



Measure Twice, Invest Once: Motivated Reasoning and Behavioral Finance

By David Raileanu*
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Convention wisdom is that winners accept their good fortune without undue introspection, whereas losers disproportionately ponder their failures. It follows that the additional time spent by losers contemplating the reasons for their failure should lead to improvements in their behavior. But new research suggests this is not case; losers merely over- or under-react to new information, reinforcing or possibly exaggerating their suboptimal behavior.

Thinking about investing can be a difficult, stressful, and often challenging process for both investors and for advisors. Understanding the way we think about investing, the processes we use and the principles in play, can help everyone make better choices and ultimately avoid some common missteps of investing.

Some of those missteps can happen when advisors and investors are unable to interpret market conditions fairly or accurately. Former Fed chairman Alan Greenspan, in his recent appearance before a Congressional committee, made note of his mistakes in taking certain things for granted, namely that banks and other financial institutions act in such a way as to “[protect] their own shareholders and their equity in the firms.” Instead, managers act in their own self-interest, even when it can be at the expense of their shareholders.

Two researchers from Penn State’s Smeal College of Business, Jeremy Ko and Oliver Hansch, explored why people make the choices they do. The idea that reasonable behavior is compromised when people interpret information in the way that best serves their interests is called “motivated reasoning,” and was originally described by Ziva Kunda in her work “The Case for Motivated Reasoning” (1990). Ko and Hansch apply this theory to investments in their paper “[Persistence of Beliefs in an Investment Experiment.](#)”

The authors studied a group of 90 undergraduate and MBA students at Penn State University who were given the equivalent of \$10 and asked to allocate it over three different choices each week. The first choice, the stock bet, asked the students which of two similarly valued stocks would go up or down, for a double-or-nothing return. The students also had the option of a chance bet, where there was a guaranteed 50% chance of winning. Finally, the students could choose to take the \$10 in cash. The study took place over two semesters and students received their winnings in cash at the end of each week.



The participants were asked if they had observed any information about their stock bet over the past week every time they placed a bet. If they had, they were asked to rate it as positive, negative, or neutral. By measuring how many people continued with their bet from the previous week versus how many chose to reallocate their \$10, Ko & Hansch were able to determine the probability for the average investor to change his thinking. They also saw whether the new information the traders received influenced their decision whether to change their bet or not.

Participants split their investments as follows: 45% in the stock bet, 20% in the chance bet, and 35% in cash. The researchers assumed participants would stay with a winning stock and change from a losing stock, leading to a 50% persistence in the stock bet. Interestingly, 67% of participants chose not to alter their allocation week-to-week. This means that 17% of the time, the participants acted irrationally, choosing to stick with a stock that did not gain over the previous week, regardless of any indication that the stock might turn around.

Motivated reasoning, as applied to investing, says that investors tend to persist in their beliefs, despite new information to the contrary, and when investors see new information, they react to it differently depending on how it fits with their prior experience.

Imagine students receiving grades after an exam. Those who had expectations, either of a good grade or a bad one, are unsurprised and unfazed when they receive their corresponding mark. Those whose expectations do not match up with their results, however, are much more wary of their grade. Either something went horribly wrong or they must have been smarter than they thought they were. The ones who do poorly have a greater tendency to question their results; the ones who do well are much more likely to believe that they are simply intelligent.

The same could be said of investors. After a success, the gains become natural, easy, expected. After a failure, however, the losses can be tragic and almost unthinkable. Losers tend to ponder their misfortune much longer than winners muse over their riches.

Consequently, those who traditionally make poor choices think about those choices longer. It would follow, therefore, that habitual losers would learn more from their mistakes and thus become better investors than those who met little adversity. The opposite is often true: Ko and Hansch identify the propensity of investors to over- or under-react to new information as one of the leading causes of artificial inflation or deflation of stock prices.



This tendency is not necessarily due to poor judgment or bad decision making. David Brooks, in a recent [column](#) in the *New York Times* called “The Behavioral Revolution,” said the breakdown in deciding what is in your best interest often stems from a bias in the way you see things. He attributes, with some help from author Nassim Nicholas Taleb, the most recent economic volatility to the fact that institutions rarely see current and potential future market conditions for what they really are. Rather, they are more likely to gamble on short-term benefits at the risk of even greater long-term losses, giving more credence to the recent history rather than cyclical trends.

The average investor may not know much about the tenets of behavioral finance and motivated reasoning, but they can probably understand its implications: people, on average, tend to believe more strongly in things that prove them right and tend to discredit those that prove them wrong.

This theory may help to explain the volatility of the stock market in recent months. When investors receive positive information, they are reassured, vindicated in their allocations and persistent in their beliefs. When bad news becomes excessive, investors anticipate the onset of a downward trend and are unlikely to believe positive new information. This leads to the selling of otherwise fairly or attractively valued securities.

Ko & Hansch take the theory of motivated reasoning a step further, in fact. Instead of believing that good news is viewed positively by investors and bad news is viewed negatively, they introduce a more thoughtful understanding of the process. They suggest that “investors adopt a passive frame toward assets that are avoided and an active frame for positions that are chosen or sought.” This means that investors are much more likely to let their own biases cloud their judgment when selling their holdings than when buying new stocks.

This conclusion, while not tremendously novel, does illuminate a thought process that may help investors avoid some of the more common errors associated with interpreting new information. The researchers suggest that investors tend to underreact to negative new information, but are less likely to be influenced by previous biases when making decisions about that new information. By acknowledging the natural tendencies to act in a short-term interest or stay with a bad investment, investors can identify their own biases and act in a more rational fashion.

A potential message advisors can take away from this study is to appreciate the importance of careful analysis in the wake of a wave of losses. After lots of bad news, clients are likely to panic and may wish to make drastic changes. The natural tendency of any investor is to avoid losses and maximize gains, but to make considerable changes to portfolios based on the very recent history



unnecessarily invites risk. Careful, methodical understanding of the information available will give advisors the confidence they need in order to develop a long-term strategy that benefits all.

To be fair, it may be impossible to ignore all of the motivations and beliefs that color the minds and perceptions of those who choose to take calculated gambles with their money. Clients will be happy with a win and will have many questions after a loss. It is up to those who manage wealth to manage these attitudes as well, taking careful note of the sentiment behind them. Advisors should ultimately be wary of their own biases and prejudices when it comes to constructing portfolios offering the greatest returns; measuring risks twice, in this case, leads to smarter investing all around.

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