

SPIVA[®] Europe Scorecard

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

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 6-month, 1-, 3-, 5-, and 10-year investment horizons.

MID-YEAR 2020 HIGHLIGHTS

As the [S&P Europe 350[®]](#) experienced its highest levels of volatility since the 2008 financial crisis and the largest single-month drawdown in almost 20 years, the widely held belief that market volatility should create widespread opportunities for active managers remained unproven.

- Over the first six months of 2020, 42% of active euro-denominated Europe Equity funds underperformed the S&P Europe 350. This figure rose to 49% over 12 months and 87% over 10 years.
- As the S&P Europe 350 recovered modestly in the second quarter of the year to return -12.4% over six months, the average asset-weighted fund return in the category was -10.6% over the same period. On the same basis, the 25th percentile fund returned -14.9%.
- The interquartile range of equity funds performance, the difference between the 75th and 25th percentile funds, revealed a high dispersion of equity fund performance across the board. Taking Europe as an example, the six-month range was 8.13%, while the 10-year long-term range was 3.15%, highlighting that in highly volatile markets, fund performance also varied considerably.
- Few active fund categories showed immunity to the widespread market conditions. Of the 23 fund categories, 19 displayed negative returns on an asset-weighted basis for the six-month period.
- Despite significant drawdowns seen across the majority of active equity funds, there was no noticeable change in fund survivorship compared with the prior year. Of the active euro-denominated Europe Equity funds, 98% survived the six-month period. Interestingly, only 51% of funds in the same category survived the 10-year period.

Size Mattered in the U.K.

- The U.K. Equity category saw some notable differences over the first six months of the year. U.K. Small-Cap fund managers had far greater success at beating the benchmark than U.K. Large-/Mid-Cap Equity funds, as 78% and 48% outperformed their benchmarks, respectively.
- The [S&P United Kingdom LargeMidCap](#) returned 0.5% more than U.K. Large-/Mid-Cap Equity funds over the six-month period. In comparison, the [S&P United Kingdom SmallCap](#) lagged the U.K. Small-Cap Equity funds by 8% over the same period when measured on an asset-weighted basis.

Country Highlights

- The S&P Denmark BMI was comfortably the top performer in the passive space, with 8.2% growth in the six-month period. Such strong performance could not be matched by Denmark Equity fund managers, as 94.7% underperformed the benchmark and returns lagged by 4.8% on asset-weighted basis during the same period.
- Initially one of the hardest hit nations by COVID-19 and early adopters of a nationwide lockdown, Spanish Equity funds struggled to offer many opportunities to active investors.
 - On an asset-weighted return basis, fund managers were down 24.6% during the first six months of 2020, trailing the benchmark by 2.2%.
 - Of the Spanish Equity funds, 65% underperformed the benchmark over the six-month period.
 - The 75th percentile fund managers posted a 20.7% loss for the six-month period; when extended to the one-year period, this figure remained low, at -16.9%.
- The COVID-19 pandemic has differentially affected European countries and their economies, but there has been no clear correlation with active fund managers' performance.
 - Germany has been less affected by the pandemic compared with France and Spain. However, France Equity fund managers outperformed compared with Germany Equity funds, which in turn outperformed Spain Equity funds.

Home Advantage in Europe

- Internationally focused equity funds generally showed weaker performance compared with their domestically focused counterparts. In the Emerging Markets Equity, Global Equity, and U.S. Equity categories, 61%, 53%, and 61% of funds underperformed their benchmarks over the first six months of 2020, respectively. This trend persisted over the medium- and long-term horizons.
 - Over the three-year period, 79%, 85%, and 84% underperformed, respectively.
 - Over the 10-year period, 96%, 98%, and 95% underperformed, respectively.

Risk-Adjusted SPIVA

- For the first time in SPIVA Europe, we introduce Report 1b: Risk-Adjusted Fund Underperformance. One of the most common arguments in the active versus passive debate is that active managers may invest with less risk than their benchmarks. Report 1b counters this argument with risk-adjusted results highlighting the following.
 - For the short-/medium-term three-year period, 75% of Europe Equity funds had worse risk-adjusted returns than the S&P Europe 350.
 - For the long-term 10-year period, 88% of Europe Equity funds had worse risk-adjusted returns than the S&P Europe 350.

UNIQUE SCORECARD FOR THE ACTIVE VERSUS PASSIVE DEBATE

Since its first publication 18 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 1a: Percentage of European Equity Funds Outperformed by Benchmarks (Based on Absolute Return)						
FUND CATEGORY	COMPARISON INDEX	YEAR-TO-DATE	1-YEAR	3-YEAR	5-YEAR	10-YEAR
EURO-DENOMINATED FUNDS (EUR)						
Europe Equity	S&P Europe 350	41.65	49.46	74.93	72.56	86.82
Eurozone Equity	S&P Eurozone BMI	44.69	55.93	79.51	85.23	91.36
Nordic Equity	S&P Nordic BMI	77.27	73.91	87.50	86.21	95.65
Global Equity	S&P Global 1200	53.33	67.38	84.96	90.83	97.69
Emerging Markets Equity	S&P/IFCI Composite	61.13	66.10	78.92	85.06	96.34
U.S. Equity	S&P 500	61.07	73.37	84.43	89.62	95.09
France Equity	S&P France BMI	34.74	50.23	95.00	84.68	91.42
Germany Equity	S&P Germany BMI	56.99	60.00	74.44	78.72	86.02
Italy Equity	S&P Italy BMI	45.45	67.86	83.61	72.55	71.21
Spain Equity	S&P Spain BMI	65.22	59.14	79.78	71.43	80.41
Netherlands Equity	S&P Netherlands BMI	100.00	100.00	100.00	100.00	100.00
BRITISH POUND STERLING-DENOMINATED FUNDS (GBP)						
Europe Equity	S&P Europe 350	43.93	42.86	70.37	64.95	74.73
Europe Ex-U.K. Equity	S&P Europe Ex-UK BMI	48.95	52.52	70.68	78.29	77.78
U.K. Equity	S&P United Kingdom BMI	45.22	31.84	56.67	65.58	69.33
U.K. Large-/Mid-Cap Equity	S&P United Kingdom LargeMidCap	52.15	38.41	65.06	78.29	71.84
U.K. Small-Cap Equity	S&P United Kingdom SmallCap	22.22	17.28	38.96	37.66	58.54
Global Equity	S&P Global 1200	48.68	56.21	74.26	84.59	92.63
Emerging Markets Equity	S&P/IFCI Composite	61.88	62.89	71.19	75.16	87.06
U.S. Equity	S&P 500	59.27	70.89	77.29	86.49	93.49
FUNDS DENOMINATED IN OTHER EUROPEAN LOCAL CURRENCIES						
Denmark Equity	S&P Denmark BMI	94.74	100.00	96.97	67.65	81.82
Poland Equity	S&P Poland BMI	10.26	10.26	46.51	50.00	72.50
Switzerland Equity	S&P Switzerland BMI	72.35	69.95	90.82	60.11	82.68
Sweden Equity	S&P Sweden BMI	74.23	71.43	68.75	69.03	81.34

Source: S&P Dow Jones Indices LLC, Morningstar. Data as of June 30, 2020. Outperformance is based on equal-weighted fund counts. Index performance based on total return. Past performance is no guarantee of future results. Table is provided for illustrative purposes.

Report 1b: Percentage of European Equity Funds Outperformed by Benchmarks (Based on Risk-Adjusted Return)					
FUND CATEGORY	COMPARISON INDEX	1-YEAR	3-YEAR	5-YEAR	10-YEAR
EURO-DENOMINATED FUNDS (EUR)					
Europe Equity	S&P Europe 350	46.64	75.21	73.62	88.35
Eurozone Equity	S&P Eurozone BMI	57.80	79.51	84.72	90.15
Nordic Equity	S&P Nordic BMI	82.61	87.50	93.10	100.00
Global Equity	S&P Global 1200	66.31	84.14	89.88	98.22
Emerging Markets Equity	S&P/IFCI Composite	66.10	79.82	85.67	95.53
U.S. Equity	S&P 500	73.87	85.49	91.80	97.93
France Equity	S&P France BMI	48.84	95.00	84.68	91.85
Germany Equity	S&P Germany BMI	60.00	74.44	77.66	81.72
Italy Equity	S&P Italy BMI	73.21	83.61	72.55	69.70
Spain Equity	S&P Spain BMI	59.14	82.02	73.81	80.41
Netherlands Equity	S&P Netherlands BMI	100.00	100.00	100.00	100.00
BRITISH POUND STERLING-DENOMINATED FUNDS (GBP)					
Europe Equity	S&P Europe 350	40.00	69.44	70.10	79.12
Europe Ex-U.K. Equity	S&P Europe Ex-UK BMI	54.68	72.93	79.84	81.48
U.K. Equity	S&P United Kingdom BMI	12.29	51.39	69.38	79.05
U.K. Large-/Mid-Cap Equity	S&P United Kingdom LargeMidCap	13.41	62.05	82.29	79.18
U.K. Small-Cap Equity	S&P United Kingdom SmallCap	12.35	38.96	36.36	60.98
Global Equity	S&P Global 1200	56.64	74.75	86.49	97.76
Emerging Markets Equity	S&P/IFCI Composite	62.37	74.01	78.26	88.24
U.S. Equity	S&P 500	72.15	82.53	90.99	99.41
FUNDS DENOMINATED IN OTHER EUROPEAN LOCAL CURRENCIES					
Denmark Equity	S&P Denmark BMI	100.00	96.97	73.53	87.88
Poland Equity	S&P Poland BMI	12.82	51.16	50.00	67.50
Switzerland Equity	S&P Switzerland BMI	75.12	90.82	65.17	90.50
Sweden Equity	S&P Sweden BMI	74.49	70.54	74.34	83.58

Source: S&P Dow Jones Indices LLC, Morningstar. Data as of June 30, 2020. Risk-adjusted return is computed as annualized average monthly return divided by annualized standard deviation of the monthly return for the measured periods. 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 (%)
YEAR-TO-DATE (EUR)		
Europe Equity	1102	97.82
Eurozone Equity	584	98.12
Nordic Equity	22	100.00
Global Equity	1275	98.04
Emerging Markets Equity	355	96.62
U.S. Equity	393	97.71
France Equity	213	100.00
Germany Equity	93	96.77
Italy Equity	55	96.36
Spain Equity	92	96.74
Netherlands Equity	6	100.00
YEAR-TO-DATE (GBP)		
Europe Equity	107	98.13
Europe Ex-U.K. Equity	143	97.90
U.K. Equity	356	98.60
U.K. Large-/Mid-Cap Equity	163	97.55
U.K. Small-Cap Equity	81	98.77
Global Equity	491	97.76
Emerging Markets Equity	202	97.52
U.S. Equity	248	97.18
YEAR-TO-DATE (OTHER EUROPEAN LOCAL CURRENCIES)		
Denmark Equity	38	94.74
Poland Equity	39	97.44
Switzerland Equity	217	97.70
Sweden Equity	97	100.00
1-YEAR (EUR)		
Europe Equity	1102	94.46
Eurozone Equity	590	96.10
Nordic Equity	23	95.65
Global Equity	1208	95.61
Emerging Markets Equity	354	92.94
U.S. Equity	398	92.46
France Equity	215	97.67
Germany Equity	95	94.74
Italy Equity	56	94.64
Spain Equity	93	94.62
Netherlands Equity	6	100.00

Source: S&P Dow Jones Indices LLC, Morningstar. Data as of June 30, 2020. 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 (%)
1-YEAR (GBP)		
Europe Equity	105	95.24
Europe Ex-U.K. Equity	139	95.68
U.K. Equity	358	95.25
U.K. Large-/Mid-Cap Equity	164	91.46
U.K. Small-Cap Equity	81	98.77
Global Equity	459	94.99
Emerging Markets Equity	194	92.78
U.S. Equity	237	92.41
1-YEAR (OTHER EUROPEAN LOCAL CURRENCIES)		
Denmark Equity	37	91.89
Poland Equity	39	97.44
Switzerland Equity	213	94.37
Sweden Equity	98	94.90
3-YEAR (EUR)		
Europe Equity	1073	85.27
Eurozone Equity	576	88.89
Nordic Equity	24	83.33
Global Equity	1097	83.14
Emerging Markets Equity	332	82.83
U.S. Equity	379	78.63
France Equity	220	88.64
Germany Equity	90	87.78
Italy Equity	61	83.61
Spain Equity	89	87.64
Netherlands Equity	7	71.43
3-YEAR (GBP)		
Europe Equity	108	79.63
Europe Ex-U.K. Equity	133	87.22
U.K. Equity	360	84.72
U.K. Large-/Mid-Cap Equity	166	77.71
U.K. Small-Cap Equity	77	94.81
Global Equity	408	85.29
Emerging Markets Equity	177	84.18
U.S. Equity	229	80.79
3-YEAR (OTHER EUROPEAN LOCAL CURRENCIES)		
Denmark Equity	33	87.88
Poland Equity	43	88.37
Switzerland Equity	196	89.29
Sweden Equity	112	77.68

Source: S&P Dow Jones Indices LLC, Morningstar. Data as of June 30, 2020. 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 (%)
5-YEAR (EUR)		
Europe Equity	1035	76.52
Eurozone Equity	589	79.80
Nordic Equity	29	58.62
Global Equity	1047	72.59
Emerging Markets Equity	328	73.17
U.S. Equity	366	71.04
France Equity	222	82.43
Germany Equity	94	77.66
Italy Equity	51	76.47
Spain Equity	84	79.76
Netherlands Equity	9	55.56
5-YEAR (GBP)		
Europe Equity	97	72.16
Europe Ex-U.K. Equity	129	77.52
U.K. Equity	369	76.42
U.K. Large-/Mid-Cap Equity	175	68.57
U.K. Small-Cap Equity	77	85.71
Global Equity	370	75.14
Emerging Markets Equity	161	74.53
U.S. Equity	222	67.57
5-YEAR (OTHER EUROPEAN LOCAL CURRENCIES)		
Denmark Equity	34	85.29
Poland Equity	44	86.36
Switzerland Equity	178	80.90
Sweden Equity	113	68.14
10-YEAR (EUR)		
Europe Equity	1176	51.19
Eurozone Equity	660	58.03
Nordic Equity	23	52.17
Global Equity	1126	47.51
Emerging Markets Equity	246	60.16
U.S. Equity	387	46.25
France Equity	233	64.81
Germany Equity	93	64.52
Italy Equity	66	50.00
Spain Equity	97	54.64
Netherlands Equity	23	17.39

Source: S&P Dow Jones Indices LLC, Morningstar. Data as of June 30, 2020. 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 (%)
10-YEAR (GBP)		
Europe Equity	91	42.86
Europe Ex-U.K. Equity	135	58.52
U.K. Equity	463	48.60
U.K. Large-/Mid-Cap Equity	245	40.41
U.K. Small-Cap Equity	82	62.20
Global Equity	312	46.79
Emerging Markets Equity	85	60.00
U.S. Equity	169	43.79
10-YEAR (OTHER EUROPEAN LOCAL CURRENCIES)		
Denmark Equity	33	72.73
Poland Equity	40	77.50
Switzerland Equity	179	63.13
Sweden Equity	134	48.51

Source: S&P Dow Jones Indices LLC, Morningstar. Data as of June 30, 2020. Past performance is no guarantee of future results. Table is provided for illustrative purposes.

Report 3: Average European Equity Fund Performance (Equal Weighted)					
CATEGORY	YEAR-TO-DATE (%)	1-YEAR (%)	3-YEAR (ANNUALIZED, %)	5-YEAR (ANNUALIZED, %)	10-YEAR (ANNUALIZED, %)
EURO-DENOMINATED FUNDS (EUR)					
Europe Equity	-11.12	-4.03	-0.73	0.98	5.96
S&P Europe 350	-12.42	-4.71	1.26	1.96	7.33
Eurozone Equity	-11.41	-5.51	-1.78	0.90	5.20
S&P Eurozone BMI	-12.18	-4.91	0.50	2.86	7.24
Nordic Equity	-5.00	2.88	2.48	3.71	7.85
S&P Nordic BMI	-2.19	7.35	4.63	5.59	10.15
Global Equity	-6.22	2.15	4.23	4.00	7.25
S&P Global 1200	-6.11	4.41	7.78	7.39	11.39
Emerging Markets Equity	-11.02	-4.13	0.58	1.30	2.44
S&P/IFCI Composite	-10.26	-2.70	2.37	3.03	4.84
U.S. Equity	-4.48	4.86	7.71	6.85	11.29
S&P 500	-3.14	9.00	11.30	10.55	14.98
France Equity	-13.56	-9.02	-4.35	1.41	5.81
S&P France BMI	-16.02	-9.27	1.22	4.05	8.15
Germany Equity	-8.21	-1.48	-1.22	1.92	7.02
S&P Germany BMI	-7.13	-0.13	0.38	3.04	8.28
Italy Equity	-15.89	-8.40	-2.13	-0.53	3.91
S&P Italy BMI	-16.61	-7.00	0.32	0.12	3.77
Spain Equity	-24.74	-21.95	-10.18	-5.19	1.38
S&P Spain BMI	-22.38	-19.52	-7.89	-3.96	2.03
Netherlands Equity	-9.18	-0.25	2.49	4.91	7.49
S&P Netherlands BMI	1.08	13.39	10.24	9.56	11.95
BRITISH POUND STERLING-DENOMINATED FUNDS (GBP)					
Europe Equity	-5.37	-1.62	2.03	7.21	9.13
S&P Europe 350	-6.02	-3.23	2.42	7.16	8.44
Europe Ex-U.K. Equity	-1.78	0.89	2.42	8.01	9.18
S&P Europe Ex-UK BMI	-1.97	1.02	3.82	9.28	9.62
U.K. Equity	-17.46	-10.37	-1.37	2.64	7.70
S&P United Kingdom BMI	-18.36	-14.55	-1.94	2.57	6.68
U.K. Large-/Mid-Cap Equity	-17.74	-12.22	-2.11	1.77	6.74
S&P United Kingdom LargeMidCap	-17.44	-14.69	-2.02	2.58	5.94
U.K. Small-Cap Equity	-15.71	-5.65	0.96	5.53	10.71
S&P United Kingdom SmallCap	-23.18	-13.80	-1.61	2.22	10.19
Global Equity	1.44	5.73	7.65	10.87	10.40
S&P Global 1200	0.51	5.67	8.96	12.80	12.54
Emerging Markets Equity	-4.68	-2.29	2.47	7.60	4.67
S&P/IFCI Composite	-3.73	-1.15	3.55	8.30	5.95
U.S. Equity	2.60	7.09	10.23	13.36	13.86
S&P 500	3.91	10.73	12.59	16.20	16.19
FUNDS DENOMINATED IN OTHER EUROPEAN LOCAL CURRENCIES					
Denmark Equity	2.80	12.84	4.16	7.54	13.16
S&P Denmark BMI	8.20	22.66	10.37	8.43	14.75
Poland Equity	-5.70	-5.37	-5.32	-1.68	-1.25
S&P Poland BMI	-16.72	-21.21	-6.87	-1.76	2.49
Switzerland Equity	-4.87	1.80	3.84	6.69	7.70
S&P Switzerland BMI	-3.05	3.99	7.31	7.04	8.99
Sweden Equity	-4.19	6.08	6.71	8.86	11.26
S&P Sweden BMI	-1.93	8.33	7.27	8.42	11.26

Source: S&P Dow Jones Indices LLC, Morningstar. Data as of June 30, 2020. 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	YEAR-TO-DATE (%)	1-YEAR (%)	3-YEAR (ANNUALIZED, %)	5-YEAR (ANNUALIZED, %)	10-YEAR (ANNUALIZED, %)
EURO-DENOMINATED FUNDS (EUR)					
Europe Equity	-10.58	-2.98	0.25	1.31	6.58
S&P Europe 350	-12.42	-4.71	1.26	1.96	7.33
Eurozone Equity	-10.80	-4.28	-1.15	1.25	5.69
S&P Eurozone BMI	-12.18	-4.91	0.50	2.86	7.24
Nordic Equity	-4.06	2.69	3.02	3.62	8.01
S&P Nordic BMI	-2.19	7.35	4.63	5.59	10.15
Global Equity	-5.85	3.34	4.90	4.45	7.98
S&P Global 1200	-6.11	4.41	7.78	7.39	11.39
Emerging Markets Equity	-10.46	-3.08	1.29	1.75	3.04
S&P/IFCI Composite	-10.26	-2.70	2.37	3.03	4.84
U.S. Equity	-3.96	6.12	8.14	7.04	11.41
S&P 500	-3.14	9.00	11.30	10.55	14.98
France Equity	-14.31	-9.43	-3.30	1.22	5.79
S&P France BMI	-16.02	-9.27	1.22	4.05	8.15
Germany Equity	-8.10	-0.72	-1.14	2.21	7.71
S&P Germany BMI	-7.13	-0.13	0.38	3.04	8.28
Italy Equity	-16.85	-9.22	-2.35	-1.25	3.72
S&P Italy BMI	-16.61	-7.00	0.32	0.12	3.77
Spain Equity	-24.61	-21.67	-9.69	-4.56	1.93
S&P Spain BMI	-22.38	-19.52	-7.89	-3.96	2.03
Netherlands Equity	-10.39	-1.85	1.79	4.26	6.70
S&P Netherlands BMI	1.08	13.39	10.24	9.56	11.95
BRITISH POUND STERLING-DENOMINATED FUNDS (GBP)					
Europe Equity	-1.29	2.63	4.78	9.49	10.60
S&P Europe 350	-6.02	-3.23	2.42	7.16	8.44
Europe Ex-U.K. Equity	0.40	3.13	4.24	9.03	9.89
S&P Europe Ex-UK BMI	-1.97	1.02	3.82	9.28	9.62
U.K. Equity	-17.25	-10.91	-1.35	2.61	7.31
S&P United Kingdom BMI	-18.36	-14.55	-1.94	2.57	6.68
U.K. Large-/Mid-Cap Equity	-17.79	-12.06	-2.03	2.04	6.86
S&P United Kingdom LargeMidCap	-17.44	-14.69	-2.02	2.58	5.94
U.K. Small-Cap Equity	-15.16	-4.36	1.19	6.01	11.76
S&P United Kingdom SmallCap	-23.18	-13.80	-1.61	2.22	10.19
Global Equity	4.19	8.15	9.79	12.89	11.72
S&P Global 1200	0.51	5.67	8.96	12.80	12.54
Emerging Markets Equity	-4.73	-2.50	2.40	7.67	5.40
S&P/IFCI Composite	-3.73	-1.15	3.55	8.30	5.95
U.S. Equity	4.76	9.60	11.02	14.03	13.94
S&P 500	3.91	10.73	12.59	16.20	16.19
FUNDS DENOMINATED IN OTHER EUROPEAN LOCAL CURRENCIES					
Denmark Equity	3.44	14.03	4.93	7.88	13.19
S&P Denmark BMI	8.20	22.66	10.37	8.43	14.75
Poland Equity	-10.99	-12.59	-7.54	-3.48	-4.50
S&P Poland BMI	-16.72	-21.21	-6.87	-1.76	2.49
Switzerland Equity	-4.12	3.34	5.21	7.66	8.61
S&P Switzerland BMI	-3.05	3.99	7.31	7.04	8.99
Sweden Equity	-5.00	5.18	5.84	8.35	11.07
S&P Sweden BMI	-1.93	8.33	7.27	8.42	11.26

Source: S&P Dow Jones Indices LLC, Morningstar. Data as of June 30, 2020. 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, %)
YEAR-TO-DATE (EUR)			
Europe Equity	-14.93	-11.04	-6.80
Eurozone Equity	-14.25	-11.22	-8.02
Nordic Equity	-6.27	-3.27	-2.47
Global Equity	-9.73	-6.28	-2.86
Emerging Markets Equity	-13.37	-11.11	-8.47
U.S. Equity	-9.15	-4.27	-0.90
France Equity	-16.89	-13.69	-10.95
Germany Equity	-11.85	-8.31	-3.66
Italy Equity	-18.59	-16.35	-13.54
Spain Equity	-27.70	-23.72	-20.73
Netherlands Equity	-8.76	-8.53	-6.45
YEAR-TO-DATE (GBP)			
Europe Equity	-9.82	-4.92	-0.28
Europe Ex-U.K. Equity	-5.19	-1.63	2.37
U.K. Equity	-21.40	-17.40	-13.85
U.K. Large-/Mid-Cap Equity	-20.81	-17.62	-15.23
U.K. Small-Cap Equity	-21.47	-16.21	-11.00
Global Equity	-3.87	0.93	5.86
Emerging Markets Equity	-8.45	-4.70	-2.02
U.S. Equity	-4.36	3.01	7.05
YEAR-TO-DATE (OTHER EUROPEAN LOCAL CURRENCIES)			
Denmark Equity	2.38	3.87	4.36
Poland Equity	-10.40	-3.10	7.36
Switzerland Equity	-6.58	-4.53	-2.84
Sweden Equity	-8.68	-4.77	-1.74
1-YEAR (EUR)			
Europe Equity	-8.74	-4.09	0.85
Eurozone Equity	-9.04	-5.47	-1.35
Nordic Equity	0.54	1.77	6.94
Global Equity	-1.68	2.11	6.34
Emerging Markets Equity	-7.11	-4.21	-0.58
U.S. Equity	-0.73	5.73	9.54
France Equity	-11.81	-9.17	-5.90
Germany Equity	-6.81	-2.00	4.16
Italy Equity	-11.23	-9.16	-5.96
Spain Equity	-25.63	-20.59	-16.94
Netherlands Equity	-0.20	0.69	3.06

Source: S&P Dow Jones Indices LLC, Morningstar. Data as of June 30, 2020. 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, %)
1-YEAR (GBP)			
Europe Equity	-6.84	-0.85	3.73
Europe Ex-U.K. Equity	-3.49	1.05	5.66
U.K. Equity	-14.97	-11.17	-5.25
U.K. Large-/Mid-Cap Equity	-15.26	-12.57	-9.08
U.K. Small-Cap Equity	-12.28	-5.31	0.33
Global Equity	-0.17	4.94	9.85
Emerging Markets Equity	-6.66	-2.75	2.38
U.S. Equity	-2.04	7.72	12.04
1-YEAR (OTHER EUROPEAN LOCAL CURRENCIES)			
Denmark Equity	11.78	14.23	15.38
Poland Equity	-14.16	-5.47	7.69
Switzerland Equity	0.61	2.60	4.69
Sweden Equity	0.94	4.69	9.54
3-YEAR (EUR)			
Europe Equity	-3.50	-0.75	1.92
Eurozone Equity	-3.85	-1.39	0.37
Nordic Equity	1.69	2.65	4.00
Global Equity	1.79	4.02	6.61
Emerging Markets Equity	-1.16	0.58	2.39
U.S. Equity	4.09	7.75	10.20
France Equity	-7.31	-4.24	-1.05
Germany Equity	-3.87	-1.55	0.78
Italy Equity	-3.58	-1.98	-0.35
Spain Equity	-11.76	-9.83	-8.27
Netherlands Equity	1.76	2.59	2.64
3-YEAR (GBP)			
Europe Equity	-1.42	1.51	4.84
Europe Ex-U.K. Equity	-0.03	2.29	5.51
U.K. Equity	-3.94	-1.84	0.93
U.K. Large-/Mid-Cap Equity	-4.07	-2.30	-0.66
U.K. Small-Cap Equity	-2.78	0.98	3.88
Global Equity	3.79	6.43	10.18
Emerging Markets Equity	0.34	2.72	4.91
U.S. Equity	5.10	9.87	13.20
3-YEAR (OTHER EUROPEAN LOCAL CURRENCIES)			
Denmark Equity	3.69	5.32	6.37
Poland Equity	-8.57	-5.49	-2.79
Switzerland Equity	2.17	4.79	6.49
Sweden Equity	3.00	5.96	9.00

Source: S&P Dow Jones Indices LLC, Morningstar. Data as of June 30, 2020. 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, %)
5-YEAR (EUR)			
Europe Equity	-1.10	0.80	2.92
Eurozone Equity	-0.87	0.79	2.27
Nordic Equity	3.76	4.29	5.47
Global Equity	2.34	3.87	5.78
Emerging Markets Equity	-0.28	1.12	2.58
U.S. Equity	4.61	6.79	8.91
France Equity	-0.05	1.70	3.05
Germany Equity	0.15	1.57	3.68
Italy Equity	-2.09	-0.62	0.66
Spain Equity	-7.38	-5.14	-2.83
Netherlands Equity	4.54	5.12	6.78
5-YEAR (GBP)			
Europe Equity	3.98	6.91	10.10
Europe Ex-U.K. Equity	6.44	7.67	9.76
U.K. Equity	0.38	2.31	4.54
U.K. Large-/Mid-Cap Equity	0.01	1.76	2.81
U.K. Small-Cap Equity	2.44	5.68	8.17
Global Equity	7.88	10.20	12.21
Emerging Markets Equity	5.66	7.40	9.22
U.S. Equity	10.02	13.15	15.58
5-YEAR (OTHER EUROPEAN LOCAL CURRENCIES)			
Denmark Equity	6.46	7.83	9.23
Poland Equity	-3.07	-0.84	1.36
Switzerland Equity	5.64	7.03	8.31
Sweden Equity	5.85	8.22	12.09
10-YEAR (EUR)			
Europe Equity	4.26	5.76	7.41
Eurozone Equity	3.86	5.17	6.33
Nordic Equity	7.63	8.57	9.25
Global Equity	6.19	7.51	8.96
Emerging Markets Equity	1.30	2.37	3.24
U.S. Equity	9.69	11.13	12.62
France Equity	4.91	5.81	6.96
Germany Equity	5.20	6.75	8.17
Italy Equity	2.52	3.94	5.34
Spain Equity	-0.70	0.93	3.14
Netherlands Equity	7.85	8.97	10.26

Source: S&P Dow Jones Indices LLC, Morningstar. Data as of June 30, 2020. 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, %)
10-YEAR (GBP)			
Europe Equity	7.64	8.98	11.34
Europe Ex-U.K. Equity	7.94	8.96	10.18
U.K. Equity	6.18	7.44	9.56
U.K. Large-/Mid-Cap Equity	5.69	6.59	7.60
U.K. Small-Cap Equity	9.43	12.01	13.42
Global Equity	8.28	10.05	11.78
Emerging Markets Equity	3.96	4.73	5.73
U.S. Equity	11.85	13.32	14.87
10-YEAR (OTHER EUROPEAN LOCAL CURRENCIES)			
Denmark Equity	12.53	12.94	13.90
Poland Equity	-1.77	1.82	3.24
Switzerland Equity	7.14	8.00	9.19
Sweden Equity	9.81	10.68	14.79

Source: S&P Dow Jones Indices LLC, Morningstar. Data as of June 30, 2020. 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 Euros, British Pound Sterling, and Other European Local Currencies

The SPIVA Europe Scorecard covers both regional and country-specific funds that are denominated in euros, British pound sterling, and other European local currencies, and they have been mapped to the relevant Morningstar fund categories as indicated in Exhibit 1. 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	
EURO-DENOMINATED FUNDS (EUR)	
MORNINGSTAR CATEGORY	SPIVA CATEGORY
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	Netherlands Equity
EAA Fund Netherlands Equity	Nordic Equity
EAA Fund Nordic Equity	Spain Equity
EAA Fund Spain Equity	

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.)	
BRITISH POUND STERLING-DENOMINATED FUNDS (GBP)	
MORNINGSTAR CATEGORY	SPIVA CATEGORY
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-U.K. Equity
EAA Fund Europe Ex-UK Large-Cap Equity	
EAA Fund Europe Ex-UK Small-/Mid-Cap Equity	
EAA Fund UK Large-Cap Blend Equity	U.K. Large-/Mid-Cap Equity
EAA Fund UK Large-Cap Growth Equity	
EAA Fund UK Large-Cap Value Equity	
EAA Fund UK Mid-Cap Equity	U.K. Small-Cap Equity
EAA Fund UK Small-Cap Equity	
EAA Fund UK Large-Cap Blend Equity	U.K. 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	
FUNDS DENOMINATED IN OTHER EUROPEAN LOCAL CURRENCIES	
EAA Fund Denmark Equity	Denmark Equity
EAA Fund Poland Equity	Poland Equity
EAA Fund Sweden Large-Cap 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 Euros and British Pound Sterling

For international equities, the SPIVA Europe Scorecard reports on three major categories (U.S., global, and global emerging markets) in both euros and British pound sterling. 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	Global Equity
EAA Fund Global Large-Cap Growth Equity	
EAA Fund Global Large-Cap Value Equity	
EAA Fund Global Small-Cap Equity	
EAA Fund U.S. Large-Cap Blend Equity	U.S. Equity
EAA Fund U.S. Large-Cap Growth Equity	
EAA Fund U.S. Large-Cap Value Equity	
EAA Fund U.S. Mid-Cap Equity	
EAA Fund U.S. Flex-Cap Equity	
EAA Fund U.S. Small-Cap Equity	Emerging Markets Equity
EAA Fund Global 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^{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 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 U.K. 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 U.K. stock market. The S&P Global BMI is a comprehensive, rules-based index designed to measure global stock market performance.

S&P UNITED KINGDOM LARGE MIDCAP

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 U.K. 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 U.K. stock market. The S&P Global BMI is a comprehensive, rules-based index designed to measure global stock market performance.

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