

DOES PAST PERFORMANCE MATTER?

THE PERSISTENCE SCORECARD

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CONTRIBUTORS

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

About the 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 most mutual fund literature. Yet due to either force of habit or conviction, investors and advisors consider past performance and related metrics to be important factors in fund selection. So 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, the University of Chicago’s Center for Research in Security Prices Survivorship (CRSP) Bias Free Mutual Fund Database serves as our underlying data source.

S&P Dow Jones Indices is one of the world’s leading index providers, maintaining a wide variety of investable and benchmark indices to meet an array of investor needs. Our Index Research & Design team is dedicated to conducting unbiased, 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 two non-overlapping three- and five-year periods.

Key features of the S&P Persistence Scorecard include:

- **Historical rankings without survivorship bias:** For anyone making an investment decision, all funds available at the time of that decision are part of the initial opportunity set. Nevertheless, in their persistence calculations, analysts often limit their sample to funds that continue to exist over the complete time period examined, ranking only the survivors. If that happens, funds that liquidate or merge during a period of study are disregarded, biasing measurements of persistence. 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 time period. This approach accounts for all initially available funds.
- **Clean universe:** The mutual fund universe used in these reports comprises actively managed domestic U.S. equity funds. Index funds, sector funds and index-based dynamic (bull/bear) funds are excluded from the sample. To avoid double-counting multiple share classes, only the largest share class of a fund is used.

- Transition matrices: Transition matrices show the movements between quartiles and halves over two non-overlapping three- and five-year periods. They also track the percentage of funds that have merged or liquidated. In addition, we monitor movements between capitalization levels. This helps us capture, for example, the conversion of some large-cap funds to mid- and small-cap funds.
- Tracking reports of top performers: The tracking reports show the percentages of funds that remain in the top-quartile or top-half rankings over three- and five-consecutive-year periods.

Summary of Results

- Very few funds can consistently stay at the top. Our studies show that as time horizons widen, the performance persistence of top quartile managers declines. Of the 692 funds that were in the top quartile as of September 2011, only 7.23% managed to stay in the top quartile at the end of September 2013. Similarly, 5.28% of the large-cap funds, 10.31% of the mid-cap funds and 8.15% of the small-cap funds remain in the top quartile.
- For the three years ended September 2013, 19.25% of large-cap funds, 20.1% of mid-cap funds and 26.8% of small-cap funds maintained a top-half ranking over three consecutive 12-month periods. It should be noted that random expectations would suggest a rate of 25% and small-cap funds was the only category to exceed the repeat rate.
- Looking at longer-term performance, only 7.71% of large-cap funds, 0.88% of mid-cap funds and 9.9% of small-cap funds maintained a top-half performance over five consecutive 12-month periods. Random expectations would suggest a repeat rate of 6.25%.
- While top-quartile and top-half repeat rates have been at or below the levels one expects based on chance, there is consistency in the death rate of bottom-quartile funds. Across all market-cap categories and all periods studied, fourth-quartile funds had a much higher rate of being merged and liquidated.

Exhibits

Exhibit 1: Performance Persistence Over Three Consecutive 12-Month Periods

Mutual Fund Category	Fund Count at Start			Percentage Remaining in Top Quartile		
	Sep-11	Sep-12	Sep-13	Sep-11	Sep-12	Sep-13
Top Quartile						
All Domestic Funds	692	21.24	7.23			
All Large-Cap Funds	265	16.60	5.28			
All Mid-Cap Funds	97	19.59	10.31			
All Small-Cap Funds	145	22.07	8.28			
All Multi-Cap Funds	185	28.11	7.57			
	Sep-11	Sep-12	Sep-13			
Top Half						
All Domestic Funds	1385	43.47	22.38			
All Large-Cap Funds	530	39.81	19.25			
All Mid-Cap Funds	194	37.11	20.1			
All Small-Cap Funds	291	47.77	26.8			
All Multi-Cap Funds	370	48.65	24.59			

Source: S&P Dow Jones Indices. Data as of Sept. 30, 2013. Tables are provided for illustrative purposes. Past performance is not a guarantee of future results.

Exhibit 2: Performance Persistence Over Five Consecutive 12-Month Periods

Mutual Fund Category	Fund Count at Start	Percentage Remaining in Top Quartile			
	Sep-09	Sep-10	Sep-11	Sep-12	Sep-13
Top Quartile					
All Domestic Funds	710	32.25	9.58	3.66	2.11
All Large-Cap Funds	253	32.02	10.28	4.35	3.95
All Mid-Cap Funds	114	28.95	3.51	0	0
All Small-Cap Funds	156	35.26	8.33	4.49	1.92
All Multi-Cap Funds	187	32.09	13.37	4.28	1.07
Mutual Fund Category	Fund Count at Start	Percentage Remaining in Top Half			
	Sep-09	Sep-10	Sep-11	Sep-12	Sep-13
Top Half					
All Domestic Funds	1421	49.19	24.49	11.33	6.47
All Large-Cap Funds	506	50.4	30.24	14.03	7.71
All Mid-Cap Funds	228	44.74	21.49	4.82	0.88
All Small-Cap Funds	313	53.35	22.36	14.06	9.9
All Multi-Cap Funds	374	46.79	20.32	9.36	5.35

Source: S&P Dow Jones Indices. Data as of Sept. 30, 2013. Tables are provided for illustrative purposes. Past performance is not a guarantee of future results.

**Exhibit 3: Three-Year Transition Matrix
Performance Over Two Non-Overlapping Three-Year Periods (Based on Quartiles)**

Mutual Fund Category	Fund Count at Start (Sep-10)	Three-Year Percentage at End						Total (%)
		1st Quartile (%)	2nd Quartile (%)	3rd Quartile (%)	4th Quartile (%)	Merged/Liquidated (%)	Style Changed (%)	
All Domestic Funds								
1st Quartile	490	26.73	25.51	17.35	22.04	8.37	0	100
2nd Quartile	490	24.69	20.82	18.98	23.47	12.04	0	100
3rd Quartile	490	14.69	18.98	25.51	19.18	21.63	0	100
4th Quartile	490	16.12	17.14	20.41	17.55	28.78	0	100
Large-Cap Funds								
1st Quartile	171	20.47	15.79	17.54	24.56	11.11	10.53	100
2nd Quartile	170	21.76	18.24	19.41	15.88	14.71	10	100
3rd Quartile	171	11.7	21.64	16.37	16.37	22.22	11.7	100
4th Quartile	170	15.29	12.35	15.88	11.76	28.82	15.89	100
Mid-Cap Funds								
1st Quartile	73	9.59	16.44	19.18	13.7	12.33	28.77	100
2nd Quartile	72	20.83	19.44	15.28	13.89	11.11	19.45	100
3rd Quartile	73	17.81	12.33	15.07	13.7	21.92	19.18	100
4th Quartile	72	12.5	11.11	11.11	18.06	27.78	19.44	100

Source: S&P Dow Jones Indices. Data as of Sept. 30, 2013. Tables are provided for illustrative purposes. Past performance is not a guarantee of future results.

Exhibit 3: Three-Year Transition Matrix (continued)
Performance Over Two Non-Overlapping Three-Year Periods (Based on Quartiles)

Three-Year Percentage at End								
Mutual Fund Category	Fund Count at Start (Sep-10)	1st Quartile (%)	2nd Quartile (%)	3rd Quartile (%)	4th Quartile (%)	Merged/Liquidated (%)	Style Changed (%)	Total (%)
Small-Cap Funds								
1st Quartile	112	16.96	16.07	19.64	36.61	6.25	4.46	100
2nd Quartile	111	18.02	15.32	33.33	18.92	9.91	4.5	100
3rd Quartile	112	24.11	23.21	18.75	13.39	11.61	8.93	100
4th Quartile	111	20.72	26.13	8.11	10.81	31.53	2.7	100

Multi-Cap Funds

1st Quartile	136	22.06	13.24	15.44	23.53	5.15	20.59	100
2nd Quartile	135	10.37	21.48	22.22	16.3	14.07	15.56	100
3rd Quartile	136	12.5	13.97	14.71	12.5	22.79	23.53	100
4th Quartile	135	16.3	12.59	8.15	8.89	29.63	24.44	100

Performance Over Two Non-Overlapping Three-Year Periods (Based on Halves)

Three-Year Percentage at End						
Mutual Fund Category	Fund Count at Start (Sep-10)	Top Half (%)	Bottom Half (%)	Merged/Liquidated (%)	Style Changed (%)	Total (%)
All Domestic Funds						
Top Half	980	48.88	40.92	10.2	0	100
Bottom Half	980	33.47	41.33	25.2	0	100
Large-Cap Funds						
Top Half	341	38.12	38.71	12.9	10.27	100
Bottom Half	341	30.5	30.21	25.51	13.79	100
Mid-Cap Funds						
Top Half	145	33.1	31.03	11.72	24.14	100
Bottom Half	145	26.9	28.97	24.83	19.31	100
Small-Cap Funds						
Top Half	223	33.18	54.26	8.07	4.49	100
Bottom Half	223	47.09	25.56	21.52	5.83	100
Multi-Cap Funds						
Top Half	271	33.58	38.75	9.59	18.09	100
Bottom Half	271	27.68	22.14	26.2	23.98	100

Source: S&P Dow Jones Indices. Data as of Sept. 30, 2013. Tables are provided for illustrative purposes. Past performance is not a guarantee of future results.

**Exhibit 4: Five-Year Transition Matrix
Performance Over Two Non-Overlapping Five-Year Periods (Based on Quartiles)**

Mutual Fund Category	Fund Count at Start (Sep-08)	Five-Year Percentage at End						Total (%)
		1st Quartile (%)	2nd Quartile (%)	3rd Quartile (%)	4th Quartile (%)	Merged/Liquidated (%)	Style Changed (%)	
All Domestic Funds								
1st Quartile	419	22.43	27.92	20.53	16.71	12.41	0	100
2nd Quartile	418	20.1	16.27	18.9	20.81	23.92	0	100
3rd Quartile	419	14.8	13.37	22.2	22.2	27.45	0	100
4th Quartile	418	17.46	17.46	13.16	15.07	36.84	0	100
Large-Cap Funds								
1st Quartile	147	13.61	15.65	20.41	24.49	17.69	8.16	100
2nd Quartile	147	10.2	19.73	18.37	15.65	23.81	12.24	100
3rd Quartile	146	18.49	11.64	12.33	11.64	30.82	15.07	100
4th Quartile	147	17.01	12.93	8.16	7.48	36.05	18.37	100
Mid-Cap Funds								
1st Quartile	71	5.63	11.27	12.68	8.45	9.86	52.11	100
2nd Quartile	71	14.08	11.27	11.27	14.08	21.13	28.17	100
3rd Quartile	71	12.68	11.27	9.86	2.82	19.72	43.66	100
4th Quartile	71	8.45	5.63	7.04	14.08	40.85	23.94	100
Small-Cap Funds								
1st Quartile	98	6.12	15.31	24.49	36.73	8.16	9.19	100
2nd Quartile	99	20.2	18.18	21.21	17.17	16.16	7.07	100
3rd Quartile	98	21.43	26.53	13.27	10.2	24.49	4.08	100
4th Quartile	98	22.45	10.2	11.22	6.12	44.9	5.1	100
Multi-Cap Funds								
1st Quartile	103	12.62	14.56	13.59	9.71	15.53	33.98	100
2nd Quartile	102	9.8	8.82	10.78	12.75	25.49	32.35	100
3rd Quartile	103	2.91	11.65	14.56	13.59	27.18	30.1	100
4th Quartile	102	18.63	8.82	4.9	7.84	34.31	25.49	100

Performance Over Two Non-Overlapping Five-Year Periods (Based on Halves)

Mutual Fund Category	Fund Count at Start (Sep-08)	Five-Year Percentage at End				Total (%)
		Top Half (%)	Bottom Half (%)	Merged/Liquidated (%)	Style Changed (%)	
All Domestic Funds						
Top Half	837	43.37	38.47	18.16	0	100
Bottom Half	837	31.54	36.32	32.14	0	100

Source: S&P Dow Jones Indices. Data as of Sept. 30, 2013. Tables are provided for illustrative purposes. Past performance is not a guarantee of future results.

**Exhibit 4: Five-Year Transition Matrix (continued)
Performance Over Two Non-Overlapping Five-Year Periods (Based on Halves)**

Mutual Fund Category	Fund Count at Start (Sep-08)	Five-Year Percentage at End				Total (%)
		Top Half (%)	Bottom Half (%)	Merged/Liquidated (%)	Style Changed (%)	
Large-Cap Funds						
Top Half	294	29.59	39.46	20.75	10.2	100
Bottom Half	293	30.03	19.8	33.45	16.72	100
Mid-Cap Funds						
Top Half	142	21.13	23.24	15.49	40.14	100
Bottom Half	142	19.01	16.9	30.28	33.8	100
Small-Cap Funds						
Top Half	197	29.95	49.75	12.18	8.12	100
Bottom Half	196	40.31	20.41	34.69	4.6	100
Multi-Cap Funds						
Top Half	205	22.93	23.41	20.49	33.17	100
Bottom Half	205	20.98	20.49	30.73	27.81	100

Source: S&P Dow Jones Indices. Data as of Sept. 30, 2013. Tables are provided for illustrative purposes. Past performance is not a guarantee of future results.

INDEX RESEARCH & DESIGN CONTACT INFORMATION

Global Head

Keith Loggie	keith.loggie@spdji.com
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New York

Phillip Brzenk	phillip.brzenk@spdji.com
Qing Li	qing.li@spdji.com
Berlinda Liu	berlinda.liu@spdji.com
Aye Soe	aye.soe@spdji.com
Peter Tsui	peter.tsui@spdji.com

Beijing

Liyu Zeng	liyu.zeng@spdji.com
-----------	---------------------

Hong Kong

Priscilla Luk	priscilla.luk@spdji.com
---------------	-------------------------

London

Xiaowei Kang	xiaowei.kang@spdji.com
Daniel Ung	daniel.ung@spdji.com

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