# Troubled by Fund Flows

Morningstar Research | Wiley Green

Flows (%)	Overall Success Ratio
30+	0.50
15-30	0.48
-15–15	0.45
-3015	0.40
-10030	0.36

Flows (%)	Survival Rate
30+	0.93
15-30	0.93
-15–15	0.89
-3015	0.84
-10030	0.75

Flows (%)	Outperformance
30+	0.53
15-30	0.52
-15–15	0.50
-3015	0.48
-10030	0.48

Flows (%)	Small-Cap Success Ratio
30+	0.52
15-30	0.53
-15—15	0.46
-3015	0.42
-10030	0.38

Flows (%)	Small-Cap Survival
30+	0.94
15-30	0.95
-15–15	0.91
-3015	0.85
-10030	0.82

Flows (%)	Small-Cap Outperformance
30+	0.55
15-30	0.55
-15–15	0.50
-3015	0.50
-10030	0.47

The flow of assets from active to passive strategies has been staggering. In the 12 months ended July 31, 2016, active U.S. equity strategies have lost nearly \$205 billion, while passive U.S. equity funds have gained nearly \$70 billion. The two shops with the most active assets under management, American Funds and Fidelity Investments, have lost about \$10.5 billion and \$36.0 billion, respectively, over the trailing year.

What does this mean for individual active funds suffering bouts of outflows? Many advisors and investors suspect drastic flows can hamper a manager's ability to execute a given strategy. We devised a test to see if historical data supports such suspicions and to perhaps help determine how worried fund owners should be if their holdings are hit by severe inflows or outflows. The study found a historical relationship between flow levels and subsequent performance.

#### **Background**

We assembled a survivorship-bias-free dataset encompassing all U.S.-domiciled open-end funds in the nine Morningstar Style Box categories. We aggregated monthly estimated fund flows (accounting for changes in assets because of appreciation/ depreciation of fund value) over year-long measurement periods for the decade beginning in 2005. Funds were distributed among five buckets representing the funds' level of inflows or outflows. Those that grew by more than 200% in any given year were eliminated because they were typically brand-new or represented other anomalies.

Then we calculated three-year success rates, or the percentage of funds that survived and finished in the top half of their respective categories at the end of the rolling time periods, for each bucket from 2005 through 2013, excluding the incomplete three-year periods starting in 2014 and 2015. The study spans the

2007 to 2009 financial crisis and subsequent bull market.

We excluded index funds from our analysis because, as a group, they show no correlation between flow levels and performance, suggesting minimal impact.

## The Bigger the Outflows, the More Likely the Fall

The average success rates of all active U.S. equity funds for all periods included in the study show that funds with more inflows had a higher rate of success in the subsequent three years.

Funds experiencing the most inflows both survived and outperformed their Morningstar Category peers at the highest rate, 50%. Meanwhile, funds with the most severe outflows historically have survived and landed in the top half of their respective peer groups three years later just 36% of the time.

#### **Predicting Survival**

Isolating each component of the success rate — survival and outperformance—showed similar stories. Funds in the more positive flows buckets were more likely to avoid liquidation, merger, or acquisition during the measuring periods than those in the more negative buckets, indicating that flows were related to a fund's survival prospects. Funds that grew by 15% or more had a 93% survival rate. Those with severe outflows of 30% or more had a survival rate of only 75%.

### **Outflows Hurt Performance, Too**

The second component of the success rate, outperformance, also exhibited a correlation with flows but to a smaller degree than survival. When only funds that survived a given three-year period were considered, those with inflows had higher rates of outperformance than those with outflows. Because performance ranks are distributed evenly, half of funds outperform by the study's definition, or beat the middle percentile. Differences from 50% can provide some information about fund behavior. While not as clearly correlated as survival, the outperformance data still suggests that funds with the most inflows, on average, had a better chance of beating the category median, with 53% doing so. Funds with

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#### Small-Cap Funds With Big-Time Outflows Organic Growth Rate Morningstar Morningstar Name Ticker Analyst Rating Category 08/01/15-07/31/16 (%) Berwyn **BERWX** 👽 Silver Small Blend -48 -41 Columbia Acorn USA AUSAX Small Growth **Bronze** -38 Royce Premier RYPRX Small Growth -36 Royce Pennsylvania Mutual PENNX Neutral Small Blend **PRCGX** Small Blend -35 Perritt MicroCap Opportunities MERDX -35 Meridian Growth Legacy **Bronze** Small Growth Royce Small-Cap Value Service RYVFX Small Value -33 -33 AllianzGI NFJ Small-Cap Value Small Value **PCVAX Silver** Royce Total Return **RYTRX** Small Blend -32 -32 Baron Small Cap **BSCFX** 📅 Bronze Small Growth LKCM Small Cap Equity LKSCX **℧** Silver Small Growth -30

Data as of July 31, 2016.

the most outflows were at a disadvantage, with only 48% landing in the top half.

#### Small-Cap Strategies Look Surprisingly Similar

Conventional industry wisdom holds that small-cap strategies are more sensitive to heavy flows because they often traffic in more illiquid and harder-totrade securities. However, when we isolated funds in the small-value, small-growth, and small-blend categories, the numbers were similar.

Funds with moderate and heavy inflows had success rates a bit greater than 50%. We also found that small-cap funds experiencing the heaviest outflows were at a significant disadvantage: Only 38% both survived and outperformed. Heavy outflows were clearly a rough headwind for small-cap managers, but no more so than they were for other active U.S. equity strategies: Overall, the success rates are similar to those for all equity funds.

When looking at survival rates alone, small-cap funds actually fared a bit better than the broader group. Those with the most severe outflows had an 82% survival rate, compared with only 75% for U.S. equity funds overall. The trend is the same, though: Funds with moderate and heavy inflows were more likely to be around three years later.

When outperformance alone is isolated, the difference between funds with inflows and those with outflows is just a bit more pronounced among small-cap funds. Of small-cap funds with heavy and moderate inflows, 55% landed in the top half of their category, while only 47% of those with the heaviest outflows outperformed their peers. This range between the top and bottom buckets is a few percentage points wider than the range for all U.S. equity funds, suggesting that flows may have a slightly greater impact on subsequent performance for small-cap funds. In both groups, neutral and moderately negative flows had little effect on the funds' chances of outperformance.

# Not Necessarily a Sell Signal

Morningstar FundInvestor

The relationship between success rates and fund flows is intriguing but not nearly as pronounced as that between success rates and expense ratios. Fund flows shouldn't be the most important factor in your decisions.

Treat this information as one more tool to evaluate funds and set expectations. Extreme outflows should be one of many signals to re-evaluate a holding to see if the thesis for owning it still holds. It's possible to weather heavy outflows. In fact, just over 10% of the Morningstar FundInvestor 500 has experienced outflows of 30% or more during either 2014 or 2015. Sometimes such outflows create an opportunity for new investors to gain access to a previously closed fund, as when **FMI Common Stock** FMIMX reopened at the end of June. Our final table shows some M500 small-cap funds that have seen a lot of money walk out the door over the past year. Some, such as Meridian Growth Legacy MERDX, have maintained strong near-term performance despite these outflows. Others are lagging lately, but those with a medalist rating retain our confidence as long-term holdings. III Contact Wiley Green at wiley.green@morningstar.com