

CONTRIBUTORS

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

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

Hong Xie, CFA
Director
Global Research & Design
hong.xie@spglobal.com

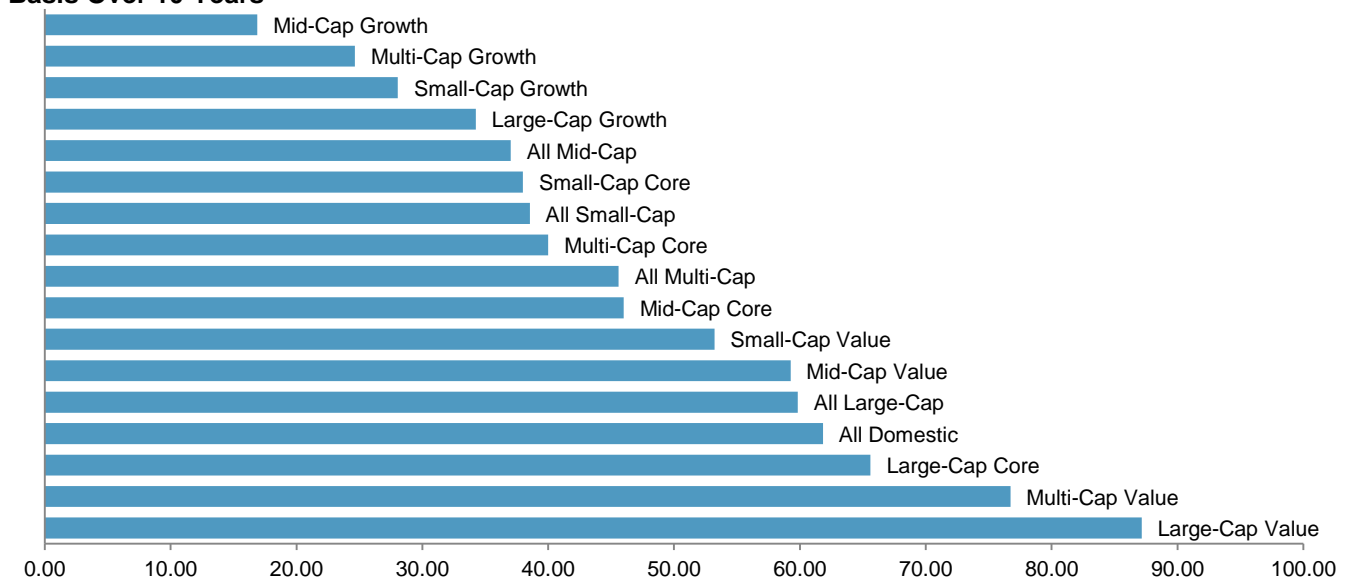
SPIVA[®] Institutional Scorecard: How Much Do Fees Affect the Active Versus Passive Debate?

EXECUTIVE SUMMARY

- This report examines the impact of fees on the performance of mutual funds and institutional managed accounts across equity and fixed income categories, using gross- and net-of-fees returns.
- Fees may negatively affect managers' performance regardless of the type of investment account, though the magnitude of impact varies depending on the category.
- For active equity institutional managers, the one-year performance figures ending December 2017 were positive, as managers in 11 out of 17 categories outperformed their benchmarks, using gross-of-fees returns.
- However, the figures worsened over the 10-year horizon, as the majority of managers in 10 out of 17 categories underperformed their respective benchmarks.
- Large-cap value was the best-performing category relative to its benchmark on both a gross- and net-of-fees basis. Almost 87% of active managers in this category outperformed the benchmark on a gross-of-fees basis in the past 10 years. Similarly, approximately 75% of large-cap value institutional accounts outperformed the benchmark in the 10-year period using net-of-fees returns.
- Similar to findings in previous scorecards, more mutual fund managers underperformed than their institutional counterparts for all equity categories on a net-of-fees basis.
- For example, over the past 10 years in the large-cap equity space, 89.51% of mutual fund managers and 58.78% of institutional accounts underperformed the [S&P 500[®]](#) on a net-of-fees basis. When measured on a gross-of-fees basis, 71.97% of large-cap mutual funds and 40.17% of institutional accounts underperformed.
- Similarly, during the same period in the mid-cap space, 96.48% (85.37%) of mutual funds and 78.57% (62.98%) of institutional accounts underperformed the [S&P MidCap 400[®]](#) on a net (gross) basis.

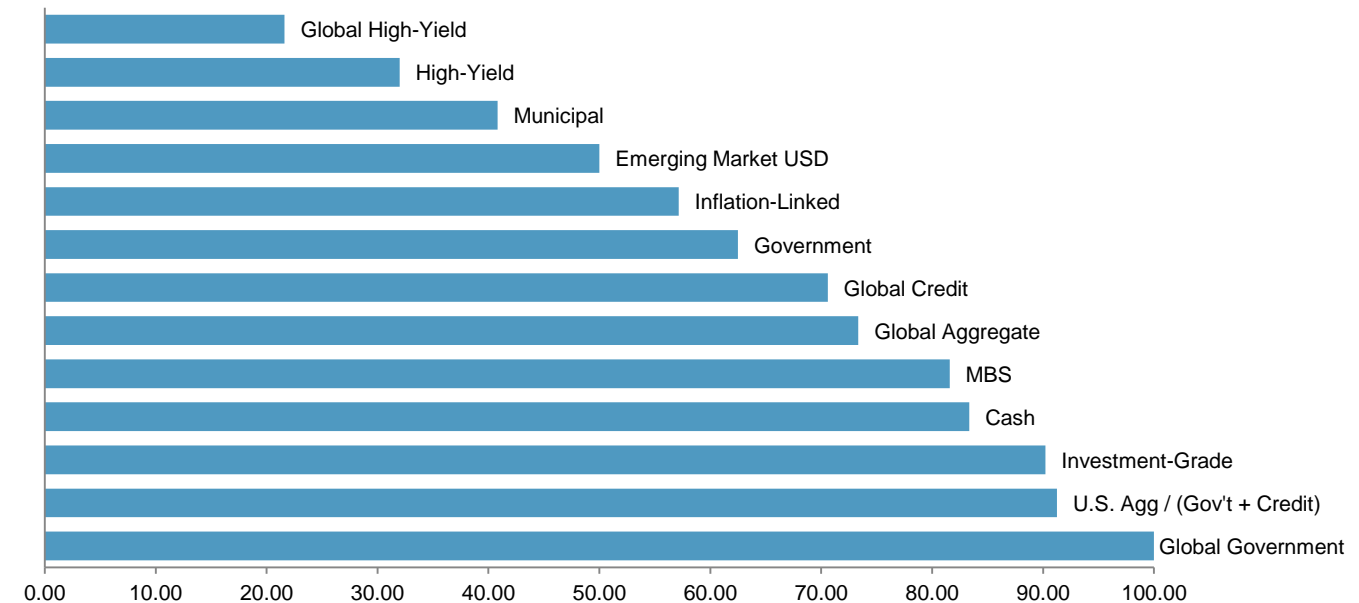
- Small-cap equity remains a challenging space for active managers. Over 80% of mutual funds underperformed the [S&P SmallCap 600®](#) (net- and gross-of-fees), while 81.61% (61.45%) of institutional accounts underperformed on a net (gross) basis in the past 10 years. The findings in the small-cap space help to dispel the myth that small-cap equity is an inefficient asset class that is best accessed via active management.
- Institutional managers investing in international, international small-cap, and global equities fared the same as or better than their domestic counterparts against their respective benchmarks on both fee schedules.
- In fixed income, the results were mixed, depending on the market segment and the type of returns used. On a gross-of-fees basis, institutional managers continued to show strength in many categories, including global government, global credit, investment-grade, inflation-linked, and mortgage-backed securities (MBS) funds, outperforming their respective benchmarks.
- The impact of fees in the municipal bond market varied significantly between institutional accounts and mutual funds. Fees overwhelmingly affected the performance of mutual fund muni managers, as approximately 63% of them failed to outperform the benchmark on a net-of-fees basis, while only 41% underperformed on a gross-of-fees basis, constituting a difference of 22%. That difference was reduced to 7% when looking at institutional muni managers.
- This significant difference in the muni mutual fund space was not surprising when we examined average fees charged by muni managers across both investment categories. The median fee for muni mutual funds was 0.75% per year, whereas the median fee for institutional muni accounts was 0.35%.

Exhibit 1a: Percent of Institutional Equity Managers Outperforming Their Benchmark on a Gross-of-Fees Basis Over 10 Years



Source: S&P Dow Jones Indices LLC, eVestment Alliance. Data as of Dec. 31, 2017. Past performance is no guarantee of future results. Chart is provided for illustrative purposes.

Exhibit 1b: Percent of Institutional Fixed Income Managers Outperforming Their Benchmark on a Gross-of-Fees Basis Over 10 Years



Source: S&P Dow Jones Indices LLC, eVestment Alliance. Data as of Dec. 31, 2017. Past performance is no guarantee of future results. Chart is provided for illustrative purposes.

Fees play a major role in the active versus passive debate. After subtracting fees, returns from active management tend to be less than those from passive management, as the latter costs less.¹ Within active management, it is widely understood and has been documented that fees can vary meaningfully depending on the type of investor.² In general, retail investors tend to pay higher advisory and management fees than institutional investors.³ Institutional investors have the option to negotiate fees directly with asset managers based on the size of the mandate and how many strategies may already exist with one manager. Retail investors, on the other hand, lack such bargaining power.

Since 2002, S&P Dow Jones Indices has been publishing the S&P Indices Versus Active (SPIVA) U.S. Scorecard. The scorecard measures the performance of actively managed equity funds investing in domestic and international equity, as well as fixed income funds, against their respective benchmarks. The University of Chicago’s Center for Research in Security Prices (CRSP) Survivor-Bias-Free US Mutual Fund Database serves as the underlying data source for the scorecard. As the CRSP database consists of publicly traded open-ended mutual funds, the fee structure primarily reflects retail products rather than institutional accounts.

¹ Sharpe, William F., “[The Arithmetic of Active Management](#),” *Financial Analysts Journal*, January/February 1991, Volume 47 Issue 1. “Properly measured, the average actively managed dollar must underperform the average passively managed dollar, net of costs.”

² For example, research by the Investment Company Institute in “[Mutual Funds and Institutional Accounts: A Comparison](#),” (2006) showed that the average mutual fund advisory fee for large-cap domestic equity funds is around 70 bps, whereas the same category for a separate institutional account averages 53 bps. Similarly, the average mutual fund advisory fee for a domestic fixed income fund ranges around 48 bps, while that for a separate institutional account is 30 bps.

³ Fee differentials between mutual funds and separate accounts may stem from a number of factors. It is beyond the scope of our paper to cover those factors. For a more detailed write up on the key differences between the two structures, please refer to the Investment Company Institute’s “[Mutual Funds and Institutional Accounts: A Comparison](#),” (2006).

This report attempts to answer three questions that are pertinent to the active versus passive debate.

1. When measured on a net- and gross-of-fees basis, do institutional asset managers outperform their respective benchmarks?
2. Similarly, do mutual funds outperform their respective benchmarks when measured on a net- and gross-of-fees basis?
3. For particular asset classes and sub-asset classes, do institutional managers fare better than their retail fund counterparts when measured on a gross-of-fees basis?

To answer these questions, we report the relative performance of U.S. equity and fixed income asset managers for institutional accounts⁴ using composite returns from eVestment Alliance,⁵ a provider of investment data and analytics for the institutional asset management industry. It should be noted that, unlike the publicly traded mutual fund performance data, the data from eVestment relies on self-reporting by managers. Relative performance for retail funds on a gross-of-fees basis is computed by adding back the annual expense ratio to the net-of-fees returns. Appendix A contains detailed mapping of various investment strategies to their groups.

In addition, we compare the relative performance of open-ended mutual funds—using net- and gross-of-fees returns—against similar peer groupings composed of institutional accounts. We report the figures for domestic equity, international equity, and fixed income categories.

By producing this report, we aim to provide the institutional community with the ability to judge managers' true skills without the possible distortions that fees may create on performance. Including mutual funds—on both a net- and gross-of-fees performance basis—with institutional accounts also allows readers to see if fees make any meaningful difference in a particular asset class for a certain type of market participant.

This report also aims to address the notion that benchmarks are not directly investable and do not incur costs, thereby making any performance comparison of active funds against their benchmarks not “apples-to-apples.” By comparing retail mutual funds and institutional accounts on a gross-of-fees basis against their respective benchmarks, we eliminate any possibility that fees are the sole contributor to a given manager's underperformance.

This report is organized as follows. In Section I, we highlight the relative performance of retail funds and institutional accounts against their respective benchmarks for the equity and fixed income categories. Section II replicates the headline SPIVA U.S. Scorecard using only institutional accounts, detailing related metrics such as survivorship, style consistency, asset-weighted versus equal-weighted performance figures, and quartile breakpoints.

⁴ Institutional accounts include institutional separately managed accounts and commingled trusts.

⁵ Composite returns can be measured as the equal-weighted or asset-weighted averages of the returns of all individual constituent portfolios, depending on the manager's discretion.

SECTION I: PERCENTAGE OF RETAIL FUNDS AND INSTITUTIONAL ACCOUNTS UNDERPERFORMING THEIR BENCHMARKS

Domestic Equity

Across various categories within the domestic equity space, the overwhelming majority of active managers, both retail and institutional, lagged their respective benchmarks on a net-of-fees basis. Institutional managers have delivered better performance than their retail counterparts, with more than 40% outperforming the benchmark on a gross-of-fees basis. Overall findings suggest that, on a gross- or net-of-fees basis, the U.S. equity space poses meaningful challenges for active managers to overcome.

Exhibit 2: Domestic Equity – Percentage of Managers Underperforming Over 10 Years

CATEGORY	BENCHMARK	MUTUAL FUND (%) NET OF FEES	MUTUAL FUND (%) GROSS OF FEES	INSTITUTIONAL ACCOUNTS (%) NET OF FEES	INSTITUTIONAL ACCOUNTS (%) GROSS OF FEES
All Domestic Funds	S&P Composite 1500®	86.65	71.20	57.94	38.16
All Large-Cap Funds	S&P 500	89.51	71.97	58.78	40.17
All Mid-Cap Funds	S&P MidCap 400	96.48	85.37	78.57	62.98
All Small-Cap Funds	S&P SmallCap 600	95.71	82.00	81.61	61.45
All Multi-Cap Funds	S&P Composite 1500	90.70	78.77	72.63	54.40
Large-Cap Growth Funds	S&P 500 Growth	93.65	84.66	81.44	65.75
Large-Cap Core Funds	S&P 500	94.95	73.85	60.71	34.39
Large-Cap Value Funds	S&P 500 Value	70.44	50.74	25.14	12.84
Mid-Cap Growth Funds	S&P MidCap 400 Growth	97.69	91.33	92.65	83.12
Mid-Cap Core Funds	S&P MidCap 400	96.15	84.62	70.59	54.00
Mid-Cap Value Funds	S&P MidCap 400 Value	88.04	73.91	57.58	40.74
Small-Cap Growth Funds	S&P SmallCap 600 Growth	95.56	86.11	84.48	71.94
Small-Cap Core Funds	S&P SmallCap 600	96.23	83.49	80.46	62.02
Small-Cap Value Funds	S&P SmallCap 600 Value	92.78	74.23	74.48	46.77
Multi-Cap Growth Funds	S&P Composite 1500 Growth	94.77	88.24	92.73	75.36
Multi-Cap Core Funds	S&P Composite 1500	90.14	78.52	69.12	60.00
Multi-Cap Value Funds	S&P Composite 1500 Value	84.21	63.91	40.30	23.26

Source: S&P Dow Jones Indices LLC, eVestment Alliance, CRSP. Data as of Dec. 31, 2017. Past performance is no guarantee of future results. Table is provided for illustrative purposes.

International Equity

In the non-U.S. equity space, we find that managers investing in international small-cap equities delivered higher returns than their respective benchmarks over the 5- and 10-year periods. Observations from previous SPIVA U.S. Scorecards also show that international small-cap funds is one area of international equity investing in which active management has fared quite well historically. While managers outperformed on a gross-of-fees basis in this space, retail funds in this category failed to provide value after fees were accounted for. This is to be expected, as access to smaller, less liquid foreign securities can be costly.

Mutual fund managers investing in emerging market equities, which has traditionally been thought to be one area where active management can add value, fell short of the benchmark over the trailing 10-year period. Approximately 60% of these managers failed to deliver excess returns compared with the broad-based benchmark on a gross-of-fees basis.

Institutional managers investing in international equities continued to fare better than their retail counterparts. The majority were able to provide positive excess returns over their benchmarks on a net-of-fees basis.

Exhibit 3: International Equity – Percentage of Managers Underperforming Over 10 Years

CATEGORY	BENCHMARK	MUTUAL FUND (%) NET OF FEES	MUTUAL FUND (%) GROSS OF FEES	INSTITUTIONAL ACCOUNTS (%) NET OF FEES	INSTITUTIONAL ACCOUNTS (%) GROSS OF FEES
Emerging Market Funds	S&P/IFCI Composite	85.14	60.81	48.61	31.58
Global Funds	S&P Global 1200	81.98	57.66	42.86	33.90
International Funds	S&P International 700	81.68	61.07	45.07	28.71
International Small-Cap Funds	S&P Developed Ex-U.S. SmallCap	72.55	43.14	34.62	14.63

Source: S&P Dow Jones Indices LLC, eVestment Alliance, CRSP. Data as of Dec. 31, 2017. Past performance is no guarantee of future results. Table is provided for illustrative purposes.

Fixed Income

For fixed income, we present the performance of retail funds separate from institutional accounts due to classification nuances. Our source for mutual fund data, the CRSP Survivor-Bias-Free US Mutual Funds Database, adopted style and objective codes from the Lipper objective codes after 1998. Lipper objective codes classify funds by sector, maturity, and credit quality, whereas our source for institutional SMA data, the eVestment Universe, groups fixed income strategies mostly by sector. While it is reasonably straightforward to map sector funds between CRSP and eVestment, a good amount of subjectivity is required in mapping them for composites and composites with various maturity slices. In some sectors, such as government and investment grade, it is challenging to make a direct comparison between the performance of mutual funds and institutional accounts due to maturity slices.

Institutional funds outperformed their retail counterparts on a gross-of-fees basis across almost all categories. All global government funds beat the benchmark over the 10-year period. Less than 10% of institutional managers in the investment-grade funds category underperformed, outperforming the retail managers of all maturity buckets.

Fees appeared to give retail MBS and municipal bond managers the biggest performance hurdles. When measured on a gross (net) basis, approximately 41% (63%) of retail general municipal debt funds underperformed the benchmark. Similarly, nearly 59% of institutional muni bond managers lagged on a gross-of-fees basis, compared with 66% when measured on a net-of-fees basis.

For MBS, on a net-of-fees basis, 81% of retail funds underperformed the benchmark, while only 35% of institutional accounts underperformed.

Exhibit 4: Fixed Income – Percentage of Mutual Fund Managers Underperforming Over 10 Years

CATEGORY	BENCHMARK	MUTUAL FUND (%) NET OF FEES	MUTUAL FUND (%) GROSS OF FEES
Government Long Funds	Barclays U.S. Government Long	95.24	88.10
Government Intermediate Funds	Barclays U.S. Government Intermediate	78.05	58.54
Government Short Funds	Barclays U.S. Government (1-3 Year)	76.47	52.94
Investment-Grade Long Funds	Barclays U.S. Government/Credit Long	95.40	94.25
Investment-Grade Intermediate Funds	Barclays U.S. Government/Credit Intermediate	51.06	40.43
Investment-Grade Short Funds	Barclays U.S. Government/Credit (1-3 Year)	57.81	45.31
High-Yield Funds	Barclays U.S. Corporate High Yield	98.37	84.55
Mortgage-Backed Securities Funds	Barclays U.S. Aggregate Securitized - MBS	81.40	32.56
Global Income Funds	Barclays Global Aggregate	58.33	45.83
Emerging Markets Debt Funds	Barclays Emerging Markets	73.68	42.11
General Municipal Debt Funds	S&P National AMT-Free Municipal Bond	63.29	40.51
California Municipal Debt Funds	S&P California AMT-Free Municipal Bond	66.67	25.64
New York Municipal Debt Funds	S&P New York AMT-Free Municipal Bond	85.29	35.29
Loan Participation Funds	S&P/LSTA U.S. Leveraged Loan 100	100.00	41.18

Source: S&P Dow Jones Indices LLC, CRSP. Data as of Dec. 31, 2017. Past performance is no guarantee of future results. Table is provided for illustrative purposes.

Exhibit 5: Fixed Income – Percentage of Institutional Managers Underperforming Over 10 Years

CATEGORY	BENCHMARK	INSTITUTIONAL ACCOUNTS (%) NET OF FEES	INSTITUTIONAL ACCOUNTS (%) GROSS OF FEES
Emerging Market USD Funds	Barclays EM USD Aggregate	66.67	50.00
Global Aggregate Funds	Barclays Global Aggregate	36.00	26.67
Global Credit Funds	Barclays Global Aggregate - Corporate	50.00	29.41
Global Government Funds	Barclays Global Treasuries	16.67	0.00
Global High-Yield Funds	Barclays Global High Yield	100.00	78.38
Cash Funds	Barclays Short Treasury	35.14	16.67
U.S. Agg. / (Gov't + Credit) Funds	Barclays U.S. Aggregate	19.31	8.75
Investment-Grade Funds	Barclays U.S. Credit	10.71	9.80
Government Funds	Barclays U.S. Government	36.36	37.50
High-Yield Funds	Barclays U.S. Corporate High Yield	86.90	68.00
MBS Funds	Barclays U.S. Aggregate Securitized - MBS	34.62	18.42
Municipal Funds	S&P National AMT-Free Municipal Bond	65.82	59.17
Inflation-Linked Funds	Barclays U.S. Treasury: U.S. TIPS	68.75	42.86

Source: S&P Dow Jones Indices LLC, eVestment Alliance. Data as of Dec. 31, 2017. Past performance is no guarantee of future results. Table is provided for illustrative purposes.

SECTION II: INSTITUTIONAL ACCOUNTS – SPIVA U.S. SCORECARD

Report 1: Percentage of U.S. Equity Funds Outperformed by Benchmarks					
FUND CATEGORY	COMPARISON INDEX	ONE-YEAR	THREE-YEAR	FIVE-YEAR	TEN-YEAR
All Domestic Funds	S&P Composite 1500	57.66	63.84	59.60	38.16
All Large-Cap Funds	S&P 500	52.91	62.21	57.16	40.17
All Mid-Cap Funds	S&P MidCap 400	29.52	65.06	46.15	62.98
All Small-Cap Funds	S&P SmallCap 600	41.71	68.35	66.67	61.45
All Multi-Cap Funds	S&P Composite 1500	54.49	69.32	66.26	54.40
Large-Cap Growth Funds	S&P 500 Growth	36.43	52.67	57.83	65.75
Large-Cap Core Funds	S&P 500	50.00	62.42	55.80	34.39
Large-Cap Value Funds	S&P 500 Value	27.43	45.70	41.56	12.84
Mid-Cap Growth Funds	S&P Midcap 400 Growth	6.86	74.26	47.42	83.12
Mid-Cap Core Funds	S&P MidCap 400	23.53	50.75	38.71	54.00
Mid-Cap Value Funds	S&P MidCap 400 Value	18.81	46.53	43.56	40.74
Small-Cap Growth Funds	S&P SmallCap 600 Growth	8.07	71.07	58.82	71.94
Small-Cap Core Funds	S&P SmallCap 600	39.23	68.97	63.31	62.02
Small-Cap Value Funds	S&P SmallCap 600 Value	55.84	63.18	71.63	46.77
Multi-Cap Growth Funds	S&P Composite 1500 Growth	40.70	76.47	68.24	75.36
Multi-Cap Core Funds	S&P Composite 1500	53.38	72.46	66.14	60.00
Multi-Cap Value Funds	S&P Composite 1500 Value	43.44	57.76	57.02	23.26

Source: S&P Dow Jones Indices LLC, eVestment Alliance. Data as of Dec. 31, 2017. Past performance is no guarantee of future results. Table is provided for illustrative purposes.

Report 2: Survivorship and Style Consistency of U.S. Equity Funds			
FUND CATEGORY	NO. OF FUNDS AT START	SURVIVORSHIP (%)	STYLE CONSISTENCY (%)
ONE-YEAR			
All Domestic Funds	2374	99.75	100.00
All Large-Cap Funds	1032	99.81	100.00
All Mid-Cap Funds	309	99.03	100.00
All Small-Cap Funds	639	99.84	100.00
All Multi-Cap Funds	394	100.00	100.00
Large-Cap Growth Funds	315	100.00	100.00
Large-Cap Core Funds	341	99.41	100.00
Large-Cap Value Funds	376	100.00	100.00
Mid-Cap Growth Funds	124	99.19	100.00
Mid-Cap Core Funds	71	98.59	100.00
Mid-Cap Value Funds	114	99.12	100.00
Small-Cap Growth Funds	184	99.46	100.00
Small-Cap Core Funds	200	100.00	100.00
Small-Cap Value Funds	255	100.00	100.00
Multi-Cap Growth Funds	102	100.00	100.00
Multi-Cap Core Funds	157	100.00	100.00
Multi-Cap Value Funds	135	100.00	100.00

Source: S&P Dow Jones Indices LLC, eVestment Alliance. Data as of Dec. 31, 2017. Past performance is no guarantee of future results. Table is provided for illustrative purposes.

Report 2: Survivorship and Style Consistency of U.S. Equity Funds (cont.)			
FUND CATEGORY	NO. OF FUNDS AT START	SURVIVORSHIP (%)	STYLE CONSISTENCY (%)
THREE-YEAR			
All Domestic Funds	2308	98.96	100.00
All Large-Cap Funds	1006	99.11	100.00
All Mid-Cap Funds	304	99.01	100.00
All Small-Cap Funds	621	98.07	100.00
All Multi-Cap Funds	377	100.00	100.00
Large-Cap Growth Funds	304	99.67	100.00
Large-Cap Core Funds	328	98.78	100.00
Large-Cap Value Funds	374	98.93	100.00
Mid-Cap Growth Funds	121	99.17	100.00
Mid-Cap Core Funds	70	98.57	100.00
Mid-Cap Value Funds	113	99.12	100.00
Small-Cap Growth Funds	182	96.70	100.00
Small-Cap Core Funds	194	98.97	100.00
Small-Cap Value Funds	245	98.37	100.00
Multi-Cap Growth Funds	101	100.00	100.00
Multi-Cap Core Funds	147	100.00	100.00
Multi-Cap Value Funds	129	100.00	100.00
FIVE-YEAR			
All Domestic Funds	2202	97.87	100.00
All Large-Cap Funds	946	98.94	100.00
All Mid-Cap Funds	293	96.59	100.00
All Small-Cap Funds	601	96.34	100.00
All Multi-Cap Funds	362	98.62	100.00
Large-Cap Growth Funds	288	99.65	100.00
Large-Cap Core Funds	302	98.68	100.00
Large-Cap Value Funds	356	98.60	100.00
Mid-Cap Growth Funds	116	97.41	100.00
Mid-Cap Core Funds	65	96.92	100.00
Mid-Cap Value Funds	112	95.54	100.00
Small-Cap Growth Funds	174	95.40	100.00
Small-Cap Core Funds	187	96.79	100.00
Small-Cap Value Funds	240	96.67	100.00
Multi-Cap Growth Funds	99	97.98	100.00
Multi-Cap Core Funds	136	100.00	100.00
Multi-Cap Value Funds	127	97.64	100.00

Source: S&P Dow Jones Indices LLC, eVestment Alliance. Data as of Dec. 31, 2017. Past performance is no guarantee of future results. Table is provided for illustrative purposes.

Report 2: Survivorship and Style Consistency of U.S. Equity Funds (cont.)

FUND CATEGORY	NO. OF FUNDS AT START	SURVIVORSHIP (%)	STYLE CONSISTENCY (%)
TEN-YEAR			
All Domestic Funds	1841	96.85	100.00
All Large-Cap Funds	799	98.75	100.00
All Mid-Cap Funds	246	95.53	100.00
All Small-Cap Funds	507	93.69	100.00
All Multi-Cap Funds	289	98.27	100.00
Large-Cap Growth Funds	257	99.61	100.00
Large-Cap Core Funds	246	98.37	100.00
Large-Cap Value Funds	296	98.31	100.00
Mid-Cap Growth Funds	99	95.96	100.00
Mid-Cap Core Funds	55	96.36	100.00
Mid-Cap Value Funds	92	94.57	100.00
Small-Cap Growth Funds	156	91.67	100.00
Small-Cap Core Funds	145	95.17	100.00
Small-Cap Value Funds	206	94.17	100.00
Multi-Cap Growth Funds	82	97.56	100.00
Multi-Cap Core Funds	108	99.07	100.00
Multi-Cap Value Funds	99	97.98	100.00

Source: S&P Dow Jones Indices LLC, eVestment Alliance. Data as of Dec. 31, 2017. Past performance is no guarantee of future results. Table is provided for illustrative purposes.

Report 3: Average U.S. Equity Fund Performance (Equal-Weighted)

CATEGORY	ONE-YEAR (ANNUALIZED, %)	THREE-YEAR (ANNUALIZED, %)	FIVE-YEAR (ANNUALIZED, %)	TEN-YEAR (ANNUALIZED, %)
S&P Composite 1500	21.13	11.41	15.74	8.69
All Domestic Funds	20.11	10.73	15.31	9.50
S&P 500	21.83	11.41	15.79	8.50
All Large-Cap Funds	22.11	10.86	15.48	8.90
S&P MidCap 400	16.24	11.14	15.01	9.97
All Mid-Cap Funds	20.39	10.32	15.16	9.74
S&P SmallCap 600	13.23	12.00	15.99	10.43
All Small-Cap Funds	16.45	10.97	15.28	10.34
S&P Composite 1500	21.13	11.41	15.74	8.69
All Multi-Cap Funds	20.95	10.13	14.82	9.07
LARGE-CAP				
S&P 500 Growth	27.44	12.86	17.00	9.99
Large-Cap Growth Funds	28.80	12.35	16.60	9.59
S&P 500	21.83	11.41	15.79	8.50
Large-Cap Core Funds	21.61	10.83	15.40	8.84
S&P 500 Value	15.36	9.47	14.24	6.80
Large-Cap Value Funds	17.44	9.64	14.58	8.30

Source: S&P Dow Jones Indices LLC, eVestment Alliance. Data as of Dec. 31, 2017. Past performance is no guarantee of future results. Table is provided for illustrative purposes.

Report 3: Average U.S. Equity Fund Performance (Equal-Weighted) (cont.)

CATEGORY	ONE-YEAR (ANNUALIZED, %)	THREE-YEAR (ANNUALIZED, %)	FIVE-YEAR (ANNUALIZED, %)	TEN-YEAR (ANNUALIZED, %)
MID-CAP				
S&P MidCap 400 Growth	19.92	11.98	14.93	10.35
Mid-Cap Growth Funds	26.23	10.49	14.92	9.28
S&P MidCap 400	16.24	11.14	15.01	9.97
Mid-Cap Core Funds	19.39	10.62	15.40	9.96
S&P MidCap 400 Value	12.32	9.88	14.83	9.46
Mid-Cap Value Funds	15.62	9.93	15.21	9.97
SMALL-CAP				
S&P SmallCap 600 Growth	14.79	12.96	16.39	10.82
Small-Cap Growth Funds	24.88	11.47	16.13	10.04
S&P SmallCap 600	13.23	12.00	15.99	10.43
Small-Cap Core Funds	15.02	10.94	15.27	10.44
S&P SmallCap 600 Value	11.51	10.97	15.52	9.99
Small-Cap Value Funds	11.31	10.40	14.50	10.39
MULTI-CAP				
S&P Composite 1500 Growth	26.49	12.82	16.84	10.07
Multi-Cap Growth Funds	29.30	11.71	16.13	9.84
S&P Composite 1500	21.13	11.41	15.74	8.69
Multi-Cap Core Funds	20.57	9.95	14.72	8.66
S&P Composite 1500 Value	14.99	9.54	14.32	7.13
Multi-Cap Value Funds	15.88	9.08	13.91	8.85

Source: S&P Dow Jones Indices LLC, eVestment Alliance. Data as of Dec. 31, 2017. Past performance is no guarantee of future results. Table is provided for illustrative purposes.

Report 4: Average U.S. Equity Fund Performance (Asset-Weighted)

CATEGORY	ONE-YEAR (ANNUALIZED, %)	THREE-YEAR (ANNUALIZED, %)	FIVE-YEAR (ANNUALIZED, %)	TEN-YEAR (ANNUALIZED, %)
S&P Composite 1500	21.13	11.41	15.74	8.69
All Domestic Funds	21.89	11.15	15.63	9.09
S&P 500	21.83	11.41	15.79	8.50
All Large-Cap Funds	23.14	11.37	15.80	8.74
S&P MidCap 400	16.24	11.14	15.01	9.97
All Mid-Cap Funds	20.71	10.46	15.36	9.79
S&P SmallCap 600	13.23	12.00	15.99	10.43
All Small-Cap Funds	17.61	11.15	15.22	10.27
S&P Composite 1500	21.13	11.41	15.74	8.69
All Multi-Cap Funds	21.58	10.38	15.05	8.36

Source: S&P Dow Jones Indices LLC, eVestment Alliance. Data as of Dec. 31, 2017. Past performance is no guarantee of future results. Table is provided for illustrative purposes.

Report 4: Average U.S. Equity Fund Performance (Asset-Weighted) (cont.)				
CATEGORY	ONE-YEAR (ANNUALIZED, %)	THREE-YEAR (ANNUALIZED, %)	FIVE-YEAR (ANNUALIZED, %)	TEN-YEAR (ANNUALIZED, %)
LARGE-CAP				
S&P 500 Growth	27.44	12.86	17.00	9.99
Large-Cap Growth Funds	32.04	13.31	17.29	10.09
S&P 500	21.83	11.41	15.79	8.50
Large-Cap Core Funds	21.34	10.67	15.24	8.24
S&P 500 Value	15.36	9.47	14.24	6.80
Large-Cap Value Funds	18.01	10.18	14.90	7.89
MID-CAP				
S&P MidCap 400 Growth	19.92	11.98	14.93	10.35
Mid-Cap Growth Funds	26.30	10.86	15.45	9.74
S&P MidCap 400	16.24	11.14	15.01	9.97
Mid-Cap Core Funds	21.81	11.59	16.35	10.34
S&P MidCap 400 Value	12.32	9.88	14.83	9.46
Mid-Cap Value Funds	15.43	9.58	14.84	9.51
SMALL-CAP				
S&P SmallCap 600 Growth	14.79	12.96	16.39	10.82
Small-Cap Growth Funds	26.98	11.60	16.04	10.28
S&P SmallCap 600	13.23	12.00	15.99	10.43
Small-Cap Core Funds	15.32	10.99	15.05	10.29
S&P SmallCap 600 Value	11.51	10.97	15.52	9.99
Small-Cap Value Funds	11.79	10.53	14.39	9.98
MULTI-CAP				
S&P Composite 1500 Growth	26.49	12.82	16.84	10.07
Multi-Cap Growth Funds	26.92	10.82	15.85	8.37
S&P Composite 1500	21.13	11.41	15.74	8.69
Multi-Cap Core Funds	20.97	10.47	14.80	8.30
S&P Composite 1500 Value	14.99	9.54	14.32	7.13
Multi-Cap Value Funds	17.61	9.63	14.44	8.43

Source: S&P Dow Jones Indices LLC, eVestment Alliance. Data as of Dec. 31, 2017. Past performance is no guarantee of future results. Table is provided for illustrative purposes.

Report 5: Quartile Breakpoints of U.S. Equity Funds			
FUND CATEGORY	THIRD QUARTILE	SECOND QUARTILE	FIRST QUARTILE
ONE-YEAR			
All Domestic Funds	15.07	19.77	25.02
All Large-Cap Funds	17.44	21.41	26.67
All Mid-Cap Funds	15.74	20.19	25.42
All Small-Cap Funds	10.33	14.82	20.76
All Multi-Cap Funds	15.87	20.09	25.24
Large-Cap Growth Funds	25.96	28.62	32.44
Large-Cap Core Funds	19.58	21.85	24.32
Large-Cap Value Funds	15.12	17.25	19.77
Mid-Cap Growth Funds	23.15	25.98	28.54
Mid-Cap Core Funds	16.63	19.14	22.18
Mid-Cap Value Funds	12.75	15.06	17.67
Small-Cap Growth Funds	19.79	24.72	28.97
Small-Cap Core Funds	11.92	14.73	17.63
Small-Cap Value Funds	7.45	10.72	14.02
Multi-Cap Growth Funds	24.29	28.48	33.51
Multi-Cap Core Funds	17.13	20.36	23.66
Multi-Cap Value Funds	13.16	15.67	18.59
THREE-YEAR			
All Domestic Funds	9.06	10.59	12.17
All Large-Cap Funds	9.40	10.82	12.17
All Mid-Cap Funds	8.71	10.26	11.75
All Small-Cap Funds	9.20	10.67	12.50
All Multi-Cap Funds	8.11	10.10	11.90
Large-Cap Growth Funds	10.98	12.41	13.76
Large-Cap Core Funds	9.85	10.94	11.82
Large-Cap Value Funds	8.65	9.68	10.84
Mid-Cap Growth Funds	8.78	10.35	12.02
Mid-Cap Core Funds	8.74	10.71	13.15
Mid-Cap Value Funds	8.66	9.94	11.43
Small-Cap Growth Funds	9.18	11.19	13.38
Small-Cap Core Funds	9.47	10.99	12.40
Small-Cap Value Funds	8.80	10.27	12.00
Multi-Cap Growth Funds	9.62	12.10	12.72
Multi-Cap Core Funds	8.33	10.22	11.52
Multi-Cap Value Funds	7.12	9.05	10.45

Source: S&P Dow Jones Indices LLC, eVestment Alliance. Data as of Dec. 31, 2017. Past performance is no guarantee of future results. Table is provided for illustrative purposes.

Report 5: Quartile Breakpoints of U.S. Equity Funds (cont.)			
FUND CATEGORY	THIRD QUARTILE	SECOND QUARTILE	FIRST QUARTILE
FIVE-YEAR			
All Domestic Funds	13.93	15.27	16.58
All Large-Cap Funds	14.31	15.49	16.73
All Mid-Cap Funds	13.92	15.15	16.42
All Small-Cap Funds	13.73	15.16	16.58
All Multi-Cap Funds	13.32	14.79	16.21
Large-Cap Growth Funds	15.34	16.75	17.55
Large-Cap Core Funds	14.67	15.58	16.45
Large-Cap Value Funds	13.58	14.61	15.77
Mid-Cap Growth Funds	13.57	15.05	16.23
Mid-Cap Core Funds	14.29	15.55	17.06
Mid-Cap Value Funds	13.90	15.21	16.29
Small-Cap Growth Funds	14.14	15.86	17.53
Small-Cap Core Funds	13.99	15.33	16.44
Small-Cap Value Funds	13.14	14.51	15.71
Multi-Cap Growth Funds	14.50	15.79	17.33
Multi-Cap Core Funds	13.41	14.86	16.24
Multi-Cap Value Funds	12.59	14.06	15.15
TEN-YEAR			
All Domestic Funds	8.07	9.17	10.22
All Large-Cap Funds	7.90	8.84	9.66
All Mid-Cap Funds	8.54	9.65	10.56
All Small-Cap Funds	8.78	9.96	11.07
All Multi-Cap Funds	7.45	8.51	9.66
Large-Cap Growth Funds	8.69	9.58	10.26
Large-Cap Core Funds	8.07	8.88	9.40
Large-Cap Value Funds	7.42	8.22	9.08
Mid-Cap Growth Funds	8.16	9.33	10.04
Mid-Cap Core Funds	9.23	9.91	10.62
Mid-Cap Value Funds	8.59	9.80	10.97
Small-Cap Growth Funds	8.38	9.62	10.94
Small-Cap Core Funds	8.84	9.84	11.04
Small-Cap Value Funds	9.09	10.14	11.17
Multi-Cap Growth Funds	8.07	9.42	10.18
Multi-Cap Core Funds	7.36	8.36	9.28
Multi-Cap Value Funds	7.25	8.24	9.57

Source: S&P Dow Jones Indices LLC, eVestment Alliance. Data as of Dec. 31, 2017. Past performance is no guarantee of future results. Table is provided for illustrative purposes.

Report 6: Percentage of International Equity Funds Outperformed by Benchmarks

FUND CATEGORY	COMPARISON INDEX	ONE-YEAR	THREE-YEAR	FIVE-YEAR	TEN-YEAR
Emerging Market Funds	S&P/IFCI Composite	30.39	32.62	31.18	31.58
Global Funds	S&P Global 1200	48.78	57.93	48.48	33.90
International Funds	S&P International 700	53.55	40.43	21.97	28.71
International Small-Cap Funds	S&P Developed Ex-U.S. SmallCap	32.43	20.00	16.39	14.63

Source: S&P Dow Jones Indices LLC, eVestment Alliance. Data as of Dec. 31, 2017. Past performance is no guarantee of future results. Table is provided for illustrative purposes.

Report 7: Survivorship and Style Consistency of International Equity Funds

FUND CATEGORY	NO. OF FUNDS AT START	SURVIVORSHIP (%)	STYLE CONSISTENCY (%)
ONE-YEAR			
Emerging Market Funds	395	98.73	100.00
Global Funds	309	99.35	100.00
International Funds	191	99.48	100.00
International Small-Cap Funds	79	97.47	100.00
THREE-YEAR			
Emerging Market Funds	357	97.48	100.00
Global Funds	292	98.97	100.00
International Funds	176	98.86	100.00
International Small-Cap Funds	69	94.20	100.00
FIVE-YEAR			
Emerging Market Funds	302	95.70	100.00
Global Funds	255	98.43	100.00
International Funds	165	98.79	100.00
International Small-Cap Funds	65	89.23	100.00
TEN-YEAR			
Emerging Market Funds	150	94.00	100.00
Global Funds	139	96.40	100.00
International Funds	129	99.22	100.00
International Small-Cap Funds	47	85.11	100.00

Source: S&P Dow Jones Indices LLC, eVestment Alliance. Data as of Dec. 31, 2017. Past performance is no guarantee of future results. Table is provided for illustrative purposes.

Report 8: Average International Equity Fund Performance (Equal-Weighted)

CATEGORY	ONE-YEAR (ANNUALIZED, %)	THREE-YEAR (ANNUALIZED, %)	FIVE-YEAR (ANNUALIZED, %)	TEN-YEAR (ANNUALIZED, %)
S&P/IFCI Composite	33.30	8.97	4.93	2.15
Emerging Market Funds	37.40	10.13	6.20	3.86
S&P Global 1200	23.84	10.16	12.14	5.67
Global Funds	24.89	10.12	12.15	6.54
S&P International 700	26.64	8.50	7.93	2.64
International Funds	26.42	8.97	9.03	3.51
S&P Developed Ex-U.S. SmallCap	32.37	13.32	12.12	5.22
International Small-Cap Funds	34.93	15.36	14.51	7.14

Source: S&P Dow Jones Indices LLC, eVestment Alliance. Data as of Dec. 31, 2017. Past performance is no guarantee of future results. Table is provided for illustrative purposes.

Report 9: Average International Equity Fund Performance (Asset-Weighted)

CATEGORY	ONE-YEAR (ANNUALIZED, %)	THREE-YEAR (ANNUALIZED, %)	FIVE-YEAR (ANNUALIZED, %)	TEN-YEAR (ANNUALIZED, %)
S&P/IFCI Composite	33.30	8.97	4.93	2.15
Emerging Market Funds	37.89	10.15	5.95	3.32
S&P Global 1200	23.84	10.16	12.14	5.67
Global Funds	24.77	10.33	12.39	5.90
S&P International 700	26.64	8.50	7.93	2.64
International Funds	26.29	8.51	8.43	2.68
S&P Developed Ex-U.S. SmallCap	32.37	13.32	12.12	5.22
International Small-Cap Funds	33.59	14.43	13.22	6.47

Source: S&P Dow Jones Indices LLC, eVestment Alliance. Data as of Dec. 31, 2017. Past performance is no guarantee of future results. Table is provided for illustrative purposes.

Report 10: Quartile Breakpoints of International Equity Funds

FUND CATEGORY	THIRD QUARTILE	SECOND QUARTILE	FIRST QUARTILE
ONE-YEAR			
Emerging Market Funds	32.28	37.39	42.41
Global Funds	20.73	23.96	27.59
International Funds	23.93	26.50	29.02
International Small-Cap Funds	31.63	34.07	38.12
THREE-YEAR			
Emerging Market Funds	8.42	10.17	11.80
Global Funds	8.49	9.74	11.05
International Funds	7.99	8.93	9.96
International Small-Cap Funds	13.59	14.98	16.38
FIVE-YEAR			
Emerging Market Funds	4.61	5.98	7.78
Global Funds	10.93	12.18	13.47
International Funds	8.14	9.13	9.97
International Small-Cap Funds	12.85	14.06	15.94
TEN-YEAR			
Emerging Market Funds	1.99	3.20	4.65
Global Funds	5.19	6.31	7.03
International Funds	2.43	3.45	4.04
International Small-Cap Funds	5.91	6.38	8.20

Source: S&P Dow Jones Indices LLC, eVestment Alliance. Data as of Dec. 31, 2017. Past performance is no guarantee of future results. Table is provided for illustrative purposes.

Report 11: Percentage of Fixed Income Funds Outperformed by Benchmarks

FUND CATEGORY	COMPARISON INDEX	ONE-YEAR	THREE-YEAR	FIVE-YEAR	TEN-YEAR
Emerging Market USD Funds	Barclays EM USD Aggregate	12.50	55.81	65.71	50.00
Global Aggregate Funds	Barclays Global Aggregate	40.48	34.82	31.73	26.67
Global Credit Funds	Barclays Global Aggregate - Corporate	46.75	30.56	39.29	29.41
Global Government Funds	Barclays Global Treasuries	51.35	45.71	29.41	0.00
Global High-Yield Funds	Barclays Global High Yield	66.67	78.21	55.22	78.38
Cash Funds	Barclays Short Treasury	5.41	12.16	14.08	16.67
U.S. Agg. / (Gov't + Credit) Funds	Barclays U.S. Aggregate	13.43	8.81	10.75	8.75
Investment-Grade Funds	Barclays U.S. Credit	26.74	17.28	15.79	9.80
Government Funds	Barclays U.S. Government	45.00	45.00	31.58	37.50
High-Yield Funds	Barclays U.S. Corporate High Yield	46.76	60.10	50.81	68.00
MBS Funds	Barclays U.S. Aggregate Securitized - MBS	9.62	5.88	14.29	18.42
Municipal Funds	S&P National AMT-Free Municipal Bond	70.41	66.88	58.60	59.17
Inflation-Linked Funds	Barclays U.S. Treasury: U.S. TIPS	37.14	32.35	23.53	42.86

Source: S&P Dow Jones Indices LLC, eVestment Alliance. Data as of Dec. 31, 2017. Past performance is no guarantee of future results. Table is provided for illustrative purposes.

Report 12: Survivorship and Style Consistency of Fixed Income Funds

FUND CATEGORY	NO. OF FUNDS AT START	SURVIVORSHIP (%)	STYLE CONSISTENCY (%)
ONE-YEAR			
Emerging Market USD Funds	60	100.00	100.00
Global Aggregate Funds	139	100.00	100.00
Global Credit Funds	83	100.00	100.00
Global Government Funds	42	100.00	100.00
Global High-Yield Funds	104	100.00	100.00
Cash Funds	81	100.00	100.00
U.S. Agg. / (Gov't + Credit) Funds	419	99.76	100.00
Investment-Grade Funds	89	100.00	100.00
Government Funds	24	100.00	100.00
High-Yield Funds	240	100.00	100.00
MBS Funds	57	100.00	100.00
Municipal Funds	190	100.00	100.00
Inflation-Linked Funds	39	97.44	100.00

Source: S&P Dow Jones Indices LLC, eVestment Alliance. Data as of Dec. 31, 2017. Past performance is no guarantee of future results. Table is provided for illustrative purposes.

Report 12: Survivorship and Style Consistency of Fixed Income Funds (cont.)			
FUND CATEGORY	NO. OF FUNDS AT START	SURVIVORSHIP (%)	STYLE CONSISTENCY (%)
THREE-YEAR			
Emerging Market USD Funds	47	100.00	100.00
Global Aggregate Funds	127	100.00	100.00
Global Credit Funds	77	100.00	100.00
Global Government Funds	41	100.00	100.00
Global High-Yield Funds	91	100.00	100.00
Cash Funds	81	100.00	100.00
U.S. Agg. / (Gov't + Credit) Funds	405	99.75	100.00
Investment-Grade Funds	85	100.00	100.00
Government Funds	24	100.00	100.00
High-Yield Funds	230	99.57	100.00
MBS Funds	57	100.00	100.00
Municipal Funds	179	100.00	100.00
Inflation-Linked Funds	38	97.37	100.00
FIVE-YEAR			
Emerging Market USD Funds	40	100.00	100.00
Global Aggregate Funds	121	100.00	100.00
Global Credit Funds	63	100.00	100.00
Global Government Funds	38	100.00	100.00
Global High-Yield Funds	77	100.00	100.00
Cash Funds	78	100.00	100.00
U.S. Agg. / (Gov't + Credit) Funds	394	99.75	100.00
Investment-Grade Funds	80	100.00	100.00
Government Funds	22	100.00	100.00
High-Yield Funds	206	99.51	100.00
MBS Funds	55	100.00	100.00
Municipal Funds	176	100.00	100.00
Inflation-Linked Funds	38	97.37	100.00
TEN-YEAR			
Emerging Market USD Funds	18	100.00	100.00
Global Aggregate Funds	82	100.00	100.00
Global Credit Funds	26	100.00	100.00
Global Government Funds	22	100.00	100.00
Global High-Yield Funds	42	100.00	100.00
Cash Funds	74	97.30	100.00
U.S. Agg. / (Gov't + Credit) Funds	349	99.71	100.00
Investment-Grade Funds	53	100.00	100.00
Government Funds	20	100.00	100.00
High-Yield Funds	149	99.33	100.00
MBS Funds	45	100.00	100.00
Municipal Funds	135	100.00	100.00
Inflation-Linked Funds	32	96.88	100.00

Source: S&P Dow Jones Indices LLC, eVestment Alliance. Data as of Dec. 31, 2017. Past performance is no guarantee of future results. Table is provided for illustrative purposes.

Report 13: Average Fixed Income Fund Performance (Equal-Weighted)				
CATEGORY	ONE-YEAR (ANNUALIZED, %)	THREE-YEAR (ANNUALIZED, %)	FIVE-YEAR (ANNUALIZED, %)	TEN-YEAR (ANNUALIZED, %)
Barclays EM USD Aggregate	8.17	6.38	3.87	7.01
Emerging Market USD Funds	13.19	5.36	2.02	6.35
Barclays Global Aggregate	7.39	2.02	0.79	3.09
Global Aggregate Funds	8.36	2.56	1.80	4.20
Barclays Global Aggregate - Corporate	9.09	3.21	2.96	4.37
Global Credit Funds	10.23	3.77	3.39	5.79
Barclays Global Treasuries	7.29	1.79	0.03	2.65
Global Government Funds	7.97	1.68	0.41	4.45
Barclays Global High Yield	10.43	7.08	5.67	8.08
Global High-Yield Funds	11.48	6.22	5.49	7.47
Barclays Short Treasury	0.81	0.49	0.34	0.55
Cash Funds	1.52	1.26	1.14	1.73
Barclays U.S. Aggregate	3.54	2.24	2.10	4.01
U.S. Agg. / (Gov't + Credit) Funds	4.44	2.99	2.83	4.95
Barclays U.S. Credit	6.18	3.63	3.24	5.42
Investment-Grade Funds	6.52	4.27	3.97	6.40
Barclays U.S. Government	2.31	1.40	1.28	3.23
Government Funds	2.23	1.66	1.37	3.53
Barclays U.S. Corporate High Yield	7.50	6.35	5.78	8.03
High-Yield Funds	7.40	6.10	5.76	7.71
Barclays U.S. Aggregate Securitized - MBS	2.14	1.77	1.97	3.80
MBS Funds	3.02	2.50	2.69	4.62
S&P National AMT-Free Municipal Bond	5.09	2.89	2.79	4.22
Municipal Funds	4.18	2.51	2.59	3.99
Barclays U.S. Treasury: U.S. TIPS	3.01	2.05	0.13	3.53
Inflation-Linked Funds	3.06	2.17	0.31	3.53

Source: S&P Dow Jones Indices LLC, eVestment Alliance. Data as of Dec. 31, 2017. Past performance is no guarantee of future results. Table is provided for illustrative purposes.

Report 14: Average Fixed Income Fund Performance (Asset-Weighted)				
CATEGORY	ONE-YEAR (ANNUALIZED, %)	THREE-YEAR (ANNUALIZED, %)	FIVE-YEAR (ANNUALIZED, %)	TEN-YEAR (ANNUALIZED, %)
Barclays EM USD Aggregate	8.17	6.38	3.87	7.01
Emerging Market USD Funds	13.16	6.06	2.56	6.46
Barclays Global Aggregate	7.39	2.02	0.79	3.09
Global Aggregate Funds	7.13	2.24	1.49	3.54
Barclays Global Aggregate - Corporate	9.09	3.21	2.96	4.37
Global Credit Funds	9.34	3.65	3.32	5.65
Barclays Global Treasuries	7.29	1.79	0.03	2.65
Global Government Funds	5.39	1.57	1.46	5.86
Barclays Global High Yield	10.43	7.08	5.67	8.08
Global High-Yield Funds	9.96	6.50	5.77	8.08
Barclays Short Treasury	0.81	0.49	0.34	0.55
Cash Funds	1.38	1.05	0.92	1.32
Barclays U.S. Aggregate	3.54	2.24	2.10	4.01
U.S. Agg. / (Gov't + Credit) Funds	4.68	3.09	2.90	4.84
Barclays U.S. Credit	6.18	3.63	3.24	5.42
Investment-Grade Funds	7.57	4.75	4.39	6.79
Barclays U.S. Government	2.31	1.40	1.28	3.23
Government Funds	1.46	1.29	1.11	1.74
Barclays U.S. Corporate High Yield	7.50	6.35	5.78	8.03
High-Yield Funds	7.34	6.09	5.75	7.71
Barclays U.S. Aggregate Securitized - MBS	2.14	1.77	1.97	3.80
MBS Funds	2.85	2.32	2.45	4.32
S&P National AMT-Free Municipal Bond	5.09	2.89	2.79	4.22
Municipal Funds	4.73	2.73	2.81	4.34
Barclays U.S. Treasury: U.S. TIPS	3.01	2.05	0.13	3.53
Inflation-Linked Funds	2.91	2.04	0.16	3.49

Source: S&P Dow Jones Indices LLC, eVestment Alliance. Data as of Dec. 31, 2017. Past performance is no guarantee of future results. Table is provided for illustrative purposes.

Report 15: Quartile Breakpoints of Fixed Income Funds			
FUND CATEGORY	THIRD QUARTILE	SECOND QUARTILE	FIRST QUARTILE
ONE-YEAR			
Emerging Market USD Funds	10.51	13.17	15.72
Global Aggregate Funds	4.69	7.98	10.94
Global Credit Funds	6.35	9.59	12.83
Global Government Funds	4.46	7.20	10.50
Global High-Yield Funds	8.15	9.19	14.66
Cash Funds	1.11	1.47	1.87
U.S. Agg. / (Gov't + Credit) Funds	3.80	4.26	4.92
Investment-Grade Funds	6.02	6.87	7.39
Government Funds	1.30	2.40	2.88
High-Yield Funds	6.85	7.56	8.28
MBS Funds	2.45	2.77	3.41
Municipal Funds	2.31	3.95	5.54
Inflation-Linked Funds	2.61	3.14	3.51
THREE-YEAR			
Emerging Market USD Funds	3.76	5.78	7.77
Global Aggregate Funds	1.63	2.41	3.10
Global Credit Funds	2.64	3.90	4.58
Global Government Funds	1.08	1.87	2.43
Global High-Yield Funds	5.23	6.22	6.98
Cash Funds	0.69	1.32	1.79
U.S. Agg. / (Gov't + Credit) Funds	2.51	2.83	3.31
Investment-Grade Funds	3.78	4.36	4.71
Government Funds	1.08	1.56	1.97
High-Yield Funds	5.44	6.12	6.74
MBS Funds	1.93	2.24	2.83
Municipal Funds	1.42	2.36	3.23
Inflation-Linked Funds	2.00	2.16	2.32

Source: S&P Dow Jones Indices LLC, eVestment Alliance. Data as of Dec. 31, 2017. Past performance is no guarantee of future results. Table is provided for illustrative purposes.

Report 15: Quartile Breakpoints of Fixed Income Funds (cont.)			
FUND CATEGORY	THIRD QUARTILE	SECOND QUARTILE	FIRST QUARTILE
FIVE-YEAR			
Emerging Market USD Funds	-0.51	2.85	4.30
Global Aggregate Funds	0.60	1.38	2.92
Global Credit Funds	2.05	3.35	4.37
Global Government Funds	-0.19	0.63	1.66
Global High-Yield Funds	4.46	5.58	6.43
Cash Funds	0.46	1.05	1.66
U.S. Agg. / (Gov't + Credit) Funds	2.36	2.69	3.10
Investment-Grade Funds	3.63	3.96	4.30
Government Funds	0.79	1.44	1.84
High-Yield Funds	5.21	5.76	6.28
MBS Funds	2.09	2.36	2.88
Municipal Funds	1.48	2.40	3.44
Inflation-Linked Funds	0.15	0.24	0.38
TEN-YEAR			
Emerging Market USD Funds	6.37	7.03	8.13
Global Aggregate Funds	2.96	3.38	4.45
Global Credit Funds	4.22	5.40	6.57
Global Government Funds	3.32	4.02	4.54
Global High-Yield Funds	5.58	7.12	7.65
Cash Funds	0.68	1.69	2.46
U.S. Agg. / (Gov't + Credit) Funds	4.39	4.82	5.25
Investment-Grade Funds	5.89	6.36	6.85
Government Funds	2.88	3.57	3.96
High-Yield Funds	7.15	7.70	8.23
MBS Funds	3.96	4.34	4.86
Municipal Funds	2.74	3.80	4.64
Inflation-Linked Funds	3.38	3.63	3.86

Source: S&P Dow Jones Indices LLC, eVestment Alliance. Data as of Dec. 31, 2017. Past performance is no guarantee of future results. Table is provided for illustrative purposes.

APPENDIX A: MAPPING

U.S. Equity

While covering the U.S. equity markets, the SPIVA U.S. Scorecard reports on the nine traditional style boxes, as well as multi-cap core, growth, and value funds. It also reports on the U.S. REIT market. Style classifications are based on fundamental characteristics such as the P/E ratio, return on equity (ROE), and earnings growth expectation. Growth and value characteristics are assigned based on a subjective method, with a large weighting on the median of the three statistics as well as the preferred benchmark. Capitalization is subjective, based on the distribution of holdings as well as the preferred benchmark.

Exhibit A1: U.S. Equity Category Mappings	
SPIVA INSTITUTIONAL CATEGORY	eVESTMENT ALLIANCE CLASSIFICATION
Large-Cap Growth Equity	United States Large Cap Growth
Large-Cap Core Equity	United States Large Cap Core
Large-Cap Value Equity	United States Large Cap Value
Mid-Cap Growth Equity	United States Mid Cap Growth
Mid-Cap Core Equity	United States Mid Cap Core
Mid-Cap Value Equity	United States Mid Cap Value
Small-Cap Growth Equity	United States Small Cap Growth
Small-Cap Core Equity	United States Small Cap Core
Small-Cap Value Equity	United States Small Cap Value
Multi-Cap Growth Equity	United States All Cap Growth
Multi-Cap Core Equity	United States All Cap Core
Multi-Cap Value Equity	United States All Cap Value

Source: S&P Dow Jones Indices LLC, eVestment Alliance. Table is provided for illustrative purposes.

International Equity

For international equity, SPIVA reports on four major categories (global, international, international small-cap, and emerging market funds) of interest to global asset allocators. These categories also include multiple eVestment capitalization and style classifications.

Exhibit A2: International Equity Category Mappings	
SPIVA INSTITUTIONAL CATEGORY	eVESTMENT ALLIANCE CLASSIFICATION
Global Equity	Global Large Cap Value
	Global Large Cap Growth
	Global Large Cap Core
International Equity	EAFE Large Cap Value
	EAFE Large Cap Growth
	EAFE Large Cap Core
International Small-Cap Equity	EAFE Small Cap Value
	EAFE Small Cap Growth
	EAFE Small Cap Core
Emerging Market Equity	Brazil Large Cap Value
	Brazil All Cap Value
	Brazil All Cap Growth
	Brazil All Cap Core
	Mexico All Cap Value
	Mexico All Cap Growth
	Latin America Small Cap Value
	Latin America Mid Cap Value
	Latin America Large Cap Growth
	Latin America Large Cap Core
	Latin America All Cap Value
	Latin America All Cap Growth
	Latin America All Cap Core
	Global Emg Mkts Small Cap Value
	Global Emg Mkts Small Cap Growth
	Global Emg Mkts Small Cap Core
	Global Emg Mkts Mid Cap Value
	Global Emg Mkts Mid Cap Growth
	Global Emg Mkts Mid Cap Core
	Global Emg Mkts Large Cap Value
	Global Emg Mkts Large Cap Growth
Global Emg Mkts Large Cap Core	
Global Emg Mkts All Cap Value	
Global Emg Mkts All Cap Growth	
Global Emg Mkts All Cap Core	

Source: S&P Dow Jones Indices LLC, eVestment Alliance. Table is provided for illustrative purposes.

Fixed Income

SPIVA reports include eight domestic and five global fixed income classifications. For maturity buckets, short duration is one to three years, intermediate duration is three to seven years, and long duration is seven years or more. Cash funds are those with a duration similar to cash deposits. For the U.S. market, credit quality is separated into U.S. government, investment-grade corporate ('BBB' rated or higher) and high yield ('BB' rated or lower). eVestment also includes a municipals and U.S. mortgage category.

Global fixed income funds are split into emerging and global markets. Maturity and credit quality is similar to that of the U.S. market.

Exhibit A3: U.S. Fixed Income Category Mappings	
SPIVA INSTITUTIONAL CATEGORY	eVESTMENT ALLIANCE CLASSIFICATION
U.S. FUNDS	
U.S. Agg. / (Gov't + Credit) Funds	United States CoreAggregate
	United States Core Plus
Cash Funds	United States Cash Mgmt
	United States Stable Value
Government Funds	United States GovtAgency Only
Inflation-Linked Funds	United States Inflation Indexed
MBS Funds	United States Mortgage Only
Investment-Grade Funds	United States Corporate Only
High-Yield Funds	United States High Yield
Municipal Funds	United States Municipal Only
GLOBAL/EMERGING FUNDS	
Emerging Market USD Funds	Global Emg Mkts CoreAggregate
Global Aggregate Funds	Global CoreAggregate
Global Government Funds	Global GovtAgency Only
Global Credit Funds	Global Corporate Only
Global High-Yield Funds	Global High Yield

Source: S&P Dow Jones Indices LLC, eVestment Alliance. Table is provided for illustrative purposes.

APPENDIX B: GLOSSARY

Percentage of Managers 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 products that have survived and beat the index. We then report the index outperformance percentage.

Survivorship (%)

This measure represents the percentage of products in existence at the beginning of the time period that is still active at the end of the time period.

Style Consistency (%)

This calculation shows the percentage of managers that had the same style classification at the end of the time period as at the beginning of the time period.

Equal-Weighted Performance

Equal-weighted returns for a particular style category are determined by calculating a simple average return of all active managers in that category in a particular month.

Asset-Weighted Performance

Asset-weighted returns for a particular style category are determined by calculating the weighted average return of all managers in that category in a particular month, with each product's return weighted by its total net assets. Asset-weighted returns are a better indicator of manager category performance because they more accurately reflect the returns of the total money invested in that particular style category.

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, 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.

Indices

A benchmark index provides an investment vehicle against which fund performance can be measured.

U.S. Equity

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 500 leading companies in the foremost industries of the U.S. economy and provides over 80% coverage of U.S. equities.

S&P MIDCAP 400

This index consists of 400 mid-sized companies and covers approximately 7% of the U.S. equities market.

S&P SMALLCAP 600

This index consists of 600 small-cap stocks and covers approximately 3% of the U.S. equities market.

S&P COMPOSITE 1500

This is a broad, market-capitalization-weighted index of 1500 stocks. This index is comprised of three size-based indices: the S&P 500, S&P MidCap 400, and S&P SmallCap 600, which measure the performance of large-, mid-, and small-cap stocks, respectively. This index represents approximately 90% of U.S. equities.

S&P 500 GROWTH AND VALUE INDICES

These indices form an exhaustive, multi-factor style series covering the entire market capitalization of the S&P 500. Constituents, weighted according to market capitalization, are classified as growth, value, or a mix of growth and value.

S&P MIDCAP 400 GROWTH AND VALUE INDICES

These indices form an exhaustive, multi-factor style series covering the entire market capitalization of the S&P MidCap 400.

S&P SMALLCAP 600 GROWTH AND VALUE INDICES

These indices form an exhaustive, multi-factor style series covering the entire market capitalization of the S&P SmallCap 600.

S&P COMPOSITE 1500 GROWTH AND VALUE INDICES

These indices form an exhaustive, multi-factor style series covering the entire market capitalization of the [S&P Composite 1500](#).

International Equity

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 INTERNATIONAL 700

This index measures the non-U.S. component of the global equity markets, covering all the regions included in the S&P Global 1200, excluding the U.S. (S&P 500).

S&P DEVELOPED EX-U.S. SMALL CAP

This index represents the small-cap segment—the bottom 15%—of the world’s universe of institutionally investable securities, excluding the U.S.

S&P/IFCI COMPOSITE

This index 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.

Fixed Income

BARCLAYS CAPITAL LONG GOVERNMENT BOND INDEX

This index consists of U.S. Treasury and U.S. Government agency bonds with maturities greater than 10 years.

BARCLAYS CAPITAL INTERMEDIATE GOVERNMENT BOND INDEX

This index consists of U.S. Treasury and U.S. Government agency bonds with maturities from 1 to 10 years.

BARCLAYS CAPITAL 1-3 YEAR GOVERNMENT BOND INDEX

This index consists of U.S. Treasury and U.S. Government agency bonds with maturities from one to three years.

BARCLAYS CAPITAL LONG GOVERNMENT/CREDIT BOND INDEX

This index covers corporate and non-corporate fixed income securities that are rated investment grade and have maturities greater than 10 years.

BARCLAYS CAPITAL INTERMEDIATE GOVERNMENT/CREDIT BOND INDEX

This index covers corporate and non-corporate fixed income securities that are rated investment grade with maturities from 1 to 10 years.

BARCLAYS CAPITAL 1-3 YEAR GOVERNMENT/CREDIT BOND INDEX

This index covers corporate and non-corporate fixed income securities that are rated investment grade and have one to three years until their final maturity.

BARCLAYS CAPITAL HIGH YIELD BOND INDEX

This index includes all fixed income securities with a maximum quality rating of “Ba1”/ “BB+” (including defaulted issues), a minimum amount outstanding of USD 100 million, and at least one year to maturity.

BARCLAYS CAPITAL BROTHERS MORTGAGE-BACKED SECURITIES INDEX

This index includes 15- and 30-year fixed-rate securities backed by mortgage pools of the Government National Mortgage Association (GNMA), Federal Home Loan Mortgage Corporation (FHLMC), and Federal National Mortgage Association (FNMA).

BARCLAYS CAPITAL GLOBAL AGGREGATE BOND INDEX

This index covers the most liquid portion of the global investment-grade, fixed-rate bond market, including government, credit, and collateralized securities.

BARCLAYS CAPITAL EMERGING MARKETS INDEX

This index includes fixed- and floating-rate, USD-denominated debt from emerging markets.

BARCLAYS CAPITAL EMERGING MARKETS LOCAL CURRENCY GOVERNMENT INDEX

This index includes all emerging markets government debt in the local currency.

BARCLAYS CAPITAL EMERGING MARKETS USD AGGREGATE - CORPORATE INDEX

This index covers only the corporate sector of the Barclays Emerging Markets Aggregate Index.

BARCLAYS CAPITAL GLOBAL AGGREGATE CORPORATE INDEX

This index covers only the corporate sector of the Barclays Global Aggregate Index.

BARCLAYS GLOBAL TREASURY INDEX

This index covers fixed-rate government debt of investment-grade-rated countries.

BARCLAYS U.S. SHORT TREASURY INDEX

This index covers fixed-rate, USD-denominated Treasury bills issued by the U.S. Treasury.

BARCLAYS U.S. AGGREGATE INDEX

This index covers investment-grade, USD-denominated, fixed-rate taxable bonds.

BARCLAYS U.S. AGGREGATE CREDIT INDEX

This index includes all investment-grade, USD-denominated, fixed-rate, taxable corporate, and government-related bonds.

BARCLAYS U.S. AGGREGATE GOVERNMENT INDEX

This index covers U.S. Treasury and U.S. Government agency bonds with all maturities.

BARCLAYS U.S. TIPS INDEX

This index includes all maturities of U.S. Treasury Inflation Protected Securities.

S&P/LSTA U.S. LEVERAGED LOAN 100 INDEX

This index is designed to reflect the performance of the largest facilities in the floating-rate bank loan, or senior loan, market.

S&P NATIONAL AMT-FREE MUNICIPAL BOND INDEX

This index is a broad, comprehensive, market-value-weighted index designed to measure the performance of the investment-grade U.S. municipal bonds that are exempt from the Alternative Minimum Tax.

S&P CALIFORNIA AMT-FREE MUNICIPAL BOND INDEX

This index is designed to measure the performance of the investment-grade California municipal bonds that are exempt from the Alternative Minimum Tax.

S&P NEW YORK AMT-FREE MUNICIPAL BOND INDEX

This index is designed to measure the performance of the investment-grade New York bonds that are exempt from the alternative minimum tax.

S&P DJI RESEARCH CONTRIBUTORS		
Sunjiv Mainie, CFA, CQF	Global Head	sunjiv.mainie@spglobal.com
Jake Vukelic	Business Manager	jake.vukelic@spglobal.com
GLOBAL RESEARCH & DESIGN		
AMERICAS		
Aye M. Soe, CFA	Americas Head	aye.soe@spglobal.com
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	Director	qing.li@spglobal.com
Berlinda Liu, CFA	Director	berlinda.liu@spglobal.com
Hamish Preston	Associate Director	hamish.preston@spglobal.com
Maria Sanchez	Associate Director	maria.sanchez@spglobal.com
Kelly Tang, CFA	Director	kelly.tang@spglobal.com
Hong Xie, CFA	Director	hong.xie@spglobal.com
APAC		
Priscilla Luk	APAC Head	priscilla.luk@spglobal.com
Arpit Gupta	Senior Analyst	arpit.gupta1@spglobal.com
Akash Jain	Associate Director	akash.jain@spglobal.com
Liyu Zeng, CFA	Director	liyu.zeng@spglobal.com
EMEA		
Sunjiv Mainie, CFA, CQF	EMEA Head	sunjiv.mainie@spglobal.com
Leonardo Cabrer, PhD	Senior Analyst	leonardo.cabrer@spglobal.com
Andrew Cairns	Senior Analyst	andrew.cairns@spglobal.com
Andrew Innes	Associate Director	andrew.innes@spglobal.com
INDEX INVESTMENT STRATEGY		
Craig J. Lazzara, CFA	Global Head	craig.lazzara@spglobal.com
Chris Bennett, CFA	Director	chris.bennett@spglobal.com
Fei Mei Chan	Director	feimei.chan@spglobal.com
Tim Edwards, PhD	Managing Director	tim.edwards@spglobal.com
Anu R. Ganti, CFA	Director	anu.ganti@spglobal.com
Howard Silverblatt	Senior Index Analyst	howard.silverblatt@spglobal.com

GENERAL DISCLAIMER

Copyright © 2019 S&P Dow Jones Indices LLC. All rights reserved. STANDARD & POOR'S, S&P, S&P 500, S&P 500 LOW VOLATILITY INDEX, S&P 100, S&P COMPOSITE 1500, S&P MIDCAP 400, S&P SMALLCAP 600, S&P GIVI, GLOBAL TITANS, DIVIDEND ARISTOCRATS, S&P TARGET DATE INDICES, GICS, SPIVA, SPDR and INDEXOLOGY are registered trademarks of Standard & Poor's Financial Services LLC, a division of S&P Global ("S&P"). DOW JONES, DJ, DJIA and DOW JONES INDUSTRIAL AVERAGE are registered trademarks of Dow Jones Trademark Holdings LLC ("Dow Jones"). These trademarks together with others have been licensed to S&P Dow Jones Indices LLC. Redistribution or reproduction in whole or in part are prohibited without written permission of S&P Dow Jones Indices LLC. This document does not constitute an offer of services in jurisdictions where S&P Dow Jones Indices LLC, S&P, Dow Jones or their respective affiliates (collectively "S&P Dow Jones Indices") do not have the necessary licenses. Except for certain custom index calculation services, 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 and providing custom calculation services. Past performance of an index is not an indication or guarantee of future results.

It is not possible to invest directly in an index. Exposure to an asset class represented by an index may be 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 investment product or vehicle. S&P Dow Jones Indices LLC is not a tax advisor. A tax advisor should be consulted to evaluate the impact of any tax-exempt securities on portfolios and the tax consequences of making any particular investment decision. Inclusion of a security within an index is not a recommendation by S&P Dow Jones Indices to buy, sell, or hold such security, nor is it considered to be investment advice. Closing prices for S&P Dow Jones Indices' US benchmark indices are calculated by S&P Dow Jones Indices based on the closing price of the individual constituents of the index as set by their primary exchange. Closing prices are received by S&P Dow Jones Indices from one of its third party vendors and verified by comparing them with prices from an alternative vendor. The vendors receive the closing price from the primary exchanges. Real-time intraday prices are calculated similarly without a second verification.

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

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

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

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