# S&P Dow Jones Indices

A Division of S&P Global

# 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 2021 HIGHLIGHTS**

As COVID-19 disruptions lessened due to successful vaccination rollouts in Europe, the first half of 2021 was characterized by a bullish and low-volatile stock market. In this period, active funds generally struggled to keep up with their benchmarks. However, over the one-year timeframe, a larger percentage of active funds outperformed.

- The <u>S&P Europe 350®</u> outperformed 70.7% of active euro-denominated Europe Equity funds in the first half of 2021. This percentage was up from the 41.7% obtained in the first half of 2020, during which the pandemic first sent markets plummeting. These figures could support the notion that active managers may perform relatively better in uncertain times.
- Accordingly, the one-year period outperformance for the same benchmark—which includes the uncertainty of the post-COVID-19 market crash—was down to 50.7%. Similar outperformance patterns between the six-month and one-year periods can be seen across most of the fund categories.
- The relatively better performance by active funds during 2020 was not sufficient to compensate for the long-term trend. Every fund category saw its benchmark outperform at least 50% of the funds in the 10-year period, with averages greater than 80%.
- The low market volatility experienced during the first half of 2021 affected fund performance dispersion as well. The interquartile range of the performance of Europe Equity funds was just 4.2%, whereas the same metric stood at 8.1% in 2020. This highlights that active funds generally performed more similarly to their peers in the calmer market environment.

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

#### **U.K. HIGHLIGHTS**

- Size continued to matter in the U.K.: only 16.1% of U.K. Small-Cap Equity funds underperformed the benchmark in the first half of 2021, whereas the same metric was at 46.1% for U.K. Large-/Mid-Cap Equity funds.
- The size factor also shows up when looking at the absolute returns of funds. The one-year average (asset-weighted) return of U.K Large-/Mid-Cap Equity funds was 23.4%, whereas for U.K. Small-Cap Equity funds, it was 50.3%.
- This performance gap converges in the long run, with more than 60% of both U.K. Small-Cap
  Equity and U.K. Large-/Mid-Cap Equity funds failing to outperform their respective benchmarks over
  the 10-year period.

#### **OTHER COUNTRIES**

- Global Equity: Euro-denominated active funds investing in global markets continued to have some
  of the worst long-term performance results. Over the 10-year period, 98% of those funds were
  unable to beat their benchmark, even on a risk-adjusted basis.
- U.S. Equity: The <u>S&P 500<sup>®</sup> (EUR)</u> had the highest risk-adjusted returns over the 10-year period compared with any euro-denominated fund category. The risk-adjusted return ratio for the index was 1.33 compared with 1.04 for the equivalent active fund category (asset-weighted). The S&P 500 (EUR) delivered a 17.2% annualized return over the same period.
- Emerging Markets: The 10-year annualized return for euro-denominated funds in this category was 5.6% when asset weighted. This was nearly the lowest long-term performance across the fund categories, behind only Spain Equity funds, at 2.9%. The emerging market benchmark, the <u>S&P/IFCI Composite</u>, outperformed its active fund equivalents by 1.6 percentage points on an annualized basis (asset-weighted) over the same period.

#### A UNIQUE SCORECARD FOR THE ACTIVE VERSUS PASSIVE DEBATE

Since its first publication 19 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, South Africa, and MENA. 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**

FUND CATEGORY	COMPARISON INDEX	YTD	1-YEAR	3-YEAR	5-YEAR	10-YEAR
EURO-DENOMINATED FUNI	DS (EUR)	•	•	<u>'</u>	<u>'</u>	
Europe Equity	S&P Europe 350	70.75	50.70	72.34	73.24	84.77
Eurozone Equity	S&P Eurozone BMI	70.04	75.44	81.38	87.54	91.96
Nordic Equity	S&P Nordic BMI	60.87	34.78	65.22	77.78	83.33
Global Equity	S&P Global 1200	73.22	65.35	83.14	87.51	97.74
Emerging Markets Equity	S&P/IFCI Composite	73.45	65.16	74.57	82.87	94.77
U.S. Equity	S&P 500	64.76	51.39	80.42	85.48	95.11
France Equity	S&P France BMI	85.17	63.29	93.52	94.50	94.09
Germany Equity	S&P Germany BMI	62.07	44.09	66.32	71.43	81.82
Italy Equity	S&P Italy BMI	20.75	40.00	72.13	84.62	75.41
Spain Equity	S&P Spain BMI	51.76	43.96	84.09	77.91	82.61
Netherlands Equity	S&P Netherlands BMI	60.00	66.67	100.00	87.50	100.00
POUND STERLING-DENOMI	NATED FUNDS (GBP)					
Europe Equity	S&P Europe 350	61.76	37.86	63.73	64.00	73.12
Europe Ex-U.K. Equity	S&P Europe Ex-UK BMI	70.63	63.95	74.13	75.37	79.85
U.K. Equity	S&P United Kingdom BMI	45.40	22.99	34.56	40.56	62.19
U.K. Large-/Mid-Cap Equity	S&P United Kingdom LargeMidCap	46.10	19.08	33.53	47.98	64.19
U.K. Small-Cap Equity	S&P United Kingdom SmallCap	16.05	15.85	24.05	21.62	61.45
Global Equity	S&P Global 1200	71.70	52.45	69.91	77.89	91.59
Emerging Markets Equity	S&P/IFCI Composite	71.83	48.76	62.96	70.83	85.85
U.S. Equity	S&P 500	57.14	38.49	71.86	73.30	95.15
FUNDS DENOMINATED IN C	THER EUROPEAN LOCAL CURRENCIE	S				
Denmark Equity	S&P Denmark BMI	27.78	16.22	91.67	60.61	82.86
Poland Equity	S&P Poland BMI	42.42	36.36	26.32	55.26	56.41
Switzerland Equity	S&P Switzerland BMI	40.99	28.18	85.37	64.84	79.35
Sweden Equity	S&P Sweden BMI	61.17	29.29	65.77	70.27	78.83

Source: S&P Dow Jones Indices LLC, Morningstar. Data for periods ending June 30, 2021. 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.

FUND CATEGORY	COMPARISON INDEX	3-YEAR	5-YEAR	10-YEAR
EURO-DENOMINATED FUN	DS (EUR)	•	•	
Europe Equity	S&P Europe 350	75.02	77.57	86.04
Eurozone Equity	S&P Eurozone BMI	75.18	83.16	90.54
Nordic Equity	S&P Nordic BMI	86.96	100.00	100.00
Global Equity	S&P Global 1200	79.63	85.93	98.01
Emerging Markets Equity	S&P/IFCI Composite	79.48	88.47	94.43
U.S. Equity	S&P 500	83.29	88.49	97.70
France Equity	S&P France BMI	93.52	93.58	91.14
Germany Equity	S&P Germany BMI	73.68	79.12	79.55
Italy Equity	S&P Italy BMI	67.21	69.23	68.85
Spain Equity	S&P Spain BMI	84.09	76.74	81.52
Netherlands Equity	S&P Netherlands BMI	100.00	100.00	100.00
POUND STERLING-DENOM	INATED FUNDS (GBP)			
Europe Equity	S&P Europe 350	69.61	75.00	78.49
Europe Ex-U.K. Equity	S&P Europe Ex-UK BMI	76.22	78.36	80.60
U.K. Equity	S&P United Kingdom BMI	36.26	47.89	68.79
U.K. Large-/Mid-Cap Equity	S&P United Kingdom LargeMidCap	34.73	52.60	66.38
U.K. Small-Cap Equity	S&P United Kingdom SmallCap	24.05	25.68	62.65
Global Equity	S&P Global 1200	69.46	79.69	95.02
Emerging Markets Equity	S&P/IFCI Composite	69.31	82.14	87.74
U.S. Equity	S&P 500	82.25	83.71	99.39
FUNDS DENOMINATED IN	OTHER EUROPEAN LOCAL CURRENCIES			
Denmark Equity	S&P Denmark BMI	100.00	90.91	82.86
Poland Equity	S&P Poland BMI	23.68	44.74	53.85
Switzerland Equity	S&P Switzerland BMI	86.83	80.22	91.30
Sweden Equity	S&P Sweden BMI	75.68	81.08	81.02

Source: S&P Dow Jones Indices LLC, Morningstar. Data for periods ending June 30, 2021. 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.

FUND CATEGORY	NO. OF FUNDS AT START	SURVIVORSHIP (%)
YTD (EUR)	<u>'</u>	
Europe Equity	1060	97.08
Eurozone Equity	564	97.87
Nordic Equity	23	100.00
Global Equity	1322	98.34
Emerging Markets Equity	354	98.31
U.S. Equity	403	96.77
France Equity	209	98.09
Germany Equity	87	100.00
Italy Equity	53	96.23
Spain Equity	85	94.12
Netherlands Equity	5	100.00
YTD (GBP)		
Europe Equity	102	96.08
Europe Ex-U.K. Equity	143	94.41
U.K. Equity	337	97.33
U.K. Large-/Mid-Cap Equity	154	97.40
U.K. Small-Cap Equity	81	98.77
Global Equity	523	96.94
Emerging Markets Equity	213	97.65
U.S. Equity	252	98.02
YTD (OTHER EUROPEAN LOCAL CURRENCIES)		
Denmark Equity	36	97.22
Poland Equity	33	100.00
Switzerland Equity	222	100.00
Sweden Equity	103	99.03
1-YEAR (EUR)		
Europe Equity	1069	93.73
Eurozone Equity	570	95.61
Nordic Equity	23	100.00
Global Equity	1293	95.98
Emerging Markets Equity	353	95.18
U.S. Equity	397	94.21
France Equity	207	96.14
Germany Equity	93	93.55
Italy Equity	55	89.09
Spain Equity	91	87.91
Netherlands Equity	6	83.33

FUND CATEGORY	NO. OF FUNDS AT START	SURVIVORSHIP (%)
1-YEAR (GBP)	•	
Europe Equity	103	91.26
Europe Ex-U.K. Equity	147	90.48
U.K. Equity	335	94.93
U.K. Large-/Mid-Cap Equity	152	94.74
U.K. Small-Cap Equity	82	95.12
Global Equity	511	94.13
Emerging Markets Equity	201	93.03
U.S. Equity	252	95.63
1-YEAR (OTHER EUROPEAN LOCAL CURRENCIE	ES)	
Denmark Equity	37	94.59
Poland Equity	33	100.00
Switzerland Equity	220	97.27
Sweden Equity	99	98.99
3-YEAR (EUR)		
Europe Equity	1081	82.05
Eurozone Equity	564	88.83
Nordic Equity	23	86.96
Global Equity	1139	85.25
Emerging Markets Equity	346	80.64
U.S. Equity	383	79.11
France Equity	216	88.89
Germany Equity	95	83.16
Italy Equity	61	77.05
Spain Equity	88	80.68
Netherlands Equity	6	66.67
3-YEAR (GBP)		
Europe Equity	102	77.45
Europe Ex-U.K. Equity	143	80.42
U.K. Equity	353	83.85
U.K. Large-/Mid-Cap Equity	167	77.84
U.K. Small-Cap Equity	79	92.41
Global Equity	442	81.22
Emerging Markets Equity	189	81.48
U.S. Equity	231	82.68
3-YEAR (OTHER EUROPEAN LOCAL CURRENCIE	ES)	
Denmark Equity	36	83.33
Poland Equity	38	86.84
Switzerland Equity	205	88.78
Sweden Equity	111	80.18

FUND CATEGORY	NO. OF FUNDS AT START	SURVIVORSHIP (%)
5-YEAR (EUR)	-	
Europe Equity	1039	74.21
Eurozone Equity	570	81.58
Nordic Equity	27	70.37
Global Equity	1073	74.37
Emerging Markets Equity	321	73.83
U.S. Equity	365	69.04
France Equity	218	81.19
Germany Equity	91	75.82
Italy Equity	52	65.38
Spain Equity	86	75.58
Netherlands Equity	8	50.00
5-YEAR (GBP)		
Europe Equity	100	66.00
Europe Ex-U.K. Equity	134	74.63
U.K. Equity	355	74.93
U.K. Large-/Mid-Cap Equity	173	68.21
U.K. Small-Cap Equity	74	86.49
Global Equity	389	75.58
Emerging Markets Equity	168	72.62
U.S. Equity	221	71.04
5-YEAR (OTHER EUROPEAN LOCAL CURRENCIE	ES)	
Denmark Equity	33	81.82
Poland Equity	38	86.84
Switzerland Equity	182	82.97
Sweden Equity	111	72.07
10-YEAR (EUR)		
Europe Equity	1039	74.21
Eurozone Equity	570	81.58
Nordic Equity	27	70.37
Global Equity	1073	74.37
Emerging Markets Equity	321	73.83
U.S. Equity	365	69.04
France Equity	218	81.19
Germany Equity	91	75.82
Italy Equity	52	65.38
Spain Equity	86	75.58
Netherlands Equity	8	50.00

Report 2: Survivorship Consistency of European Equity Funds (cont.)					
FUND CATEGORY	NO. OF FUNDS AT START	SURVIVORSHIP (%)			
10-YEAR (GBP)					
Europe Equity	100	66.00			
Europe Ex-U.K. Equity	134	74.63			
U.K. Equity	355	74.93			
U.K. Large-/Mid-Cap Equity	173	68.21			
U.K. Small-Cap Equity	74	86.49			
Global Equity	389	75.58			
Emerging Markets Equity	168	72.62			
U.S. Equity	221	71.04			
10-YEAR (OTHER EUROPEAN LOCAL CUR	RENCIES)				
Denmark Equity	33	81.82			
Poland Equity	38	86.84			
Switzerland Equity	182	82.97			
Sweden Equity	111	72.07			

CATEGORY	YTD (%)	1-YEAR (%)	3-YEAR (ANNUALIZED %)	5-YEAR (ANNUALIZED %)	10-YEAR (ANNUALIZED %)
EURO-DENOMINATED FUNDS (EUR)			(ANNOALIZED 76)	(ANNOALIZED 78)	(ANNOALIZED 70)
Europe Equity	14.65	31.75	7.69	9.08	7.52
S&P Europe 350	15.97	28.73	8.91	9.64	8.50
Eurozone Equity	14.42	29.94	6.49	8.89	6.49
S&P Eurozone BMI	16.01	32.46	8.69	11.17	8.51
Nordic Equity	15.60	44.96	15.29	12.69	9.94
S&P Nordic BMI	16.62	42.73	16.88	14.13	12.08
Global Equity	14.60	30.07	11.51	11.09	10.40
S&P Global 1200	16.74	31.80	14.79	13.89	13.37
Emerging Markets Equity	10.65	33.27	9.79	9.88	5.00
S&P/IFCI Composite	12.51	35.28	10.94	11.87	7.17
U.S. Equity	18.13	35.08	15.37	14.05	13.60
S&P 500	18.91	33.34	18.06	16.12	17.17
France Equity	13.71	33.70	4.40	8.50	6.96
S&P France BMI	18.07	34.19	8.93	11.89	9.12
Germany Equity	12.84	31.58	7.45	9.74	7.75
S&P Germany BMI	13.06	26.86	7.79	10.21	8.40
Italy Equity	19.88	37.82	7.24	11.21	6.44
S&P Italy BMI	15.73	33.65	7.75	12.19	5.92
Spain Equity	11.33	28.70	-2.36	3.81	2.26
S&P Spain BMI	10.54	25.44	0.61	5.35	2.97
Netherlands Equity	18.03	39.33	13.00	13.78	10.16
S&P Netherlands BMI	22.95	43.91	21.00	19.52	15.30
POUND STERLING-DENOMINATED F		.0.01		.0.02	.0.00
Europe Equity	10.65	26.81	8.13	11.20	8.95
S&P Europe 350	11.23	21.59	7.83	10.35	7.94
Europe Ex-UK Equity	10.11	25.23	8.96	11.68	8.97
S&P Europe Ex-UK BMI	10.88	24.11	10.29	12.51	9.15
UK Equity	13.99	33.28	5.13	9.72	8.33
S&P United Kingdom BMI	11.24	20.41	1.36	5.94	6.18
UK Large-/Mid-Cap Equity	13.01	26.91	3.49	7.69	7.26
S&P United Kingdom LargeMidCap	10.69	17.17	0.57	5.15	5.23
UK Small-Cap Equity	19.12	52.29	10.51	16.17	12.01
S&P United Kingdom SmallCap	14.16	39.33	5.59	10.24	10.86
Global Equity	10.68	25.20	12.74	13.94	10.95
S&P Global 1200	11.94	24.68	13.59	14.57	12.77
Emerging Markets Equity	6.22	27.70	9.65	11.63	5.63
S&P/IFCI Composite	7.91	27.76	9.84	12.60	6.63
U.S. Equity	13.82	30.51	15.57	16.56	14.75
S&P 500	14.04	25.93	16.89	16.88	
FUNDS DENOMINATED IN OTHER EU				10.00	16.58
	14.71	44.32	17.81	14.16	16.30
Denmark Equity S&P Denmark BMI	13.23	37.10	21.30	14.16	17.18
	20.56	37.10	10.40		17.18
Poland Equity				9.23	
S&P Poland BMI	16.28	31.39	4.30	8.15	2.96
Switzerland Equity	15.70	28.65	11.33	11.96	9.81
S&P Switzerland BMI	15.15	23.49	14.46	12.24	10.78
Sweden Equity	17.45	48.89	19.98	17.92	13.84

CATEGORY	YTD (%)	1-YEAR (%)	3-YEAR (ANNUALIZED %)	5-YEAR (ANNUALIZED %)	10-YEAR (ANNUALIZED %)
EURO-DENOMINATED FUNDS (EUR	)		(AITITOALILLE 70)	(AITHOALILLE 70)	(AITHOALILLE 70)
Europe Equity	14.48	29.91	7.96	9.04	7.87
S&P Europe 350	15.97	28.73	8.91	9.64	8.50
Eurozone Equity	14.61	29.56	6.99	9.25	6.87
S&P Eurozone BMI	16.01	32.46	8.69	11.17	8.51
Nordic Equity	16.13	42.78	15.26	12.03	9.84
S&P Nordic BMI	16.62	42.73	16.88	14.13	12.08
Global Equity	15.10	30.18	12.38	11.54	10.79
S&P Global 1200	16.74	31.80	14.79	13.89	13.37
Emerging Markets Equity	10.06	33.37	10.37	10.30	5.58
S&P/IFCI Composite	12.51	35.28	10.94	11.87	7.17
U.S. Equity	17.43	32.83	15.63	13.82	13.71
S&P 500	18.91	33.34	18.06	16.12	17.17
France Equity	14.78	31.80	5.06	8.54	6.84
S&P France BMI	18.07	34.19	8.93	11.89	9.12
Germany Equity	11.83	28.78	6.93	9.89	8.05
S&P Germany BMI	13.06	26.86	7.79	10.21	8.40
Italy Equity	18.16	35.92	6.27	10.44	6.01
S&P Italy BMI	15.73	33.65	7.75	12.19	5.92
Spain Equity	11.21	29.48	-1.95	4.35	2.88
S&P Spain BMI	10.54	25.44	0.61	5.35	2.97
Netherlands Equity	16.77	35.86	10.85	12.20	8.96
S&P Netherlands BMI	22.95	43.91	21.00	19.52	15.30
POUND STERLING-DENOMINATED			2.100	.0.02	.0.00
Europe Equity	10.98	29.16	8.86	12.70	10.09
S&P Europe 350	11.23	21.59	7.83	10.35	7.94
Europe Ex-U.K. Equity	9.18	22.38	9.23	11.94	9.36
S&P Europe Ex-UK BMI	10.88	24.11	10.29	12.51	9.15
U.K. Equity	12.16	28.98	4.13	9.14	7.84
S&P United Kingdom BMI	11.24	20.41	1.36	5.94	6.18
U.K. Large-/Mid-Cap Equity	10.41	23.37	3.12	7.90	7.41
S&P United Kingdom LargeMidCap	10.69	17.17	0.57	5.15	5.23
U.K. Small-Cap Equity	17.67	50.34	10.43	16.17	12.57
S&P United Kingdom SmallCap	14.16	39.33	5.59	10.24	10.86
Global Equity	11.06	26.72	14.72	15.81	12.26
S&P Global 1200	11.94	24.68	13.59	14.57	12.77
Emerging Markets Equity	5.66	28.97	10.01	11.63	6.43
S&P/IFCI Composite	7.91	27.76	9.84	12.60	6.63
U.S. Equity	13.50	32.09	17.11	17.49	15.10
S&P 500	14.04	25.93	16.89	16.88	
FUNDS DENOMINATED IN OTHER E				10.00	16.58
Denmark Equity	14.03	42.66	18.38	14.37	16.25
S&P Denmark BMI	13.23	37.10	21.30	14.55	17.18
Poland Equity	19.37	36.50	6.82	6.95	-1.57
S&P Poland BMI	19.37	31.39	4.30	8.15	2.96
Switzerland Equity	15.92	28.44	12.44	12.87	10.66
S&P Switzerland BMI	15.15	23.49	14.46	12.24	10.78
Sweden Equity	16.94 18.70	47.38	18.63 19.38	17.38 17.40	13.56 13.36

Report 4: Return/Volatil	ity Ratio of European Equ	ity Funds	and Bend	chmarks						
		ВЕ	NCHMAR	RK	ASSI	ET-WEIGH	HTED	EQUA	AL-WEIGH	HTED
CATEGORY	BENCHMARK	3- YEAR	5- YEAR	10- YEAR	3- YEAR	5- YEAR	10- YEAR	3- YEAR	5- YEAR	10- YEAR
EURO-DENOMINATED	FUNDS (EUR)									
Europe Equity	S&P Europe 350	0.53	0.69	0.62	0.46	0.64	0.58	0.43	0.63	0.55
Eurozone Equity	S&P Eurozone BMI	0.44	0.68	0.53	0.37	0.59	0.45	0.35	0.58	0.43
Nordic Equity	S&P Nordic BMI	1.00	1.02	0.83	0.84	0.81	0.64	0.82	0.84	0.65
Global Equity	S&P Global 1200	0.89	1.02	1.08	0.79	0.89	0.88	0.72	0.86	0.85
Emerging Markets Equity	S&P/IFCI Composite	0.67	0.87	0.49	0.63	0.75	0.39	0.59	0.72	0.35
U.S. Equity	S&P 500	1.04	1.11	1.33	0.89	0.94	1.04	0.85	0.93	1.01
France Equity	S&P France BMI	0.44	0.70	0.56	0.25	0.52	0.44	0.22	0.52	0.45
Germany Equity	S&P Germany BMI	0.38	0.59	0.48	0.31	0.53	0.43	0.37	0.58	0.48
Italy Equity	S&P Italy BMI	0.32	0.58	0.28	0.28	0.54	0.31	0.34	0.60	0.35
Spain Equity	S&P Spain BMI	0.03	0.27	0.15	-0.09	0.24	0.16	-0.10	0.20	0.12
Netherlands Equity	S&P Netherlands BMI	1.23	1.37	1.07	0.55	0.75	0.57	0.63	0.82	0.64
POUND STERLING-DEN	NOMINATED FUNDS (GBP	)								
Europe Equity	S&P Europe 350	0.51	0.78	0.60	0.52	0.88	0.75	0.49	0.80	0.66
Europe Ex-U.K. Equity	S&P Europe Ex-UK BMI	0.65	0.91	0.64	0.59	0.88	0.68	0.54	0.82	0.63
U.K. Equity	S&P United Kingdom BMI	0.08	0.43	0.49	0.22	0.60	0.58	0.27	0.62	0.61
U.K. Large-/Mid-Cap Equity	S&P United Kingdom LargeMidCap	0.04	0.38	0.42	0.18	0.55	0.56	0.20	0.52	0.55
U.K. Small-Cap Equity	S&P United Kingdom SmallCap	0.25	0.57	0.70	0.48	0.92	0.84	0.48	0.92	0.81
Global Equity	S&P Global 1200	0.93	1.19	1.11	1.03	1.30	1.03	0.89	1.15	0.94
Emerging Markets Equity	S&P/IFCI Composite	0.68	0.93	0.44	0.65	0.83	0.44	0.63	0.84	0.38
U.S. Equity	S&P 500	1.09	1.29	1.37	1.02	1.23	1.14	0.92	1.18	1.13
FUNDS DENOMINATED	IN OTHER EUROPEAN L	OCAL CUR	RENCIE	S						
Denmark Equity	S&P Denmark BMI	1.54	1.16	1.22	1.15	1.06	1.18	1.10	1.04	1.18
Poland Equity	S&P Poland BMI	0.18	0.40	0.16	0.35	0.42	-0.09	0.54	0.56	0.08
Switzerland Equity	S&P Switzerland BMI	1.14	1.12	0.95	0.92	1.12	0.92	0.82	1.04	0.85
Sweden Equity	S&P Sweden BMI	1.08	1.18	0.91	0.95	1.08	0.87	1.06	1.15	0.91

FUND CATEGORY	THIRD QUARTILE (ANNUALIZED, %)	SECOND QUARTILE (ANNUALIZED, %)	FIRST QUARTILE (ANNUALIZED, %)
YTD (EUR)	•	, , , , , , , , , , , , , , , , , , ,	
Europe Equity	12.36	14.43	16.52
Eurozone Equity	12.65	14.48	16.44
Nordic Equity	12.45	14.79	18.35
Global Equity	12.32	14.60	16.97
Emerging Markets Equity	8.39	10.50	12.68
U.S. Equity	15.70	17.77	20.23
France Equity	11.60	14.75	17.19
Germany Equity	9.41	12.10	14.56
Italy Equity	16.55	19.37	21.30
Spain Equity	8.89	10.88	13.51
Netherlands Equity	17.75	18.33	23.05
YTD (GBP)			
Europe Equity	7.86	10.69	12.67
Europe Ex-UK Equity	7.78	9.79	11.72
UK Equity	9.90	11.78	16.84
UK Large-/Mid-Cap Equity	9.14	10.78	11.97
UK Small-Cap Equity	16.30	19.43	21.91
Global Equity	8.64	10.44	12.36
Emerging Markets Equity	3.82	6.24	8.60
U.S. Equity	11.30	13.60	15.64
YTD (OTHER EUROPEAN LOCAL CU	RRENCIES)		
Denmark Equity	13.23	14.08	14.84
Poland Equity	12.89	18.39	21.17
Switzerland Equity	14.30	15.77	17.55
Sweden Equity	14.34	17.59	20.22
1-YEAR (EUR)			
Europe Equity	25.11	29.41	36.53
Eurozone Equity	25.84	29.02	32.75
Nordic Equity	37.68	45.74	49.39
Global Equity	26.14	30.00	33.59
Emerging Markets Equity	29.61	33.22	36.66
U.S. Equity	30.01	33.59	38.24
France Equity	28.86	32.32	38.84
Germany Equity	24.29	28.60	36.98
Italy Equity	32.65	36.59	41.33
Spain Equity	22.28	27.91	34.63
Netherlands Equity	36.62	38.02	56.13

FUND CATEGORY	THIRD QUARTILE (ANNUALIZED, %)	SECOND QUARTILE (ANNUALIZED, %)	FIRST QUARTILE (ANNUALIZED, %)
1-YEAR (GBP)	(7111107121212), 70)	(7111107121213), 70)	(7.11.1107.12.12.25, 70)
Europe Equity	20.42	25.67	31.82
Europe Ex-UK Equity	19.55	22.91	28.10
UK Equity	21.59	28.64	44.69
UK Large-/Mid-Cap Equity	19.52	22.63	28.37
UK Small-Cap Equity	45.01	51.55	61.66
Global Equity	20.88	24.75	28.82
Emerging Markets Equity	23.68	28.63	31.22
U.S. Equity	24.61	27.94	32.99
1-YEAR (OTHER EUROPEAN LOCAL	CURRENCIES)		
Denmark Equity	38.91	41.53	45.44
Poland Equity	30.20	34.21	42.27
Switzerland Equity	23.37	27.50	35.09
Sweden Equity	41.55	45.56	52.88
3-YEAR (EUR)			
Europe Equity	4.97	7.33	10.22
Eurozone Equity	4.51	6.74	8.46
Nordic Equity	13.80	16.11	17.33
Global Equity	8.92	11.29	14.12
Emerging Markets Equity	8.02	9.78	11.56
U.S. Equity	12.19	15.17	18.09
France Equity	2.04	4.71	7.05
Germany Equity	4.49	7.09	9.63
Italy Equity	5.77	6.96	8.25
Spain Equity	-4.11	-2.06	-0.06
Netherlands Equity	10.68	14.58	17.95
3-YEAR (GBP)			
Europe Equity	5.19	7.54	10.45
Europe Ex-U.K. Equity	6.47	8.38	11.24
U.K. Equity	1.74	3.90	8.03
U.K. Large-/Mid-Cap Equity	1.10	2.43	3.88
U.K. Small-Cap Equity	7.39	10.57	13.79
Global Equity	9.27	12.28	15.25
Emerging Markets Equity	7.90	9.52	12.40
U.S. Equity	12.04	14.79	18.40
3-YEAR (OTHER EUROPEAN LOCAL	CURRENCIES)		
Denmark Equity	16.50	17.68	19.88
Poland Equity	5.05	8.76	11.09
Switzerland Equity	10.02	12.22	13.82
Sweden Equity	15.50	18.26	22.38

FUND CATEGORY	THIRD QUARTILE (ANNUALIZED, %)	SECOND QUARTILE (ANNUALIZED, %)	FIRST QUARTILE (ANNUALIZED, %)
5-YEAR (EUR)			
Europe Equity	6.79	8.51	10.92
Eurozone Equity	7.24	8.85	10.41
Nordic Equity	11.43	13.15	14.23
Global Equity	9.27	10.92	13.11
Emerging Markets Equity	8.31	10.08	11.62
U.S. Equity	11.32	13.51	15.57
France Equity	6.93	8.69	10.07
Germany Equity	7.85	9.52	11.54
Italy Equity	10.04	10.87	12.04
Spain Equity	1.96	3.61	5.56
Netherlands Equity	11.62	15.06	18.45
5-YEAR (GBP)			
Europe Equity	8.98	10.75	13.07
Europe Ex-U.K. Equity	9.56	11.24	13.55
U.K. Equity	6.29	8.50	13.45
U.K. Large-/Mid-Cap Equity	5.42	6.76	8.59
U.K. Small-Cap Equity	13.80	16.88	18.90
Global Equity	11.02	13.19	15.16
Emerging Markets Equity	9.94	12.02	14.01
U.S. Equity	13.25	15.82	18.76
5-YEAR (OTHER EUROPEAN LOCAL	CURRENCIES)		
Denmark Equity	12.91	14.35	15.60
Poland Equity	6.04	8.35	10.70
Switzerland Equity	10.86	11.97	13.79
Sweden Equity	15.01	16.68	19.41
10-YEAR (EUR)			
Europe Equity	5.66	7.08	8.98
Eurozone Equity	5.18	6.30	7.48
Nordic Equity	9.61	10.50	12.16
Global Equity	8.09	9.55	11.19
Emerging Markets Equity	3.95	4.89	5.81
U.S. Equity	12.15	13.51	15.13
France Equity	5.97	6.91	7.91
Germany Equity	5.48	7.30	8.76
Italy Equity	5.04	6.07	7.28
Spain Equity	0.12	1.68	4.45
Netherlands Equity	11.57	13.28	13.30

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	7.10	8.47	10.61			
Europe Ex-U.K. Equity	7.66	8.74	10.05			
U.K. Equity	6.39	7.82	10.49			
U.K. Large-/Mid-Cap Equity	5.87	6.95	8.30			
U.K. Small-Cap Equity	10.40	12.60	13.60			
Global Equity	8.93	10.60	12.34			
Emerging Markets Equity	4.53	5.37	6.87			
U.S. Equity	12.64	14.06	15.61			
10-YEAR (OTHER EUROPEAN LOC	CAL CURRENCIES)					
Denmark Equity	15.54	16.03	17.07			
Poland Equity	1.71	3.35	5.57			
Switzerland Equity	9.21	10.02	11.16			
Sweden Equity	12.01	13.17	17.38			

#### **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 include 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 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 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				
EUROPEAN FUNDS DENOMINATED IN EUROS (EUR)				
MORNINGSTAR CATEGORY	SPIVA CATEGORY			
EAA Fund Europe Flex-Cap Equity				
EAA Fund Europe Large-Cap Blend Equity				
EAA Fund Europe Large-Cap Growth Equity	Europe Equity			
EAA Fund Europe Large-Cap Value Equity				
EAA Fund Europe Mid-Cap Equity				
EAA Fund Europe Small-Cap Equity				
EAA Fund Eurozone Flex-Cap Equity	Eurozone Equity			
EAA Fund Eurozone Large-Cap Equity				
EAA Fund Eurozone Mid-Cap Equity				
EAA Fund Eurozone Small-Cap Equity				
EAA Fund France Large-Cap Equity	France Equity			
EAA Fund France Small/Mid-Cap Equity				
EAA Fund Germany Large-Cap Equity	Germany Equity			
EAA Fund Germany Small/Mid-Cap Equity	Germany Equity			
EAA Fund Italy Equity	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.

Exhibit 1: Morningstar Categories and SPIVA Peer Groups for European Equity Funds (cont.)				
EUROPEAN FUNDS DENOMINATED IN BRITISH POUND STERLING (GBP)				
MORNINGSTAR CATEGORY	SPIVA CATEGORY			
EAA Fund Europe Flex-Cap Equity				
EAA Fund Europe Large-Cap Blend Equity	Europe 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				
EAA Fund Europe Ex-UK Large-Cap Equity	Europe Ex-U.K. Equity			
EAA Fund Europe Ex-UK Small/Mid-Cap Equity				
EAA Fund UK Large-Cap Blend Equity				
EAA Fund UK Large-Cap Growth Equity	U.K. Large-/Mid-Cap Equity			
EAA Fund UK Large-Cap Value Equity				
EAA Fund UK Mid-Cap Equity				
EAA Fund UK Small-Cap Equity	U.K. Small-Cap Equity			
EAA Fund UK Large-Cap Blend Equity				
EAA Fund UK Large-Cap Growth Equity	U.K. 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				
EUROPEAN FUNDS DENOMINATED IN OTHER EUROPEAN L	OCAL CURRENCIES			
EAA Fund Denmark Equity	Denmark Equity			
EAA Fund Poland Equity	Poland Equity			
EAA Fund Sweden Large-Cap Equity	Swadon Equity			
EAA Fund Sweden Small/Mid-Cap Equity	Sweden Equity			
EAA Fund Switzerland Small/Mid-Cap Equity	Switzerland Equity			
EAA Fund Switzerland Large-Cap Equity	Switzerland 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 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	Global Equity			
EAA Fund Global Large-Cap Growth Equity				
EAA Fund Global Large-Cap Value Equity	Global Equity			
EAA Fund Global Small/Mid-Cap Equity				
EAA Fund U.S. Large-Cap Blend Equity				
EAA Fund U.S. Large-Cap Growth Equity				
EAA Fund U.S. Large-Cap Value Equity	U.S. Equity			
EAA Fund U.S. Mid-Cap Equity				
EAA Fund U.S. Flex-Cap Equity				
EAA Fund U.S. 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**

## 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<sup>th</sup> 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 <u>S&P Denmark BMI</u>, a subset of the <u>S&P Global BMI</u>, 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 <u>S&P Eurozone BMI</u>, a subset of the S&P Global BMI, is designed to represent the stock markets of European countries that adopt the euro.

#### 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 <u>S&P Germany BMI</u>, 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 <u>S&P Global 1200</u> 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), <u>S&P/TOPIX 150</u> (Japan), <u>S&P/TSX 60</u> (Canada), <u>S&P/ASX All Australian 50</u> (Australia), <u>S&P Asia 50</u> (Asia Ex-Japan), and <u>S&P Latin America 40</u> (Latin America).

#### S&P ITALY BMI

The <u>S&P Italy BMI</u>, 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 <u>S&P Netherlands BMI</u>, 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 <u>S&P Poland BMI</u>, 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 <u>S&P Spain BMI</u>, 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 <u>S&P Sweden BMI</u>, 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 <u>S&P Switzerland BMI</u>, 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 <u>S&P United Kingdom BMI</u>, 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 LARGEMIDCAP

The <u>S&P United Kingdom LargeMidCap</u>, 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 <u>S&P United Kingdom SmallCap</u>, 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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