

Investor Psychology

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The 2013 market was noted for its nearly continuous and steady rise, only experiencing two down months. It could be concluded that in such a market investors are able to avoid the impact of irrational decision making in investing, however, this was not the case. Market timing is a key strategy for success. In 2013, as well as prior years, many investors sold investments after experiencing a loss and started investing again after the markets had recovered. This results in investors participating in the downside while being out of the market during the rise. In order to analyze investor performance concerning timing of the market, we can look at the "Guess Right Ratio." This ratio looks at fund inflows and outflows in order to see how often investors correctly anticipated the direction of the market. Investors typically make money when their guess right ratio is above 50%. In 2013, the steady rise made this prediction easier than in more volatile years. Even in such a predictable market, investors still only guessed right 75% of the time, and in more volatile years, such as 2008, this ratio was as low as 42%.¹

We like to think that as investors we are capable of making rational investment decisions. Unfortunately, for many, this is not the case. High frequency of irrational decision making in investing has led to the study of **Investor Psychology**. This area of study looks at biases and errors in judgment that arise due to the uncertainty and complexity of the market, and how these lead to irrational investor decision making as described above. This behavior, driven by biases and illusions, causes investors to inadequately assess their interest and true wishes and ignore relevant facts.

Biases of Judgment

Investors fall into biases of judgment when forced to use their intuitions; unanticipated outcomes and unjustified trading are the consequences.

A major bias of judgment is **overconfidence**. When analyzing estimates about potential outcomes, such as the level of inflation three years from now, research suggests that investors unknowingly use confidence intervals (CIs) to determine the likelihood of a particular outcome. When an investor is determining that they are 99% confident that inflation will be no higher than a certain value and 99% confident it will be no lower than another, they create a CI stating that you are 98% confident that inflation will fall between their upper and lower estimate. This judgment is then used to drive decisions. Research has shown that upon creating these CIs, investors are often times overconfident. The surprise rate, which measures the frequency the actual outcome fell above or below the estimates, associated with these 98% CI described above is between 15% and 20%. In order to avoid these surprises investors must become better calibrated and aware, because often they may be falling into the trap of being overconfident. Being overconfident while making investing decisions can have many negative impacts. First, it can justify a lack of asset diversification. It can also lead an investor to buy risky investments because they underestimate the risk associated with the investment. Finally, it leads to investors trading too much because their belief that they can successfully time the market.²

¹ Williams, Jeffrey S. "DALBAR's 20th Annual Quantitative Analysis of Investor Behavior: 2014 Advisor Edition." Grand Wealth. Web.

² Swedroe, Larry. "How Overconfidence Hurts Investors." CBSNews. CBS, 2013. Web. 21 May 2014.

Optimism is another key bias of judgment often times made during investment decisions. In general, people's beliefs are biased in the direction of optimism. These biased beliefs lead to an underestimate of the occurrence of bad outcomes and an illusion of control. Optimism paired with overconfidence leads investors to overestimate their knowledge and ability to control events thereby underestimating their risk. The overall outcome of this bias is a high level of statistical surprise. It is important for investors to understand that things could go wrong, that they often times do, and that they have little control. Keeping this in mind while making investing decisions will lead to fewer surprises and overall better investing decisions.³

Often times, after the conclusion of an event, such as a fourth quarter comeback for the win, people believe they "knew it all along." The truth is, they usually could not have known or even predicted the outcome. This bias of judgment is known as **hindsight**. Hindsight is described as having three levels of severity. The first is memory distortion, where you misremember an earlier opinion or judgment. The next level is the belief that the event was inevitable. The final level is focused around foreseeability, or the belief that we personally could and should have foreseen the event. Often times analysts will explain with confidence why the market acted the way it had proceeded the market closing. This leads some investors to believe that this market behavior could have been predicted before it had occurred. This is often times not the case, in fact, if the market was predictable, people would act differently due to their knowledge, once again changing the overall outcome of the market. Hindsight errors both promote overconfidence and turn the perception of reasonable gambles into foolish mistakes. Understanding the errors associated with hindsight allow investors to limit their overconfidence, realizing that sometimes unpredictable events will occur, and not to dread over an event that may have seemed predictable in hindsight.⁴

Errors of Preference

It is important to also look at errors of preference, more specifically, how investors make irrational decisions due to judgments of probabilities associated with different options.

When given different options with equally significant differences, investors often times **weigh probabilities in a non-linear manner**. Let's say that an individual is given three different opportunities to win \$50,000. The first, with a probability equal to either 0% or 1%. The second, either 41% or 42%. And the final, either 99% or 100%. The question arises whether or not the difference is equally significant when comparing the three opportunities. Weighting by probabilities tells us that one percentage point increase in probability should have the same effect on weighting outcomes, whether starting at 0%, 41%, or 99%. People faced with similar opportunities were found to be willing to pay more to raise the probability from 0% to 1% or from 99% to 100%, than to increase the probability from 41% to 42%. People tend to over-weigh low probabilities and under-weigh moderate and high probabilities, with an emphasis on weighing high probabilities. This explains why people like long shots better than other gambles of equally expected value. In a study, people preferred a 1% chance to win

³ Kahneman, Daniel, and Mark Riepe. "Aspects of Investor Psychology." (1998): 52-64. *Economia*. Web. 19 May 2014.

⁴ Association for Psychological Science. "'I knew it all along ... didn't I?' -- Understanding hindsight bias." *ScienceDaily*. 6 September 2012

\$1,000 over receiving a \$10 gift card. These preferences lead investors to take similar actions, taking unnecessary risks and not understanding the true probability of success associated with their decisions.⁵

It is important that as an investor you are aware of both biases of judgment and errors of preference. Being knowledgeable of these biases and errors as well as using your understanding of them while making investment decisions can allow you to avoid irrational investor decision making. Here at Harbor Financial Group, we take these biases and errors into account while making any investment decision. By doing so we aim to decrease the occurrence of irrational decisions and increase overall investment performance.

⁵ Kahneman, Daniel, and Mark Riepe. "Aspects of Investor Psychology." (1998): 52-64. *Economia*. Web. 19 May 2014.