Are Cash Holdings in Equity Mutual Funds Predictive?

by Mark W. Riepe, CFA, and David Suarez

Mark W. Riepe, CFA, is senior vice president of Schwab Center for Investment Research in San Francisco, California (a division of Charles Schwab & Co. Inc., member SIPC 0005-7185).

David Suarez is a senior research analyst of the Schwab Center for Investment Research in San Francisco, California.

Periodically, the financial media will report on the percentage of assets in equity mutual fund assets that are invested in cash. There are at least a couple of reasons why cash levels might be useful for assessing future market returns.

Dry Powder Hypothesis

The first reason is what we'll call the "dry powder" hypothesis. Adherents of this view believe that for equity markets to move higher, an influx of new money needs to come into the market to bid up prices. Mutual funds, being major players in the market, are a natural source of that new money. The new money can come from either (a) new or existing shareholders who pump money into equity funds or (b) funds investing, of their own volition, existing fund assets otherwise held in cash. This view sees low levels of cash as a bearish signal because if funds are fully invested there is no additional money to be invested unless investors are willing to buy new shares of the fund. High cash levels are bullish because it indicates dry powder exists that can come into the market and drive prices up.

The dry powder hypothesis is not entirely satisfying. It feels more like a description of a necessary condition rather than a sufficient condition. For example, if cash levels are high, it is true that that represents assets on the sideline that can come into the market, but unless there is some motivation for fund managers to put that cash to work there is no mechanism for high cash levels by themselves to produce higher returns going forward. In other words, dry powder is fine, but without a spark it can't create price movement.

Contrarian Investor View

A more complete picture comes into view if we consider the perspective of a contrarian investor. Imagine a contrarian who believes that equity mutual fund managers, in aggregate, are just as prone to performance chasing as individuals often are. High cash levels mean managers don't see many compelling future opportunities and because of this have moved money out of the market onto the sidelines. Because these managers collectively tend to get it wrong and pull money out of the market at a bottom, high cash levels are a bullish signal. Conversely, if cash levels are low because managers as a group see great opportunities and are fully invested, that optimism is itself a bearish signal.

What's interesting to us is that the contrarian view leads to the same predictions as the dry powder hypothesis (that is, high cash levels are bullish and low levels are bearish), but the reasoning to get to that prediction is completely different and the two approaches are arguably mutually exclusive. The mutual exclusivity comes from the fact that if high cash levels indicate that equity managers are pessimistic about the market (and they're wrong) then why would pessimistic managers move this idle cash into the market as required by the dry powder hypothesis?

"What's interesting to us is that the contrarian view leads to the same predictions as the dry powder hypothesis … but the reasoning to get to that prediction is completely different and the two approaches are arguably mutually exclusive."

The Evidence

What does the empirical evidence say? Is there any evidence that paying attention to cash levels tells us anything about future equity returns?

To shed some light on this question, we looked at monthly returns on the U.S. stock market as measured by the Russell 3000 for the 10 years ending April 2010.

Our method was to look at the average cash holdings of U.S. equity mutual funds measured as an aggregate average percentage of total equity mutual fund assets for month t and assess the ability of that variable to explain returns to the Russell 3000 in month $t+1$ after controlling for various risk factors.

Our set of risk factors includes the following: value premium (the return of value stocks minus the return of growth stocks), small cap premium (the return of small cap stocks minus the return of large cap stocks), default premium (the return of corporate bonds minus the return of government bonds), term premium (the return of long-term bonds minus the return of short-term bonds), and inflation.

Our results are striking. A 1 percentage point increase in the average cash level of equity funds is associated with a 1.29 percent decline in market return over the next month and that result is statistically significant.

What's driving these results? One explanation requires us to focus more on changes in cash levels and less on the absolute level of cash itself. As funds build up cash levels, they appear to be doing so by selling securities and placing the proceeds in cash. Those security sales are of sufficient magnitude to drive down prices somewhat. We're not entirely sold on this argument, however. The reason is that our empirical work focused on cash levels in month t and returns on the Russell 3000 over the next month. Security sales should push prices down immediately, not a month later, unless, of course, there are some lagged effects of these sales (for example, mutual funds sell securities pushing prices down some, which leads momentum investors to come into the market and sell more after they see the initial price drops).

An explanation more consistent with this set of data is that mutual funds collectively have some short-term timing ability (that is, they raise [lower] cash and markets tend to drop [rise] a month later).

It also could be the case that the cash levels have nothing to with subsequent returns and the reason there's this apparent relationship is that another variable is correlated with cash levels.

Over the years, many variables have been considered to have some predictive power for the market. We added a few of these variables (S&P 500 dividend yield, 90-day Treasury bill yield, whether the Fed was in a tightening or loosening mode) to the default and term premium variables as well as the mutual fund cash variable and analyzed the results over the same 10 years. We used quarterly data instead of monthly data to try to better capture the leads and lags associated with the data.

The results were the same (that is, rising cash levels were associated with lower returns over the next quarter).

Is there a real relationship here? That's a good question. There are lots of additional questions that would need to be answered before this qualified as a robust result. Are there additional omitted variables driving the results? Are these results tied to the period being studied? Do these results hold consistently over sub periods? What about the cash levels of other market participants?

Nevertheless, these results are intriguing and worthy of more study.

IF YOU'RE THINKING OF WAYS TO GROW YOUR ADVISORY BUSINESS,

THINK SCOTTRADE ADVISOR SERVICES.

Scottrade Advisor Services delivers the tools and resources advisors like you need to run your business, your way:

- No matter the number of assets under management, you can rely on a team that has extensive knowledge of Scottrade to deliver first-class service.
- Scottrade Advisor Services provides you with a dedicated relationship team that gets to know you and your business.
- Whether it's your personalized team or a branch office, all Scottrade services are focused on helping your business grow, without ever competing for your clients.

Scottrade® ADVISOR SERVICES

To find out more about how Scottrade Advisor Services can support your independent business, visit advisor.scottrade.com or call (866) 306-7135.

Brokerage Products and Services offered by Scottrade, Inc. - Member FINRA/SIPC.