# The S&P Persistence Scorecard: Does Past Performance Really Matter?

### About the S&P Persistence Scorecard

The phrase "past performance is not an indicator of future outcomes" (or some variation thereof) can be found in the fine print of almost all mutual fund literature. Yet due to either force of habit or conviction, investors and advisors alike consider past performance and related metrics to be important factors in fund selection. Does past performance really matter?

To answer this question on a continuous basis, the S&P Persistence Scorecard, released twice per year, tracks the consistency of top performers over yearly consecutive periods and measures performance persistence through transition matrices. As in our widely followed SPIVA® Scorecards, University of Chicago's Center for Research in Security Prices Survivorship (CRSP) Bias Free Mutual Fund Database serves as our underlying data source. <sup>1</sup>

S&P Indices is one of the world's leading index providers, maintaining a wide variety of investable and benchmark indices to meet a wide array of investor needs. Our indices research team is dedicated to conducting unbiased and in-depth analysis on a broad range of topics and issues facing investors in today's marketplace. This scorecard highlights performance persistence over three- and five-year consecutive 12-month periods and performance over two non-overlapping three- and five-year periods. Key features of the S&P Persistence Scorecard include:

#### Historical rankings without survivorship bias

All funds available at the outset of a given period are part of an investor's initial opportunity set. Nevertheless, during persistence calculations, analysts often limit their sample to funds that exist over a specific historical time period, essentially ranking the survivors only. It is important to consider that many funds may have liquidated or merged during a period of study and these funds should be factored into measurements of persistence. By using the University of Chicago's CRSP Survivorship Bias Free Mutual fund Database, the S&P Persistence Scorecard ranks all funds available at each point in time and tracks the top-quartile and top-half performers throughout the entire time period.

#### Transition matrices

Transition matrices are used to show the movements between quartiles and halves for two non-overlapping three- and five-year periods, and to track the percentage of funds that have merged or liquidated. We also monitor movements between capitalization levels, capturing, for example, the conversion of some large-cap funds to mid- and small-cap funds.

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<sup>&</sup>lt;sup>1</sup> The CRSP Survivor-Bias-Free US Mutual Fund Database is the only complete database of both active and liquidated/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.

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#### Tracking reports of top performers

Tracking reports are provided to show the percentages of funds that remain in the top-quartile or top-half rankings for three- and five consecutive-year periods.

The S&P Persistence Scorecard is the only comprehensive, periodic and publicly available source of such data. Scorecards can be found online at <a href="https://www.spiva.standardandpoors.com">www.spiva.standardandpoors.com</a>.

## **Summary of Results**

- Very few funds manage to consistently repeat top-half or top-quartile performance. Over the five years
  ending March 2011, only 0.96% of large-cap funds, 1.14% of mid-cap funds and 2.59% of small-cap funds
  maintained a top-half ranking over five consecutive 12-month periods. Random expectations would suggest a
  rate of 6.25%.
- Looking at longer-term performance, 19.15% of large-cap funds with a top-quartile ranking over the five years ending March 2011 maintained a top-quartile ranking over the next five years. Only 9.38% of mid-cap funds and 23.26% of small-cap funds maintained top-quartile performance over the same period. Random expectations would suggest a rate of 25%.
- While consistent top-quartile and top-half repeat rates have been at or below levels one expects based solely
  on chance, there is consistency in the death rate of bottom quartile funds. Across the board, fourth-quartile
  funds have a much higher rate of being merged and liquidated than all other funds.

Mutual Fund Category	Fund Count at Start	Percentage Remain	ing in Top Quartile	
	March 2009	March 2010	March-2011	
Top Quartile				
All Domestic Funds	560	11.96	4.29	
Large-Cap Funds	188	7.98	5.32	
Mid-Cap Funds	94	12.77	2.13	
Small-Cap Funds	130	16.15	5.38	
Multi-Cap Funds	148	12.84	3.38	
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	Fund Count at Start	Percentage Remaining in Top Half		
	March 2009	March 2010	March 2011	
Top Half				
All Domestic Funds	1120	31.61	15.45	
Large-Cap Funds	376	31.38	18.35	
Mid-Cap Funds	189	28.57	10.05	
Small-Cap Funds	259	34.36	15.83	
Multi-Cap Funds	296	31.42	14.86	

Report 2: Performance Persistence over Five Consecutive 12-Month Periods*								
Mutual Fund Category	Fund Count at Start	Percentage Remaining in Top Quartile						
	March 2007	March 2008	March 2009	March 2010	March 2011			
Top Quartile								
All Domestic Funds	513	13.06	5.46	0.39	0			
Large-Cap Funds	157	10.83	6.37	0	0			
Mid-Cap Funds	88	13.64	3.41	0	0			
Small-Cap Funds	116	19.83	8.62	0.86	0			
Multi-Cap Funds	152	9.87	3.29	0.66	0			

	Fund Count at Start	Percentage Remaining in Top Half							
	March 2007	March 2008	March 2009	March 2010	March 2011				
Top Half									
All Domestic Funds	1025	35.8	20.29	5.17	1.56				
Large-Cap Funds	313	28.75	16.29	4.15	0.96				
Mid-Cap Funds	176	34.66	19.32	2.84	1.14				
Small-Cap Funds	232	49.14	31.90	10.34	2.59				
Multi-Cap Funds	304	33.55	16.12	3.62	1.64				

Report 3: Three-Year Transition Matrix (March 2008 - March 2011) Performance over Two Non-Overlapping Three-Year Periods (Based on Quartiles) Three-Year Percentages at End **Fund Count** Merged/ Style 2<sup>nd</sup> Quartile 3<sup>rd</sup> Quartile 4<sup>th</sup> Quartile Total Quartile Liquidated at Start Changed March 2008 **All Domestic Funds** 1st Quartile 465 23.71 26.29 19.18 22.63 8.19 0 100 2<sup>nd</sup> Quartile 463 16.16 21.12 26.51 24.14 12.07 100 0 3<sup>rd</sup> Quartile 464 18.14 19.22 25.05 22.25 15.33 100 4th Quartile 463 18.10 14.22 15.73 0 100 26.94 25.00 Large-Cap Funds 1st Quartile 21.62 18.24 12.84 100 148 21.62 16.89 8.78 2<sup>nd</sup> Quartile 147 17.69 21.09 25.85 17.69 10.20 7.49 100 3<sup>rd</sup> Quartile 148 16.89 22.97 16.22 21.62 14.19 8.11 100 4<sup>th</sup> Quartile 147 20.41 15.65 12.24 19.05 22.45 10.20 100 **Mid-Cap Funds** 1st Quartile 80 12.5 13.75 15.00 16.25 12.50 30.00 100 2<sup>nd</sup> Quartile 100 80 18.75 16.25 13.75 13.75 12.50 25.00 3<sup>rd</sup> Quartile 80 16.25 11.25 17.50 11.25 11.25 32.50 100 4<sup>th</sup> Quartile 80 6.25 13.75 7.50 12.5 30.00 30.00 100 **Small-Cap Funds** 1st Quartile 108 25.93 25.00 20.37 19.44 0.93 8.33 100 2<sup>nd</sup> Quartile 108 21.30 19.44 27.78 16.67 12.96 1.85 100 3<sup>rd</sup> Quartile 107 19.63 22.43 21.50 20.56 14.02 1.87 100 4<sup>th</sup> Quartile 108 14.81 15.74 12.04 25.00 29.63 2.78 100 **Multi-Cap Funds** 1<sup>st</sup> Quartile 129 19.38 12.4 11.63 17.05 8.53 31.00 100 2<sup>nd</sup> Quartile 128 12.5 17.19 15.63 10.16 14.06 30.47 100 3<sup>rd</sup> Quartile 129 6.98 16.28 15.50 11.63 16.28 33.33 100 4<sup>th</sup> Quartile 128 15.63 9.38 11.72 15.63 21.88 25.78 100

Performance over Two	Non-Overlapping T	hree-Year Peri	ods (Based On Ha	ılves)		
		Three-Year Percentages at End				
	Fund Count at Start	Top Half	Bottom Half	Merged/ Liquidated	Style Changed	Total
	March 2008					
All Domestic Funds						
Top Half	928	43.64	46.23	10.13	0	100
Bottom Half	927	41.21	38.62	20.17	0	100
Large-Cap Funds						
Top Half	295	38.64	41.69	11.53	8.13	100
Bottom Half	295	37.97	34.58	18.31	9.15	100
Mid-Cap Funds			T			
Top Half	160	30.63	29.38	12.50	27.50	100
Bottom Half	160	23.75	24.38	20.63	31.25	100
Small-Cap Funds						
Top Half	216	45.83	42.13	6.94	5.10	100
Bottom Half	215	36.28	39.53	21.86	2.33	100
Multi-Cap Funds						
Top Half	257	30.74	27.24	11.28	30.74	100
Bottom Half	257	24.12	27.24	19.07	29.57	100

Report 4: Five-Year Transition Matrix (March 2006 - March 2011) Performance over Two Non-Overlapping Five-Year Periods (Based on Quartiles) Five-Year Percentages at End 3<sup>rd</sup> **Fund Count** Merged/ Style 1<sup>st</sup> Quartile 2<sup>nd</sup> Quartile Total at Start Quartile Quartile Liquidated Changed March 2006 **All Domestic** Funds 1st Quartile 10.20 391 30.36 20.41 18.37 20.66 0 100 2<sup>nd</sup> Quartile 393 21.99 20.20 20.20 21.23 16.37 0 100 3<sup>rd</sup> Quartile 22.96 0 391 11.22 19.39 21.94 24.49 100 4<sup>th</sup> Quartile 391 13.30 16.88 15.35 13.04 41.43 0 100 Large-Cap Funds 1st Quartile 141 19.15 13.48 26.95 24.11 9.93 6.38 100 2<sup>nd</sup> Quartile 141 15.60 19.15 14.18 18.44 18.44 14.18 100 3<sup>rd</sup> Quartile 141 9.93 17.02 10.64 14.89 33.33 14.19 100 4th Quartile 141 17.73 13.48 10.64 4.96 46.10 7.09 100 Mid-Cap Funds 1st Quartile 100 64 9.38 15.63 12.50 12.50 6.25 43.75 2<sup>nd</sup> Quartile 64 9.38 12.50 15.63 15.63 17.19 29.69 100 3<sup>rd</sup> Quartile 64 23.44 12.50 12.50 15.63 9.38 26.56 100 4<sup>th</sup> Quartile 7.81 7.81 64 9.38 6.25 42.19 26.56 100 **Small-Cap Funds** 1st Quartile 23.26 4.65 100 86 20.93 20.93 26.74 3.49 2<sup>nd</sup> Quartile 12.64 5.75 100 87 13.79 19.54 21.84 26.44 3<sup>rd</sup> Quartile 86 20.93 18.60 23.26 13.95 19.77 3.49 100 4th Quartile 18.60 17.44 10.47 40.70 3.49 100 86 9.3 **Multi-Cap Funds** 1st Quartile 100 15.00 11.00 17.00 15.00 8.00 34.00 100 2<sup>nd</sup> Quartile 101 11.88 11.88 9.90 13.86 18.81 33.67 100 3<sup>rd</sup> Quartile 100 7.00 13.00 12.00 6.00 32.00 30.00 100 4<sup>th</sup> Quartile 100 10.00 7.00 5.00 8.00 36.00 34.00 100

	Five-Year Percentages at End						
	Fund Count at Start	Top Half	Bottom Half	Merged/ Liquidated	Style Changed	Total	
	March 2006						
All Domestic Funds							
Top Half	784	46.49	40.23	13.28	0	100	
Bottom Half	782	30.40	36.65	32.95	0	100	
Large-Cap Funds			T				
	282	33.69	41.84	14.18	10.29	100	
Top Half	-		11101		10.00		
Bottom Half	282	29.08	20.57	39.72	10.63	100	
Mid-Cap Funds							
Top Half	128	23.44	28.13	11.72	36.72	100	
Bottom Half	128	26.56	21.09	25.78	26.56	100	
Ownell Own Fronts							
Small-Cap Funds							
Top Half	173	38.73	47.98	8.67	4.62	100	
Bottom Half	172	37.79	28.49	30.23	3.49	100	
Multi-Cap Funds							
Top Half	201	24.88	27.86	13.43	33.83	100	
Bottom Half	200	18.50	15.5	34.00	32.00	100	

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# **About S&P Indices Research & Design**

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