S&P Dow Jones Indices

A Division of S&P Global

SPIVA® U.S. Scorecard

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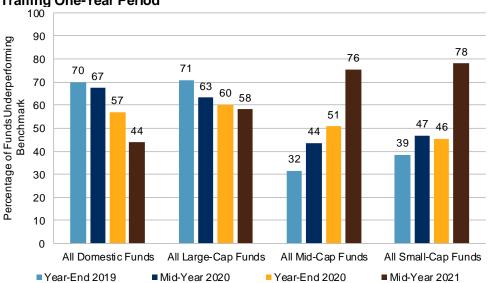
Experience the active vs. passive debate on a global scale.

SUMMARY

Following an initial steep drop and recovery at the onset of the COVID-19 pandemic, equity markets around the world continued their rebound in 2021 as the global economy began to re-open. The <u>S&P 500®</u> had recovered all of its COVID-19-related losses by August 2020, and it posted a 40.8% gain over the 12 months ending on June 30, 2021. Of the 31 distinct benchmarks tracked by this report, 27 finished with a positive return over the year; the exceptions were among longer-term fixed income indices.

The positive market performance broadly translated into good *absolute* returns for active fund managers. But *relative* returns continued to disappoint; **in 15 out of 18 categories of domestic equity funds, the majority of actively managed funds underperformed their benchmarks.** The performance was particularly underwhelming in the small-cap space, as **78% of all small-cap funds lagged the** <u>S&P SmallCap 600</u>® (see Report 1a).

Exhibit 1: Percent of Domestic Equity Funds Underperforming Benchmarks in Trailing One-Year Period



Source: S&P Dow Jones Indices LLC. Data as of June 30, 2021. Past performance is no guarantee of future results. Chart is provided for illustrative purposes.

It's worth taking a moment to delve deeper into differences across market cap segments. Over the 12-month period, 58% of large-cap funds, 76% of mid-cap funds, and 78% of small-cap funds trailed the S&P 500, <u>S&P MidCap 400</u>®, and S&P SmallCap 600, respectively. At first glance, this isn't particularly new: SPIVA year-end reports have shown that more than 50% of large-cap funds have lagged the S&P 500 each year for 11 consecutive years (see Report 1a).

However, fund managers in the mid-cap and small-cap segments have often managed to do better than their large-cap counterparts when the large-cap benchmark had a higher return than the respective mid-or small-cap benchmark, in ways that are not consistent with the "greater skill" premise. Instead, it is more likely that mid-cap and small-cap fund managers are quietly edging into the larger-cap space and benefiting from the higher returns available there.

The re-opening gains of early 2021 add one more data point to that hypothesis. As the rest of the market caught up to the large-cap rally of the initial pandemic phase, mid-cap and small-cap managers who tilted up the capitalization scale were caught leaning in the wrong direction. Exhibit 2 shows how quickly many funds fell short of the benchmark.

Exhibit 2: Possible Performance Trickery, Mid-Year 2021 Annex						
CATEGORY	YEAR-END 2020	MID-YEAR 2021				
S&P 500 Total Return, 12-Month Period (%)	18.40	40.79				
S&P MidCap 400 Total Return, 12-Month Period (%)	13.66	53.24				
S&P SmallCap 600 Total Return, 12-Month Period (%)	11.29	67.40				
Large-Cap Funds Underperforming the S&P 500, 12-Month Period (%)	60.33	58.20				
Mid-Cap Funds Underperforming the S&P 400, 12-Month Period (%)	50.68	75.52				
Small-Cap Funds Underperforming the S&P 600, 12-Month Period (%)	45.52	78.02				

Source: S&P Dow Jones Indices LLC. Data as of June 30, 2021. Past performance is no guarantee of future results. Table is provided for illustrative purposes.

The performance difference across the market cap segments also explains how the majority of large-, mid-, and small-cap funds did worse than their benchmarks, but only 44% of all domestic funds underperformed the S&P Composite 1500@">S&P Composite 1500@">S&P Composite 1500@ and small-cap space, those funds trailed their narrower market cap benchmarks, but they still beat the S&P Composite 1500 in the all-funds comparison (see Report 1a).

We also assess returns of actively managed funds against their benchmarks on a risk-adjusted basis. We consider volatility, calculated through the standard deviation of monthly returns, as a proxy for risk, and use return/volatility ratios to evaluate performance. After adjusting for risk, the majority of actively managed domestic equity funds in all categories underperformed their benchmarks on a net-of-fees basis over long-term investment horizons. The few bright spots in the mid-term investment periods were concentrated in mid- and small-cap growth funds and real estate funds (see Report 1b).

¹ For more information on silent style drift, see Ganti, Anu R. and Craig J. Lazzara, "<u>Style Bias and Active Performance</u>," S&P Dow Jones Indices, March 2021; see also Lazzara, Craig, "<u>Performance Trickery</u>, <u>part 3</u>," *Indexology* **Blog, April 2020.

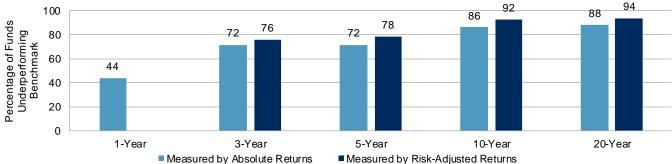
More internationally focused funds posted similarly strong absolute returns, but the majority of funds in those categories also lagged their benchmarks, both in absolute and risk-adjusted terms (see Reports 6a and 6b).

In a period of mostly climbing yields, fixed income funds posted better relative results than their benchmarks. In 12 of the 14 categories tracked, the majority of funds outperformed the relevant index benchmark. However, if we widen the lookback window to three years, the majority outperformed in just four categories. For those with a long-term view, in no fixed income category did the majority of funds manage to surpass their benchmark over a 15-year window (see Reports 11a and 11b).

SPIVA SCORES IN SELECTED CATEGORIES

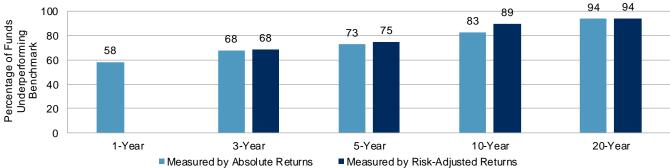
Exhibits 3 through 10 highlight SPIVA scores in selected investment categories, measured both by absolute returns and risk-adjusted returns. One-year SPIVA scores are calculated only in absolute returns, as volatilities calculated from only 12 monthly return data points are not statistically meaningful. While long-term SPIVA scores are calculated up to the 20-year period for domestic and international equities, fixed income scores use a 15-year period due to limited data availability.

Exhibit 3: Percentage of All Domestic Equity Funds Underperforming the S&P Composite 1500



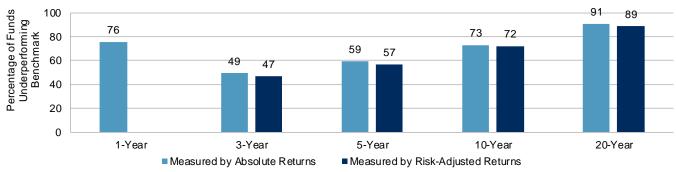
Source: S&P Dow Jones Indices LLC. Data as of June 30, 2021. Past performance is no guarantee of future results. Chart is provided for illustrative purposes.

Exhibit 4: Percentage of All Large-Cap Funds Underperforming the S&P 500



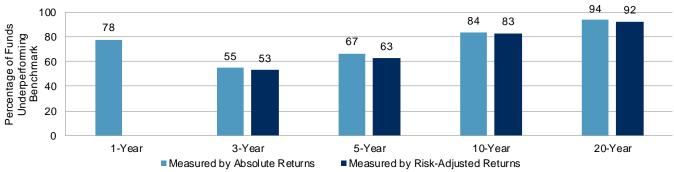
Source: S&P Dow Jones Indices LLC. Data as of June 30, 2021. Past performance is no guarantee of future results. Chart is provided for illustrative purposes.

Exhibit 5: Percentage of All Mid-Cap Funds Underperforming the S&P MidCap 400



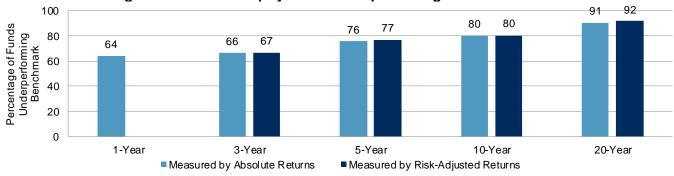
Source: S&P Dow Jones Indices LLC. Data as of June 30, 2021. Past performance is no guarantee of future results. Chart is provided for illustrative purposes.

Exhibit 6: Percentage of All Small-Cap Funds Underperforming the S&P SmallCap 600



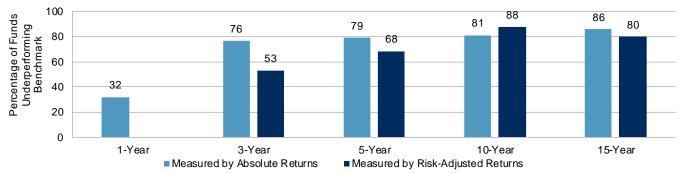
Source: S&P Dow Jones Indices LLC. Data as of June 30, 2021. Past performance is no guarantee of future results. Chart is provided for illustrative purposes.

Exhibit 7: Percentage of International Equity Funds Underperforming the S&P International 700



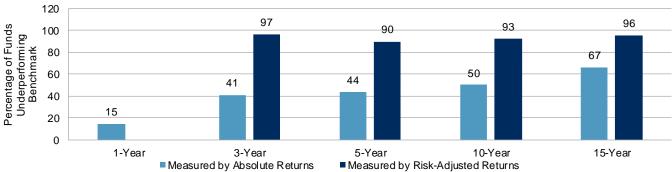
Source: S&P Dow Jones Indices LLC. Data as of June 30, 2021. Past performance is no guarantee of future results. Chart is provided for illustrative purposes.

Exhibit 8: Percentage of Government Intermediate Funds Underperforming Barclays US Government Intermediate



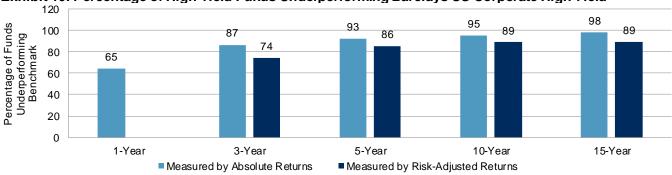
Source: S&P Dow Jones Indices LLC. Data as of June 30, 2021. Past performance is no guarantee of future results. Chart is provided for illustrative purposes.

Exhibit 9: Percentage of Investment-Grade Intermediate Funds Underperforming Barclays US Government/Credit Intermediate



Source: S&P Dow Jones Indices LLC. Data as of June 30, 2021. Past performance is no guarantee of future results. Chart is provided for illustrative purposes.

Exhibit 10: Percentage of High Yield Funds Underperforming Barclays US Corporate High Yield



Source: S&P Dow Jones Indices LLC. Data as of June 30, 2021. Past performance is no guarantee of future results. Chart is provided for illustrative purposes.

METHODOLOGY

There is nothing novel about the index versus active debate. It has been a contentious subject for decades, and there are 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 defacto 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 often addresses far more fascinating issues—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 assetweighted 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 countbased calculations, using only the share class with most 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.

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	43.77	71.50	71.57	85.95	87.84	
All Large-Cap Funds	S&P 500	58.20	67.64	72.67	82.51	93.80	
All Mid-Cap Funds	S&P MidCap 400	75.52	49.35	59.20	73.09	90.72	
All Small-Cap Funds	S&P SmallCap 600	78.02	54.83	66.73	83.51	93.80	
All Multi-Cap Funds	S&P Composite 1500	50.55	68.62	69.81	88.58	91.32	
Large-Cap Growth Funds	S&P 500 Growth	64.98	53.14	52.78	81.46	95.93	
Large-Cap Core Funds	S&P 500	62.74	74.80	81.58	93.32	95.31	
Large-Cap Value Funds	S&P 500 Value	48.35	72.56	71.26	87.75	77.56	
Mid-Cap Growth Funds	S&P MidCap 400 Growth	60.15	19.53	30.56	55.43	89.73	
Mid-Cap Core Funds	S&P MidCap 400	72.55	64.52	75.81	86.92	90.91	
Mid-Cap Value Funds	S&P MidCap 400 Value	76.47	79.63	87.93	87.84	89.69	
Small-Cap Growth Funds	S&P SmallCap 600 Growth	77.13	16.48	32.12	66.99	96.27	
Small-Cap Core Funds	S&P SmallCap 600	77.05	69.85	86.06	96.08	89.52	
Small-Cap Value Funds	S&P SmallCap 600 Value	75.00	79.38	86.84	98.10	90.32	
Multi-Cap Growth Funds	S&P Composite 1500 Growth	55.56	63.58	68.27	88.18	92.98	
Multi-Cap Core Funds	S&P Composite 1500	53.81	81.36	85.37	94.58	90.23	
Multi-Cap Value Funds	S&P Composite 1500 Value	39.39	85.00	77.50	87.50	84.29	
Real Estate Funds	S&P United States REIT	74.67	46.91	43.02	72.73	86.67	

Source: S&P Dow Jones Indices LLC. Data as of June 30, 2021. Returns shown are annualized. 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	75.79	78.26	92.42	93.80		
All Large-Cap Funds	S&P 500	68.38	74.92	89.49	94.05		
All Mid-Cap Funds	S&P MidCap 400	46.73	56.75	72.30	88.70		
All Small-Cap Funds	S&P SmallCap 600	53.01	62.77	83.16	92.25		
All Multi-Cap Funds	S&P Composite 1500	73.72	74.69	93.21	93.91		
Large-Cap Growth Funds	S&P 500 Growth	66.95	62.30	98.48	99.71		
Large-Cap Core Funds	S&P 500	74.80	85.20	96.14	95.67		
Large-Cap Value Funds	S&P 500 Value	68.90	70.96	82.78	75.12		
Mid-Cap Growth Funds	S&P MidCap 400 Growth	22.66	34.72	61.14	90.81		
Mid-Cap Core Funds	S&P MidCap 400	61.29	70.97	86.92	90.91		
Mid-Cap Value Funds	S&P MidCap 400 Value	59.26	72.41	78.38	79.38		
Small-Cap Growth Funds	S&P SmallCap 600 Growth	18.68	30.57	79.61	98.76		
Small-Cap Core Funds	S&P SmallCap 600	65.44	76.89	93.33	89.52		
Small-Cap Value Funds	S&P SmallCap 600 Value	76.29	80.70	90.48	82.26		
Multi-Cap Growth Funds	S&P Composite 1500 Growth	75.72	80.77	98.52	96.49		
Multi-Cap Core Funds	S&P Composite 1500	85.17	89.43	97.02	91.95		
Multi-Cap Value Funds	S&P Composite 1500 Value	88.33	83.33	88.33	83.91		
Real Estate Funds	S&P United States REIT	38.27	44.19	59.09	81.67		

Source: S&P Dow Jones Indices LLC. Data as of June 30, 2021. Returns shown are annualized. Past performance is no guarantee of future results. Table is provided for illustrative purposes.

FUND CATEGORY	NO. OF FUNDS AT START	SURVIVORSHIP (%)	STYLE CONSISTENCY (%)
1-YEAR	•		
All Domestic Funds	2,015	95.48	90.67
All Large-Cap Funds	701	96.29	90.73
All Mid-Cap Funds	286	96.15	88.46
All Small-Cap Funds	496	96.17	93.75
All Multi-Cap Funds	542	93.36	89.11
Large-Cap Growth Funds	217	96.77	95.85
Large-Cap Core Funds	212	94.34	91.98
Large-Cap Value Funds	273	97.44	85.71
Mid-Cap Growth Funds	133	96.24	90.98
Mid-Cap Core Funds	102	96.08	82.35
Mid-Cap Value Funds	51	96.08	94.12
Small-Cap Growth Funds	188	97.34	98.40
Small-Cap Core Funds	244	95.90	91.80
Small-Cap Value Funds	68	94.12	88.24
Multi-Cap Growth Funds	180	95.56	87.22
Multi-Cap Core Funds	197	95.43	86.29
Multi-Cap Value Funds	165	88.48	94.55
Real Estate Funds	75	94.67	100.00
3-YEAR			
All Domestic Funds	2,193	84.91	76.01
All Large-Cap Funds	819	86.94	77.17
All Mid-Cap Funds	306	83.01	71.24
All Small-Cap Funds	549	83.61	83.24
All Multi-Cap Funds	529	84.12	69.38
Large-Cap Growth Funds	239	88.70	84.10
Large-Cap Core Funds	254	87.80	72.83
Large-Cap Value Funds	328	84.76	75.61
Mid-Cap Growth Funds	128	85.94	81.25
Mid-Cap Core Funds	124	80.65	59.68
Mid-Cap Value Funds	54	81.48	74.07
Small-Cap Growth Funds	182	88.46	91.76
Small-Cap Core Funds	272	83.09	82.72
Small-Cap Value Funds	97	76.29	69.07
Multi-Cap Growth Funds	173	89.02	69.94
Multi-Cap Core Funds	236	83.47	62.71
Multi-Cap Value Funds	120	78.33	81.67
Real Estate Funds	81	85.19	97.53

Source: S&P Dow Jones Indices LLC. Data as of June 30, 2021. Past performance is no guarantee of future results. Table is provided for illustrative purposes.

FUND CATEGORY	NO. OF FUNDS AT START	SURVIVORSHIP (%)	STYLE CONSISTENCY (%)
5-YEAR	•		
All Domestic Funds	2,332	76.67	66.60
All Large-Cap Funds	889	77.73	70.42
All Mid-Cap Funds	326	72.70	62.58
All Small-Cap Funds	556	77.88	75.00
All Multi-Cap Funds	573	76.09	54.80
Large-Cap Growth Funds	252	78.97	81.35
Large-Cap Core Funds	304	76.97	60.86
Large-Cap Value Funds	334	77.54	70.96
Mid-Cap Growth Funds	144	75.00	70.14
Mid-Cap Core Funds	124	71.77	54.03
Mid-Cap Value Funds	58	68.97	62.07
Small-Cap Growth Funds	193	79.79	84.46
Small-Cap Core Funds	251	76.49	78.09
Small-Cap Value Funds	114	78.07	52.63
Multi-Cap Growth Funds	208	80.77	53.37
Multi-Cap Core Funds	246	74.80	51.22
Multi-Cap Value Funds	120	70.83	64.17
Real Estate Funds	86	77.91	97.67
10-YEAR			
All Domestic Funds	2,640	61.02	50.23
All Large-Cap Funds	1,018	61.69	57.66
All Mid-Cap Funds	379	59.10	46.70
All Small-Cap Funds	564	63.65	60.11
All Multi-Cap Funds	692	58.82	33.09
Large-Cap Growth Funds	329	60.49	64.74
Large-Cap Core Funds	389	60.15	52.44
Large-Cap Value Funds	302	64.90	56.62
Mid-Cap Growth Funds	175	59.43	60.00
Mid-Cap Core Funds	130	54.62	39.23
Mid-Cap Value Funds	74	66.22	28.38
Small-Cap Growth Funds	206	58.74	77.67
Small-Cap Core Funds	255	65.49	55.29
Small-Cap Value Funds	105	69.52	38.10
Multi-Cap Growth Funds	203	58.62	39.41
Multi-Cap Core Funds	369	63.41	27.10
Multi-Cap Value Funds	120	45.00	40.83
Real Estate Funds	88	82.95	77.27

Source: S&P Dow Jones Indices LLC. Data as of June 30, 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	2,179	30.29	39.24			
All Large-Cap Funds	823	25.27	48.48			
All Mid-Cap Funds	345	36.81	31.01			
All Small-Cap Funds	387	38.50	44.19			
All Multi-Cap Funds	657	28.77	29.53			
Large-Cap Growth Funds	344	19.77	48.26			
Large-Cap Core Funds	277	26.71	53.79			
Large-Cap Value Funds	205	32.20	41.95			
Mid-Cap Growth Funds	185	25.95	44.86			
Mid-Cap Core Funds	66	42.42	21.21			
Mid-Cap Value Funds	97	53.61	10.31			
Small-Cap Growth Funds	161	31.68	61.49			
Small-Cap Core Funds	105	39.05	43.81			
Small-Cap Value Funds	124	46.77	21.77			
Multi-Cap Growth Funds	228	21.49	35.53			
Multi-Cap Core Funds	174	30.46	32.76			
Multi-Cap Value Funds	261	34.10	21.84			
Real Estate Funds	60	43.33	81.67			

Source: S&P Dow Jones Indices LLC. Data as of June 30, 2021. Past performance is no guarantee of future results. Table is provided for illustrative purposes.

CATEGORY	1-YEAR (%)	3-YEAR (%)	5-YEAR (%)	10-YEAR (%)	20-YEAR (%)
S&P Composite 1500	42.12	18.12	17.38	14.63	8.82
All Domestic Funds	47.02	15.53	15.88	11.87	7.55
S&P 500	40.79	18.67	17.65	14.84	8.61
All Large-Cap Funds	40.37	16.44	15.72	12.36	7.11
S&P MidCap 400	53.24	13.17	14.29	12.40	10.15
All Mid-Cap Funds	48.13	15.42	15.71	11.50	8.21
S&P SmallCap 600	67.40	12.20	15.82	13.49	10.60
All Small-Cap Funds	59.30	13.39	15.71	11.36	8.64
S&P Composite 1500	42.12	18.12	17.38	14.63	8.82
All Multi-Cap Funds	44.10	16.22	16.22	11.63	6.97
LARGE-CAP					
S&P 500 Growth	41.36	23.08	21.83	17.29	9.83
Large-Cap Growth Funds	40.11	22.99	21.79	15.11	7.90
S&P 500	40.79	18.67	17.65	14.84	8.61
Large-Cap Core Funds	39.50	16.42	15.32	12.16	7.14
S&P 500 Value	39.54	13.14	12.54	11.85	7.03
Large-Cap Value Funds	40.79	11.69	11.55	10.16	6.66
MID-CAP					
S&P MidCap 400 Growth	45.43	14.23	15.25	12.63	9.97
Mid-Cap Growth Funds	44.48	20.88	19.84	13.01	8.45
S&P MidCap 400	53.24	13.17	14.29	12.40	10.15
Mid-Cap Core Funds	48.17	11.93	13.27	10.60	8.41
S&P MidCap 400 Value	61.43	11.52	12.81	11.88	10.10
Mid-Cap Value Funds	57.08	9.74	10.76	10.04	8.26
SMALL-CAP					
S&P SmallCap 600 Growth	57.49	13.21	16.91	13.95	11.04
Small-Cap Growth Funds	52.20	19.77	21.13	13.79	8.49
S&P SmallCap 600	67.40	12.20	15.82	13.49	10.60
Small-Cap Core Funds	61.48	10.67	13.12	10.29	8.58
S&P SmallCap 600 Value	77.26	10.78	14.42	12.88	10.02
Small-Cap Value Funds	69.79	8.63	12.09	9.63	9.07
MULTI-CAP					
S&P Composite 1500 Growth	41.96	22.27	21.29	16.88	9.40
Multi-Cap Growth Funds	41.62	21.46	20.46	13.76	7.39
S&P Composite 1500	42.12	18.12	17.38	14.63	8.82
Multi-Cap Core Funds	41.96	14.65	14.22	10.82	6.78
S&P Composite 1500 Value	41.80	12.93	12.61	11.88	7.90
Multi-Cap Value Funds	49.12	11.38	12.75	10.35	6.89
REAL ESTATE					
S&P United States REIT	37.82	9.95	6.13	9.24	9.94
Real Estate Funds	34.61	10.55	6.84	8.29	8.62

Source: S&P Dow Jones Indices LLC. Data as of June 30, 2021. Returns shown are annualized. Past performance is no guarantee of future results. Table is provided for illustrative purposes.

CATEGORY	1-YEAR (%)	3-YEAR (%)	5-YEAR (%)	10-YEAR (%)	20-YEAR (%)
S&P Composite 1500	42.12	18.12	17.38	14.63	8.82
All Domestic Funds	43.30	17.54	17.49	13.32	8.01
S&P 500	40.79	18.67	17.65	14.84	8.61
All Large-Cap Funds	41.43	17.84	17.57	13.78	7.64
S&P MidCap 400	53.24	13.17	14.29	12.40	10.15
All Mid-Cap Funds	46.38	17.34	16.29	12.30	8.43
S&P SmallCap 600	67.40	12.20	15.82	13.49	10.60
All Small-Cap Funds	54.56	14.80	17.75	12.47	9.20
S&P Composite 1500	42.12	18.12	17.38	14.63	8.82
All Multi-Cap Funds	44.32	17.97	17.72	13.03	8.13
LARGE-CAP					
S&P 500 Growth	41.36	23.08	21.83	17.29	9.83
Large-Cap Growth Funds	42.10	23.05	23.02	16.42	8.88
S&P 500	40.79	18.67	17.65	14.84	8.61
Large-Cap Core Funds	39.14	15.93	15.96	13.48	7.10
S&P 500 Value	39.54	13.14	12.54	11.85	7.03
Large-Cap Value Funds	43.63	13.68	13.14	11.56	7.26
MID-CAP					
S&P MidCap 400 Growth	45.43	14.23	15.25	12.63	9.97
Mid-Cap Growth Funds	42.78	21.59	19.33	13.66	9.24
S&P MidCap 400	53.24	13.17	14.29	12.40	10.15
Mid-Cap Core Funds	51.50	12.99	13.50	11.14	8.43
S&P MidCap 400 Value	61.43	11.52	12.81	11.88	10.10
Mid-Cap Value Funds	53.94	11.53	11.30	10.88	8.15
SMALL-CAP					
S&P SmallCap 600 Growth	57.49	13.21	16.91	13.95	11.04
Small-Cap Growth Funds	49.39	19.35	22.13	15.21	8.82
S&P SmallCap 600	67.40	12.20	15.82	13.49	10.60
Small-Cap Core Funds	61.45	12.21	14.33	10.74	9.01
S&P SmallCap 600 Value	77.26	10.78	14.42	12.88	10.02
Small-Cap Value Funds	63.67	8.63	12.38	9.96	9.45
MULTI-CAP					
S&P Composite 1500 Growth	41.96	22.27	21.29	16.88	9.40
Multi-Cap Growth Funds	44.78	22.60	22.53	16.21	8.67
S&P Composite 1500	42.12	18.12	17.38	14.63	8.82
Multi-Cap Core Funds	41.42	15.23	15.10	11.69	8.36
S&P Composite 1500 Value	41.80	12.93	12.61	11.88	7.90
Multi-Cap Value Funds	49.05	10.69	11.54	10.67	7.77
REAL ESTATE					
S&P United States REIT	37.82	9.95	6.13	9.24	9.94
Real Estate Funds	32.11	9.93	6.57	8.40	8.94

Source: S&P Dow Jones Indices LLC. Data as of June 30, 2021. Returns shown are annualized. Past performance is no guarantee of future results. Table is provided for illustrative purposes.

FUND CATEGORY	THIRD QUARTILE (%)	SECOND QUARTILE (%)	FIRST QUARTILE (%)
1-YEAR			
All Domestic Funds	38.78	44.16	53.26
All Large-Cap Funds	36.49	39.81	43.60
All Mid-Cap Funds	41.28	47.81	53.27
All Small-Cap Funds	50.64	57.47	66.37
All Multi-Cap Funds	38.27	42.78	47.50
Large-Cap Growth Funds	37.00	39.79	42.89
Large-Cap Core Funds	37.22	39.65	42.59
Large-Cap Value Funds	35.17	39.97	47.25
Mid-Cap Growth Funds	38.55	43.24	47.82
Mid-Cap Core Funds	43.77	49.83	54.20
Mid-Cap Value Funds	50.64	55.09	60.59
Small-Cap Growth Funds	45.16	51.84	57.17
Small-Cap Core Funds	54.27	60.90	66.99
Small-Cap Value Funds	59.81	69.98	79.46
Multi-Cap Growth Funds	37.57	41.49	44.88
Multi-Cap Core Funds	37.01	41.75	45.87
Multi-Cap Value Funds	40.81	46.54	52.87
Real Estate Funds	32.36	35.30	37.95
3-YEAR			
All Domestic Funds	11.19	15.23	20.10
All Large-Cap Funds	12.30	16.51	21.13
All Mid-Cap Funds	11.04	14.48	20.21
All Small-Cap Funds	9.25	12.81	16.96
All Multi-Cap Funds	11.63	16.07	20.05
Large-Cap Growth Funds	21.53	23.24	25.06
Large-Cap Core Funds	15.00	17.31	18.87
Large-Cap Value Funds	10.24	11.87	13.89
Mid-Cap Growth Funds	18.09	20.76	24.35
Mid-Cap Core Funds	10.40	12.46	14.36
Mid-Cap Value Funds	7.59	10.47	11.61
Small-Cap Growth Funds	16.11	19.03	23.09
Small-Cap Core Funds	8.60	11.11	13.10
Small-Cap Value Funds	7.41	8.71	11.01
Multi-Cap Growth Funds	18.97	20.96	24.53
Multi-Cap Core Funds	12.22	15.36	17.72
Multi-Cap Value Funds	9.08	10.52	12.29
Real Estate Funds	8.88	11.15	12.72

Source: S&P Dow Jones Indices LLC. Data as of June 30, 2021. Returns shown are annualized. Past performance is no guarantee of future results. Table is provided for illustrative purposes.

FUND CATEGORY	THIRD QUARTILE (%)	SECOND QUARTILE (%)	FIRST QUARTILE (%)
5-YEAR	<u>. </u>		
All Domestic Funds	12.16	15.44	19.69
All Large-Cap Funds	12.24	15.65	19.70
All Mid-Cap Funds	12.02	15.36	19.78
All Small-Cap Funds	12.15	14.76	19.30
All Multi-Cap Funds	12.13	15.74	19.88
Large-Cap Growth Funds	20.54	22.93	24.24
Large-Cap Core Funds	14.34	16.29	17.62
Large-Cap Value Funds	10.52	11.98	13.33
Mid-Cap Growth Funds	17.69	19.93	22.47
Mid-Cap Core Funds	11.48	12.88	14.94
Mid-Cap Value Funds	9.44	11.04	12.18
Small-Cap Growth Funds	18.03	20.97	24.56
Small-Cap Core Funds	11.79	13.51	15.34
Small-Cap Value Funds	10.47	12.15	13.28
Multi-Cap Growth Funds	18.17	20.41	23.05
Multi-Cap Core Funds	11.80	14.49	16.72
Multi-Cap Value Funds	10.51	11.77	13.29
Real Estate Funds	6.02	6.88	7.98
10-YEAR			
All Domestic Funds	10.44	12.22	14.40
All Large-Cap Funds	10.87	12.92	15.31
All Mid-Cap Funds	10.37	11.92	14.30
All Small-Cap Funds	10.24	11.61	13.59
All Multi-Cap Funds	9.98	12.06	14.10
Large-Cap Growth Funds	15.00	16.46	17.55
Large-Cap Core Funds	11.83	13.19	14.12
Large-Cap Value Funds	9.72	10.70	11.60
Mid-Cap Growth Funds	12.61	14.30	15.07
Mid-Cap Core Funds	10.05	10.92	12.28
Mid-Cap Value Funds	9.90	10.44	11.68
Small-Cap Growth Funds	13.06	14.18	15.41
Small-Cap Core Funds	9.84	10.87	12.00
Small-Cap Value Funds	9.35	10.37	11.04
Multi-Cap Growth Funds	12.33	14.32	16.33
Multi-Cap Core Funds	9.70	11.26	13.20
Multi-Cap Value Funds	9.80	10.58	12.12
Real Estate Funds	7.26	8.68	9.59

Source: S&P Dow Jones Indices LLC. Data as of June 30, 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 (%)				
20-YEAR							
All Domestic Funds	7.33	8.36	9.55				
All Large-Cap Funds	7.00	7.92	8.59				
All Mid-Cap Funds	7.77	8.94	10.15				
All Small-Cap Funds	8.61	9.38	10.36				
All Multi-Cap Funds	6.79	7.91	8.97				
Large-Cap Growth Funds	7.54	8.40	9.57				
Large-Cap Core Funds	6.92	7.98	8.33				
Large-Cap Value Funds	6.79	7.53	8.16				
Mid-Cap Growth Funds	8.08	9.44	10.51				
Mid-Cap Core Funds	7.91	8.31	9.69				
Mid-Cap Value Funds	7.41	8.94	9.91				
Small-Cap Growth Funds	8.02	9.24	10.29				
Small-Cap Core Funds	8.85	9.67	10.67				
Small-Cap Value Funds	8.65	9.15	9.95				
Multi-Cap Growth Funds	7.43	8.66	9.90				
Multi-Cap Core Funds	6.76	7.65	9.09				
Multi-Cap Value Funds	6.60	7.63	8.62				
Real Estate Funds	7.91	9.22	10.31				

Source: S&P Dow Jones Indices LLC. Data as of June 30, 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	54.26	64.26	71.54	83.05	86.51
International Funds	S&P International 700	63.95	66.49	75.57	80.13	90.63
International Small-Cap Funds	S&P Developed Ex-U.S. SmallCap	57.14	63.10	65.82	63.27	86.21
Emerging Markets Funds	S&P/IFCI Composite	52.31	62.96	75.00	76.16	91.89

Source: S&P Dow Jones Indices LLC. Data as of June 30, 2021. Returns shown are annualized. 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	65.53	71.54	86.44	86.51	
International Funds	S&P International 700	66.76	77.10	80.47	92.01	
International Small-Cap Funds	S&P Developed Ex-U.S. SmallCap	59.52	58.23	59.18	89.66	
Emerging Markets Funds	S&P/IFCI Composite	65.74	82.08	76.16	94.59	

Source: S&P Dow Jones Indices LLC. Data as of June 30, 2021. Returns shown are annualized. Past performance is no guarantee of future results. Table is provided for illustrative purposes.

Report 7: Survivorship and Style 0	Consistency of International Equity Fu	ınds	
FUND CATEGORY	NO. OF FUNDS AT START	SURVIVORSHIP (%)	STYLE CONSISTENCY (%)
1-YEAR		<u>.</u>	
Global Funds	223	94.62	85.20
International Funds	380	94.47	85.26
International Small-Cap Funds	77	93.51	83.12
Emerging Markets Funds	195	92.82	99.49
3-YEAR			
Global Funds	235	84.68	62.98
International Funds	370	87.84	61.62
International Small-Cap Funds	84	76.19	75.00
Emerging Markets Funds	216	79.63	93.06
5-YEAR			
Global Funds	246	75.61	49.59
International Funds	393	78.37	53.94
International Small-Cap Funds	79	73.42	65.82
Emerging Markets Funds	240	69.17	92.08
10-YEAR			
Global Funds	177	56.50	26.55
International Funds	297	60.94	34.68
International Small-Cap Funds	49	71.43	51.02
Emerging Markets Funds	151	63.58	94.70
20-YEAR			
Global Funds	126	31.75	33.33
International Funds	288	31.25	31.25
International Small-Cap Funds	29	37.93	20.69
Emerging Markets Funds	74	41.89	95.95

Source: S&P Dow Jones Indices LLC. Data as of June 30, 2021. Past performance is no guarantee of future results. Table is provided for illustrative purposes.

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

Emerging Markets Funds

CATEGORY	1-YEAR (%)	3-YEAR (%)	5-YEAR (%)	10-YEAR (%)	20-YEAR (%)
S&P Global 1200	39.13	15.36	15.40	11.11	7.86
Global Funds	38.63	14.38	14.15	9.10	6.51
S&P International 700	36.41	10.42	12.04	6.57	6.95
International Funds	34.66	9.25	11.07	5.94	5.56
S&P Developed Ex-U.S. SmallCap	44.16	9.36	12.17	8.11	9.44
International Small-Cap Funds	43.28	9.46	12.07	7.84	8.56
S&P/IFCI Composite	42.84	11.52	13.34	5.04	11.11

Source: S&P Dow Jones Indices LLC. Data as of June 30, 2021. Returns shown are annualized. Past performance is no guarantee of future results. Table is provided for illustrative purposes.

11.66

11.88

3.82

9.18

42.62

Report 9: Average International Equity Fund Performance (Asset-Weighted)								
CATEGORY	1-YEAR (%)	3-YEAR (%)	5-YEAR (%)	10-YEAR (%)	20-YEAR (%)			
S&P Global 1200	39.13	15.36	15.40	11.11	7.86			
Global Funds	40.12	14.48	14.61	10.26	7.72			
S&P International 700	36.41	10.42	12.04	6.57	6.95			
International Funds	38.68	11.07	12.26	7.00	6.65			
S&P Developed Ex-U.S. SmallCap	44.16	9.36	12.17	8.11	9.44			
International Small-Cap Funds	40.45	10.83	13.45	8.82	9.24			
S&P/IFCI Composite	42.84	11.52	13.34	5.04	11.11			
Emerging Markets Funds	40.62	13.09	13.61	5.45	10.21			

Source: S&P Dow Jones Indices LLC. Data as of June 30, 2021. Returns shown are annualized. Past performance is no guarantee of future results. Table is provided for illustrative purposes.

FUND CATEGORY	THIRD QUARTILE (%)	SECOND QUARTILE (%)	FIRST QUARTILE (%)
1-YEAR		Į	
Global Funds	34.45	38.82	43.78
International Funds	31.02	34.07	39.00
International Small-Cap Funds	36.91	43.68	48.66
Emerging Markets Funds	38.06	42.98	46.62
3-YEAR			
Global Funds	10.71	14.58	18.27
International Funds	6.48	8.70	11.98
International Small-Cap Funds	7.03	9.33	12.65
Emerging Markets Funds	9.59	11.33	15.39
5-YEAR			
Global Funds	10.71	14.13	18.21
International Funds	8.65	10.54	12.51
International Small-Cap Funds	10.52	12.01	14.49
Emerging Markets Funds	10.41	12.45	14.23
10-YEAR			
Global Funds	7.54	9.58	11.56
International Funds	4.85	5.86	7.27
International Small-Cap Funds	7.47	8.11	9.78
Emerging Markets Funds	2.98	4.18	5.73
20-YEAR			
Global Funds	6.34	7.33	8.93
International Funds	5.08	6.05	7.07
International Small-Cap Funds	8.07	8.92	10.59
Emerging Markets Funds	8.52	9.99	10.60

Source: S&P Dow Jones Indices LLC. Data as of June 30, 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	8.57	96.00	100.00	97.26	98.08	
Government Intermediate Funds	Barclays US Government Intermediate	32.14	76.47	78.95	81.25	85.71	
Government Short Funds	Barclays US Government (1-3 Year)	55.00	72.00	77.78	71.43	80.56	
Investment-Grade Long Funds	Barclays US Government/Credit Long	8.33	94.12	90.32	98.35	97.09	
Investment-Grade Intermediate Funds	Barclays US Government/Credit Intermediate	14.74	41.26	43.81	50.20	66.50	
Investment-Grade Short Funds	Barclays US Government/Credit (1-3 Year)	8.60	56.25	34.07	40.98	73.33	
High Yield Funds	Barclays US Corporate High Yield	64.56	86.63	92.56	95.21	97.96	
Mortgage-Backed Securities Funds	Barclays US Aggregate Securitized - MBS	18.75	68.00	62.96	73.68	85.71	
Global Income Funds	Barclays Global Aggregate	39.58	53.40	49.11	59.38	63.83	
Emerging Markets Debt Funds	Barclays Emerging Markets	8.47	78.18	78.69	100.00	94.74	
General Municipal Debt Funds	S&P National AMT-Free Municipal Bond	25.00	49.33	51.25	44.30	76.60	
California Municipal Debt Funds	S&P California AMT-Free Municipal Bond	8.82	39.39	45.71	33.33	75.56	
New York Municipal Debt Funds	S&P New York AMT-Free Municipal Bond	11.11	20.00	23.08	48.28	78.38	
Loan Participation Funds	S&P/LSTA U.S. Leveraged Loan 100	32.14	98.11	90.00	88.57	100.00	

Source: S&P Dow Jones Indices LLC, FactSet. Data as of June 30, 2021. Returns shown are annualized. Past performance is no guarantee of future results. Table is provided for illustrative purposes.

Report 11b: Percentage of	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	26.00	35.85	43.84	63.46		
Government Intermediate Funds	Barclays US Government Intermediate	52.94	68.42	87.50	79.59		
Government Short Funds	Barclays US Government (1-3 Year)	72.00	77.78	92.86	94.44		
Investment-Grade Long Funds	Barclays US Government/Credit Long	31.76	22.58	28.93	57.28		
Investment-Grade Intermediate Funds	Barclays US Government/Credit Intermediate	96.60	90.00	92.65	95.57		
Investment-Grade Short Funds	Barclays US Government/Credit (1-3 Year)	98.96	94.51	98.36	100.00		
High Yield Funds	Barclays US Corporate High Yield	74.26	85.58	88.83	89.12		
Mortgage-Backed Securities Funds	Barclays US Aggregate Securitized - MBS	78.00	79.63	82.46	97.96		
Global Income Funds	Barclays Global Aggregate	72.82	54.46	71.88	80.85		
Emerging Markets Debt Funds	Barclays Emerging Markets	94.55	95.08	100.00	100.00		
General Municipal Debt Funds	S&P National AMT-Free Municipal Bond	92.00	91.25	81.01	89.36		
California Municipal Debt Funds	S&P California AMT-Free Municipal Bond	96.97	91.43	75.76	93.33		
New York Municipal Debt Funds	S&P New York AMT-Free Municipal Bond	96.00	84.62	96.55	97.30		
Loan Participation Funds	S&P/LSTA U.S. Leveraged Loan 100	98.11	98.00	91.43	88.24		

Source: S&P Dow Jones Indices LLC, FactSet. Data as of June 30, 2021. Returns shown are annualized. 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	35	97.14	100.00			
Government Intermediate Funds	28	96.43	100.00			
Government Short Funds	20	95.00	95.00			
Investment-Grade Long Funds	84	97.62	100.00			
Investment-Grade Intermediate Funds	190	98.95	98.95			
Investment-Grade Short Funds	93	97.85	98.92			
High-Yield Funds	158	94.94	100.00			
Mortgage-Backed Securities Funds	48	100.00	97.92			
Global Income Funds	96	91.67	98.96			
Emerging Markets Debt Funds	59	94.92	100.00			
General Municipal Debt Funds	76	96.05	98.68			
California Municipal Debt Funds	34	97.06	97.06			
New York Municipal Debt Funds	27	96.30	100.00			
Loan Participation Funds	56	96.43	100.00			

Source: S&P Dow Jones Indices LLC, FactSet. Data as of June 30, 2021. Past performance is no guarantee of future results. Table is provided for illustrative purposes.

FUND CATEGORY	NO. OF FUNDS AT START	SURVIVORSHIP (%)	STYLE CONSISTENCY (%)
3-YEAR			
Government Long Funds	50	88.00	72.00
Government Intermediate Funds	17	100.00	94.12
Government Short Funds	25	80.00	88.00
Investment-Grade Long Funds	85	92.94	91.76
Investment-Grade Intermediate Funds	206	87.86	95.63
Investment-Grade Short Funds	96	91.67	93.75
High-Yield Funds	202	88.61	75.25
Mortgage-Backed Securities Funds	50	88.00	98.00
Global Income Funds	103	89.32	88.35
Emerging Markets Debt Funds	55	85.45	96.36
General Municipal Debt Funds	75	90.67	93.33
California Municipal Debt Funds	33	90.91	96.97
New York Municipal Debt Funds	25	92.00	100.00
Loan Participation Funds	53	96.23	100.00
5-YEAR			
Government Long Funds	53	81.13	75.47
Government Intermediate Funds	19	89.47	94.74
Government Short Funds	27	74.07	88.89
Investment-Grade Long Funds	93	82.80	86.02
Investment-Grade Intermediate Funds	210	82.38	92.86
Investment-Grade Short Funds	91	86.81	94.51
High-Yield Funds	215	81.40	76.74
Mortgage-Backed Securities Funds	54	83.33	94.44
Global Income Funds	112	75.00	83.04
Emerging Markets Debt Funds	61	65.57	95.08
General Municipal Debt Funds	80	83.75	93.75
California Municipal Debt Funds	35	85.71	94.29
New York Municipal Debt Funds	26	88.46	96.15
Loan Participation Funds	50	94.00	98.00

Source: S&P Dow Jones Indices LLC, FactSet. Data as of June 30, 2021. Past performance is no guarantee of future results. Table is provided for illustrative purposes.

FUND CATEGORY	NO. OF FUNDS AT START	SURVIVORSHIP (%)	STYLE CONSISTENCY (%)
10-YEAR	<u> </u>		
Government Long Funds	73	71.23	63.01
Government Intermediate Funds	32	56.25	78.13
Government Short Funds	28	57.14	82.14
Investment-Grade Long Funds	121	74.38	57.02
Investment-Grade Intermediate Funds	245	70.61	64.08
Investment-Grade Short Funds	61	75.41	88.52
High-Yield Funds	188	72.87	82.98
Mortgage-Backed Securities Funds	57	75.44	82.46
Global Income Funds	96	69.79	72.92
Emerging Markets Debt Funds	42	66.67	57.14
General Municipal Debt Funds	79	74.68	84.81
California Municipal Debt Funds	33	87.88	93.94
New York Municipal Debt Funds	29	79.31	96.55
Loan Participation Funds	35	91.43	91.43
15-YEAR			
Government Long Funds	52	46.15	78.85
Government Intermediate Funds	49	46.94	71.43
Government Short Funds	36	41.67	77.78
Investment-Grade Long Funds	103	47.57	58.25
Investment-Grade Intermediate Funds	203	48.28	72.91
Investment-Grade Short Funds	75	45.33	93.33
High-Yield Funds	147	54.42	82.99
Mortgage-Backed Securities Funds	49	61.22	87.76
Global Income Funds	47	61.70	68.09
Emerging Markets Debt Funds	19	68.42	89.47
General Municipal Debt Funds	94	54.26	91.49
California Municipal Debt Funds	45	64.44	93.33
New York Municipal Debt Funds	37	59.46	91.89
Loan Participation Funds	17	76.47	94.12

Source: S&P Dow Jones Indices LLC, FactSet. Data as of June 30, 2021. Past performance is no guarantee of future results. Table is provided for illustrative purposes.

CATEGORY	1-YEAR (%)	3-YEAR (%)	5-YEAR (%)	10-YEAR (%)	15-YEAR (%)
Barclays US Government Long	-10.42	7.97	3.18	6.62	6.82
Government Long Funds	-2.93	3.93	1.68	2.57	3.65
Barclays US Government Intermediate	-1.14	3.94	1.94	2.13	3.35
Government Intermediate Funds	-0.85	3.14	1.41	1.57	2.73
Barclays US Government (1-3 Year)	0.06	2.72	1.61	1.23	2.23
Government Short Funds	0.06	2.20	1.31	1.04	1.84
Barclays US Government/Credit Long	-1.86	9.92	5.45	7.30	7.42
Investment-Grade Long Funds	3.33	6.76	4.11	3.89	4.45
Barclays US Government/Credit Intermediate	0.19	4.70	2.63	2.76	3.86
Investment-Grade Intermediate Funds	1.39	4.81	2.92	3.02	3.62
Barclays US Government/Credit (1-3 Year)	0.44	2.96	1.88	1.49	2.49
Investment-Grade Short Funds	2.45	2.82	1.97	1.62	1.93
Barclays US Corporate High Yield	15.37	7.45	7.48	6.66	7.53
High Yield Funds	14.51	5.99	5.95	5.09	5.41
Barclays US Aggregate Securitized - MBS	-0.42	3.78	2.27	2.64	4.06
Mortgage-Backed Securities Funds	1.09	3.65	2.23	2.47	3.53
Barclays Global Aggregate	2.63	4.23	2.34	2.05	3.71
Global Income Funds	3.92	4.10	2.90	2.24	3.63
Barclays Emerging Markets	6.34	6.70	4.88	5.43	6.78
Emerging Markets Debt Funds	9.33	5.32	4.09	2.52	4.61
S&P National AMT-Free Municipal Bond	4.04	4.93	3.09	4.09	4.31
General Municipal Debt Funds	5.68	4.74	2.93	3.97	3.72
S&P California AMT-Free Municipal Bond	2.91	4.61	2.87	4.43	4.53
California Municipal Debt Funds	5.53	4.62	2.81	4.69	4.10
S&P New York AMT-Free Municipal Bond	4.09	4.60	2.79	3.99	4.29
New York Municipal Debt Funds	6.06	4.67	2.82	3.94	3.82
S&P/LSTA U.S. Leveraged Loan 100	9.37	4.30	4.67	4.06	4.45
Loan Participation Funds	9.95	2.81	3.60	3.30	3.36

Source: S&P Dow Jones Indices LLC, FactSet. Data as of June 30, 2021. Returns shown are annualized. Past performance is no guarantee of future results. Table is provided for illustrative purposes.

CATEGORY	1-YEAR (%)	3-YEAR (%)	5-YEAR (%)	10-YEAR (%)	15-YEAR (%)
Barclays US Government Long	-10.42	7.97	3.18	6.62	6.82
Government Long Funds	-2.93	4.86	2.20	2.59	3.73
Barclays US Government Intermediate	-1.14	3.94	1.94	2.13	3.35
Government Intermediate Funds	-0.84	3.11	1.52	2.39	3.55
Barclays US Government (1-3 Year)	0.06	2.72	1.61	1.23	2.23
Government Short Funds	0.48	2.84	1.67	1.39	2.30
Barclays US Government/Credit Long	-1.86	9.92	5.45	7.30	7.42
Investment-Grade Long Funds	2.53	7.83	4.61	4.10	4.61
Barclays US Government/Credit Intermediate	0.19	4.70	2.63	2.76	3.86
Investment-Grade Intermediate Funds	2.22	5.73	3.65	3.65	4.44
Barclays US Government/Credit (1-3 Year)	0.44	2.96	1.88	1.49	2.49
Investment-Grade Short Funds	2.43	3.47	2.45	2.15	2.78
Barclays US Corporate High Yield	15.37	7.45	7.48	6.66	7.53
High Yield Funds	15.69	6.63	6.64	5.74	6.04
Barclays US Aggregate Securitized - MBS	-0.42	3.78	2.27	2.64	4.06
Mortgage-Backed Securities Funds	0.10	3.64	2.21	2.58	3.96
Barclays Global Aggregate	2.63	4.23	2.34	2.05	3.71
Global Income Funds	2.47	3.10	2.37	2.15	4.16
Barclays Emerging Markets	6.34	6.70	4.88	5.43	6.78
Emerging Markets Debt Funds	9.66	5.13	4.15	3.91	5.94
S&P National AMT-Free Municipal Bond	4.04	4.93	3.09	4.09	4.31
General Municipal Debt Funds	6.59	5.32	3.42	4.70	4.31
S&P California AMT-Free Municipal Bond	2.91	4.61	2.87	4.43	4.53
California Municipal Debt Funds	5.44	5.27	3.24	5.11	4.51
S&P New York AMT-Free Municipal Bond	4.09	4.60	2.79	3.99	4.29
New York Municipal Debt Funds	7.01	5.65	3.79	4.56	4.12
S&P/LSTA U.S. Leveraged Loan 100	9.37	4.30	4.67	4.06	4.45
Loan Participation Funds	11.53	2.33	3.63	3.32	3.43

Source: S&P Dow Jones Indices LLC, FactSet. Data as of June 30, 2021. Returns shown are annualized. Past performance is no guarantee of future results. Table is provided for illustrative purposes.

FUND CATEGORY	THIRD QUARTILE	SECOND QUARTILE	FIRST QUARTILE
1-YEAR		L	
Government Long Funds	-2.66	-1.63	-0.79
Government Intermediate Funds	-1.38	-0.86	-0.06
Government Short Funds	-0.27	0.00	0.58
Investment-Grade Long Funds	2.22	3.54	5.37
Investment-Grade Intermediate Funds	0.60	1.32	2.45
Investment-Grade Short Funds	1.14	2.13	2.95
High-Yield Funds	12.76	14.49	16.54
Mortgage-Backed Securities Funds	-0.32	0.39	2.20
Global Income Funds	1.90	4.31	5.96
Emerging Markets Debt Funds	8.31	9.35	10.72
General Municipal Debt Funds	4.39	5.93	7.33
California Municipal Debt Funds	4.66	5.50	6.64
New York Municipal Debt Funds	5.58	6.36	7.02
Loan Participation Funds	9.21	9.93	11.82
3-YEAR			
Government Long Funds	3.34	4.14	4.63
Government Intermediate Funds	2.46	3.13	3.65
Government Short Funds	1.90	2.37	2.96
Investment-Grade Long Funds	5.64	6.94	7.86
Investment-Grade Intermediate Funds	4.19	5.25	5.82
Investment-Grade Short Funds	2.56	2.91	3.29
High-Yield Funds	5.33	6.39	7.00
Mortgage-Backed Securities Funds	3.29	3.54	4.04
Global Income Funds	3.36	4.27	5.44
Emerging Markets Debt Funds	4.94	6.04	6.77
General Municipal Debt Funds	4.64	5.00	5.46
California Municipal Debt Funds	4.54	4.77	5.34
New York Municipal Debt Funds	4.68	4.81	5.22
Loan Participation Funds	2.59	3.26	3.73

Source: S&P Dow Jones Indices LLC, FactSet. Data as of June 30, 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	1.58	2.02	2.33
Government Intermediate Funds	1.21	1.46	1.73
Government Short Funds	1.23	1.44	1.69
Investment-Grade Long Funds	3.56	4.38	5.18
Investment-Grade Intermediate Funds	2.37	3.04	3.54
Investment-Grade Short Funds	1.88	2.10	2.32
High-Yield Funds	5.63	6.42	6.88
Mortgage-Backed Securities Funds	1.80	2.10	2.62
Global Income Funds	1.94	2.87	4.02
Emerging Markets Debt Funds	3.59	4.55	5.17
General Municipal Debt Funds	2.88	3.17	3.54
California Municipal Debt Funds	2.70	3.03	3.43
New York Municipal Debt Funds	2.83	2.94	3.12
Loan Participation Funds	3.40	3.72	4.27
10-YEAR			
Government Long Funds	2.16	2.63	3.07
Government Intermediate Funds	1.31	1.62	2.35
Government Short Funds	0.90	1.18	1.43
Investment-Grade Long Funds	3.44	4.00	4.71
Investment-Grade Intermediate Funds	2.52	3.45	3.88
Investment-Grade Short Funds	1.58	1.75	1.98
High-Yield Funds	5.10	5.65	6.03
Mortgage-Backed Securities Funds	2.19	2.47	2.93
Global Income Funds	1.56	2.26	3.55
Emerging Markets Debt Funds	1.44	3.47	4.42
General Municipal Debt Funds	4.08	4.43	4.85
California Municipal Debt Funds	4.59	4.88	5.23
New York Municipal Debt Funds	3.84	4.16	4.56
Loan Participation Funds	3.14	3.44	3.84

Source: S&P Dow Jones Indices LLC, FactSet. Data as of June 30, 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	3.32	3.65	4.59
Government Intermediate Funds	2.58	2.88	3.49
Government Short Funds	1.94	2.21	2.47
Investment-Grade Long Funds	4.16	4.74	5.51
Investment-Grade Intermediate Funds	3.63	4.32	4.66
Investment-Grade Short Funds	2.28	2.61	2.87
High-Yield Funds	5.78	6.17	6.57
Mortgage-Backed Securities Funds	3.41	3.61	4.04
Global Income Funds	3.28	4.05	4.65
Emerging Markets Debt Funds	5.80	5.97	6.56
General Municipal Debt Funds	3.92	4.27	4.55
California Municipal Debt Funds	4.14	4.40	4.69
New York Municipal Debt Funds	3.93	4.22	4.31
Loan Participation Funds	3.13	3.57	3.79

Source: S&P Dow Jones Indices LLC, FactSet. Data as of June 30, 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 multicap 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. GovernmentFunds	
	General U.S. Treasury Funds	
Government Intermediate Funds	Intermediate U.S. Government	
Government intermediate runds	Short-Intermediate U.S. Government	
2	Short U.S. Government Funds	
Government Short Funds	Short U.S. Treasury	
Investment-Grade Long Funds	Corporate Debt Funds A-Rated	
	Corporate Debt Funds BBB-Rated	
	Intermediate Investment-Grade Debt Funds	
Investment-Grade Intermediate Funds	Short-Intermediate Investment-Grade Debt Funds	
Investment-Grade Short Funds	Short Investment-Grade Debt Funds	
High-Yield Funds	High Current Yield Funds	
W. D. I.O. W. E. I.	U.S. Mortgage Funds	
Mortgage-Backed Securities Funds	GNMA Funds	
Global Income 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 pth 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.

INDICES²

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.

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

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.), <u>S&P Europe 350®</u> (Europe), <u>S&P/TOPIX 150</u> (Japan), <u>S&P/TSX 60</u> (Canada), <u>S&P/ASX All Australian 50</u> (Australia), <u>S&P Asia 50</u> (Asia Ex-Japan), and <u>S&P Latin America 40</u> (Latin America).

S&P 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. 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 Income³

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.

³ 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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