

CONTRIBUTORS

Ryan Poirier, FRM
Senior Analyst
Global Research & Design
ryan.poirier@spglobal.com

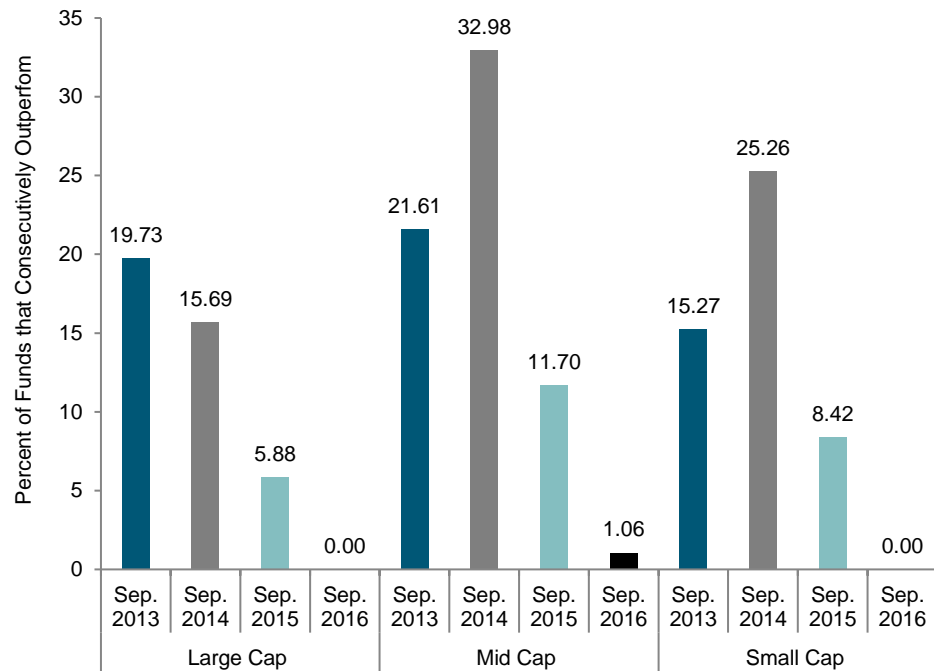
Aye M. Soe, CFA
Managing Director
Global Research & Design
aye.soe@spglobal.com

Fleeting Alpha: Evidence From the SPIVA and Persistence Scorecards

EXECUTIVE SUMMARY

- One of the key measurements of successful active management is a manager's ability to deliver consistent positive excess returns over a given period, on a net-of-fees basis.
- We study whether a group of funds that outperform their benchmarks in one period can subsequently persist in delivering alpha in consecutive periods.
- We measure this by tracking a group of funds that outperform the benchmark on a rolling quarterly basis, based on annualized returns over the past three-year period. We then examine whether these outperforming funds (the "winners") can continue to outperform during each of the three subsequent one-year periods.
- With the exception of large-cap value managers, the data show negligible performance persistence across most domestic equity categories beyond a one-year horizon.
- The data indicate the difficulty market participants face in finding a skillful manager that can offer consistent alpha on a near- to medium-term basis. Therefore, market participants may not be best served by picking managers based solely on past performance.
- For example, out of 1,034 large-cap funds that existed in the universe as of Sept. 30, 2013, only 19.73%, or 204 funds, outperformed the [S&P 500®](#). In the following year, 15.69% of those 204 funds outperformed the benchmark. By the end of the third year, none of those original 204 funds were able to outperform the S&P 500 on a consecutive basis (see Exhibit 1).

Exhibit 1: Percent of Funds That Outperformed the S&P 500



Source: S&P Dow Jones Indices LLC and CRSP. Data as of Sept. 30, 2016. Past performance is no guarantee of future results. Table is provided for illustrative purposes.

INTRODUCTION

The phrase “past performance is not an indicator of future results” (or some variation thereof) can be found in the fine print of most funds’ literature. Despite a wealth of studies showing a lack of long-term performance persistence among actively managed mutual funds,¹ many market participants consider past performance and related metrics to be important factors in manager selection. The decision to use past performance in this way most likely stems from the conviction that winners persist—in other words, that a manager who outperformed last year is likely to outperform this year.

Since 2002, S&P Dow Jones Indices has published the SPIVA® U.S. Scorecard, which measures the percentage of managers that outperform their benchmarks across various equity and fixed income categories, and the Persistence Scorecard, which measures the likelihood of a top quartile manager repeating the same status over consecutive three- and five-year horizons.

With this paper, we marry the two reports by studying whether a group of funds that outperform their benchmarks in one period can subsequently persist in delivering alpha in consecutive periods. We measure this by

One of the key measurements of successful active management is the ability of a manager to deliver consistent positive excess returns for some period, on a net-of-fees basis.

¹ The earliest work on mutual performance persistence is by Jensen (1968), who found that historically, mutual funds had not outperformed a buy-and-hold strategy, on average. For additional key studies on mutual fund performance, see Grinblatt and Titman (1989, 1992), Goetzmann and Ibbotson (1994), Brown and Goetzmann (1995), and Carhart (1997).

tracking a group of funds that outperform the benchmark, based on three-year annualized returns, on a net-of-fees basis. We then examine whether these outperforming funds (the “winners”) can continue to outperform during each of the subsequent three one-year periods.

One of the key measurements of successful active management is the ability of a manager to deliver consistent positive excess returns for some period, on a net-of-fees basis. This is particularly important in light of the secular trend toward low-cost, passive investment vehicles, which increasingly compete with active managers for capital.

Our research adds to the growing body of literature on active management’s performance and the persistence of alpha. We attempt to identify the likely persistence of a manager’s ability to generate positive alpha (whether due to luck or skill). With the exception of large-cap value managers, the data show negligible performance persistence across most domestic equity categories beyond a one-year horizon. The odds of identifying a superior manager in advance seem to improve in alternative asset classes such as real estate. It is possible that additional factors, such as benchmark mismatch and/or asymmetric information due to uniqueness of each property or location may have contributed to higher persistence observed among real estate funds.

DATA AND METHODOLOGY

Our research adds to the growing body of literature on active management’s performance and the persistence of alpha.

The University of Chicago’s Center for Research and Security Prices (CRSP) Survivorship-Bias-Free US Mutual Fund Database serves as the underlying data source for our study. The universe used for the study only includes actively managed domestic U.S. equity funds. Index funds, sector funds, and index-based dynamic (leveraged or inverse) funds are excluded from the sample. To avoid double counting multiple share classes, only the share class with the highest previous period return of each fund is used. At each measurement period, the universe, on average, consists of over 2,300 active equity funds (See Appendix I).

The study period is from March 31, 2000, through Sept. 30, 2016, based on the earliest availability of Lipper style classifications. Beginning on March 31, 2003, on a quarterly basis, using three-year annualized returns for each of the funds in our universe as well as their corresponding benchmarks, we identify funds that beat their benchmarks. We then track their relative performance for each of the following three years. This approach, by identifying funds that beat their benchmarks as winners and those that do not as losers, applies the “winner-winner, winner-loser” methodology developed by Brown and Goetzmann (1995) and examines if winners in period t are also winners in $t+j$, where $j = \text{Year 1, Year 2, and Year 3}$.

LACK OF PERSISTENCE OBSERVED AMONG OUTPERFORMING FUNDS

Exhibit 2 shows the performance persistence of managers investing in various domestic and international equity categories as of Sept. 30, 2016, based on trailing three-year returns. With the exception of real estate funds, less than one-quarter of domestic equity managers that beat their benchmarks as of Sept. 30, 2013, exhibited performance persistence in the subsequent year.

We observe little to no evidence of performance persistence among active managers, except in the large-cap value and real estate categories. For example, out of 1,034 large-cap funds that existed in the universe as of Sept. 30, 2013, only 19.73%, or 204 funds, outperformed the [S&P 500](#). In the following year, 15.69% of those 204 funds outperformed the benchmark. By the end of the third year, none of those original 204 funds were able to outperform the S&P 500 on a consecutive basis.

A point-in-time snapshot of the performance persistence figure can be unduly influenced by cyclical market conditions. Therefore, we also compute the rolling quarterly average performance persistence figures from March 31, 2003, through Sept. 30, 2016 (see Exhibit 3).

Quarterly average numbers paint a slightly more favorable picture. We can see that, on average, a fair degree of outperformance persisted in the first year across most categories. However, an inverse relationship can be observed between the level of persistence and time horizon, with persistence declining in each subsequent year. Real estate and international equity managers have a higher degree of outperformance persistence than their domestic core equity counterparts, with international small-cap active managers in particular displaying the highest persistence level of 9%, on average.

An inverse relationship can be observed between the level of persistence and time horizon, with persistence declining with each subsequent year.

CONCLUSION

The findings in this report are not surprising, given that the Persistence Scorecard already highlights the small probability of a top quartile fund maintaining its status repeatedly over three- and five-year horizons. Taken together, the data indicate the difficulty market participants face in finding a skillful manager that can offer consistent alpha on a near- to medium-term basis. Therefore, market participants may not be best served by chasing hot hands or picking managers based solely on past performance.

Exhibit 2: Outperformance Persistence Over Three Consecutive Years

FUND CATEGORY	BENCHMARK	TOTAL NUMBER OF FUNDS	# OF FUNDS OUT- PERFORMING THE BENCHMARK	% OF FUNDS OUT- PERFORMING THE BENCHMARK	PERCENTAGE OUTPERFORMING THE BENCHMARK (PERIOD END)		
					SEPT. 30, 2014	SEPT. 30, 2015	SEPT. 30, 2016
DOMESTIC EQUITY							
All Domestic	S&P Composite 1500	2858	880	30.79	13.75	5.91	0.45
All Large-Cap	S&P 500	1034	204	19.73	15.69	5.88	0.00
All Mid-Cap	S&P MidCap 400®	435	94	21.61	32.98	11.70	1.06
All Small-Cap	S&P SmallCap 600®	622	95	15.27	25.26	8.42	0.00
All Multi-Cap	S&P Composite 1500®	767	184	23.99	21.20	9.78	1.63
Large-Cap Growth	S&P 500 Growth	348	74	21.26	4.05	1.35	1.35
Large-Cap Core	S&P 500	374	61	16.31	32.79	9.84	0.00
Large-Cap Value	S&P 500 Value	312	80	25.64	31.25	12.50	6.25
Mid-Cap Growth	S&P MidCap 400 Growth	192	28	14.58	14.29	3.57	0.00
Mid-Cap Core	S&P MidCap 400	168	43	25.60	25.58	4.65	0.00
Mid-Cap Value	S&P MidCap 400 Value	75	19	25.33	36.84	15.79	0.00
Small-Cap Growth	S&P SmallCap 600 Growth	233	48	20.60	18.75	4.17	0.00
Small-Cap Core	S&P SmallCap 600	276	23	8.33	34.78	4.35	0.00
Small-Cap Value	S&P SmallCap 600 Value	113	16	14.16	18.75	6.25	0.00
Multi-Cap Growth	S&P Composite 1500 Growth	228	53	23.25	9.43	0.00	0.00
Multi-Cap Core	S&P Composite 1500	388	82	21.13	15.85	8.54	1.22
Multi-Cap Value	S&P Composite 1500 Value	151	34	22.52	26.47	14.71	0.00
Real Estate	S&P U.S. REITs	105	7	6.67	57.14	28.57	28.57
INTERNATIONAL EQUITY							
Global	S&P Global 1200	174	52	29.89	17.31	13.46	1.92
International	S&P 700	350	121	34.57	32.23	20.66	5.79
International Small-Cap	S&P Developed Ex-U.S. Small Cap	55	32	58.18	28.13	15.63	3.13
Emerging Markets	S&P/IFCI Composite	158	54	34.18	27.78	12.96	3.70

Source: S&P Dow Jones Indices LLC and CRSP. Data as of Sept. 30, 2016. Past performance is no guarantee of future results. Table is provided for illustrative purposes.

Exhibit 3: Rolling Qtrly. Avg. Outperformance Persistence Over Three Consecutive Years – From March 31, 2003 to Sept. 30, 2016

FUND CATEGORY	BENCHMARK	TOTAL AVERAGE NUMBER OF FUNDS	# OF FUNDS OUTPERFORMING THE BENCHMARK	% OF FUNDS OUTPERFORMING THE BENCHMARK	PERCENTAGE OUTPERFORMING THE BENCHMARK (SUBSEQUENT YEAR)		
					EVALUATION PERIOD	YEAR 1	YEAR 2
DOMESTIC EQUITY							
All Domestic	S&P Composite 1500	2328	906	39.62	42.49	18.01	7.05
All Large-Cap	S&P 500	789	232	30.83	33.93	13.62	5.17
All Mid-Cap	S&P MidCap 400	383	96	25.65	30.39	10.35	3.24
All Small-Cap	S&P SmallCap 600	511	154	30.58	35.25	13.30	4.60
All Multi-Cap	S&P Composite 1500	645	233	36.98	30.68	12.25	4.51
Large-Cap Growth	S&P 500 Growth	259	63	25.79	29.61	9.33	1.95
Large-Cap Core	S&P 500	289	67	24.58	24.71	9.51	3.09
Large-Cap Value	S&P 500 Value	241	94	39.80	32.27	14.58	6.02
Mid-Cap Growth	S&P MidCap 400 Growth	184	40	21.96	24.83	7.16	2.26
Mid-Cap Core	S&P MidCap 400	105	25	24.39	18.11	5.24	1.15
Mid-Cap Value	S&P MidCap 400 Value	94	27	28.54	24.89	7.98	2.01
Small-Cap Growth	S&P SmallCap 600 Growth	196	39	19.49	29.92	11.20	4.31
Small-Cap Core	S&P SmallCap 600	197	55	28.34	29.74	10.38	2.95
Small-Cap Value	S&P SmallCap 600 Value	118	53	44.11	28.76	10.02	2.86
Multi-Cap Growth	S&P Composite 1500 Growth	181	60	34.87	28.81	10.57	3.22
Multi-Cap Core	S&P Composite 1500	271	92	35.69	26.53	9.76	3.34
Multi-Cap Value	S&P Composite 1500 Value	192	63	32.64	22.22	8.39	2.66
Real Estate	S&P U.S. REITs	82	29	36.43	37.16	16.18	6.64
INTERNATIONAL EQUITY							
Global	S&P Global 1200	118	52	35.87	38.35	17.54	7.16
International	S&P 700	314	121	23.89	36.68	15.56	6.88
International Small-Cap	S&P Developed Ex-U.S. Small Cap	48	32	43.64	43.46	19.79	9.32
Emerging Markets	S&P/IFCI Composite	95	54	25.24	38.39	15.48	5.22

Source: S&P Dow Jones Indices LLC and CRSP. Data as of Sept. 30, 2016. Past performance is no guarantee of future results. Table is provided for illustrative purposes.

APPENDIX I: NUMBER OF FUNDS**Exhibit 4: Universe Summary Statistic**

FUND CATEGORY	AVERAGE	MEDIAN
DOMESTIC EQUITY		
All Domestic	2328	2187
All Large-Cap	789	748
All Mid-Cap	383	373
All Small-Cap	511	486
All Multi-Cap	645	619
Large-Cap Growth	259	232
Large-Cap Core	289	277
Large-Cap Value	241	213
Mid-Cap Growth	184	188
Mid-Cap Core	105	103
Mid-Cap Value	94	90
Small-Cap Growth	196	189
Small-Cap Core	197	212
Small-Cap Value	118	114
Multi-Cap Growth	181	179
Multi-Cap Core	271	284
Multi-Cap Value	192	174
Real Estate	82	78
INTERNATIONAL EQUITY		
Global	118	113
International	314	311
International Small Cap	48	48
Emerging Markets	95	88

Source: S&P Dow Jones Indices LLC and CRSP. Data as of Sept. 30, 2016. Average and Median are calculated based on all quarterly snapshots between March 31, 2003 and Sept. 30, 2016. Past performance is no guarantee of future results. Table is provided for illustrative purposes.

REFERENCES

- Brown, S. J., and Goetzmann, W. N. (1995). Performance Persistence. *The Journal of Finance*, 50(2), 679-698.
- Goetzmann, W. N., and Ibbotson, R. G. (1994). Do Winners Repeat? *The Journal of Portfolio Management*, 20(2), 9-18.
- Grinblatt, M., and Titman, S. (1989). Mutual Fund Performance: An Analysis of Quarterly Portfolio Holdings. *The Journal of Business*, 62(3), 393-416.
- Grinblatt, M., and Titman, S. (1992). The Persistence of Mutual fund Performance. *The Journal of Finance*, 47(5), 1977-1984.
- Jensen, M. C. (1968). The Performance of Mutual Funds in the Period 1945-1964. *The Journal of Finance*, 23(2), 389-416.
- Mark, C. M. (1997). On Persistence in Mutual Fund Performance. *The Journal of Finance*, 52(1), 57-82.

S&P DJI Research Contributors		
NAME	TITLE	EMAIL
Charles "Chuck" Mounts	Global Head	charles.mounts@spglobal.com
Global Research & Design		
Aye M. Soe, CFA	Americas Head	aye.soe@spglobal.com
Dennis Badlyans	Associate Director	dennis.badlyans@spglobal.com
Phillip Brzenk, CFA	Director	phillip.brzenk@spglobal.com
Smita Chirputkar	Director	smita.chirputkar@spglobal.com
Rachel Du	Senior Analyst	rachel.du@spglobal.com
Qing Li	Associate Director	qing.li@spglobal.com
Berlinda Liu, CFA	Director	berlinda.liu@spglobal.com
Ryan Poirier	Senior Analyst	ryan.poirier@spglobal.com
Maria Sanchez	Associate Director	maria.sanchez@spglobal.com
Kelly Tang, CFA	Director	kelly.tang@spglobal.com
Peter Tsui	Director	peter.tsui@spglobal.com
Hong Xie, CFA	Director	hong.xie@spglobal.com
Priscilla Luk	APAC Head	priscilla.luk@spglobal.com
Utkarsh Agrawal, CFA	Associate Director	utkarsh.agrawal@spglobal.com
Liyu Zeng, CFA	Director	liyu.zeng@spglobal.com
Akash Jain	Associate Director	akash.jain@spglobal.com
Sunjiv Mainie, CFA, CQF	EMEA Head	sunjiv.mainie@spglobal.com
Daniel Ung, CFA, CAIA, FRM	Director	daniel.ung@spglobal.com
Andrew Innes	Senior Analyst	andrew.innes@spglobal.com
Index Investment Strategy		
Craig Lazzara, CFA	Global Head	craig.lazzara@spglobal.com
Fei Mei Chan	Director	feimei.chan@spglobal.com
Tim Edwards, PhD	Senior Director	tim.edwards@spglobal.com
Howard Silverblatt	Senior Industry Analyst	howard.silverblatt@spglobal.com
Anu Ganti	Director	anu.ganti@spglobal.com

GENERAL DISCLAIMER

Copyright © 2017 by S&P Dow Jones Indices LLC, a part of S&P Global. All rights reserved. Standard & Poor's®, S&P 500® and S&P® are registered trademarks of Standard & Poor's Financial Services LLC ("S&P"), a subsidiary of S&P Global. Dow Jones® is a registered trademark of Dow Jones Trademark Holdings LLC ("Dow Jones"). Trademarks have been licensed to S&P Dow Jones Indices LLC. Redistribution, reproduction and/or photocopying in whole or in part are prohibited without written permission. This document does not constitute an offer of services in jurisdictions where S&P Dow Jones Indices LLC, Dow Jones, S&P or their respective affiliates (collectively "S&P Dow Jones Indices") do not have the necessary licenses. All information provided by S&P Dow Jones Indices is impersonal and not tailored to the needs of any person, entity or group of persons. S&P Dow Jones Indices receives compensation in connection with licensing its indices to third parties. Past performance of an index is not a guarantee of future results.

It is not possible to invest directly in an index. Exposure to an asset class represented by an index is available through investable instruments based on that index. S&P Dow Jones Indices does not sponsor, endorse, sell, promote or manage any investment fund or other investment vehicle that is offered by third parties and that seeks to provide an investment return based on the performance of any index. S&P Dow Jones Indices makes no assurance that investment products based on the index will accurately track index performance or provide positive investment returns. S&P Dow Jones Indices LLC is not an investment advisor, and S&P Dow Jones Indices makes no representation regarding the advisability of investing in any such investment fund or other investment vehicle. A decision to invest in any such investment fund or other investment vehicle should not be made in reliance on any of the statements set forth in this document. Prospective investors are advised to make an investment in any such fund or other vehicle only after carefully considering the risks associated with investing in such funds, as detailed in an offering memorandum or similar document that is prepared by or on behalf of the issuer of the investment fund or other vehicle. Inclusion of a security within an index is not a recommendation by S&P Dow Jones Indices to buy, sell, or hold such security, nor is it considered to be investment advice.

These materials have been prepared solely for informational purposes based upon information generally available to the public and from sources believed to be reliable. No content contained in these materials (including index data, ratings, credit-related analyses and data, research, valuations, model, software or other application or output therefrom) or any part thereof (Content) may be modified, reverse-engineered, reproduced or distributed in any form or by any means, or stored in a database or retrieval system, without the prior written permission of S&P Dow Jones Indices. The Content shall not be used for any unlawful or unauthorized purposes. S&P Dow Jones Indices and its third-party data providers and licensors (collectively "S&P Dow Jones Indices Parties") do not guarantee the accuracy, completeness, timeliness or availability of the Content. S&P Dow Jones Indices Parties are not responsible for any errors or omissions, regardless of the cause, for the results obtained from the use of the Content. THE CONTENT IS PROVIDED ON AN "AS IS" BASIS. S&P DOW JONES INDICES PARTIES DISCLAIM ANY AND ALL EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, ANY WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR USE, FREEDOM FROM BUGS, SOFTWARE ERRORS OR DEFECTS, THAT THE CONTENT'S FUNCTIONING WILL BE UNINTERRUPTED OR THAT THE CONTENT WILL OPERATE WITH ANY SOFTWARE OR HARDWARE CONFIGURATION. In no event shall S&P Dow Jones Indices Parties be liable to any party for any direct, indirect, incidental, exemplary, compensatory, punitive, special or consequential damages, costs, expenses, legal fees, or losses (including, without limitation, lost income or lost profits and opportunity costs) in connection with any use of the Content even if advised of the possibility of such damages.

S&P Dow Jones Indices keeps certain activities of its business units separate from each other in order to preserve the independence and objectivity of their respective activities. As a result, certain business units of S&P Dow Jones Indices may have information that is not available to other business units. S&P Dow Jones Indices has established policies and procedures to maintain the confidentiality of certain non-public information received in connection with each analytical process.

In addition, S&P Dow Jones Indices provides a wide range of services to, or relating to, many organizations, including issuers of securities, investment advisers, broker-dealers, investment banks, other financial institutions and financial intermediaries, and accordingly may receive fees or other economic benefits from those organizations, including organizations whose securities or services they may recommend, rate, include in model portfolios, evaluate or otherwise address.