

## Misperception of Risk – Where Are Your Pitfalls?



Individuals perceive risk differently. Some enjoy the high stakes of Vegas, while others find comfort in stashing cash in a bank account. Although these are opposite ends of the risk tolerance spectrum, they share a common trait. Both are rooted in the Misperception of Risk. Misperception of Risk damages the health of investment portfolios and can damage the health of investors too by creating unnecessary stress.

From 1995 – 2014 the S&P 500 Index returned 9.8% per year (near the 200-year historical average of stocks), however, the average investor in equity mutual funds earned only 4.8% per year.<sup>1</sup> How is this possible? It was due to poor investment behavior – buying when markets were strong and selling when markets were weak. Mountains of research show that most investors hurt themselves with bad investing behavior. Here, we discuss five behavioral pitfalls that result from Misperception of Risk.

### Fixation on a Key Past Event

For this investor, a defining moment in their life – the Great Depression, hyper-inflation of the 1970s, 2000 Tech Bubble, Financial Crisis of 2008 – drives their perception of market performance and risk. Some will remember a parent or grandparent stashing money in a coffee can. Those who lived through the Great Depression and saw banks fail developed a mistrust of the banking system and federal government. Despite FDIC insurance and other measures instituted since then, some over-estimate the modern-day risk of U.S. banks and government-backed securities such as treasuries. Their perception of risk is anchored by a past event which guides their future financial decisions.

Others remember the 10% annual inflation period of 1979 to 1981.<sup>2</sup> Investors impacted by this time period may overly-focus on inflation risk; however, Federal Reserve officials now have a much better understanding of inflation and ability to control it. Inflation has been kept near 2% for the last 35 years. By over-loading a portfolio with inflation-hedges such as gold, commodities and inflation-adjusted treasuries, these investors have lost the “inflation bet” and hurt their returns.

### Paralyzed by Uncertainty

This investor fears uncertainty. When presented with too much data, too many decisions and too many unknowns, their natural inclination is to do nothing. This fear is similar to that which may strike those planning a wedding or renovating a home. Faced with choosing between 19 flower arrangements or faucet styles, most eventually feel overwhelmed, afraid of making the wrong choice. Similarly, in a dynamic economy each day may bring another set of investment decisions.

This is decision fatigue, and the recent research behind it is discussed in the best-selling book, *Willpower*.<sup>3</sup> For this investor, doing nothing is the least-risky option. Nobel laureate Richard Kahneman refers to this as a status quo bias.<sup>4</sup> Doing nothing, however, can lead to missed opportunities or portfolios that are inconsistent with financial objectives.

This paralysis can explain why an investor will sit on cash for years, with inflation gradually eroding its spending power. And consider those whose portfolios became over-allocated with tech stocks in 2000 or real estate in 2007 as these asset classes rose, but then were never rebalanced. They lost far more than they should have when the bubbles popped.

## Resistant to Change

Similar to the anchoring behavior in the first example, this investor has expectations that no longer apply to the current market. They rely too heavily on past performance as justification for their strategy. For example, an investor who enjoyed fixed income gains over the past decade as interest rates fell, may be resistant to rebalance even though the Federal Reserve is now raising interest rates. Others in 2007 may have thought, “leveraged real estate investments have always done well,” and did not realize they were over-allocating to a risky asset class. Despite the most-likely outcome – that risk and return in a particular asset class will revert to the norm – this investor resists making changes and over-invests in asset categories which brought past success.

## Overreact to Recent Information

This behavior relies on an exaggerated emotional response to new information, regardless of risk, known as recency bias. A positive-reaction example is the investor who chases a hot stock pick whether or not it fits her investment strategy. She believes she knows something that will give her an advantage. She ignores the fact that there are highly-trained experts whose job it is to study that stock and have greater access to information. These experts are analyzing and effectively setting that stock price every day. She misperceives the risk of placing this bet and exuberantly chases the lead.

A negative-reaction example is the investor who hears a financial-news sound bite and wants to “abandon ship” because the “sky is falling.” He does not assess all possibilities and weigh them appropriately. He over-emphasizes the worst-case scenario based on limited recent data and takes action. In both cases, impulsive decision making based on a misperception of risk could sabotage a well-planned investment strategy.

Further research shows that investors tend to focus on information that confirms their opinions and discount information that counters their viewpoint. This is confirmation bias. We often cling to messages that resonate with our past experiences while ignoring contradictory viewpoints and data.

## Attached to Cash

These investors tend to be overweight in cash as they hold a false sense of security with cash. This behavior results from the misperception that cash holds no risk. This is known in economics as the money illusion or price illusion – the tendency to think of currency in nominal rather than real (after-inflation) terms.<sup>5</sup> Individuals tend not to adjust dollar value for inflation. Holding too much cash results in exposure to inflation risk, which leads to a loss of real portfolio value. Holding cash also has an opportunity cost from missing other investments.

Many of these misperceptions of risk are fear based. Behavioral economist Dr. James Grubman finds that investors experience the pain of losses two-and-a-half times more strongly than they experience the joy of gains. Multiply that pain across years of market ups and downs, and we see how investing can generate significant stress for investors.<sup>6</sup>

“Scientists have discovered why we experience losses much more powerfully than gains,” Grubman explains, “Our frontal lobes, the areas that put together and understand data, process and analyze most of the information related to gains. However, the limbic system, the emotional system of the brain, comes into play in processing losses.”<sup>6</sup>

As humans, we all have these natural biases and are subject to the pitfalls above. According to Grubman, “We have a finite store of mental energy for exerting self-control. Sticking with a plan requires energy. When mentally depleted, we lose willpower and become susceptible to doing something impulsively, becoming paralyzed, or letting go of the plan. Whatever feels easy becomes attractive.”<sup>6</sup>

Fortunately, we can overcome these biases and exhibit healthier investor behavior. The first step is identifying and confronting our investment-behavior imperfections. Self awareness is key to perceiving risk more accurately, gaining confidence and moving forward. The second step is clearly identifying your goals. This provides a reliable framework for decision making for you and your financial advisor.

Finally, communicating concerns and biases with your financial advisor is an important strategy for improving investment behavior. Your advisor can help you better understand risk, gain historical perspective, determine the best course and create an investment balance that pursues your goals while reducing worry.

**Notes and Acknowledgements:**

1. Dalbar’s Quantitative Analysis of Investor Behavior 2015. Returns are for the period ending December 31, 2014. Average equity investor performance results are calculated using data supplied by the Investment Company Institute. Investor returns are represented by the change in total mutual fund assets after excluding sales, redemptions, and exchanges. This method of calculation captures realized and unrealized capital gains, dividends, interest, trading costs, sales charges, fees, expenses, and other costs. After calculating investor returns in dollar terms, two percentages are calculated for the period examined: total investor return rate and annualized investor return rate. Total return rate is determined by calculating the investor return dollars as a percentage of the net of the sales, redemptions and exchanges. Additional evidence is found in, “Putting a value on your value: Quantifying Vanguard Advisor’s Alpha,” The Vanguard Group, Inc. & Morningstar, Inc.
2. U.S. Bureau of Labor Statistics
3. *Willpower*, Baumeister and Tierney, 2014
4. “Anomalies: The Endowment Effect, Loss Aversion, and Status Quo Bias,” Daniel Kahneman, Jack Knetsch, Richard Thaler (1991), *Journal of Economic Perspectives* 5 (1): 193–206
5. Fisher, Irving (1928), “The Money Illusion,” New York: Adelphi Company
6. Dr. James Grubman, University of Michigan and University of Vermont; State Street Global Advisors, September, 2014