

CONTRIBUTORS

Andrew Innes
Associate Director
Global Research & Design
andrew.innes@spglobal.com

Leonardo Cabrer
Senior Analyst
Global Research & Design
leonardo.cabrer@spglobal.com

SPIVA[®] Europe Scorecard

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 2017 HIGHLIGHTS

- **Global and European equity markets soared from mid-2016 to mid-2017.** The [S&P Global 1200](#) and [S&P Europe 350](#) rose 16.1% and 18.6%, respectively, over the one-year period in euro terms. Markets responded positively to the U.S. election result, while globally, a more stable, macroeconomic landscape with accommodative monetary policy supported above-average performance and calmer markets.
- **Reduced macro risks allowed fundamentals to drive markets.** In addition, decelerating inflation in Europe due to a weaker U.S. dollar over the first half of the year contributed to strong earnings growth across the continent. The risk of a populist nationalist movement sweeping across Europe in the wake of Brexit was dampened by the success of Macron in the French elections. An overall reduction in uncertainties and recession concerns is most evident through the lower-than-average volatility of the global equity markets over the past year.
- **Active funds investing in pan-European equities collectively failed to beat the benchmark over the past year.** As the S&P Europe 350 showed an impressive one-year return of 18.6%, euro-denominated active funds investing in pan-European equities underperformed, with an average asset-weighted performance of 17.6%. While an average equal-weighted performance figure for the same active funds was 19.2% for the one-year period, this fell short of the average return of a stock within the benchmark, represented by a 23.3% annual return for the [S&P Europe 350 Equal Weight Index](#).

- **A higher proportion of active funds in Europe outperformed over the one-year period compared with the SPIVA Europe Year-End 2016 Scorecard.** There has been a notable increase in the number of actively managed European equity funds outperforming the benchmark over the past year. Within this period, 50.9% of euro-denominated European equity funds underperformed their benchmark. While this represents a small majority, it is still fewer than the equivalent 80.4% that were reported to underperform in the SPIVA Europe Year-End 2016 Scorecard. Similar trends were evident across many active fund categories in Europe. Most notably, the number of actively managed funds investing in just the UK, France, or Germany that outperformed their benchmarks increased from year-end 2016.
- **The majority of active fund categories in Europe underperformed over the past 10 years.** In addition, the percentage of underperformers across each fund category ranged from 72 to 98% when analyzing a 10-year horizon.
- **Asset-weighted performance of active funds investing in single countries was mixed.** Actively managed funds investing in equities from solely the UK, the U.S. (denominated in GBP), France, Germany, Switzerland, Sweden, or Denmark outperformed their corresponding benchmarks over the one-year period (on an asset-weighted basis). Those funds investing in the U.S. (denominated in EUR), Italy, Spain, The Netherlands, or Poland failed to beat the benchmark.
- **Actively managed UK equity fund performance stood out.** British pound sterling-denominated active funds investing in UK equity achieved an average asset-weighted return of 24.2% over the one-year period, compared with 17.6% for the S&P United Kingdom BMI. Only a fifth of these active UK equity funds were beaten by the benchmark in the same period. The real star performers in the UK were those active funds investing in small-cap stocks, generating average asset-weighted returns of 38.3% for the year, compared with 22.7% for the S&P United Kingdom SmallCap.
- **European funds investing in U.S. equities remained challenged.** Euro-denominated active funds investing in U.S. equities continued to show significant underperformance relative to the [S&P 500](#) across all periods analyzed. Of these funds, 61% underperformed the S&P 500 over the most recent year, while over 93% underperformed when looking at the three-year period.
- **Active emerging market equity funds in Europe continued to struggle.** The broad market performance of emerging market equities over the one-year period was as strong as European equities. Relatively steady economic growth data has materialized on the back of continued expansion in global activity. Interestingly, in spite of the widely held belief that active management can be most effective in less efficient markets, emerging market equity funds in Europe continue to be one of the region's worst-performing fund categories. The performance of active managers investing in emerging market equities fell short of the [S&P/IFCI](#) benchmark for all periods analyzed.

A UNIQUE SCORECARD FOR THE ACTIVE VERSUS PASSIVE DEBATE

Since its first publication 15 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

Report 1: Percentage of European Equity Funds Outperformed by Benchmarks

FUND CATEGORY	COMPARISON INDEX	ONE-YEAR	THREE-YEAR	FIVE-YEAR	TEN-YEAR
DATA IN EUROS (EUR)					
Europe Equity	S&P Europe 350	50.90	59.46	72.95	87.38
Eurozone Equity	S&P Eurozone BMI	66.67	78.51	85.83	89.23
Nordic Equity	S&P Nordic BMI	48.84	47.73	59.46	72.73
Global Equity	S&P Global 1200	60.23	92.93	93.97	98.37
Emerging Markets Equity	S&P/IFCI	75.58	90.32	90.88	96.70
U.S. Equity	S&P 500	61.01	93.70	96.90	98.21
France Equity	S&P France BMI	44.59	59.91	74.80	83.50
Germany Equity	S&P Germany BMI	57.14	68.75	72.53	78.63
Italy Equity	S&P Italy BMI	53.85	35.29	47.27	76.84
Spain Equity	S&P Spain BMI	75.00	57.89	74.71	82.93
Netherlands Equity	S&P Netherlands BMI	62.50	80.00	93.33	94.29
DATA IN POUND STERLING (GBP)					
Europe Equity	S&P Europe 350	41.35	44.21	55.43	77.11
Europe Ex-UK Equity	S&P Europe Ex-UK BMI	61.42	65.00	70.08	75.18
UK Equity	S&P United Kingdom BMI	20.40	45.78	46.72	71.76
UK Large-/Mid-Cap Equity	S&P United Kingdom LargeMidCap	24.34	41.03	40.54	73.98
UK Small-Cap Equity	S&P United Kingdom SmallCap	6.25	50.00	61.11	73.68
Global Equity	S&P Global 1200	46.10	80.91	83.23	94.06
Emerging Markets Equity	S&P/IFCI	59.39	77.92	79.49	80.00
U.S. Equity	S&P 500	41.63	90.15	90.36	93.89
DATA IN OTHER EUROPEAN LOCAL CURRENCIES					
Denmark Equity	S&P Denmark BMI	0.00	9.09	17.65	76.47
Poland Equity	S&P Poland BMI	84.78	53.19	58.33	92.59
Switzerland Equity	S&P Switzerland BMI	23.46	42.46	58.15	75.48
Sweden Equity	S&P Sweden BMI	62.73	50.89	59.38	75.21

Source: S&P Dow Jones Indices LLC, Morningstar. Data for periods ending June 30, 2017. 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 2: Survivorship Consistency of European Equity Funds		
FUND CATEGORY	NO. OF FUNDS AT START	SURVIVORSHIP (%)
ONE-YEAR (EUR)		
Europe Equity	1089	94.67
Eurozone Equity	573	95.64
Nordic Equity	44	90.91
Global Equity	1256	94.82
Emerging Markets Equity	321	95.33
U.S. Equity	393	94.66
France Equity	227	96.92
Germany Equity	92	94.57
Italy Equity	52	98.08
Spain Equity	84	95.24
Netherlands Equity	8	87.50
ONE-YEAR (GBP)		
Europe Equity	110	96.36
Europe Ex-UK Equity	132	96.97
UK Equity	368	95.38
UK Large-/Mid-Cap Equity	200	94.50
UK Small-Cap Equity	67	98.51
Global Equity	431	95.13
Emerging Markets Equity	175	95.43
U.S. Equity	230	93.04
ONE-YEAR (OTHER EUROPEAN LOCAL CURRENCIES)		
Denmark Equity	34	100.00
Poland Equity	64	100.00
Switzerland Equity	183	93.99
Sweden Equity	111	92.79
THREE-YEAR (EUR)		
Europe Equity	1065	83.94
Eurozone Equity	588	85.37
Nordic Equity	46	73.91
Global Equity	1195	82.34
Emerging Markets Equity	327	77.98
U.S. Equity	370	83.24
France Equity	232	90.52
Germany Equity	97	83.51
Italy Equity	51	90.20
Spain Equity	78	87.18
Netherlands Equity	10	70.00

Source: S&P Dow Jones Indices LLC, Morningstar. Data for periods ending June 30, 2017. Past performance is no guarantee of future results. Table is provided for illustrative purposes.

Report 2: Survivorship Consistency of European Equity Funds (cont.)		
FUND CATEGORY	NO. OF FUNDS AT START	SURVIVORSHIP (%)
THREE-YEAR (GBP)		
Europe Equity	100	85.00
Europe Ex-UK Equity	124	85.48
UK Equity	377	84.62
UK Large-/Mid-Cap Equity	202	83.17
UK Small-Cap Equity	72	86.11
Global Equity	398	80.90
Emerging Markets Equity	160	80.63
U.S. Equity	211	77.25
THREE-YEAR (OTHER EUROPEAN LOCAL CURRENCIES)		
Denmark Equity	33	96.97
Poland Equity	65	98.46
Switzerland Equity	183	85.79
Sweden Equity	113	81.42
FIVE-YEAR (EUR)		
Europe Equity	1120	70.45
Eurozone Equity	648	71.60
Nordic Equity	40	70.00
Global Equity	1228	68.73
Emerging Markets Equity	308	70.45
U.S. Equity	375	68.80
France Equity	255	73.33
Germany Equity	92	75.00
Italy Equity	55	76.36
Spain Equity	89	68.54
Netherlands Equity	15	40.00
FIVE-YEAR (GBP)		
Europe Equity	93	61.29
Europe Ex-UK Equity	130	69.23
UK Equity	418	69.62
UK Large-/Mid-Cap Equity	227	68.28
UK Small-Cap Equity	74	75.68
Global Equity	355	67.89
Emerging Markets Equity	122	72.13
U.S. Equity	175	61.71
FIVE-YEAR (OTHER EUROPEAN LOCAL CURRENCIES)		
Denmark Equity	34	88.24
Poland Equity	66	93.94
Switzerland Equity	187	75.40
Sweden Equity	129	66.67

Source: S&P Dow Jones Indices LLC, Morningstar. Data for periods ending June 30, 2017. Past performance is no guarantee of future results. Table is provided for illustrative purposes.

Report 2: Survivorship Consistency of European Equity Funds (cont.)		
FUND CATEGORY	NO. OF FUNDS AT START	SURVIVORSHIP (%)
TEN-YEAR (EUR)		
Europe Equity	1336	45.81
Eurozone Equity	766	47.26
Nordic Equity	36	61.11
Global Equity	1402	42.30
Emerging Markets Equity	221	57.47
U.S. Equity	522	36.78
France Equity	302	51.66
Germany Equity	117	49.57
Italy Equity	95	34.74
Spain Equity	124	45.16
Netherlands Equity	35	17.14
TEN-YEAR (GBP)		
Europe Equity	83	34.94
Europe Ex-UK Equity	144	54.86
UK Equity	529	45.37
UK Large-/Mid-Cap Equity	323	40.56
UK Small-Cap Equity	76	57.89
Global Equity	315	45.71
Emerging Markets Equity	63	65.08
U.S. Equity	185	39.46
TEN-YEAR (OTHER EUROPEAN LOCAL CURRENCIES)		
Denmark Equity	34	70.59
Poland Equity	39	94.87
Switzerland Equity	156	62.18
Sweden Equity	124	52.42

Source: S&P Dow Jones Indices LLC, Morningstar. Data for periods ending June 30, 2017. Past performance is no guarantee of future results. Table is provided for illustrative purposes.

Report 3: Average European Equity Fund Performance (Equal Weighted)				
CATEGORY	ONE-YEAR (%)	THREE-YEAR (ANNUALIZED %)	FIVE-YEAR (ANNUALIZED %)	TEN-YEAR (ANNUALIZED %)
DATA IN EUR				
Europe Equity	19.21	7.32	12.01	2.09
S&P Europe 350	18.55	6.64	11.96	3.07
Eurozone Equity	24.56	7.56	13.04	1.44
S&P Eurozone BMI	26.30	8.5	14.76	2.35
Nordic Equity	22.53	11.67	15.32	5.41
S&P Nordic BMI	18.43	9.58	14.92	5.03
Global Equity	15.25	9.06	11.09	2.80
S&P Global 1200	16.13	12.58	14.19	6.39
Emerging Markets Equity	17.80	6.04	5.13	1.50
S&P/IFCI	20.76	8.6	7.49	4.42
U.S. Equity	14.35	12.33	13.91	5.80
S&P 500	14.84	16.5	17.10	9.01
France Equity	28.78	11.12	15.58	3.04
S&P France BMI	26.01	9.74	15.04	3.39
Germany Equity	25.04	8.5	13.98	4.13
S&P Germany BMI	26.74	8.82	14.84	4.56
Italy Equity	31.41	4.68	13.04	-2.06
S&P Italy BMI	31.75	2.89	11.68	-3.02
Spain Equity	29.79	2.69	12.83	0.36
S&P Spain BMI	32.38	2.21	13.07	0.60
Netherlands Equity	24.98	11.56	13.84	1.83
S&P Netherlands BMI	26.48	14.65	17.55	5.68
DATA IN GBP				
Europe Equity	26.60	12.13	15.54	6.20
S&P Europe 350	25.24	9.99	13.83	5.88
Europe Ex-UK Equity	29.14	12.74	16.8	7.12
S&P Europe Ex-UK BMI	29.81	12.41	16.66	6.51
UK Equity	23.78	8.57	12.87	6.07
S&P United Kingdom BMI	17.55	7.13	10.46	5.50
UK Large-/Mid-Cap Equity	20.22	7.54	11.56	5.43
S&P United Kingdom LargeMidCap	16.65	6.2	9.17	4.88
U.K. Small-Cap Equity	37.44	12.37	17.24	8.20
S&P United Kingdom SmallCap	22.72	11.06	16.52	8.85
Global Equity	22.99	13.44	14.19	7.06
S&P Global 1200	22.36	16.06	16.10	9.22
Emerging Markets Equity	26.48	10.51	8.06	6.99
S&P/IFCI	27.59	11.99	9.26	7.23
U.S. Equity	23.77	17.13	17.41	9.89
S&P 500	21.33	20.13	19.03	11.94
DATA IN OTHER EUROPEAN LOCAL CURRENCIES				
Denmark Equity	19.20	17.03	24.21	8.92
S&P Denmark BMI	6.98	13.10	20.28	9.13
Poland Equity	31.07	1.97	4.71	4.40
S&P Poland BMI	39.44	5.16	8.05	-0.28
Switzerland Equity	22.96	8.91	14.11	2.87
S&P Switzerland BMI	16.70	6.50	12.76	3.56
Sweden Equity	26.13	13.27	17.73	7.45
S&P Sweden BMI	26.92	12.22	16.53	6.99

Source: S&P Dow Jones Indices LLC, Morningstar. Data for periods ending June 30, 2017. 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 European Equity Fund Performance (Asset Weighted)				
CATEGORY	ONE-YEAR (%)	THREE-YEAR (ANNUALIZED %)	FIVE-YEAR (ANNUALIZED %)	TEN-YEAR (ANNUALIZED %)
DATA IN EUR				
Europe Equity	17.63	6.97	11.68	2.11
S&P Europe 350	18.55	6.64	11.96	3.07
Eurozone Equity	24.47	7.50	13.07	1.18
S&P Eurozone BMI	26.30	8.50	14.76	2.35
Nordic Equity	18.43	10.27	14.19	4.49
S&P Nordic BMI	18.43	9.58	14.92	5.03
Global Equity	15.02	9.45	11.51	3.12
S&P Global 1200	16.13	12.58	14.19	6.39
Emerging Markets Equity	18.02	6.67	5.70	2.09
S&P/IFCI	20.76	8.60	7.49	4.42
U.S. Equity	13.35	12.47	13.84	5.76
S&P 500	14.84	16.50	17.10	9.01
France Equity	26.59	9.53	14.25	2.39
S&P France BMI	26.01	9.74	15.04	3.39
Germany Equity	28.74	9.35	15.49	4.55
S&P Germany BMI	26.74	8.82	14.84	4.56
Italy Equity	29.69	4.03	12.51	-2.25
S&P Italy BMI	31.75	2.89	11.68	-3.02
Spain Equity	29.79	3.17	13.09	0.66
S&P Spain BMI	32.38	2.21	13.07	0.60
Netherlands Equity	24.34	10.77	13.26	1.68
S&P Netherlands BMI	26.48	14.65	17.55	5.68
DATA IN GBP				
Europe Equity	28.95	13.41	16.02	7.57
S&P Europe 350	25.24	9.99	13.83	5.88
Europe Ex-UK Equity	27.50	13.22	16.52	6.86
S&P Europe Ex-UK BMI	29.81	12.41	16.66	6.51
UK Equity	24.18	8.28	12.21	5.78
S&P United Kingdom BMI	17.55	7.13	10.46	5.50
UK Large-/Mid-Cap Equity	21.49	7.75	11.69	5.59
S&P United Kingdom LargeMidCap	16.65	6.20	9.17	4.88
UK Small-Cap Equity	38.33	13.08	17.68	8.70
S&P United Kingdom SmallCap	22.72	11.06	16.52	8.85
Global Equity	24.35	15.2	15.69	7.85
S&P Global 1200	22.36	16.06	16.10	9.22
Emerging Markets Equity	25.25	10.75	8.55	7.05
S&P/IFCI	27.59	11.99	9.26	7.23
U.S. Equity	23.78	17.55	17.48	10.05
S&P 500	21.33	20.13	19.03	11.94
DATA IN OTHER EUROPEAN LOCAL CURRENCIES				
Denmark Equity	18.74	16.71	23.81	8.88
S&P Denmark BMI	6.98	13.10	20.28	9.13
Poland Equity	29.67	0.98	4.20	1.15
S&P Poland BMI	39.44	5.16	8.05	-0.28
Switzerland Equity	22.75	9.04	14.40	3.14
S&P Switzerland BMI	16.70	6.50	12.76	3.56
Sweden Equity	27.69	13.22	17.69	7.41
S&P Sweden BMI	26.92	12.22	16.53	6.99

Source: S&P Dow Jones Indices LLC, Morningstar. Data for periods ending June 30, 2017. Index performance based on total returns. Past performance is no guarantee of future results. Table is provided for illustrative purposes.

Report 5: Quartile Breakpoints of European Equity Funds			
FUND CATEGORY	THIRD QUARTILE (ANNUALIZED, %)	SECOND QUARTILE (ANNUALIZED, %)	FIRST QUARTILE (ANNUALIZED, %)
ONE-YEAR (EUR)			
Europe Equity	15.18	18.79	23.14
Eurozone Equity	20.26	24.01	27.79
Nordic Equity	15.90	21.63	24.87
Global Equity	12.20	15.28	17.88
Emerging Markets Equity	14.53	17.44	20.90
U.S. Equity	11.33	13.88	17.00
France Equity	22.63	27.91	33.13
Germany Equity	22.95	26.18	29.07
Italy Equity	27.56	31.33	35.70
Spain Equity	26.06	28.62	32.42
Netherlands Equity	21.67	22.84	34.00
ONE-YEAR (GBP)			
Europe Equity	23.93	26.80	30.59
Europe Ex-UK Equity	25.59	28.30	32.36
UK Equity	18.84	22.81	28.86
UK Large-/Mid-Cap Equity	17.56	20.14	22.77
U.K. Small-Cap Equity	30.87	35.24	40.40
Global Equity	19.83	23.24	25.67
Emerging Markets Equity	21.99	26.75	29.79
U.S. Equity	20.09	22.56	26.43
ONE-YEAR (OTHER EUROPEAN LOCAL CURRENCIES)			
Denmark Equity	16.27	18.28	20.91
Poland Equity	24.11	28.75	32.18
Switzerland Equity	17.57	20.20	27.51
Sweden Equity	23.31	26.20	29.32
THREE-YEAR (EUR)			
Europe Equity	4.67	6.52	8.74
Eurozone Equity	5.27	6.83	8.52
Nordic Equity	8.33	11.78	14.59
Global Equity	6.86	8.93	10.62
Emerging Markets Equity	4.66	5.98	7.45
U.S. Equity	10.49	12.77	14.16
France Equity	7.35	8.71	13.23
Germany Equity	5.96	7.55	10.28
Italy Equity	2.70	4.11	5.81
Spain Equity	0.04	2.14	4.00
Netherlands Equity	11.62	12.37	15.54
THREE-YEAR (GBP)			
Europe Equity	9.32	11.58	14.88
Europe Ex-UK Equity	10.80	12.08	14.05
UK Equity	6.32	8.19	10.49
UK Large-/Mid-Cap Equity	6.01	7.31	8.67
UK Small-Cap Equity	9.03	12.36	14.95
Global Equity	11.47	13.86	15.97
Emerging Markets Equity	9.13	10.78	12.07
U.S. Equity	16.07	17.65	18.81
THREE-YEAR (OTHER EUROPEAN LOCAL CURRENCIES)			
Denmark Equity	14.86	15.95	17.77
Poland Equity	1.76	4.90	7.25
Switzerland Equity	5.92	7.91	12.00
Sweden Equity	10.57	13.00	15.89

Source: S&P Dow Jones Indices LLC, Morningstar. Data for periods ending June 30, 2017. Index performance based on total returns. Past performance is no guarantee of future results. Table is provided for illustrative purposes.

Report 5: Quartile Breakpoints of European Equity Funds (cont.)			
FUND CATEGORY	THIRD QUARTILE (ANNUALIZED, %)	SECOND QUARTILE (ANNUALIZED, %)	FIRST QUARTILE (ANNUALIZED, %)
FIVE-YEAR (EUR)			
Europe Equity	9.62	11.21	13.44
Eurozone Equity	10.97	12.53	14.31
Nordic Equity	12.41	15.16	17.54
Global Equity	9.22	11.04	12.61
Emerging Markets Equity	4.06	5.21	6.18
U.S. Equity	12.33	13.61	15.29
France Equity	12.20	13.56	17.24
Germany Equity	11.60	13.52	16.26
Italy Equity	10.69	12.41	13.83
Spain Equity	10.18	11.59	14.09
Netherlands Equity	14.16	14.45	15.40
FIVE-YEAR (GBP)			
Europe Equity	13.66	14.91	17.08
Europe Ex-UK Equity	14.99	16.45	17.64
UK Equity	10.71	12.49	15.18
UK Large-/Mid-Cap Equity	9.90	11.36	12.71
UK Small-Cap Equity	14.35	17.04	19.17
Global Equity	12.67	14.49	16.14
Emerging Markets Equity	7.18	8.10	9.83
U.S. Equity	15.85	17.18	18.56
FIVE-YEAR (OTHER EUROPEAN LOCAL CURRENCIES)			
Denmark Equity	21.74	22.67	25.33
Poland Equity	4.44	7.38	10.72
Switzerland Equity	11.81	13.34	16.28
Sweden Equity	15.76	17.15	21.14
TEN-YEAR (EUR)			
Europe Equity	0.55	1.70	3.34
Eurozone Equity	-0.02	1.10	2.17
Nordic Equity	3.51	4.91	6.81
Global Equity	1.79	2.98	4.12
Emerging Markets Equity	0.51	1.69	2.50
U.S. Equity	4.72	5.94	6.85
France Equity	0.94	2.06	4.51
Germany Equity	3.06	4.27	5.55
Italy Equity	-3.35	-2.08	-1.04
Spain Equity	-1.03	-0.13	1.21
Netherlands Equity	1.73	2.61	5.68
TEN-YEAR (GBP)			
Europe Equity	5.27	6.57	7.99
Europe Ex-UK Equity	5.38	6.26	7.93
UK Equity	4.85	6.25	7.91
UK Large-/Mid-Cap Equity	4.47	5.50	6.77
UK Small-Cap Equity	6.59	8.45	10.32
Global Equity	6.25	7.10	8.33
Emerging Markets Equity	5.18	6.19	7.31
U.S. Equity	9.15	10.58	11.32
TEN-YEAR (OTHER EUROPEAN LOCAL CURRENCIES)			
Denmark Equity	7.92	8.48	9.23
Poland Equity	-5.62	-3.43	-1.57
Switzerland Equity	1.86	3.13	4.20
Sweden Equity	5.98	6.93	8.53

Source: S&P Dow Jones Indices LLC, Morningstar. Data for periods June 30, 2017. 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.

Exhibit 1: Morningstar Categories and SPIVA Peer Groups for European Equity Funds	
EUROPEAN FUNDS DENOMINATED IN EUROS (EUR)	
MORNINGSTAR CATEGORY	SPIVA CATEGORY
Europe Open-Ended Europe Flex-Cap Equity	
Europe Open-Ended Europe Large-Cap Blend Equity	
Europe Open-Ended Europe Large-Cap Growth Equity	S&P Europe 350 (EUR) Gross Total Return
Europe Open-Ended Europe Large-Cap Value Equity	
Europe Open-Ended Europe Mid-Cap Equity	
Europe Open-Ended Europe Small-Cap Equity	
Europe Open-Ended Eurozone Flex-Cap Equity	
Europe Open-Ended Eurozone Large-Cap Equity	S&P Eurozone BMI (EUR) Gross Total Return
Europe Open-Ended Eurozone Mid-Cap Equity	
Europe Open-Ended Eurozone Small-Cap Equity	
Europe Open-Ended France Large-Cap Equity	S&P France BMI (EUR) Gross Total Return
Europe Open-Ended France Small-/Mid-Cap Equity	
Europe Open-Ended Germany Large-Cap Equity	S&P Germany BMI (EUR) Gross Total Return
Europe Open-Ended Germany Small-/Mid-Cap Equity	
Europe Open-Ended Italy Equity	S&P Italy BMI (EUR) Gross Total Return
Europe Open-Ended Netherlands Equity	S&P Netherlands BMI (EUR) Gross Total Return
Europe Open-Ended Nordic Equity	S&P Nordic BMI (EUR) Gross Total Return
Europe Open-Ended Spain Equity	S&P Spain BMI (EUR) Gross Total Return

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

Exhibit 1: Morningstar Categories and SPIVA Peer Groups for European Equity Funds (cont.)

EUROPEAN FUNDS DENOMINATED IN POUND STERLING (GBP)

MORNINGSTAR CATEGORY	SPIVA CATEGORY
Europe Open-Ended Europe Flex-Cap Equity	
Europe Open-Ended Europe Large-Cap Blend Equity	
Europe Open-Ended Europe Large-Cap Growth Equity	S&P Europe 350 (GBP) (WM) Gross Total Return
Europe Open-Ended Europe Large-Cap Value Equity	
Europe Open-Ended Europe Mid-Cap Equity	
Europe Open-Ended Europe Small-Cap Equity	
Europe Open-Ended Europe Ex-UK Large-Cap Equity	S&P Europe Ex-UK BMI (GBP) Gross Total Return
Europe Open-Ended Europe Ex-UK Small-/Mid-Cap Equity	
Europe Open-Ended UK Large-Cap Blend Equity	
Europe Open-Ended UK Large-Cap Growth Equity	S&P United Kingdom LargeMidCap (GBP) Gross Total Return
Europe Open-Ended UK Large-Cap Value Equity	
Europe Open-Ended UK Mid-Cap Equity	
Europe Open-Ended UK Small-Cap Equity	S&P United Kingdom SmallCap (GBP) Gross Total Return
Europe Open-Ended UK Large-Cap Blend Equity	
Europe Open-Ended UK Large-Cap Growth Equity	
Europe Open-Ended UK Large-Cap Value Equity	S&P United Kingdom BMI (GBP) Gross Total Return
Europe Open-Ended UK Mid-Cap Equity	
Europe Open-Ended UK Small-Cap Equity	
Europe Open-Ended UK Flex-Cap Equity	
EUROPEAN FUNDS DENOMINATED IN OTHER EUROPEAN LOCAL CURRENCIES	
Europe Open-Ended Denmark Equity	S&P Denmark BMI (Local Currency) Gross Total Return
Europe Open-Ended Poland Equity	S&P Poland BMI (Local Currency) Gross Total Return
Europe Open-Ended Sweden Large-Cap Equity	S&P Sweden BMI (Local Currency) Gross Total Return
Europe Open-Ended Sweden Small/Mid-Cap Equity	
Europe Open-Ended Switzerland Small/Mid-Cap Equity	S&P Switzerland BMI (Local Currency) Gross Total Return
Europe Open-Ended 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-DENOMINATED INTERNATIONAL FUNDS

MORNINGSTAR CATEGORY	SPIVA CATEGORY
Europe Open-Ended Global Large-Cap Blend Equity	
Europe Open-Ended Global Large-Cap Growth Equity	
Europe Open-Ended Global Large-Cap Value Equity	S&P Global 1200 Total Return (EUR)
Europe Open-Ended Global Small-Cap Equity	
Europe Open-Ended U.S. Large-Cap Blend Equity	
Europe Open-Ended U.S. Large-Cap Growth Equity	
Europe Open-Ended U.S. Large-Cap Value Equity	
Europe Open-Ended U.S. Mid-Cap Equity	S&P 500 Total Return (EUR)
Europe Open-Ended U.S. Flex-Cap Equity	
Europe Open-Ended U.S. Small-Cap Equity	
Europe Open-Ended Global Emerging Markets Equity	S&P/IFCI Total Return (EUR)
Europe Open-Ended Global Large-Cap Blend Equity	
Europe Open-Ended Global Large-Cap Growth Equity	
Europe Open-Ended Global Large-Cap Value Equity	S&P Global 1200 Total Return (GBP)
Europe Open-Ended Global Small-Cap Equity	
Europe Open-Ended U.S. Large-Cap Blend Equity	
Europe Open-Ended U.S. Large-Cap Growth Equity	
Europe Open-Ended U.S. Large-Cap Value Equity	
Europe Open-Ended U.S. Mid-Cap Equity	S&P 500 Total Return (GBP)
Europe Open-Ended U.S. Small-Cap Equity	
Europe Open-Ended U.S. Flex-Cap Equity	
Europe Open-Ended Global Emerging Markets Equity	S&P/IFCI (GBP)

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 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 75th percentile, which is the value separating the elements of a population into the lower 75% and the upper 25%. The second quartile is the 50th percentile, and the third quartile is the 25th percentile. For fund category quartiles in a particular time horizon, the data used is the return of the largest 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

The [S&P/IFCI](#) 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.

S&P DJI RESEARCH CONTRIBUTORS		
Charles Mounts	Global Head	charles.mounts@spglobal.com
Jake Vukelic	Business Manager	jake.vukelic@spglobal.com
GLOBAL RESEARCH & DESIGN		
AMERICAS		
Aye M. Soe, CFA	Americas Head	aye.soe@spglobal.com
Dennis Badlyans	Associate Director	dennis.badlyans@spglobal.com
Phillip Brzenk, CFA	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	Associate Director	qing.li@spglobal.com
Berlinda Liu, CFA	Director	berlinda.liu@spglobal.com
Ryan Poirier, FRM	Senior Analyst	ryan.poirier@spglobal.com
Maria Sanchez	Associate Director	maria.sanchez@spglobal.com
Kelly Tang, CFA	Director	kelly.tang@spglobal.com
Peter Tsui	Director	peter.tsui@spglobal.com
Hong Xie, CFA	Director	hong.xie@spglobal.com
APAC		
Priscilla Luk	APAC Head	priscilla.luk@spglobal.com
Utkarsh Agrawal, CFA	Associate Director	utkarsh.agrawal@spglobal.com
Liyu Zeng, CFA	Director	liyu.zeng@spglobal.com
Akash Jain	Associate Director	akash.jain@spglobal.com
EMEA		
Sunjiv Mainie, CFA, CQF	EMEA Head	sunjiv.mainie@spglobal.com
Leonardo Cabrer	Senior Analyst	leonardo.cabrer@spglobal.com
Andrew Innes	Associate Director	andrew.innes@spglobal.com
INDEX INVESTMENT STRATEGY		
Craig J. Lazzara, CFA	Global Head	craig.lazzara@spglobal.com
Fei Mei Chan	Director	feimei.chan@spglobal.com
Tim Edwards, PhD	Senior Director	tim.edwards@spglobal.com
Anu R. Ganti, CFA	Director	anu.ganti@spglobal.com
Hamish Preston	Senior Associate	hamish.preston@spglobal.com
Howard Silverblatt	Senior Index Analyst	howard.silverblatt@spglobal.com

GENERAL DISCLAIMER

Copyright © 2017 by S&P Dow Jones Indices LLC, a part of S&P Global. 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.

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 Dow Jones Indices keeps certain activities of its business units separate from each other in order to preserve the independence and objectivity of their respective activities. As a result, certain business units of S&P Dow Jones Indices may have information that is not available to other business units. S&P Dow Jones Indices 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.