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The S&P Persistence Scorecard

Does Past Performance Really Matter?

Thought Leadership by Global Research & Design www.indexresearch.standardandpoors.com

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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. However, 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.¹

S&P Indices is the world's leading index provider, 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 market place. 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

When making investment decisions, funds available at that time typically become a key 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 CRSP¹ 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.

Clean universe

We start our analysis using a mutual fund universe composed solely of actively managed domestic U.S. equity funds. Therefore, index funds, sector funds, and index-based dynamic (bull/bear) funds are excluded from the sample. To avoid double counting of multiple share classes, only the largest share class of a fund is used.

Transition matrices

Transition matrices are used to show the movements between quartiles and halves for two nonoverlapping 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 the conversion of some large-cap funds to mid- and small-cap funds, for example.

¹ 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.

• 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 <u>www.spiva.standardandpoors.com</u>.

Summary of Results

- Very few funds have managed to consistently repeat top-half or top-quartile performance. Over the five years ending September 2010, only 4.10% of large-cap funds, 3.80% of midcap funds, and 4.60% of small-cap funds maintained a top-half ranking over five consecutive 12-month periods. Expectations of a random outcome would suggest a rate of 6.25%.
- Looking at longer-term performance, 14.20% of large-cap funds with a top-quartile ranking over five years ending September 2005, maintained a top-quartile ranking over the next five years. Only 8.50% of mid-cap funds and 27.30% of small-cap funds maintained a topquartile performance over the same period. Expectations of a random outcome would suggest a repeat rate of 25.00%.
- While 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.

Mutual Fund Category	Fund Count at Start	Percentage Remaining in Top Quartile			
	Sept-08	Sept-09	Sept-10		
Top Quartile	I ·	·	· ·		
All Domestic Funds	595	21.51	5.21		
	1	1	I		
Large-Cap Funds	186	17.74	7.53		
Mid-Cap Funds	103	24.27	4.85		
Small-Cap Funds	138	21.01	3.62		
Multi-Cap Funds	168	24.40	4.17		
	·	·			
	Fund Count at Start	Percen	tage Remaining in Top Half		
	Sept-08	Sept-09	Sept-10		
Top Half	·	·	· · · ·		
All Domestic Funds	1,190	42.35	21.34		
	:				
Large-Cap Funds	373	46.65	25.47		
Mid-Cap Funds	206	39.32	17.96		
Small-Cap Funds	276	40.22	19.57		
Multi-Cap Funds	335	41.19	20.30		

Report 2: Performance Persistence over Five Consecutive 12-Month Periods*

Mutual Fund Category	Fund Count at Start	Percentage Remaining in Top Quartile			
	Sept-06	Sept-07	Sept-08	Sept-09	Sept-10
Top Quartile					
All Domestic Funds	542	12.92	1.85	0.55	0
				•	
Large-Cap Funds	173	8.67	2.89	0.58	0
Mid-Cap Funds	92	10.87	1.09	0	0
Small-Cap Funds	121	15.70	2.48	0.83	0
Multi-Cap Funds	156	16.67	0.64	0.64	0

	Fund Count at Start	Percentage Remaining in Top Half			
	Sept-06	Sept-07	Sept-08	Sept-09	Sept-10
Top Half	<u>.</u>				
All Domestic Funds	1,083	39.52	18.74	9.51	4.16
Large-Cap Funds	346	33.24	17.92	8.67	4.05
Mid-Cap Funds	184	40.22	19.02	8.15	3.80
Small-Cap Funds	242	47.11	22.73	11.98	4.55
Multi-Cap Funds	311	40.19	16.40	9.32	4.18

		Three-Year Percentages at End						
	Fund Count at Start	1 st Quartile	2 nd Quartile	3 rd Quartile	4 th Quartile	Merged/ Liquidated	Style Changed	Total
	Sept-07							
All Domestic Funds								
1 st Quartile	577	35.01	22.88	20.10	16.29	5.72	0	100
2 nd Quartile	577	21.32	25.65	24.96	21.49	6.59	0	100
3 rd Quartile	577	17.68	23.40	25.13	25.30	8.49	0	100
4 th Quartile	577	17.68	19.76	21.32	28.60	12.65	0	100
Large-Cap Funds								
1 st Quartile	196	30.61	19.90	14.80	15.82	10.20	8.68	100
2 nd Quartile	196	23.47	22.96	25.51	21.43	4.59	2.04	100
3 rd Quartile	196	16.33	25.51	27.55	22.96	5.61	2.04	100
4 th Quartile	196	17.35	18.88	19.90	27.04	12.76	4.08	100
Mid-Cap Funds								1
1 st Quartile	92	30.43	17.39	18.48	17.39	5.43	10.87	100
2 nd Quartile	92	16.30	28.26	18.48	15.22	8.70	13.04	100
3 rd Quartile	92	11.96	16.30	18.48	19.57	15.22	18.48	100
4 th Quartile	92	17.39	15.22	20.65	23.91	16.3	6.53	100
Small-Cap Funds		1	1				1	1
1 st Quartile	131	34.35	16.79	19.85	22.14	2.29	4.58	100
2 nd Quartile	130	23.08	24.62	26.92	16.15	6.15	3.08	100
3 rd Quartile	131	22.14	25.19	25.19	19.08	6.87	1.53	100
4 th Quartile	130	9.23	21.54	16.92	30.77	17.69	3.85	100
Multi-Cap Funds			1					1
1 st Quartile	159	30.19	19.50	21.38	16.98	3.77	8.18	100
2 nd Quartile	158	17.09	26.58	22.15	18.99	5.70	9.49	100
3 rd Quartile	158	18.87	25.79	22.13	18.87	7.55	6.29	100
4 th Quartile	159	18.35	12.66	18.35	29.75	10.13	10.76	100

Performance over Two	o Non-Overlapping	Three-Year P	eriods (Based On I	Halves)				
		Three-Year	Three-Year Percentages at End					
	Fund Count at Start	Top Half	Bottom Half	Merged/ Liquidated	Style Changed	Total		
	Sept-07							
All Domestic Funds								
Top Half	1154	52.43	41.42	6.15	0	100		
Bottom Half	1154	39.25	50.17	10.57	0	100		
		1						
Large-Cap Funds								
Top Half	392	48.47	38.78	7.40	5.36	100		
Bottom Half	392	39.03	48.72	9.18	3.06	100		
		1						
Mid-Cap Funds								
Top Half	184	46.20	34.78	7.07	11.95	100		
Bottom Half	184	30.43	41.30	15.76	12.50	100		
Small-Cap Funds								
Top Half	261	49.43	42.53	4.21	3.84	100		
Bottom Half	261	39.08	45.98	12.26	2.68	100		
Multi-Cap Funds								
Top Half	317	46.69	39.75	4.73	8.83	100		
Bottom Half	317	37.85	44.79	8.83	8.52	100		

Report 4: Five-Year Transition Matrix (Sept 2005 – Sept 2010) Performance over Two Non-Overlapping Five-Year Periods (Based on Quartiles)								
		Five-Year Percentages at End						
	Fund Count at Start	1 st Quartile	2 nd Quartile	3 rd Quartile	4 th Quartile	Merged/ Liquidated	Style Changed	Total
	Sept-05							
All Domestic Funds								
1 st Quartile	481	25.16	20.58	19.54	23.08	11.64	0	100
2 nd Quartile	481	15.18	22.87	22.04	24.12	15.80	0	100
3 rd Quartile	481	18.92	17.05	23.70	19.96	20.37	0	100
4 th Quartile	481	21.62	20.37	15.38	13.72	28.90	0	100
Large-Cap Funds					1			
1 st Quartile	155	14.19	20.65	21.94	22.58	11.61	9.04	100
2 nd Quartile	155	14.84	15.48	27.10	21.94	12.90	7.75	100
3 rd Quartile	154	16.88	18.83	14.29	20.78	25.97	3.25	100
4 th Quartile	155	27.74	18.71	10.32	8.39	28.39	6.45	100
Mid-Cap Funds					1			
1 st Quartile	82	8.54	19.51	15.85	19.51	15.85	20.74	100
2 nd Quartile	82	19.51	13.41	23.17	10.98	13.41	19.52	100
3 rd Quartile	82	14.63	14.63	9.76	14.63	25.61	20.73	100
4 th Quartile	82	15.85	10.98	8.54	13.41	28.05	23.17	100
Small-Cap Funds					1			
1 st Quartile	110	27.27	20.00	15.45	25.45	8.18	3.64	100
2 nd Quartile	109	12.84	25.69	22.02	19.27	16.51	3.67	100
3 rd Quartile	110	22.73	19.09	25.45	16.36	15.45	0.91	100
4 th Quartile	109	15.60	13.76	14.68	17.43	35.78	2.75	100
Multi-Cap Funds	-							
1 st Quartile	135	15.56	9.63	19.26	17.78	12.59	25.19	100
2 nd Quartile	135	10.37	18.52	14.07	17.04	14.07	25.93	100
3 rd Quartile	134	14.93	14.93	16.42	14.18	16.42	23.13	100
4 th Quartile	135	17.78	15.56	8.15	9.63	28.15	20.74	100

Performance over Two Non-Overlapping Five-Year Periods (Based On Halves)							
		Five-Year P	Five-Year Percentages at End				
	Fund Count at Start	Top Half	Bottom Half	Merged/ Liquidated	Style Changed	Total	
	Sept-05						
All Domestic Funds							
Top Half	962	41.89	44.39	13.72	0	100	
Bottom Half	962	38.98	36.38	24.64	0	100	
Large-Cap Funds							
Top Half	310	32.58	46.77	12.26	8.39	100	
Bottom Half	309	41.10	26.86	27.18	4.86	100	
Mid-Cap Funds							
Top Half	164	30.49	34.76	14.63	20.13	100	
Bottom Half	164	28.05	23.17	26.83	21.95	100	
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Small-Cap Funds							
Top Half	219	42.92	41.10	12.33	3.65	100	
Bottom Half	219	35.62	36.99	25.57	1.83	100	
Multi-Cap Funds							
Top Half	270	27.04	34.07	13.33	25.56	100	
Bottom Half	269	31.60	24.16	22.30	21.94	100	

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