

SPIVA® U.S. Scorecard

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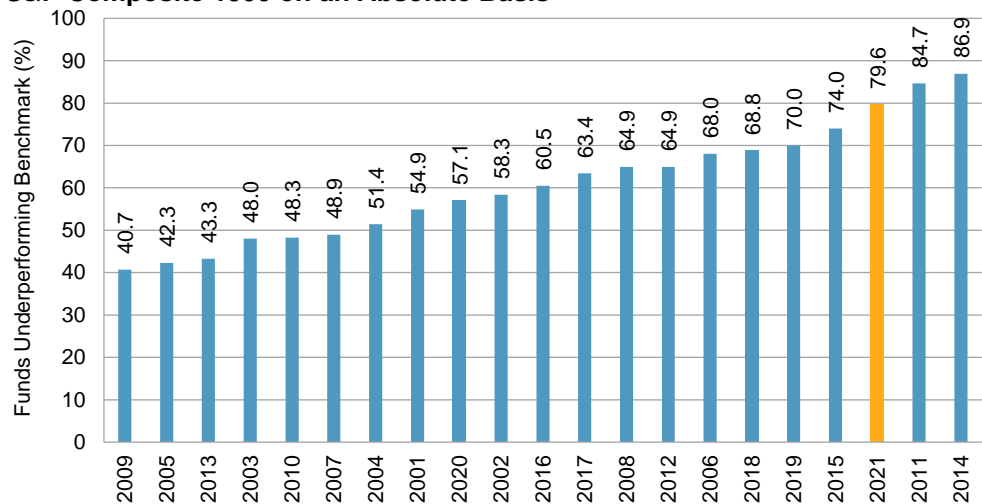
[Experience](#) the active vs. passive debate on a global scale.

SUMMARY

Global equity markets powered ahead in 2021, despite the ongoing COVID-19 pandemic. As rocky vaccine rollouts and new coronavirus variants prolonged the pandemic, governments and central banks continued their strategies of generous fiscal spending and loose monetary policy. The [S&P 500®](#) gained 28.7% in 2021, capping an impressive 100.4% cumulative advance over the past three years.

The positive market performance translated into good absolute returns for active fund managers, although relative performance continued to disappoint: **79.6% of domestic equity funds lagged the [S&P Composite 1500®](#) in 2021** (see Report 1a).

Exhibit 1: Percentage of All Domestic Equity Funds Underperforming the S&P Composite 1500 on an Absolute Basis



Source: S&P Dow Jones Indices LLC. Data as of Dec. 31, 2021. Past performance is no guarantee of future results. Chart is provided for illustrative purposes.

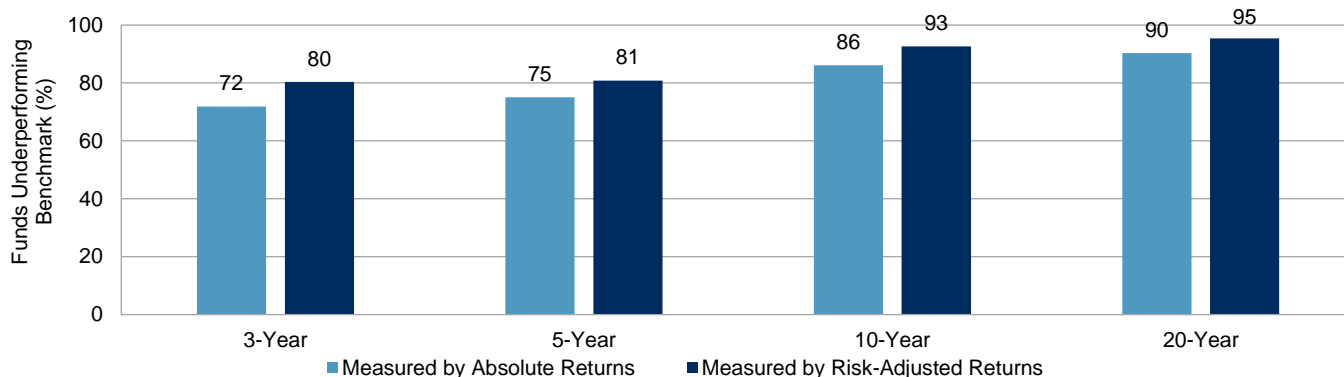
In 16 of the 18 categories tracking U.S. equities-focused funds, more than half the funds underperformed their benchmark. Particularly noteworthy were the **98.6% of large-cap growth funds that failed to beat the [S&P 500 Growth](#)**—not only the worst-performing category in 2021, but the **worst performing of any U.S. equities category in the past 21 years** (see Report 1a).

Large-cap funds continued their underperformance for the 12th consecutive calendar year, as 85% of active large-cap funds trailed the S&P 500. Mid-cap (62%) and small-cap (71%) funds acquitted themselves

slightly better relative to the [S&P MidCap 400®](#) and [S&P SmallCap 600®](#), but still offered scant reason to celebrate (see Report 1a).

Fund managers often respond to evidence of active underperformance by claiming to offer better returns per unit of volatility (i.e., to outperform in risk-adjusted terms). This would be an appropriate counterargument, if only it were true. However, the data shows that the vast majority of actively managed funds underperformed on this metric as well. **Among domestic equity funds, while 90% have underperformed the S&P Composite 1500 over the past 20 years, an even greater 95% did so on a risk-adjusted basis** (see Reports 1a and 1b).

Exhibit 2: Percentage of All Domestic Equity Funds Underperforming the S&P Composite 1500 on an Absolute and Risk-Adjusted Basis



Source: S&P Dow Jones Indices LLC. Data as of Dec. 31, 2021. Past performance is no guarantee of future results. Chart is provided for illustrative purposes.

For internationally focused U.S. funds, relative results in 2021 were a mixed bag. Most global (84%) and emerging markets (65%) funds failed to top the [S&P Global 1200](#) and [S&P/IFCI Composite](#), respectively. Investors in international (50%) and international small-cap (31%) funds were less likely to fall short of the [S&P International 700](#) and [S&P Developed Ex-U.S. SmallCap](#), respectively. Taking a longer view, however, nearly 85-90% trailed their benchmarks over the past 20 years, similar to their domestic counterparts (see Report 6a).

While equity markets whistled past the inflation graveyard, the fixed income world started to price in the end of the easy money party. The Bloomberg Barclays US Government (1-3 Year), Intermediate, and Long indices returned -0.60%, -1.69%, and -4.57% for the year, respectively. The funds charged with beating these benchmarks reflected this non-parallel movement in the rates term structure: government short funds had little chance (26%) of beating their hurdle rate, but intermediate (52%) and long (82%) funds took greater advantage of the lower bars they needed to clear (see Report 11a).

Echoing the results from equities, longer observation horizons offered little sanctuary. More than 60% of funds did not surpass their benchmarks across all fixed income categories over the 15-year horizon on both an absolute and risk-adjusted basis (see Report 11a).

The SPIVA Scorecard’s accounting for survivorship bias continues to be a valuable cautionary tale. As has generally been the case in recent years, roughly 5% of funds across asset classes and categories were merged or liquidated in 2021. **Over 20 years, nearly 70% of domestic equity funds and two-thirds of internationally focused equity funds across segments were confined to the history books.** Similarly, roughly half of fixed income funds closed their doors over the past 15 years (see Reports 2, 7, and 12).

A UNIQUE SCORECARD FOR THE ACTIVE VERSUS PASSIVE DEBATE

There is nothing novel about the index versus active debate. It has been a contentious subject for decades, and there are a few strong believers on both sides, with the vast majority of market participants falling somewhere in between. Since its first publication in 2002, the SPIVA Scorecard has served as the de facto scorekeeper of the active versus passive debate. When headline numbers have deviated from their beliefs, we have heard passionate arguments from both camps.

Beyond the SPIVA Scorecard's widely cited headline numbers is a rich data set that addresses issues—often far more fascinating though far less discussed—about measurement techniques, universe composition, and fund survivorship. These data sets are rooted in the following fundamental principles of the SPIVA Scorecard, with which regular readers will be familiar.

- **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.
- **Apples-to-Apples Comparison:** Fund returns are often compared to popular benchmarks such as the S&P 500, regardless of size or style classification. SPIVA Scorecards avoid this pitfall by measuring a fund's returns against the returns of a benchmark appropriate for that particular investment category.
- **Asset-Weighted Returns:** Average returns for a fund group are often calculated using only equal weighting, which results in the returns of a USD 10 billion fund affecting the average in the same manner as the returns of a USD 10 million fund. A more accurate representation of how market participants fared in a particular period is found by calculating weighted average returns where each fund's return is weighted by net assets. SPIVA Scorecards show both equal- and asset-weighted averages.
- **Style Consistency:** SPIVA Scorecards measure style consistency for each style category across different time horizons. Style consistency is an important metric because style drift (the tendency of funds to diverge from their initial investment categorization) can have an impact on asset allocation decisions.
- **Data Cleaning:** SPIVA Scorecards avoid double counting multiple share classes in all count-based calculations, using only the share class with greater assets. Since this is meant to be a scorecard for active managers, it excludes index funds, leveraged and inverse funds, and other index-linked products.
- **Risk-Adjusted Returns:** The return/volatility ratio looks at the relationship and the trade-off between risk and return. A fund with a higher ratio is preferable since it delivers a higher return per unit of risk taken.

HISTORICAL VIEW

To provide context for the relative performance of active funds, we compile annual league tables (see Exhibits 3a, 3b, and 3c) across the U.S. equity, international equity, and fixed income categories. The tables show how active funds performed against their benchmarks in each calendar year.

We also provide the three-year relative performance of managers across major domestic and international equity categories (see Exhibits 4, 5, and 6). The figures are calculated on a rolling semiannual basis.

Exhibit 3a: Percentage of U.S. Equity Funds Underperforming Benchmarks Each Year

FUND CATEGORY	COMPARISON INDEX	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
All Domestic Funds	S&P Composite 1500	48.9	64.9	40.7	48.3	84.6	64.9	43.3	86.9	74.0	60.5	63.4	68.8	70.0	57.1	79.6
All Large-Cap Funds	S&P 500	44.6	56.0	48.4	65.9	82.2	62.7	54.6	86.7	65.4	66.0	63.1	64.5	71.0	60.3	85.1
All Mid-Cap Funds	S&P MidCap 400	45.8	75.7	55.7	73.3	68.6	79.8	37.1	66.1	57.2	89.4	44.4	45.6	31.7	50.7	61.9
All Small-Cap Funds	S&P SmallCap 600	46.0	83.3	30.7	54.0	85.8	66.3	67.8	72.0	71.8	85.5	47.7	68.5	38.5	45.5	70.5
All Multi-Cap Funds	S&P Composite 1500	46.0	70.1	39.3	60.4	83.9	65.2	46.8	81.6	70.1	74.9	56.5	66.8	69.2	55.6	80.3
Large-Cap Growth Funds	S&P 500 Growth	27.1	90.7	36.8	51.0	95.9	45.6	41.1	95.6	47.6	89.8	32.9	60.3	33.3	38.2	98.6
Large-Cap Core Funds	S&P 500	43.5	52.3	50.5	76.6	83.2	66.6	57.7	80.4	73.7	74.6	69.0	75.8	69.5	65.9	78.8
Large-Cap Value Funds	S&P 500 Value	45.8	24.5	45.7	70.6	54.3	85.0	64.9	77.8	61.5	78.0	46.9	46.3	97.2	33.4	38.5
Mid-Cap Growth Funds	S&P MidCap 400 Growth	42.0	91.0	54.0	84.1	76.5	86.8	34.5	55.4	79.7	94.6	18.0	15.2	9.3	17.2	83.2
Mid-Cap Core Funds	S&P MidCap 400	60.8	60.2	70.7	86.5	65.7	78.6	43.0	58.6	68.2	90.6	61.7	62.2	40.5	80.4	44.8
Mid-Cap Value Funds	S&P MidCap 400 Value	57.8	68.0	47.3	57.1	67.6	73.5	40.8	71.4	34.4	96.8	43.1	72.2	65.0	52.7	62.7
Small-Cap Growth Funds	S&P SmallCap 600 Growth	40.8	94.8	31.3	62.2	94.1	62.9	55.3	64.0	87.5	96.0	15.1	61.5	13.8	13.7	87.2
Small-Cap Core Funds	S&P SmallCap 600	55.5	82.1	33.2	58.6	86.0	68.7	77.7	66.9	77.5	89.5	58.6	87.5	41.4	62.4	61.3
Small-Cap Value Funds	S&P SmallCap 600 Value	39.4	72.1	25.2	42.0	81.8	61.5	78.8	94.1	45.0	88.9	74.1	83.3	80.0	43.8	50.7
Multi-Cap Growth Funds	S&P Composite 1500 Growth	29.8	88.3	42.0	45.7	94.8	51.6	38.8	87.4	65.5	85.3	46.3	65.9	45.2	46.7	92.9
Multi-Cap Core Funds	S&P Composite 1500	45.2	65.8	39.2	66.1	82.9	68.2	53.3	84.1	83.9	74.5	68.8	81.7	74.4	62.1	80.1
Multi-Cap Value Funds	S&P Composite 1500 Value	58.1	48.4	35.8	68.2	66.7	72.6	47.9	67.3	55.6	71.2	49.6	74.8	91.8	50.0	50.9
Real Estate Funds	S&P United States REIT	45.3	72.9	38.3	66.7	66.3	62.0	64.8	67.8	43.0	84.0	36.9	88.9	26.6	24.7	70.3

Source: S&P Dow Jones Indices LLC. Data as of Dec. 31, 2021. Past performance is no guarantee of future results. Table is provided for illustrative purposes.

Exhibit 3b: Percentage of International Equity Funds Underperforming Benchmarks Each Year

FUND CATEGORY	COMPARISON INDEX	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Global Funds	S&P Global 1200	54.2	61.6	52.3	43.8	71.8	61.8	47.5	76.5	58.2	79.7	50.2	70.6	57.1	54.3	84.1
International Funds	S&P 700	68.2	64.3	71.5	40.2	69.5	44.3	43.2	68.2	25.5	84.9	54.0	76.8	57.3	54.6	49.7
International Small Cap Funds	S&P Developed Ex-U.S. SmallCap	36.5	53.1	49.2	45.3	60.0	24.6	47.9	69.0	48.9	71.8	44.0	90.8	60.5	51.9	31.1
Emerging Markets Funds	S&P/IFCI Composite	69.9	65.3	71.2	64.9	52.6	45.6	55.0	70.7	66.0	63.9	64.9	61.9	36.1	52.0	64.6

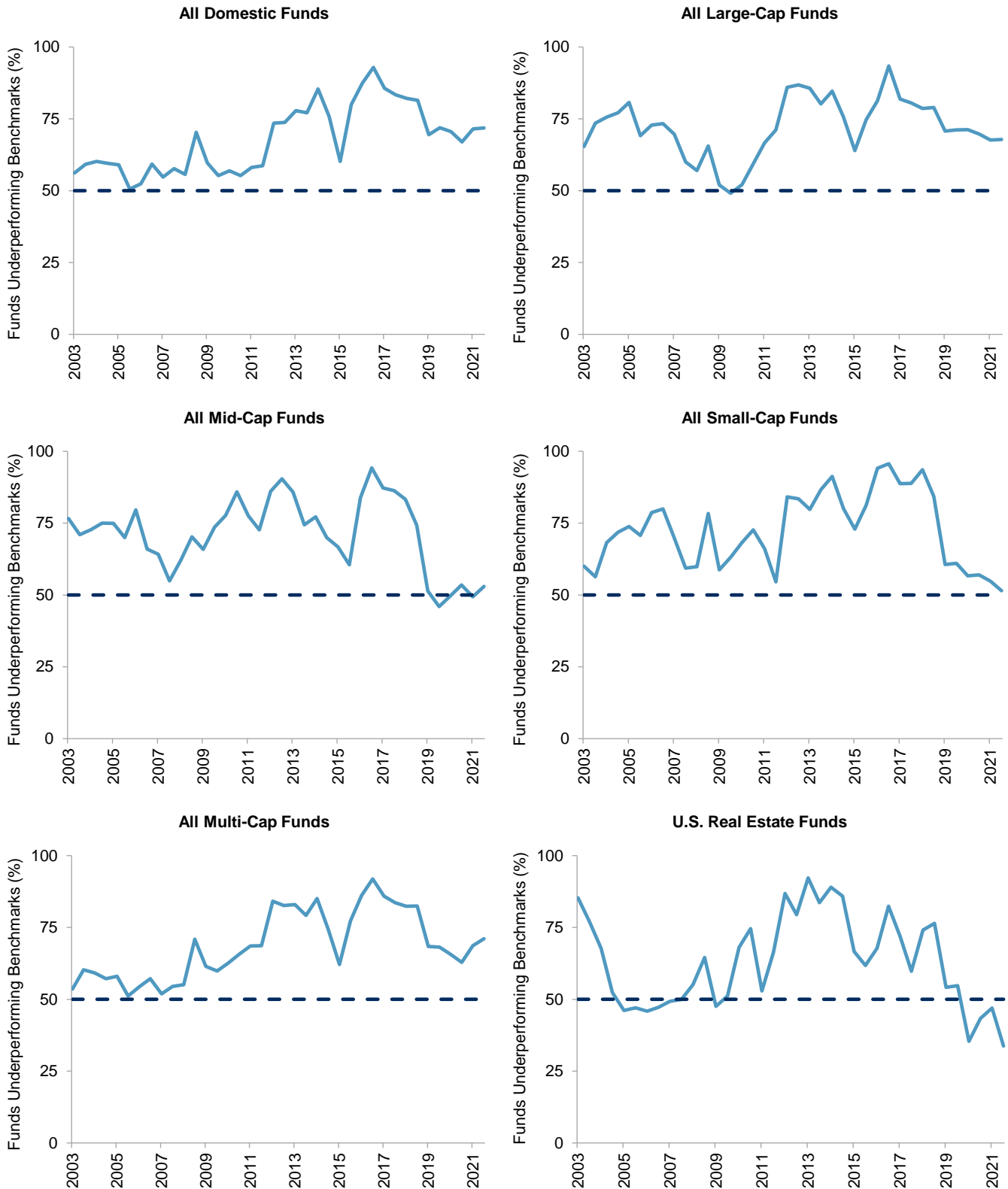
Source: S&P Dow Jones Indices LLC. Data as of Dec. 31, 2021. Past performance is no guarantee of future results. Table is provided for illustrative purposes.

Exhibit 3c: Percentage of Fixed Income Funds Underperforming Benchmarks Each Year

FUND CATEGORY	COMPARISON INDEX	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Government Long Funds	Barclays US Government Long	89.4	95.7	8.3	95.3	96.6	71.4	10.9	96.8	20.3	87.9	96.4	17.0	98.0	94.3	17.6
Government Intermediate Funds	Barclays US Government Intermediate	92.6	90.0	9.1	73.8	60.5	33.3	76.7	44.4	88.9	74.1	57.9	100.0	68.8	53.6	48.1
Government Short Funds	Barclays US Government (1-3 Year)	90.7	86.0	23.8	59.5	61.0	42.5	95.1	60.0	89.7	63.2	47.8	87.0	73.1	47.8	73.7
Investment-Grade Long Funds	Barclays US Government/Credit Long	84.3	95.2	7.4	78.0	99.3	62.0	7.3	98.0	12.1	75.0	96.7	9.1	95.3	94.4	9.4
Investment-Grade Intermediate Funds	Barclays US Government/Credit Intermediate	93.0	89.9	14.1	31.4	49.6	20.7	63.5	33.1	93.2	19.8	31.4	90.8	32.2	33.5	36.7
Investment-Grade Short Funds	Barclays US Government/Credit (1-3 Year)	96.3	98.8	16.7	25.0	56.6	11.1	52.6	50.0	70.9	26.6	22.2	92.6	37.1	44.0	23.3
High Yield Funds	Barclays US Corporate High Yield	44.2	39.2	90.7	75.3	80.0	72.9	68.3	74.1	34.7	94.2	81.0	75.6	64.8	77.7	64.3
Mortgage-Backed Securities Funds	Barclays US Aggregate Securitized - MBS	87.5	94.3	36.5	25.0	53.1	24.6	71.2	75.8	72.9	60.0	67.9	84.6	70.8	52.1	55.3
Global Income Funds	Barclays Global Aggregate	69.4	77.0	30.0	39.6	77.7	18.5	48.9	37.8	61.5	33.1	64.9	61.0	38.8	69.1	41.8
Emerging Markets Debt Funds	Barclays Emerging Markets	42.9	65.4	48.3	34.5	91.4	50.8	74.0	77.8	89.3	39.2	22.6	93.0	49.1	64.4	79.7
General Municipal Debt Funds	S&P National AMT-Free Municipal Bond	84.1	81.5	25.0	57.3	77.2	20.8	68.7	31.3	59.3	71.9	42.9	85.3	40.3	59.7	31.5
California Municipal Debt Funds	S&P California AMT-Free Municipal Bond	95.2	94.9	10.5	77.8	75.0	6.1	91.4	13.9	38.9	61.1	25.7	93.9	32.4	68.6	12.5
New York Municipal Debt Funds	S&P New York AMT-Free Municipal Bond	91.2	88.2	27.3	58.1	75.0	17.2	100.0	7.1	53.6	74.1	33.3	76.0	26.9	57.1	11.5
Loan Participation Funds	S&P/LSTA U.S. Leveraged Loan 100	-	-	-	55.0	14.8	77.5	36.8	56.9	13.5	81.8	52.1	56.9	100.0	90.6	27.3

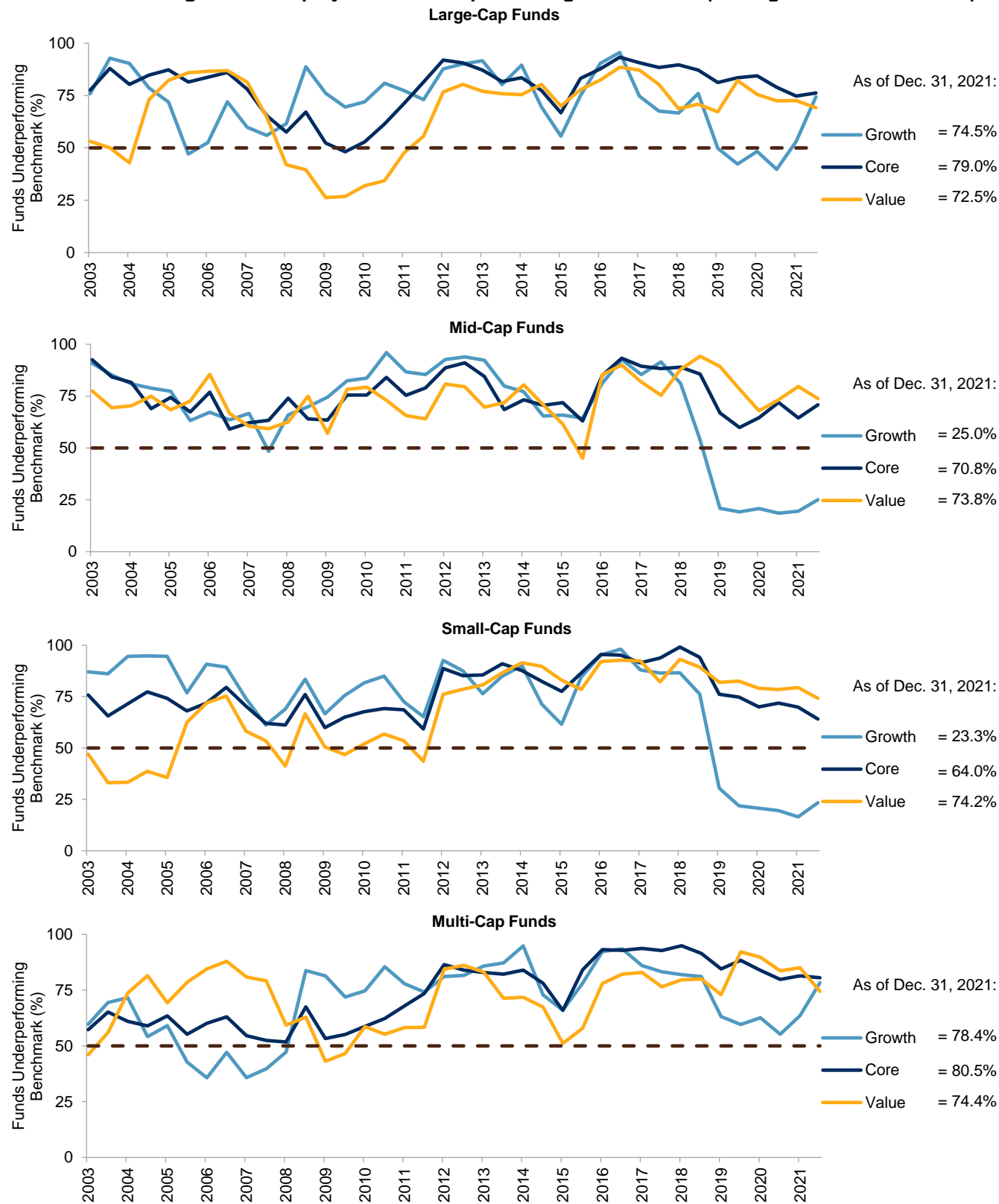
Source: S&P Dow Jones Indices LLC. Data as of Dec. 31, 2021. Past performance is no guarantee of future results. Table is provided for illustrative purposes.

Exhibit 4: Percentage of U.S. Equity Funds Underperforming Benchmarks (Rolling Three-Year Returns)



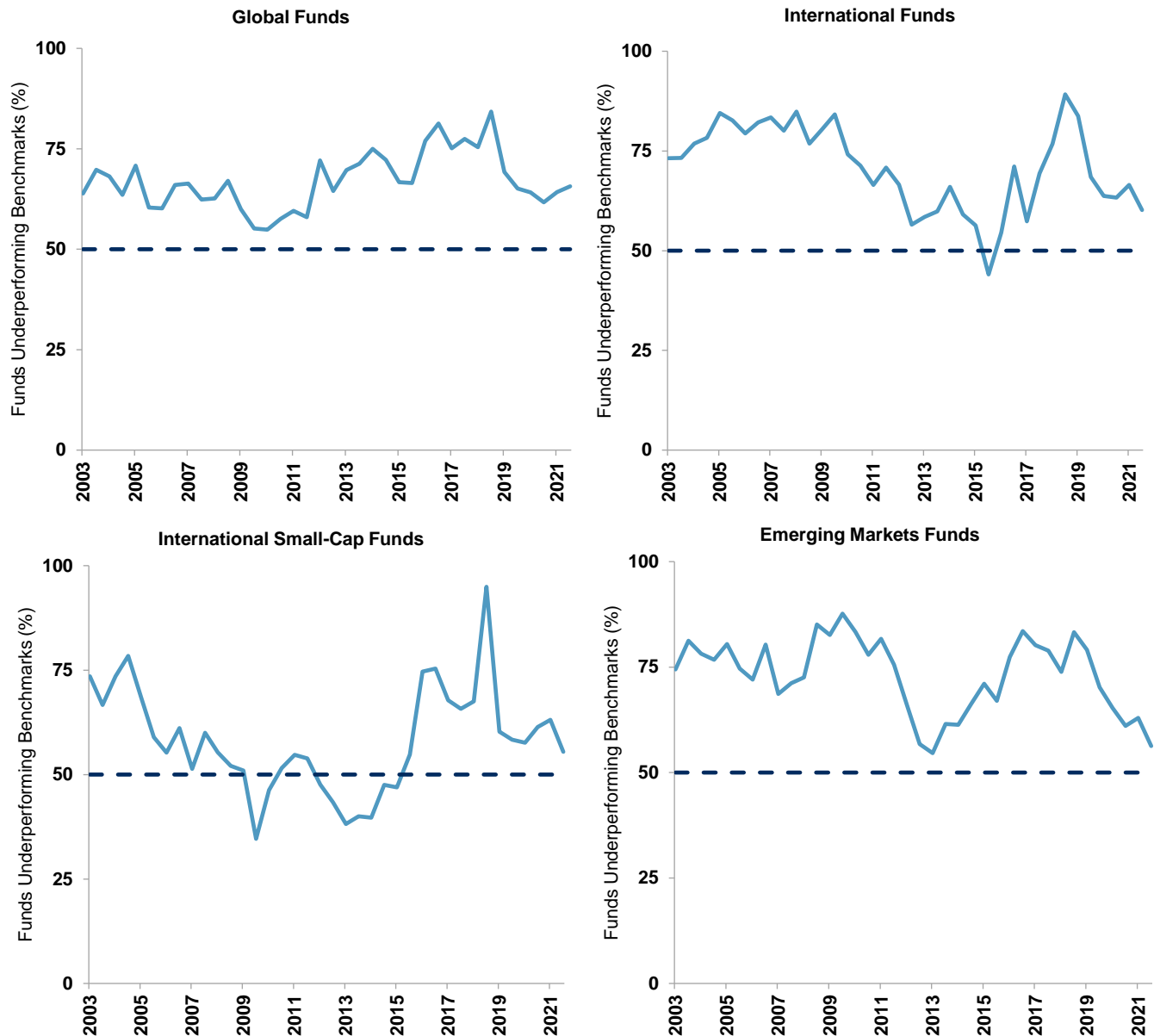
Source: S&P Dow Jones Indices LLC. Data as of Dec. 31, 2021. Past performance is no guarantee of future results. Charts are provided for illustrative purposes.

Exhibit 5: Percentage of U.S. Equity Funds Underperforming Benchmarks (Rolling Three-Year Returns)



Source: S&P Dow Jones Indices LLC. Data as of Dec. 31, 2021. Past performance is no guarantee of future results. Charts are provided for illustrative purposes.

Exhibit 6: Percentage of International Equity Funds Underperforming Benchmarks (Rolling Three-Year Returns)

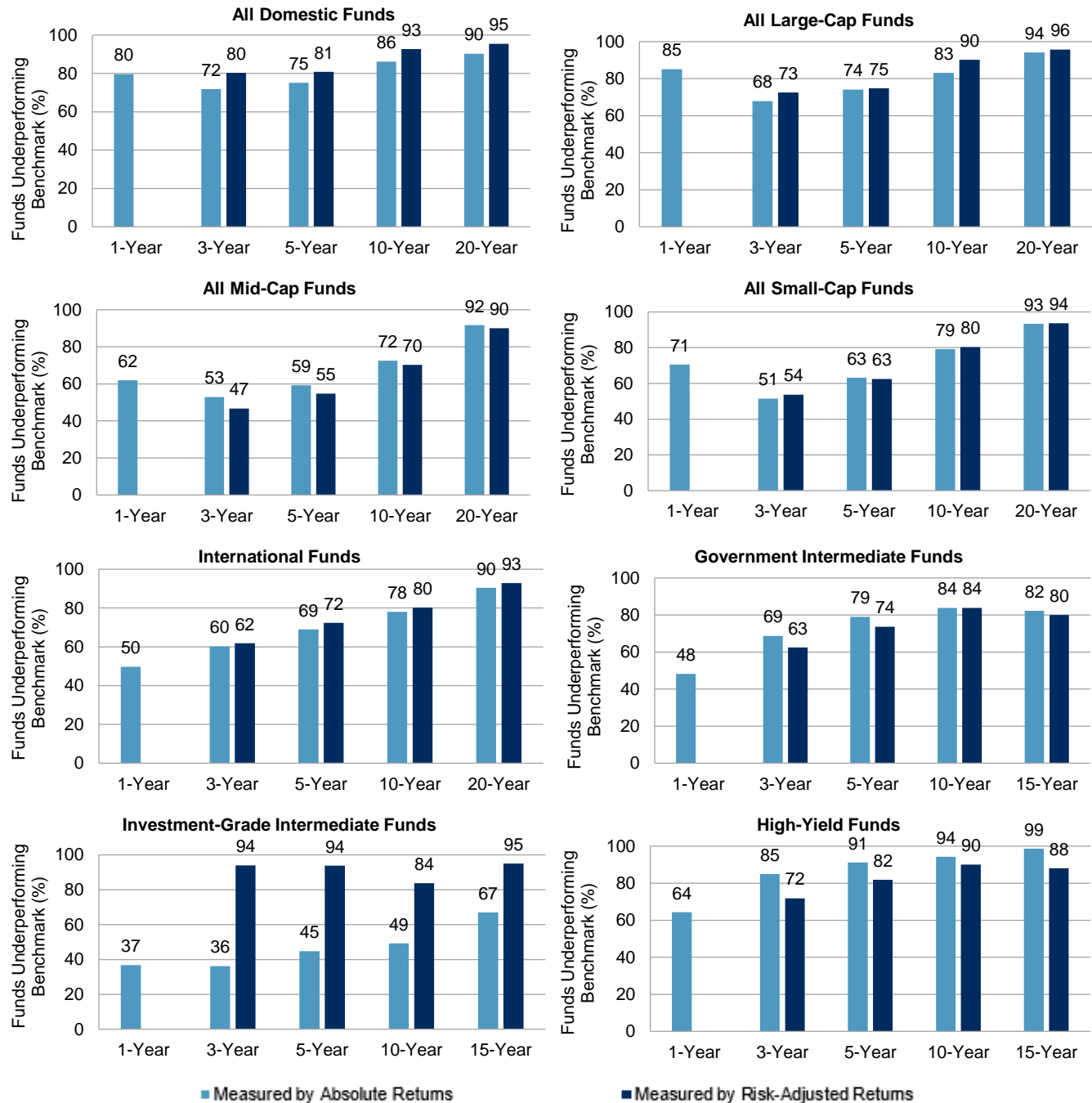


Source: S&P Dow Jones Indices LLC. Data as of Dec. 31, 2021. Past performance is no guarantee of future results. Charts are provided for illustrative purposes.

RISK-ADJUSTED SPIVA SCORES IN SELECTED CATEGORIES

Exhibit 7 highlights SPIVA scores in selected investment categories, measured both by absolute returns and risk-adjusted returns. One-year SPIVA scores are calculated based only on absolute returns, as volatilities calculated from only 12-month return data points are not statistically meaningful. While long-term SPIVA scores are calculated up to the 20-year period for domestic and international equities, fixed income categories use a 15-year period due to limited data availability.

Exhibit 7: Percentage of Funds Underperforming Benchmarks on Absolute and Risk-Adjusted Bases



Source: S&P Dow Jones Indices LLC. Data as of Dec. 31, 2021. Past performance is no guarantee of future results. Charts are provided for illustrative purposes.

REPORTS

Report 1a: Percentage of U.S. Equity Funds Underperforming Their Benchmarks – Absolute Returns

FUND CATEGORY	COMPARISON INDEX	1-YEAR (%)	3-YEAR (%)	5-YEAR (%)	10-YEAR (%)	20-YEAR (%)
All Domestic Funds	S&P Composite 1500	79.63	71.81	75.07	86.10	90.30
All Large-Cap Funds	S&P 500	85.07	67.85	74.10	83.07	94.12
All Mid-Cap Funds	S&P MidCap 400	61.87	52.94	59.22	72.45	91.67
All Small-Cap Funds	S&P SmallCap 600	70.54	51.49	63.26	79.23	93.35
All Multi-Cap Funds	S&P Composite 1500	80.30	71.10	71.83	87.25	91.83
Large-Cap Growth Funds	S&P 500 Growth	98.64	74.46	67.61	87.34	97.08
Large-Cap Core Funds	S&P 500	78.82	76.27	87.37	92.93	95.30
Large-Cap Value Funds	S&P 500 Value	38.46	69.23	67.88	88.96	83.41
Mid-Cap Growth Funds	S&P MidCap 400 Growth	83.21	25.00	31.62	54.07	90.05
Mid-Cap Core Funds	S&P MidCap 400	44.79	70.80	76.03	87.25	89.53
Mid-Cap Value Funds	S&P MidCap 400 Value	62.75	73.77	86.54	93.26	93.88
Small-Cap Growth Funds	S&P SmallCap 600 Growth	87.24	23.30	30.27	65.66	96.99
Small-Cap Core Funds	S&P SmallCap 600	61.34	64.04	78.03	93.13	92.23
Small-Cap Value Funds	S&P SmallCap 600 Value	50.72	74.23	85.59	90.83	86.40
Multi-Cap Growth Funds	S&P Composite 1500 Growth	92.90	78.36	77.50	88.73	92.41
Multi-Cap Core Funds	S&P Composite 1500	80.10	80.53	88.66	93.98	92.43
Multi-Cap Value Funds	S&P Composite 1500 Value	50.87	74.42	80.33	84.56	86.78
Real Estate Funds	S&P United States REIT	70.27	33.75	50.59	70.45	84.21

Source: S&P Dow Jones Indices LLC. Data as of Dec. 31, 2021. Past performance is no guarantee of future results. Table is provided for illustrative purposes.

Report 1b: Percentage of U.S. Equity Funds Underperforming Their Benchmarks – Risk-Adjusted Returns					
FUND CATEGORY	COMPARISON INDEX	3-YEAR (%)	5-YEAR (%)	10-YEAR (%)	20-YEAR (%)
All Domestic Funds	S&P Composite 1500	80.33	80.85	92.68	95.39
All Large-Cap Funds	S&P 500	72.53	74.80	90.20	95.65
All Mid-Cap Funds	S&P MidCap 400	46.73	54.69	70.25	90.10
All Small-Cap Funds	S&P SmallCap 600	53.72	62.54	80.33	93.61
All Multi-Cap Funds	S&P Composite 1500	78.71	76.23	92.69	93.84
Large-Cap Growth Funds	S&P 500 Growth	88.31	85.83	98.05	99.71
Large-Cap Core Funds	S&P 500	78.81	86.67	94.70	97.99
Large-Cap Value Funds	S&P 500 Value	64.92	64.24	84.74	80.09
Mid-Cap Growth Funds	S&P MidCap 400 Growth	26.52	33.09	60.47	93.03
Mid-Cap Core Funds	S&P MidCap 400	59.29	67.77	78.43	91.86
Mid-Cap Value Funds	S&P MidCap 400 Value	54.10	69.23	78.65	77.55
Small-Cap Growth Funds	S&P SmallCap 600 Growth	32.39	32.43	80.30	98.80
Small-Cap Core Funds	S&P SmallCap 600	62.92	75.76	88.41	92.23
Small-Cap Value Funds	S&P SmallCap 600 Value	62.89	79.28	81.67	80.00
Multi-Cap Growth Funds	S&P Composite 1500 Growth	92.98	87.50	99.53	97.32
Multi-Cap Core Funds	S&P Composite 1500	87.17	91.09	96.56	90.81
Multi-Cap Value Funds	S&P Composite 1500 Value	87.60	86.89	89.71	85.12
Real Estate Funds	S&P United States REIT	28.75	42.35	56.82	78.95

Source: S&P Dow Jones Indices LLC. Data as of Dec. 31, 2021. 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 (%)
1-YEAR			
All Domestic Funds	1983	95.76	88.60
All Large-Cap Funds	683	97.22	88.14
All Mid-Cap Funds	278	96.04	82.73
All Small-Cap Funds	499	95.79	93.99
All Multi-Cap Funds	533	93.62	87.43
Large-Cap Growth Funds	221	98.19	92.76
Large-Cap Core Funds	203	96.06	85.71
Large-Cap Value Funds	260	97.31	86.15
Mid-Cap Growth Funds	131	93.13	83.97
Mid-Cap Core Funds	96	98.96	76.04
Mid-Cap Value Funds	51	98.04	92.16
Small-Cap Growth Funds	196	96.94	96.94
Small-Cap Core Funds	238	94.96	94.12
Small-Cap Value Funds	69	95.65	85.51
Multi-Cap Growth Funds	169	94.08	82.84
Multi-Cap Core Funds	191	94.24	86.91
Multi-Cap Value Funds	173	92.49	92.49
Real Estate Funds	74	97.30	100.00
3-YEAR			
All Domestic Funds	2150	85.58	74.60
All Large-Cap Funds	790	88.61	75.06
All Mid-Cap Funds	306	84.31	67.65
All Small-Cap Funds	538	83.83	82.90
All Multi-Cap Funds	526	83.46	69.58
Large-Cap Growth Funds	231	92.21	82.68
Large-Cap Core Funds	236	89.41	69.92
Large-Cap Value Funds	325	85.23	73.54
Mid-Cap Growth Funds	132	86.36	75.76
Mid-Cap Core Funds	113	81.42	58.41
Mid-Cap Value Funds	61	85.25	67.21
Small-Cap Growth Funds	176	89.77	93.75
Small-Cap Core Funds	267	82.40	82.77
Small-Cap Value Funds	97	77.32	63.92
Multi-Cap Growth Funds	171	83.63	70.18
Multi-Cap Core Funds	226	85.40	62.83
Multi-Cap Value Funds	129	79.84	80.62
Real Estate Funds	80	90.00	97.50

Source: S&P Dow Jones Indices LLC. Data as of Dec. 31, 2021. 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 (%)
5-YEAR			
All Domestic Funds	2282	77.91	65.51
All Large-Cap Funds	861	79.79	68.06
All Mid-Cap Funds	309	75.08	61.17
All Small-Cap Funds	558	76.88	75.09
All Multi-Cap Funds	568	77.64	54.58
Large-Cap Growth Funds	247	82.19	77.33
Large-Cap Core Funds	285	80.70	58.60
Large-Cap Value Funds	330	77.27	69.39
Mid-Cap Growth Funds	136	75.00	69.85
Mid-Cap Core Funds	121	76.86	51.24
Mid-Cap Value Funds	52	71.15	61.54
Small-Cap Growth Funds	185	81.08	87.03
Small-Cap Core Funds	264	74.24	77.27
Small-Cap Value Funds	111	76.58	50.45
Multi-Cap Growth Funds	200	82.00	52.00
Multi-Cap Core Funds	247	74.90	50.61
Multi-Cap Value Funds	122	76.23	66.39
Real Estate Funds	85	78.82	97.65
10-YEAR			
All Domestic Funds	2611	62.08	50.10
All Large-Cap Funds	1010	62.48	57.52
All Mid-Cap Funds	363	60.33	46.83
All Small-Cap Funds	549	64.66	60.66
All Multi-Cap Funds	698	60.46	32.81
Large-Cap Growth Funds	308	59.74	67.21
Large-Cap Core Funds	396	62.12	50.00
Large-Cap Value Funds	308	65.58	57.47
Mid-Cap Growth Funds	172	60.47	58.14
Mid-Cap Core Funds	102	55.88	45.10
Mid-Cap Value Funds	89	65.17	26.97
Small-Cap Growth Funds	198	61.62	81.31
Small-Cap Core Funds	233	65.24	57.08
Small-Cap Value Funds	120	69.17	34.17
Multi-Cap Growth Funds	213	62.44	37.56
Multi-Cap Core Funds	349	64.76	28.94
Multi-Cap Value Funds	136	46.32	35.29
Real Estate Funds	88	84.09	78.41

Source: S&P Dow Jones Indices LLC. Data as of Dec. 31, 2021. 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 (%)
20-YEAR			
All Domestic Funds	2236	30.28	40.97
All Large-Cap Funds	850	24.82	51.65
All Mid-Cap Funds	384	35.42	32.81
All Small-Cap Funds	391	37.85	45.01
All Multi-Cap Funds	649	30.20	30.05
Large-Cap Growth Funds	342	18.13	51.46
Large-Cap Core Funds	298	26.17	57.05
Large-Cap Value Funds	211	33.65	44.55
Mid-Cap Growth Funds	201	25.87	46.77
Mid-Cap Core Funds	86	37.21	24.42
Mid-Cap Value Funds	98	54.08	11.22
Small-Cap Growth Funds	166	31.93	61.45
Small-Cap Core Funds	103	39.81	46.60
Small-Cap Value Funds	125	44.00	21.60
Multi-Cap Growth Funds	224	23.21	36.61
Multi-Cap Core Funds	185	34.05	31.89
Multi-Cap Value Funds	242	33.88	22.31
Real Estate Funds	57	43.86	78.95

Source: S&P Dow Jones Indices LLC. Data as of Dec. 31, 2021. 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	1-YEAR (%)	3-YEAR (%)	5-YEAR (%)	10-YEAR (%)	20-YEAR (%)
S&P Composite 1500	28.45	25.63	17.95	16.35	9.68
All Domestic Funds	22.03	22.62	14.98	13.50	8.14
S&P 500	28.71	26.07	18.47	16.55	9.52
All Large-Cap Funds	24.10	22.85	15.86	13.88	7.84
S&P MidCap 400	24.76	21.41	13.09	14.20	10.56
All Mid-Cap Funds	19.67	23.13	14.73	13.39	8.71
S&P SmallCap 600	26.82	20.11	12.42	14.50	10.73
All Small-Cap Funds	20.31	21.47	12.79	12.86	8.86
S&P Composite 1500	28.45	25.63	17.95	16.35	9.68
All Multi-Cap Funds	22.05	22.89	15.78	13.42	7.69
LARGE-CAP					
S&P 500 Growth	32.01	32.20	24.11	19.23	10.73
Large-Cap Growth Funds	20.68	29.74	22.26	16.75	8.77
S&P 500	28.71	26.07	18.47	16.55	9.52
Large-Cap Core Funds	25.76	23.30	15.60	13.80	7.90
S&P 500 Value	24.90	18.65	11.90	13.29	7.95
Large-Cap Value Funds	25.38	17.48	11.30	11.56	7.18
MID-CAP					
S&P MidCap 400 Growth	18.90	22.62	14.66	14.54	10.44
Mid-Cap Growth Funds	12.36	27.82	19.18	15.04	9.00
S&P MidCap 400	24.76	21.41	13.09	14.20	10.56
Mid-Cap Core Funds	24.73	20.04	12.11	12.44	8.97
S&P MidCap 400 Value	30.65	19.55	11.08	13.55	10.46
Mid-Cap Value Funds	28.90	17.84	9.35	11.68	8.52
SMALL-CAP					
S&P SmallCap 600 Growth	22.62	21.11	14.37	15.35	11.36
Small-Cap Growth Funds	10.75	25.87	18.44	15.28	8.93
S&P SmallCap 600	26.82	20.11	12.42	14.50	10.73
Small-Cap Core Funds	25.34	19.70	10.53	11.81	8.69
S&P SmallCap 600 Value	30.95	18.69	10.25	13.52	9.98
Small-Cap Value Funds	30.37	17.67	8.54	11.12	9.14
MULTI-CAP					
S&P Composite 1500 Growth	31.16	31.38	23.26	18.85	10.50
Multi-Cap Growth Funds	16.43	27.68	20.69	15.61	8.41
S&P Composite 1500	28.45	25.63	17.95	16.35	9.68
Multi-Cap Core Funds	23.46	21.90	14.01	12.49	7.41
S&P Composite 1500 Value	25.39	18.71	11.78	13.31	8.50
Multi-Cap Value Funds	25.54	18.11	11.18	12.13	7.38
REAL ESTATE					
S&P United States REIT	43.05	18.08	10.57	11.21	10.69
Real Estate Funds	38.27	18.96	10.63	10.33	9.21

Source: S&P Dow Jones Indices LLC. Data as of Dec. 31, 2021. Returns shown are annualized. 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	1-YEAR (%)	3-YEAR (%)	5-YEAR (%)	10-YEAR (%)	20-YEAR (%)
S&P Composite 1500	28.45	25.63	17.95	16.35	9.68
All Domestic Funds	22.14	24.28	17.06	14.99	8.70
S&P 500	28.71	26.07	18.47	16.55	9.52
All Large-Cap Funds	23.33	24.31	17.53	15.05	8.42
S&P MidCap 400	24.76	21.41	13.09	14.20	10.56
All Mid-Cap Funds	17.53	24.25	15.52	14.19	9.16
S&P SmallCap 600	26.82	20.11	12.42	14.50	10.73
All Small-Cap Funds	17.05	22.43	14.95	13.88	9.43
S&P Composite 1500	28.45	25.63	17.95	16.35	9.68
All Multi-Cap Funds	22.17	24.84	17.19	15.49	8.85
LARGE-CAP					
S&P 500 Growth	32.01	32.20	24.11	19.23	10.73
Large-Cap Growth Funds	20.55	30.15	23.25	18.13	9.81
S&P 500	28.71	26.07	18.47	16.55	9.52
Large-Cap Core Funds	25.44	22.34	15.75	15.04	7.88
S&P 500 Value	24.90	18.65	11.90	13.29	7.95
Large-Cap Value Funds	25.77	19.39	12.97	12.64	7.98
MID-CAP					
S&P MidCap 400 Growth	18.90	22.62	14.66	14.54	10.44
Mid-Cap Growth Funds	11.88	27.72	19.10	15.67	9.96
S&P MidCap 400	24.76	21.41	13.09	14.20	10.56
Mid-Cap Core Funds	25.79	21.36	12.79	13.55	9.31
S&P MidCap 400 Value	30.65	19.55	11.08	13.55	10.46
Mid-Cap Value Funds	28.19	18.87	9.82	12.33	8.60
SMALL-CAP					
S&P SmallCap 600 Growth	22.62	21.11	14.37	15.35	11.36
Small-Cap Growth Funds	11.06	25.50	19.95	16.44	9.44
S&P SmallCap 600	26.82	20.11	12.42	14.50	10.73
Small-Cap Core Funds	26.45	21.00	11.75	12.32	9.13
S&P SmallCap 600 Value	30.95	18.69	10.25	13.52	9.98
Small-Cap Value Funds	26.44	17.61	8.90	11.34	9.45
MULTI-CAP					
S&P Composite 1500 Growth	31.16	31.38	23.26	18.85	10.50
Multi-Cap Growth Funds	16.48	29.38	22.11	17.91	9.77
S&P Composite 1500	28.45	25.63	17.95	16.35	9.68
Multi-Cap Core Funds	23.49	22.41	15.26	13.17	9.11
S&P Composite 1500 Value	25.39	18.71	11.78	13.31	8.50
Multi-Cap Value Funds	27.95	18.27	10.42	12.78	8.10
REAL ESTATE					
S&P United States REIT	43.05	18.08	10.57	11.21	10.69
Real Estate Funds	38.35	17.77	10.37	10.35	9.70

Source: S&P Dow Jones Indices LLC. Data as of Dec. 31, 2021. Returns shown are annualized. 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 QUANTILE (%)	SECOND QUANTILE (%)	FIRST QUANTILE (%)
1-YEAR			
All Domestic Funds	17.48	23.95	27.72
All Large-Cap Funds	21.54	24.96	27.39
All Mid-Cap Funds	13.89	21.52	28.16
All Small-Cap Funds	12.44	22.34	29.13
All Multi-Cap Funds	18.38	24.03	27.80
Large-Cap Growth Funds	17.70	21.51	24.36
Large-Cap Core Funds	24.21	26.76	28.24
Large-Cap Value Funds	23.27	25.60	27.54
Mid-Cap Growth Funds	8.14	13.81	17.20
Mid-Cap Core Funds	21.42	26.39	29.42
Mid-Cap Value Funds	27.08	28.23	32.01
Small-Cap Growth Funds	4.55	10.29	16.37
Small-Cap Core Funds	20.99	25.50	30.79
Small-Cap Value Funds	26.16	31.26	34.73
Multi-Cap Growth Funds	11.21	17.10	24.22
Multi-Cap Core Funds	20.53	25.16	27.78
Multi-Cap Value Funds	23.01	25.92	28.79
Real Estate Funds	38.99	41.56	43.44
3-YEAR			
All Domestic Funds	18.26	22.26	27.20
All Large-Cap Funds	18.16	23.32	28.17
All Mid-Cap Funds	19.10	21.96	27.30
All Small-Cap Funds	18.23	20.90	25.05
All Multi-Cap Funds	18.17	23.24	27.51
Large-Cap Growth Funds	27.99	30.41	32.38
Large-Cap Core Funds	21.47	24.36	26.29
Large-Cap Value Funds	16.04	17.69	19.66
Mid-Cap Growth Funds	23.99	27.98	30.60
Mid-Cap Core Funds	18.65	20.53	22.09
Mid-Cap Value Funds	16.79	17.84	19.76
Small-Cap Growth Funds	22.49	26.07	28.80
Small-Cap Core Funds	17.71	19.66	21.86
Small-Cap Value Funds	16.22	18.12	19.51
Multi-Cap Growth Funds	25.60	28.43	31.44
Multi-Cap Core Funds	19.70	22.73	25.48
Multi-Cap Value Funds	15.74	17.43	19.65
Real Estate Funds	17.94	19.95	21.91

Source: S&P Dow Jones Indices LLC. Data as of Dec. 31, 2021. Returns shown are annualized. 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 (%)
5-YEAR			
All Domestic Funds	10.94	14.63	19.39
All Large-Cap Funds	11.88	15.94	20.63
All Mid-Cap Funds	10.83	13.86	19.56
All Small-Cap Funds	9.34	12.02	16.53
All Multi-Cap Funds	11.30	15.79	20.02
Large-Cap Growth Funds	21.41	23.21	24.93
Large-Cap Core Funds	13.99	16.49	18.10
Large-Cap Value Funds	10.04	11.40	13.04
Mid-Cap Growth Funds	17.64	19.84	21.84
Mid-Cap Core Funds	10.56	12.30	13.75
Mid-Cap Value Funds	8.28	10.10	10.95
Small-Cap Growth Funds	15.84	18.59	21.47
Small-Cap Core Funds	9.17	10.93	12.79
Small-Cap Value Funds	7.07	8.89	9.91
Multi-Cap Growth Funds	18.23	21.00	23.48
Multi-Cap Core Funds	11.46	14.11	16.81
Multi-Cap Value Funds	9.27	10.49	11.80
Real Estate Funds	9.18	11.23	12.73
10-YEAR			
All Domestic Funds	12.00	13.83	16.07
All Large-Cap Funds	12.29	14.48	16.84
All Mid-Cap Funds	12.40	13.98	16.12
All Small-Cap Funds	11.68	13.10	14.90
All Multi-Cap Funds	11.54	13.71	16.05
Large-Cap Growth Funds	16.78	18.21	19.10
Large-Cap Core Funds	13.38	14.80	15.74
Large-Cap Value Funds	10.97	12.08	12.88
Mid-Cap Growth Funds	14.62	16.03	17.00
Mid-Cap Core Funds	11.90	13.27	14.08
Mid-Cap Value Funds	11.29	12.37	12.84
Small-Cap Growth Funds	14.62	15.64	16.72
Small-Cap Core Funds	11.38	12.34	13.62
Small-Cap Value Funds	10.75	11.78	12.67
Multi-Cap Growth Funds	14.51	16.52	18.34
Multi-Cap Core Funds	11.04	12.72	14.99
Multi-Cap Value Funds	11.58	12.48	13.80
Real Estate Funds	9.24	10.69	11.60

Source: S&P Dow Jones Indices LLC. Data as of Dec. 31, 2021. Returns shown are annualized. 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 QUANTILE (%)	SECOND QUANTILE (%)	FIRST QUANTILE (%)
20-YEAR			
All Domestic Funds	7.89	8.96	9.97
All Large-Cap Funds	7.67	8.63	9.43
All Mid-Cap Funds	8.25	9.46	10.43
All Small-Cap Funds	8.74	9.42	10.33
All Multi-Cap Funds	7.55	8.56	9.75
Large-Cap Growth Funds	8.56	9.44	10.26
Large-Cap Core Funds	7.78	8.67	9.11
Large-Cap Value Funds	7.31	7.94	8.85
Mid-Cap Growth Funds	8.42	9.85	10.97
Mid-Cap Core Funds	8.81	9.35	10.86
Mid-Cap Value Funds	7.65	9.10	9.97
Small-Cap Growth Funds	9.04	9.78	10.59
Small-Cap Core Funds	8.59	9.23	10.15
Small-Cap Value Funds	8.81	9.35	10.15
Multi-Cap Growth Funds	8.55	9.74	11.04
Multi-Cap Core Funds	7.67	8.56	9.48
Multi-Cap Value Funds	7.13	8.15	9.18
Real Estate Funds	8.61	10.08	11.15

Source: S&P Dow Jones Indices LLC. Data as of Dec. 31, 2021. Returns shown are annualized. Past performance is no guarantee of future results. Table is provided for illustrative purposes.

Report 6a: Percentage of International Equity Funds Underperforming Their Benchmarks – Absolute Returns

FUND CATEGORY	COMPARISON INDEX	1-YEAR (%)	3-YEAR (%)	5-YEAR (%)	10-YEAR (%)	20-YEAR (%)
Global Funds	S&P Global 1200	84.09	65.64	69.17	84.78	85.25
International Funds	S&P 700	49.74	60.22	68.93	78.08	90.44
International Small-Cap Funds	S&P Developed Ex-U.S. SmallCap	31.08	55.42	57.65	60.38	87.88
Emerging Markets Funds	S&P/IFCI Composite	64.55	56.31	74.68	79.75	93.42

Source: S&P Dow Jones Indices LLC. Data as of Dec. 31, 2021. Past performance is no guarantee of future results. Table is provided for illustrative purposes.

Report 6b: Percentage of International Equity Funds Underperforming Their Benchmarks – Risk Adjusted Returns

FUND CATEGORY	COMPARISON INDEX	3-YEAR (%)	5-YEAR (%)	10-YEAR (%)	20-YEAR (%)
Global Funds	S&P Global 1200	67.84	74.17	89.13	87.70
International Funds	S&P International 700	61.83	72.32	80.14	92.83
International Small-Cap Funds	S&P Developed Ex-U.S. SmallCap	50.60	56.47	56.60	87.88
Emerging Markets Funds	S&P/IFCI Composite	62.61	78.97	79.75	94.74

Source: S&P Dow Jones Indices LLC. Data as of Dec. 31, 2021. 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 (%)	
1-YEAR				
Global Funds	220	94.09	85.00	
International Funds	378	95.50	87.57	
International Small-Cap Funds	74	93.24	89.19	
Emerging Markets Funds	189	94.71	100.00	
3-YEAR				
Global Funds	227	83.70	63.00	
International Funds	372	88.44	63.71	
International Small-Cap Funds	83	80.72	75.90	
Emerging Markets Funds	222	78.38	93.24	
5-YEAR				
Global Funds	240	74.58	50.00	
International Funds	383	79.63	52.22	
International Small-Cap Funds	85	71.76	67.06	
Emerging Markets Funds	233	68.67	92.70	
10-YEAR				
Global Funds	184	54.89	23.91	
International Funds	292	59.59	35.62	
International Small-Cap Funds	53	67.92	47.17	
Emerging Markets Funds	163	65.03	93.87	
20-YEAR				
Global Funds	122	32.79	28.69	
International Funds	293	31.74	26.28	
International Small-Cap Funds	33	39.39	24.24	
Emerging Markets Funds	76	43.42	96.05	

Source: S&P Dow Jones Indices LLC. Data as of Dec. 31, 2021. Past performance is no guarantee of future results. Table is provided for illustrative purposes.

Report 8: Average International Equity Fund Performance (Equal-Weighted)						
CATEGORY	1-YEAR (%)	3-YEAR (%)	5-YEAR (%)	10-YEAR (%)	20-YEAR (%)	
S&P Global 1200	21.55	21.67	15.42	13.11	8.60	
Global Funds	16.14	20.22	13.81	10.87	7.10	
S&P 700	9.90	14.70	10.65	8.48	7.37	
International Funds	9.33	14.53	10.50	7.98	6.06	
S&P Developed Ex-U.S. SmallCap	9.56	15.99	11.01	10.34	9.89	
International Small-Cap Funds	12.47	17.33	11.62	10.13	9.19	
S&P/IFCI Composite	0.43	11.73	10.53	6.47	10.66	
Emerging Markets Funds	-0.62	12.53	9.65	5.23	8.89	

Source: S&P Dow Jones Indices LLC. Data as of Dec. 31, 2021. Returns shown are annualized. Past performance is no guarantee of future results. Table is provided for illustrative purposes.

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

CATEGORY	1-YEAR (%)	3-YEAR (%)	5-YEAR (%)	10-YEAR (%)	20-YEAR (%)
S&P Global 1200	21.55	21.67	15.42	13.11	8.60
Global Funds	15.79	20.48	14.22	12.09	8.25
S&P 700	9.90	14.70	10.65	8.48	7.37
International Funds	7.27	16.12	10.81	8.94	7.00
S&P Developed Ex-U.S. SmallCap	9.56	15.99	11.01	10.34	9.89
International Small-Cap Funds	11.13	18.85	13.53	11.46	10.10
S&P/IFCI Composite	0.43	11.73	10.53	6.47	10.66
Emerging Markets Funds	-2.45	13.60	10.96	6.54	9.94

Source: S&P Dow Jones Indices LLC. Data as of Dec. 31, 2021. Returns shown are annualized. 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 (%)
1-YEAR			
Global Funds	13.71	17.04	20.14
International Funds	6.88	10.12	12.66
International Small-Cap Funds	9.55	12.97	15.51
Emerging Markets Funds	-5.85	-1.92	3.32
3-YEAR			
Global Funds	16.34	20.74	24.78
International Funds	11.48	14.11	18.25
International Small-Cap Funds	14.37	16.67	21.84
Emerging Markets Funds	10.10	12.17	16.27
5-YEAR			
Global Funds	10.18	14.03	18.08
International Funds	7.53	9.64	12.54
International Small-Cap Funds	9.67	11.93	14.89
Emerging Markets Funds	8.45	9.71	12.04
10-YEAR			
Global Funds	9.06	11.13	13.17
International Funds	6.71	8.06	9.46
International Small-Cap Funds	9.59	10.67	12.24
Emerging Markets Funds	4.24	5.53	7.09
20-YEAR			
Global Funds	7.06	8.01	9.56
International Funds	5.54	6.57	7.67
International Small-Cap Funds	9.13	9.43	11.68
Emerging Markets Funds	8.13	9.50	10.12

Source: S&P Dow Jones Indices LLC. Data as of Dec. 31, 2021. Returns shown are annualized. Past performance is no guarantee of future results. Table is provided for illustrative purposes.

Report 11a: Percentage of Fixed Income Funds Underperforming Their Benchmarks – Absolute Returns						
FUND CATEGORY	COMPARISON INDEX	1-YEAR (%)	3-YEAR (%)	5-YEAR (%)	10-YEAR (%)	15-YEAR (%)
Government Long Funds	Barclays US Government Long	17.65	95.74	96.23	98.65	98.00
Government Intermediate Funds	Barclays US Government Intermediate	48.15	68.75	78.95	83.87	82.22
Government Short Funds	Barclays US Government (1-3 Year)	73.68	61.54	72.00	75.86	77.14
Investment-Grade Long Funds	Barclays US Government/Credit Long	9.41	95.24	96.67	98.25	97.12
Investment-Grade Intermediate Funds	Barclays US Government/Credit Intermediate	36.70	36.18	44.76	49.21	67.00
Investment-Grade Short Funds	Barclays US Government/Credit (1-3 Year)	23.33	38.78	39.36	36.84	76.06
High Yield Funds	Barclays US Corporate High Yield	64.29	84.92	91.12	94.24	98.59
Mortgage-Backed Securities Funds	Barclays US Aggregate Securitized - MBS	55.32	60.42	68.52	72.41	87.50
Global Income Funds	Barclays Global Aggregate	41.76	45.19	66.37	55.10	64.58
Emerging Markets Debt Funds	Barclays Emerging Markets	79.66	70.91	84.13	97.92	94.74
General Municipal Debt Funds	S&P National AMT-Free Municipal Bond	31.51	37.50	44.74	42.86	73.63
California Municipal Debt Funds	S&P California AMT-Free Municipal Bond	12.50	29.41	40.00	33.33	72.73
New York Municipal Debt Funds	S&P New York AMT-Free Municipal Bond	11.54	15.38	25.93	44.83	74.29
Loan Participation Funds	S&P/LSTA U.S. Leveraged Loan 100	27.27	96.23	93.75	81.08	100.00

Source: S&P Dow Jones Indices LLC, FactSet. Data as of Dec. 31, 2021. Past performance is no guarantee of future results. Table is provided for illustrative purposes.

Report 11b: Percentage of Fixed Income Funds Underperforming Their Benchmarks – Risk-Adjusted Returns

FUND CATEGORY	COMPARISON INDEX	3-YEAR (%)	5-YEAR (%)	10-YEAR (%)	15-YEAR (%)
Government Long Funds	Barclays US Government Long	29.79	35.85	39.19	62.00
Government Intermediate Funds	Barclays US Government Intermediate	62.50	73.68	83.87	80.00
Government Short Funds	Barclays US Government (1-3 Year)	76.92	84.00	86.21	88.57
Investment-Grade Long Funds	Barclays US Government/Credit Long	46.43	50.00	27.19	60.58
Investment-Grade Intermediate Funds	Barclays US Government/Credit Intermediate	93.97	93.81	83.73	95.00
Investment-Grade Short Funds	Barclays US Government/Credit (1-3 Year)	98.98	95.74	96.49	100.00
High Yield Funds	Barclays US Corporate High Yield	71.86	81.78	90.05	88.03
Mortgage-Backed Securities Funds	Barclays US Aggregate Securitized - MBS	79.17	88.89	77.59	97.92
Global Income Funds	Barclays Global Aggregate	63.46	73.45	61.22	79.17
Emerging Markets Debt Funds	Barclays Emerging Markets	94.55	93.65	100.00	100.00
General Municipal Debt Funds	S&P National AMT-Free Municipal Bond	90.28	88.16	81.82	89.01
California Municipal Debt Funds	S&P California AMT-Free Municipal Bond	94.12	94.29	81.82	93.18
New York Municipal Debt Funds	S&P New York AMT-Free Municipal Bond	92.31	96.30	96.55	97.14
Loan Participation Funds	S&P/LSTA U.S. Leveraged Loan 100	100.00	100.00	97.30	87.50

Source: S&P Dow Jones Indices LLC, FactSet. Data as of Dec. 31, 2021. 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 (%)
1-YEAR			
Government Long Funds	34	97.06	100.00
Government Intermediate Funds	27	100.00	100.00
Government Short Funds	19	100.00	94.74
Investment-Grade Long Funds	85	95.29	100.00
Investment-Grade Intermediate Funds	188	98.40	98.94
Investment-Grade Short Funds	90	96.67	100.00
High-Yield Funds	154	97.40	100.00
Mortgage-Backed Securities Funds	47	100.00	100.00
Global Income Funds	91	95.60	98.90
Emerging Markets Debt Funds	59	98.31	100.00
General Municipal Debt Funds	73	97.26	100.00
California Municipal Debt Funds	32	100.00	100.00
New York Municipal Debt Funds	26	100.00	100.00
Loan Participation Funds	55	90.91	100.00

Source: S&P Dow Jones Indices LLC, FactSet. Data as of Dec. 31, 2021. 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 (%)
3-YEAR			
Government Long Funds	47	91.49	72.34
Government Intermediate Funds	16	100.00	100.00
Government Short Funds	26	76.92	88.46
Investment-Grade Long Funds	84	90.48	92.86
Investment-Grade Intermediate Funds	199	89.95	95.48
Investment-Grade Short Funds	98	88.78	93.88
High-Yield Funds	199	89.95	74.37
Mortgage-Backed Securities Funds	48	93.75	97.92
Global Income Funds	104	89.42	88.46
Emerging Markets Debt Funds	55	87.27	98.18
General Municipal Debt Funds	72	91.67	95.83
California Municipal Debt Funds	34	91.18	97.06
New York Municipal Debt Funds	26	92.31	100.00
Loan Participation Funds	53	92.45	100.00
5-YEAR			
Government Long Funds	53	79.25	75.47
Government Intermediate Funds	19	89.47	94.74
Government Short Funds	25	80.00	88.00
Investment-Grade Long Funds	90	80.00	90.00
Investment-Grade Intermediate Funds	210	82.38	93.33
Investment-Grade Short Funds	94	85.11	92.55
High-Yield Funds	214	82.24	75.70
Mortgage-Backed Securities Funds	54	81.48	94.44
Global Income Funds	113	76.11	84.07
Emerging Markets Debt Funds	63	68.25	95.24
General Municipal Debt Funds	76	85.53	94.74
California Municipal Debt Funds	35	88.57	94.29
New York Municipal Debt Funds	27	88.89	96.30
Loan Participation Funds	48	89.58	100.00

Source: S&P Dow Jones Indices LLC, FactSet. Data as of Dec. 31, 2021. 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 (%)
10-YEAR			
Government Long Funds	74	72.97	59.46
Government Intermediate Funds	31	58.06	77.42
Government Short Funds	29	58.62	82.76
Investment-Grade Long Funds	114	75.44	59.65
Investment-Grade Intermediate Funds	252	70.24	64.29
Investment-Grade Short Funds	57	78.95	91.23
High-Yield Funds	191	72.77	82.20
Mortgage-Backed Securities Funds	58	74.14	82.76
Global Income Funds	98	67.35	74.49
Emerging Markets Debt Funds	48	66.67	54.17
General Municipal Debt Funds	77	74.03	88.31
California Municipal Debt Funds	33	87.88	93.94
New York Municipal Debt Funds	29	79.31	96.55
Loan Participation Funds	37	89.19	97.30
15-YEAR			
Government Long Funds	50	46.00	76.00
Government Intermediate Funds	45	51.11	71.11
Government Short Funds	35	48.57	80.00
Investment-Grade Long Funds	104	46.15	58.65
Investment-Grade Intermediate Funds	200	48.50	72.00
Investment-Grade Short Funds	71	45.07	92.96
High-Yield Funds	142	54.93	82.39
Mortgage-Backed Securities Funds	48	60.42	87.50
Global Income Funds	48	60.42	68.75
Emerging Markets Debt Funds	19	68.42	89.47
General Municipal Debt Funds	91	57.14	90.11
California Municipal Debt Funds	44	65.91	93.18
New York Municipal Debt Funds	35	62.86	91.43
Loan Participation Funds	16	68.75	93.75

Source: S&P Dow Jones Indices LLC, FactSet. Data as of Dec. 31, 2021. Past performance is no guarantee of future results. Table is provided for illustrative purposes.

Report 13: Average Fixed Income Fund Performance (Equal-Weighted)					
CATEGORY	1-YEAR (%)	3-YEAR (%)	5-YEAR (%)	10-YEAR (%)	15-YEAR (%)
Barclays US Government Long	-4.57	8.78	6.53	4.53	6.58
Government Long Funds	-2.22	3.63	2.57	2.03	3.36
Barclays US Government Intermediate	-1.69	3.02	2.32	1.68	3.05
Government Intermediate Funds	-1.81	2.53	1.74	1.18	2.46
Barclays US Government (1-3 Year)	-0.60	2.03	1.62	1.10	1.99
Government Short Funds	-1.14	1.67	1.32	0.92	1.61
Barclays US Government/Credit Long	-2.52	10.62	7.39	5.72	7.03
Investment-Grade Long Funds	-1.03	6.72	4.49	3.56	4.09
Barclays US Government/Credit Intermediate	-1.44	3.86	2.91	2.38	3.53
Investment-Grade Intermediate Funds	-1.26	4.41	3.16	2.79	3.30
Barclays US Government/Credit (1-3 Year)	-0.47	2.28	1.85	1.39	2.25
Investment-Grade Short Funds	-0.05	2.45	1.83	1.61	1.68
Barclays US Corporate High Yield	5.28	8.83	6.30	6.83	7.07
High Yield Funds	4.70	7.32	4.93	5.30	4.99
Barclays US Aggregate Securitized - MBS	-1.04	3.01	2.50	2.28	3.68
Mortgage-Backed Securities Funds	-1.06	3.01	2.35	2.14	3.18
Barclays Global Aggregate	-4.71	3.59	3.36	1.77	3.31
Global Income Funds	-3.50	3.65	3.14	2.15	3.29
Barclays Emerging Markets	-1.65	5.82	4.57	5.12	5.99
Emerging Markets Debt Funds	-3.68	4.47	3.18	2.59	3.59
S&P National AMT-Free Municipal Bond	1.59	4.62	3.98	3.52	4.01
General Municipal Debt Funds	2.03	4.61	3.83	3.46	3.43
S&P California AMT-Free Municipal Bond	1.04	4.42	3.86	3.84	4.25
California Municipal Debt Funds	2.10	4.61	3.92	4.04	3.82
S&P New York AMT-Free Municipal Bond	1.80	4.33	3.65	3.46	4.00
New York Municipal Debt Funds	2.66	4.63	3.77	3.42	3.54
S&P/LSTA U.S. Leveraged Loan 100	3.54	5.62	3.88	4.34	4.28
Loan Participation Funds	4.11	3.90	2.86	3.59	3.21

Source: S&P Dow Jones Indices LLC, FactSet. Data as of Dec. 31, 2021. Returns shown are annualized. Past performance is no guarantee of future results. Table is provided for illustrative purposes.

Report 14: Average Fixed Income Fund Performance (Asset-Weighted)					
CATEGORY	1-YEAR (%)	3-YEAR (%)	5-YEAR (%)	10-YEAR (%)	15-YEAR (%)
Barclays US Government Long	-4.57	8.78	6.53	4.53	6.58
Government Long Funds	-2.38	4.42	3.18	2.02	3.48
Barclays US Government Intermediate	-1.69	3.02	2.32	1.68	3.05
Government Intermediate Funds	-1.60	2.86	1.86	1.96	3.33
Barclays US Government (1-3 Year)	-0.60	2.03	1.62	1.10	1.99
Government Short Funds	-0.72	2.23	1.69	1.24	2.06
Barclays US Government/Credit Long	-2.52	10.62	7.39	5.72	7.03
Investment-Grade Long Funds	-1.39	7.82	5.19	3.90	4.24
Barclays US Government/Credit Intermediate	-1.44	3.86	2.91	2.38	3.53
Investment-Grade Intermediate Funds	-0.93	5.38	3.90	3.41	4.12
Barclays US Government/Credit (1-3 Year)	-0.47	2.28	1.85	1.39	2.25
Investment-Grade Short Funds	-0.07	3.03	2.34	2.10	2.52
Barclays US Corporate High Yield	5.28	8.83	6.30	6.83	7.07
High Yield Funds	5.75	8.31	5.62	5.99	5.63
Barclays US Aggregate Securitized - MBS	-1.04	3.01	2.50	2.28	3.68
Mortgage-Backed Securities Funds	-1.05	3.00	2.39	2.26	3.59
Barclays Global Aggregate	-4.71	3.59	3.36	1.77	3.31
Global Income Funds	-3.43	2.41	2.55	2.42	3.70
Barclays Emerging Markets	-1.65	5.82	4.57	5.12	5.99
Emerging Markets Debt Funds	-3.11	4.61	3.16	3.77	5.03
S&P National AMT-Free Municipal Bond	1.59	4.62	3.98	3.52	4.01
General Municipal Debt Funds	2.78	5.26	4.42	4.13	4.01
S&P California AMT-Free Municipal Bond	1.04	4.42	3.86	3.84	4.25
California Municipal Debt Funds	2.22	5.22	4.40	4.47	4.23
S&P New York AMT-Free Municipal Bond	1.80	4.33	3.65	3.46	4.00
New York Municipal Debt Funds	3.56	5.69	4.67	4.02	3.82
S&P/LSTA U.S. Leveraged Loan 100	3.54	5.62	3.88	4.34	4.28
Loan Participation Funds	5.54	3.80	2.84	3.64	3.31

Source: S&P Dow Jones Indices LLC, FactSet. Data as of Dec. 31, 2021. Returns shown are annualized. 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
1-YEAR			
Government Long Funds	-2.71	-2.08	-1.54
Government Intermediate Funds	-2.10	-1.67	-1.17
Government Short Funds	-1.34	-1.12	-0.63
Investment-Grade Long Funds	-1.64	-1.09	-0.46
Investment-Grade Intermediate Funds	-1.68	-1.19	-0.56
Investment-Grade Short Funds	-0.37	-0.10	0.59
High-Yield Funds	3.80	4.87	5.72
Mortgage-Backed Securities Funds	-1.70	-1.11	-0.32
Global Income Funds	-5.33	-3.02	-1.25
Emerging Markets Debt Funds	-4.57	-3.11	-2.03
General Municipal Debt Funds	1.42	2.24	3.10
California Municipal Debt Funds	1.73	2.03	2.76
New York Municipal Debt Funds	2.29	2.81	3.43
Loan Participation Funds	3.84	4.28	5.10
3-YEAR			
Government Long Funds	2.70	3.50	4.06
Government Intermediate Funds	2.00	2.58	3.16
Government Short Funds	1.50	1.94	2.32
Investment-Grade Long Funds	5.49	7.07	7.85
Investment-Grade Intermediate Funds	3.57	4.88	5.53
Investment-Grade Short Funds	2.16	2.55	2.88
High-Yield Funds	6.90	7.74	8.59
Mortgage-Backed Securities Funds	2.59	2.89	3.40
Global Income Funds	2.79	3.98	4.90
Emerging Markets Debt Funds	4.19	5.36	5.95
General Municipal Debt Funds	4.50	4.94	5.40
California Municipal Debt Funds	4.49	4.78	5.42
New York Municipal Debt Funds	4.58	4.73	5.20
Loan Participation Funds	3.81	4.44	5.06

Source: S&P Dow Jones Indices LLC, FactSet. Data as of Dec. 31, 2021. Returns shown are annualized. 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
5-YEAR			
Government Long Funds	1.91	2.55	2.94
Government Intermediate Funds	1.37	1.76	2.24
Government Short Funds	1.14	1.44	1.71
Investment-Grade Long Funds	3.82	4.69	5.20
Investment-Grade Intermediate Funds	2.58	3.47	3.86
Investment-Grade Short Funds	1.80	1.98	2.24
High-Yield Funds	4.65	5.27	5.77
Mortgage-Backed Securities Funds	1.90	2.23	2.80
Global Income Funds	2.61	3.25	3.99
Emerging Markets Debt Funds	2.88	3.79	4.54
General Municipal Debt Funds	3.87	4.07	4.66
California Municipal Debt Funds	3.76	4.11	4.60
New York Municipal Debt Funds	3.80	3.90	4.17
Loan Participation Funds	2.74	3.21	3.51
10-YEAR			
Government Long Funds	1.68	2.07	2.86
Government Intermediate Funds	1.04	1.26	1.84
Government Short Funds	0.73	0.99	1.19
Investment-Grade Long Funds	3.01	3.58	4.47
Investment-Grade Intermediate Funds	2.24	3.07	3.54
Investment-Grade Short Funds	1.52	1.70	2.02
High-Yield Funds	5.39	5.90	6.21
Mortgage-Backed Securities Funds	1.71	2.09	2.60
Global Income Funds	1.29	2.16	3.27
Emerging Markets Debt Funds	1.36	3.17	4.27
General Municipal Debt Funds	3.63	3.87	4.29
California Municipal Debt Funds	4.00	4.17	4.58
New York Municipal Debt Funds	3.32	3.63	4.07
Loan Participation Funds	3.47	3.86	4.25

Source: S&P Dow Jones Indices LLC, FactSet. Data as of Dec. 31, 2021. Returns shown are annualized. 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
15-YEAR			
Government Long Funds	2.90	3.30	4.42
Government Intermediate Funds	2.35	2.63	3.24
Government Short Funds	1.66	1.99	2.21
Investment-Grade Long Funds	3.85	4.38	5.09
Investment-Grade Intermediate Funds	3.32	3.99	4.33
Investment-Grade Short Funds	1.91	2.36	2.60
High-Yield Funds	5.36	5.76	6.19
Mortgage-Backed Securities Funds	3.04	3.23	3.56
Global Income Funds	2.81	3.50	4.15
Emerging Markets Debt Funds	4.77	5.09	5.67
General Municipal Debt Funds	3.63	3.98	4.31
California Municipal Debt Funds	3.84	4.14	4.42
New York Municipal Debt Funds	3.64	3.93	4.05
Loan Participation Funds	3.13	3.51	3.62

Source: S&P Dow Jones Indices LLC, FactSet. Data as of Dec. 31, 2021. Returns shown are annualized. Past performance is no guarantee of future results. Table is provided for illustrative purposes.

APPENDIX A

SPIVA Styles and Lipper Fund Classifications

The CRSP Survivor-Bias-Free US Mutual Fund Database is the only complete database of both active and liquidated or merged mutual funds. It was created in 1995 and contains fund data from December 1961. Current and historical data from August 1998 has been supplied by Lipper and Thomson Reuters. The fund classifications are based upon the Lipper fund classification system. The SPIVA Scorecard covers domestic equity, global equity, and global fixed income categories.

U.S. Equity

SPIVA covers major capitalization levels (large-, mid-, small-, and multi-cap funds) and investment styles (growth, core, and value). S&P Dow Jones Indices uses the Lipper fund classifications, which determine a fund portfolio's capitalization and investment style assignments.

Lipper assigns a market capitalization to each fund based on the percentages of a fund's three-year weighted equity assets that fall into each of Lipper's three defined market capitalization slices. The market capitalization breakpoints are calculated using all common stocks, excluding all non-U.S. domiciled stocks and ADRs, trading on the NYSE, AMEX, and NASDAQ. Funds are assigned to the capitalization level in which they have a 75% or higher weighting. Any fund that has less than 75% of its three-year weighted allocation in any of the three market capitalization ranges is classified as a multi-cap fund.

For investment style selection, the Lipper classification system uses three-year fundamental portfolio characteristics (price/earnings, price/book, and three-year sales-per-share growth) and, if necessary, confirming secondary characteristics (price-to-sales and price-to-operating cash flow). Fund statistics are compared to their relevant S&P Dow Jones Indices capitalization-level index to determine the growth, core, or value style.

In some cases, S&P Dow Jones Indices combines closely related Lipper fund classifications in one SPIVA category. Exhibit A1 maps the SPIVA U.S. Equity fund categories to Lipper classifications.

Exhibit A1: U.S. Equity Category Mappings	
SPIVA CATEGORY	LIPPER FUND CLASSIFICATION
Large-Cap Growth Funds	Large-Cap Growth Funds
Large-Cap Core Funds	Large-Cap Core Funds
Large-Cap Value Funds	Large-Cap Value Funds
	Equity Income Funds
Mid-Cap Growth Funds	Mid-Cap Growth Funds
Mid-Cap Core Funds	Mid-Cap Core Funds
Mid-Cap Value Funds	Mid-Cap Value Funds
Small-Cap Growth Funds	Small-Cap Growth Funds
Small-Cap Core Funds	Small-Cap Core Funds
Small-Cap Value Funds	Small-Cap Value Funds
Multi-Cap Growth Funds	Multi-Cap Growth Funds
Multi-Cap Core Funds	Multi-Cap Core Funds
Multi-Cap Value Funds	Multi-Cap Value Funds
Real Estate Funds	Real Estate Funds

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

International Equity

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

Exhibit A2: Global Equity Category Mappings	
SPIVA CATEGORY	LIPPER FUND CLASSIFICATION
Global Funds	Global Large-Cap Growth Funds
	Global Large-Cap Core Funds
	Global Large-Cap Value Funds
	Global Multi-Cap Growth Funds
	Global Multi-Cap Core Funds
	Global Multi-Cap Value Funds
International Funds	International Large-Cap Growth Funds
	International Large-Cap Core Funds
	International Large-Cap Value Funds
	International Multi-Cap Growth Funds
	International Multi-Cap Core Funds
	International Multi-Cap Value Funds
International Small-Cap Funds	International Small-/Mid-Cap Growth Funds
	International Small-/Mid-Cap Core Funds
	International Small-/Mid-Cap Value Funds
Emerging Market Funds	Emerging Markets Funds

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

Fixed Income

SPIVA reports on nine domestic, two global, and three municipal fixed income categories. The Lipper domestic fixed income classifications are based on maturity and credit quality. For maturity, long is over 10 years, intermediate is 5-10 years, short/intermediate is 1-5 years, and short is 1-3.5 years. For credit quality, bonds are assigned to U.S. Treasury, U.S. government (includes government and agency issues), A- or BBB-rated (according to Lipper fund rating methodology), loan participations, and high yield classifications. Lipper also includes U.S. mortgages and Government National Mortgage Association (GNMA) classifications.

In global fixed income, Lipper differentiates between global (including the U.S.) and international (excluding the U.S.) objectives. For municipal debt funds, we include the general classification (invests in the top four credit ratings) plus two state funds (California and New York).

Exhibit A3: Fixed Income Category Mappings	
SPIVA CATEGORY	LIPPER FUND CLASSIFICATION
Government Long Funds	General U.S. Government Funds
	General U.S. Treasury Funds
Government Intermediate Funds	Intermediate U.S. Government
	Short-Intermediate U.S. Government
Government Short Funds	Short U.S. Government Funds
	Short U.S. Treasury
Investment-Grade Long Funds	Corporate Debt Funds A-Rated
	Corporate Debt Funds BBB-Rated
Investment-Grade Intermediate Funds	Intermediate Investment-Grade Debt Funds
	Short-Intermediate Investment-Grade Debt Funds
Investment-Grade Short Funds	Short Investment-Grade Debt Funds
High-Yield Funds	High Current Yield Funds
Mortgage-Backed Securities Funds	U.S. Mortgage Funds
	GNMA Funds
Global Income Funds	Global Income Funds
	International Income Funds
Emerging Market Debt Funds	Emerging Market Debt Funds
General Municipal Debt Funds	General Municipal Debt Funds
California Municipal Debt Funds	California Municipal Debt Funds
New York Municipal Debt Funds	New York Municipal Debt Funds
Loan Participation Funds	Loan Participation Funds

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

APPENDIX B: GLOSSARY

Percentage of Funds Underperforming 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 (%)

This measure represents the percentage of funds 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 funds that had the same style classification at the end of the time period as at the beginning 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 more accurately reflect the returns of the total money invested in that particular style category.

Quartiles 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. For fund category quartiles in a particular time horizon, the data used is the return of the largest share class of the fund net of fees, excluding loads.

Survivorship Bias

Many funds might liquidate or merge during a period of study. This usually occurs due to continued poor performance by the fund. Therefore, if index returns were compared to fund returns using only surviving funds, the comparison would be biased in favor of the fund category. These reports remove this bias by (a) using 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, (b) explicitly showing the survivorship rate in each category, and (c) constructing 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.

INDICES¹

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 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.

¹ For more information on S&P Dow Jones Indices, please visit <http://www.spglobal.com/spdji/>.

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.

S&P UNITED STATES REIT

This index measures the investable universe of publicly traded real estate investment trusts.

International Equity

S&P GLOBAL 1200

Capturing approximately 70% of the world's capital markets by market capitalization, 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 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. SMALLCAP

This index represents the small-cap segment—the bottom 15% by size—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 market participants.

Fixed Income²

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.

² Barclays Capital Fixed Income Indices were formerly the Lehman Brothers Indices.

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 U.S. dollar-denominated debt from emerging markets.

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/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.

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