Economic SYNOPSES
short essays and reports on the economic issues of the day
2014 ■ Number 18

The Cost of Chasing Returns

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Recent studies have shown that households form their economic and financial expectations based on their past experiences. For example, people's *expectations* of future inflation are driven by their past experience with inflation.[1] Expectations and experience also play a role in investor behavior in the stock market. Even among professional investors, *expectations* of stock market returns tend to be closely tied to past stock market returns, but do not match up well with actual future returns.[2]

Investors' expectations also affect their portfolio choices, which can have large effects on their portfolio returns. In this essay, I examine investment strategies and the relationship between returns and equity mutual fund flows. I use data from the Investment Company Institute from the first quarter of 1984 through the last quarter of 2012.

Market mistiming reduces profits.

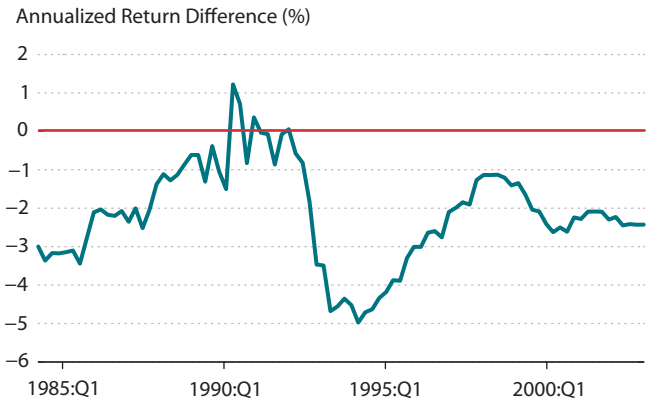
To measure the connections between (i) past and future stock market returns over various time periods and (ii) current flows of investments into and out of equity mutual funds, I calculate correlation coefficients. Current equity flows are positively correlated with stock returns from one and two quarters ago, with correlation coefficients approaching 0.4. (The table shows these coefficients, which indicate a stronger positive correlation the closer they are to 1.0 and a stronger negative correlation the closer they are to –1.0.) In addition, the correlation is small but still positive even with the realized returns from three quarters ago. In contrast, the correlation of current equity flows with future stock returns is negative, though not sizable, for *all* future quarters. The positive correlation between current flows and past returns suggests equity mutual fund investors tend to buy when past returns are high and sell otherwise. This behavior is called return chasing.

This return-chasing behavior may be costly for mutual fund investors. Given that stock market returns are essentially unpredictable in the short run and move back to their average in the long run, return-chasing behavior can miss

Correlation Coefficient between Current Flows and Stock Returns, 1984:Q1 to 2012:Q4

Stock returns	Correlation coefficient
3 Quarters ago	0.13
2 Quarters ago	0.31
Previous quarter	0.38
Next quarter	–0.06
2 Quarters later	–0.07
3 Quarters later	–0.13

Return Difference between Return Chasing and Buy-and-Hold



the market timing—that is, investors may buy when prices are too high and sell when prices are too low. This market mistiming can reduce investors' profits, which is also implied by the negative correlation between mutual fund flows and future returns shown in the table. To assess how much return-chasing behavior costs investors, I compare the results from return chasing and buy-and-hold strategies. The former exactly replicates the equity flows observed in the data and the latter assumes investors simply buy equity and hold it for an extended period of time. Because return

chasing changes the size of investors' equity positions over time, the returns of both investment behaviors are weighted by the value of the assets held.[3]

The figure plots the difference between the annual returns from the return-chasing strategy and the returns from the buy-and-hold strategy over rolling 7-year windows. The differences are all negative (i.e., the return-chasing strategy results in relative losses each year) except for a few quarters in the early 1990s. Thus, a simple buy-and-hold strategy almost always performs better during this sample period. Moreover, the difference in returns between the two strategies can be large: The buy-and-hold strategy outperformed the return-chasing strategy by up to 5 percent, meaning that the cumulative difference in returns over 7 years could be as high as 40 percent. Ultimately, this analysis shows that poor investment timing caused by return-chasing behavior has a significant impact on portfolio performance. ■

NOTES

[1] See Malmendier and Nagel (2013).

[2] See Greenwood and Shleifer (2014).

[3] The asset-weighted return of the buy-and-hold strategy simply equals the time-weighted return of the holding period, which is the standard definition of average equity return reported on financial statements.

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Posted on July 18, 2014