&P Global BMI is a comprehensive, rules-based index designed to measure global stock market performance.

### S&P EUROZONE BMI

The [S&P Eurozone BMI](#), a subset of the S&P Global BMI, is designed to represent the stock markets of European countries that adopt the euro currency.

### S&P FRANCE BMI

The S&P France BMI, a subset of the S&P Global BMI, is an equity index that is designed to represent the French stock market. The S&P Global BMI is a comprehensive, rules-based index designed to measure global stock market performance.

## S&P GERMANY BMI

The S&P Germany BMI, a subset of the S&P Global BMI, is an equity index that is designed to represent the German stock market. The S&P Global BMI is a comprehensive, rules-based index designed to measure global stock market performance.

## 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 (U.S.), S&P Europe 350 (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).

## S&P ITALY BMI

The S&P Italy BMI, a subset of the S&P Global BMI, is an equity index that is designed to represent the Italian stock market. The S&P Global BMI is a comprehensive, rules-based index designed to measure global stock market performance.

## S&P NETHERLANDS BMI

The S&P Netherlands BMI, a subset of the S&P Global BMI, is an equity index that is designed to represent the Dutch stock market. The S&P Global BMI is a comprehensive, rules-based index designed to measure global stock market performance.

## S&P NORDIC BMI

The S&P Nordic BMI, a subset of the S&P Global BMI, is an equity index that is designed to represent the Swedish, Danish, Norwegian, and Finnish stock markets. The S&P Global BMI is a comprehensive, rules-based index designed to measure global stock market performance.

## S&P POLAND BMI

The S&P Poland BMI, a subset of the S&P Global BMI, is an equity index that is designed to represent the Polish stock market. The S&P Global BMI is a comprehensive, rules-based index designed to measure global stock market performance.

## S&P SPAIN BMI

The S&P Spain BMI, a subset of the S&P Global BMI, is an equity index that is designed to represent the Spanish stock market. The S&P Global BMI is a comprehensive, rules-based index designed to measure global stock market performance.

## S&P SWEDEN BMI

The S&P Sweden BMI, a subset of the S&P Global BMI, is an equity index that is designed to represent the Swedish stock market. The S&P Global BMI is a comprehensive, rules-based index designed to measure global stock market performance.

## S&P SWITZERLAND BMI

The S&P Switzerland BMI, a subset of the S&P Global BMI, is an equity index that is designed to represent the Swiss stock market. The S&P Global BMI is a comprehensive, rules-based index designed to measure global stock market performance.

## S&P UNITED KINGDOM BMI

The [S&P United Kingdom BMI](#), a subset of the S&P Global BMI, is an equity index that is designed to represent the UK stock market. The S&P Global BMI is a comprehensive, rules-based index designed to measure global stock market performance.

## S&P UNITED KINGDOM LARGEMIDCAP

The [S&P United Kingdom LargeMidCap](#), a subset of the S&P Global BMI, is an equity index that is designed to represent the large- and mid-cap companies of the UK stock market and covers approximately 85% of the float market cap. The S&P Global BMI is a comprehensive, rules-based index designed to measure global stock market performance.

## S&P UNITED KINGDOM SMALLCAP

The S&P United Kingdom SmallCap, a subset of the S&P Global BMI, is an equity index that is designed to represent the small-cap companies of the UK stock market. The S&P Global BMI is a comprehensive, rules-based index designed to measure global stock market performance.

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

## GENERAL DISCLAIMER

Copyright © 2019 by S&P Dow Jones Indices LLC. All rights reserved. Standard & Poor's ®, S&P 500 ® and S&P ® are registered trademarks of Standard & Poor's Financial Services LLC ("S&P"), a subsidiary of S&P Global. Dow Jones ® is a registered trademark of Dow Jones Trademark Holdings LLC ("Dow Jones"). Trademarks have been licensed to S&P Dow Jones Indices LLC. Redistribution, reproduction and/or photocopying in whole or in part are prohibited without written permission. This document does not constitute an offer of services in jurisdictions where S&P Dow Jones Indices LLC, Dow Jones, S&P or their respective affiliates (collectively "S&P Dow Jones Indices") do not have the necessary licenses. All information provided by S&P Dow Jones Indices is impersonal and not tailored to the needs of any person, entity or group of persons. S&P Dow Jones Indices receives compensation in connection with licensing its indices to third parties. Past performance of an index is not a guarantee of future results.

It is not possible to invest directly in an index. Exposure to an asset class represented by an index is available through investable instruments based on that index. S&P Dow Jones Indices does not sponsor, endorse, sell, promote or manage any investment fund or other investment vehicle that is offered by third parties and that seeks to provide an investment return based on the performance of any index. S&P Dow Jones Indices makes no assurance that investment products based on the index will accurately track index performance or provide positive investment returns. S&P Dow Jones Indices LLC is not an investment advisor, and S&P Dow Jones Indices makes no representation regarding the advisability of investing in any such investment fund or other investment vehicle. A decision to invest in any such investment fund or other investment vehicle should not be made in reliance on any of the statements set forth in this document. Prospective investors are advised to make an investment in any such fund or other vehicle only after carefully considering the risks associated with investing in such funds, as detailed in an offering memorandum or similar document that is prepared by or on behalf of the issuer of the investment fund or other vehicle. Inclusion of a security within an index is not a recommendation by S&P Dow Jones Indices to buy, sell, or hold such security, nor is it considered to be investment advice. Closing prices for S&P Dow Jones Indices' US benchmark indices are calculated by S&P Dow Jones Indices based on the closing price of the individual constituents of the index as set by their primary exchange. Closing prices are received by S&P Dow Jones Indices from one of its third party vendors and verified by comparing them with prices from an alternative vendor. The vendors receive the closing price from the primary exchanges. Real-time intraday prices are calculated similarly without a second verification.]

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

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

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

IFCI and IFCG are trademarks of International Finance Corporation and have been licensed for use by S&P Dow Jones Indices.

LSTA is a trademark of Loan Syndications and Trading Association, Inc. and has been licensed for use by S&P Dow Jones Indices.