BAIRD

How Your Mind Plays Tricks on You

Lessons From Behavioral Finance

By Baird Private Wealth Management

There is no doubt that the global economy is experiencing heightened volatility and uncertainty. How we make decisions in the face of uncertainty can have long-lasting implications, especially those choices heavily influenced by emotion. This is true for many decisions made in life, but our focus is to address how biases and emotions impact financial decision-making. For that we explore the field of behavioral finance.

Behavioral finance uses psychological and social factors to study how people make economic decisions. It was once thought that human beings will over time take the most logical, rational approach when tackling problems. As you might imagine, this is not always the case. In this paper, we address three common issues that affect amateur and professional investors alike and explain different ways these issues manifest themselves in everyday life. We also offer some advice on how to mitigate the negative outcomes when the mind plays tricks on you. Being self-aware of these factors is a critical first step.

Issue No. 1: How We Process Information

It is often said that we are living in the information age. With 24/7 news cycles and handheld media devices, people have unparalleled access to information. The human brain is amazingly capable of processing mass amounts of information and experiences, but it too has limitations. Over time, individuals have developed familiar heuristics or "rules of thumb" that aid in the processing of complex or missing information. Of course, any time a shortcut is taken, the margin of error increases. Even though we may believe that we approach decision-making in an objective, rational manner, the lens in which we view events is often tainted by heuristics.

> "Get your facts first; then distort them as you please."
> – Author Mark Twain

Anchoring and Adjustment

A common strategy for estimating unknown information is to start with known information that serves as an anchor or reference point, and then make subsequent adjustments until a more accurate value is obtained. Put simply, this is a crude system of trial and error, often taking place subconsciously. The problem is that we are predisposed to outweigh known information (anchor) regardless of its accuracy or relevance, and any adjustments are usually insufficient in determining a precise result. Think about whether you would actually pay the full sticker price on a car. Dealerships explicitly use that reference point to make a final sale price more attractive. Just because something is on sale doesn't mean it is a good deal. Alternatively, wineries use prices as a signal of quality and sometimes list reserve wines at such a high price that all other bottles appear attractively priced.

The process of anchoring and adjustment is widespread in the investment business. Examples include thinking that past performance has predictive qualities or basing valuations on historical points such as 52-week high/low price.

Tips and Advice
Use various benchmarks or reference points to better triangulate. Past performance should not set the precedent for future outcomes. Try to understand why something is priced the way that it is – there is usually a good reason. Realize that the margin of error in any decision is often larger than you anticipate.

Confirmation Bias and Cognitive Dissonance

Our innate desire to be right and avoid the embarrassment of being wrong skews how we seek or process information. This means seeking evidence that supports a viewpoint (confirmation bias) or rationalizing evidence that disproves a viewpoint (cognitive dissonance).

Why do people with left-wing or right-wing political views watch specific programs or channels for their news? It is because they find it more pleasing to be exposed to information that they already believe. People may more commonly recognize this behavior in the form of "selective hearing" when a spouse or child only hears what they want to hear – one form of confirmation bias. On the other hand, cognitive dissonance deals with denial, avoidance and rationalization.

These biases can be harmful in investing if people become emotionally attached to an investment opportunity or lack the objectivity to process information rationally. There does appear to be less dissonance when a recommendation is made by another since there is now someone to blame other than yourself. The different responses to internally versus externally generated ideas are something we see quite often.

Tips and Advice
Employ objective screens when selecting investments. For financial and non-financial decisions, play Devil's Advocate with yourself, ask disconfirming questions, and use a trusted resource (including a Financial Advisor) as a sounding board.

> "The four most expensive words in the English language are 'This time it's different.'"
> – Investor turned philanthropist Sir John Templeton

Availability and Hindsight Bias

When processing information, the mind tends to prioritize for ease of dissemination and recollection. Not surprisingly, the newest information and most vivid "stories" are given higher preference when it reconstructs memories. This is called the availability bias.

When purchasing a car are you more apt to purchase based on 1,000 anonymous consumer reviews that rate it highly or your neighbor, who just purchased the car and it turned out to be a lemon? Most people weigh the neighbor's claims more heavily despite it being a sample size of only one because it represents a more salient example.

How could anyone have missed that there was a bubble in the housing market? Wasn't that obvious? Hindsight is 20/20 and revisionist history is rampant when money is on the line, making people believe that an outcome is more obvious once it is already known. However, after-the-fact observations mask the uncertainty that occurs in real-time market analysis. If someone would have acted on the housing bubble, would they have foreseen the liquidity crisis and ensuing recession? Perhaps not.

Tips and Advice

Keep accurate records of why an important financial decision was made and refer to it in order to help prevent future mistakes. Don't let abnormal, one-off events or wishful thinking dictate your investment strategy. Remain focused on the long-term and don't let daily market volatility or events drive emotions.

Mental Accounting

Mental accounting is the tendency for people to separate their money into 'accounts' based on subjective criteria, like source or intent, and act differently with the money based on the account type.

For example, found money (tax returns, inheritance, bonuses, etc.) is often treated differently than earned income, with found money being spent more frivolously. Another common mistake occurs when the financial transaction takes place well before the consumption date. How many times have you actually used a coupon book sold by a kid in the neighborhood raising money for school? Surprisingly, sites such as Groupon estimate that 20–30% of its coupons go unused. This is because people tend to treat previous purchases as a sunk cost and have already written it off in their mind.

Mental accounting impacts personal finances because people segment their assets instead of taking a holistic view. Individuals must remember that a dollar is worth a dollar no matter where it came from.

Tips and Advice

Have your advisor create a financial plan that includes all of your assets and make decisions based on the whole puzzle, not individual pieces. View all money the same and debt as negative money (plus interest) – focus on both sides of your personal balance sheet when making decisions.

Issue No. 2: The Role of Emotions

Emotions are a powerful driver of decision-making – particularly feelings

of satisfaction and regret – and can quickly turn a rational thought process into an irrational one. Investing – or any financial transaction – has its highs and lows.

A useful way to begin to understand how financial decisions are often made is to first recall what the process feels like. Buying a house is a great example. Initially, there is great excitement when finding the perfect house for you and your family. Apprehension sets in when signing reams of paper at the mortgage closing. From there, you experience the joys and hardships of being a homeowner until it is time to sell, at which point emotional and financial ties to the home cause you to value it very different from how others value it.

We dedicate this section to exploring the psychological factors that cause investing to be a similar emotional rollercoaster.

Prospect Theory

At the core of behavioral finance is how investors feel about gains and losses. The Prospect Theory purports that people fear losing more than they value winning. This concept was first empirically tested in the 1970s by Nobel laureate professors Daniel Kahneman and Amos Tversky.[1] They quantified that the fear of losing money is felt twice as much as the joy of winning money, meaning that individuals are inherently loss-averse. Before these findings, it was assumed that decisions were made rationally based on the choice that presented the highest expected gain or lowest expected loss.

Let us work through an example to highlight this point. Suppose you were presented with the two investment opportunities. Option A is a guaranteed payoff of $1,000 and Option B has a 50/50 chance of earning $2,500 or $0[2]. Numerous studies have shown that the majority select Option A, preferring the certainty of earning $1,000 despite it having inferior expected payoff relative to Option B ($1,250 or .5 × $2,500 + .5 × $0). This is a classic example of risk aversion.

Now let us turn the situation on its head and talk about decisions that present losses. Now Option A is a guaranteed loss of $1,000 and Option B has a 50/50 chance of losing $2,500 or $0.[2] In this situation Option A now has the superior expected outcome (i.e., losing less), yet studies have shown that individuals most likely would choose Option B.

This is the fascinating revelation of Prospect Theory: when posed with expected gains, individuals are risk-averse, but when posed with expected losses, individuals actually become risk-seeking.

Tips and Advice

Try to spread out a gain as opposed to realizing the entire amount immediately. When faced with potential losses, sometimes it is easier to take one large loss and move on than to prolong it into a series of smaller losses. Don't become overly aggressive when trying to make up for market losses.

“The most important thing to do when you find yourself in a hole is to stop digging.”
– Investor Warren Buffett

Disposition Effect

The Prospect Theory has clear implications for many decisions made in life because, at its core, it is about how one weighs risks and opportunities. It is therefore natural for people to want to recognize good feelings immediately and defer bad ones. The theory also goes a long way in explaining the well-known tendency for investors to hold on to losing stocks too long and sell winning stocks too quickly – known as the disposition effect.

Investors often feel satisfaction when their investments show a profit and are quick to lock in those gains. Conversely, the pain of feeling regret will prompt many to hold on to a losing position in the hopes that it will break even. The most comprehensive study on this subject examined more than 10,000 brokerage accounts and confirmed that losing stocks are held in a portfolio longer than winning stocks.[3] Furthermore, over the subsequent 12 months after the sale, those sold for a gain had an average return that was twice as much as those sold for a loss. Investors often cut short on great investments and hold hope for poor investments.

Tips and Advice
Use set criteria for purchasing or selling securities. Incorporate new information as it comes available and regularly evaluate your decisions. Investment opportunities rarely have infinite lives – there is always a time to get in and get out. Employ formal or informal stop loss limits (when applicable).

Issue No. 3: Misdiagnosing Skill and Luck

The next set of common mistakes is based on an investor’s perception of how skillful he or she is at predicting future outcomes. Egos are made and broken on a daily basis in investing, and these mistakes – namely overconfidence – can be among the most dangerous.

Overconfidence

How many times have you heard someone tell you that they are 99% sure about something? How many times were they incorrect? Probably more than 1%. Overconfidence in behavioral finance doesn’t mean that everyone is a narcissist. What it does state is that we tend to be too confident in the accuracy of our own judgments, and believe we know the solutions to complicated problems. This inflated perception of skill can lead to suboptimal investment decisions.

Underlying most financial transactions is the belief that the outcome will be a positive one. If that isn’t true, the transaction would likely not be made. We purchase securities that we believe will increase in value, and sell ones we believe will decrease. Unfortunately, we are not as adept at fortune telling as we think. Overconfidence can lead to speculative investments. Studies have also shown that overconfident investors trade more frequently and achieve below-market results.

Tips and Advice
Allow third-party experts to invest on your behalf in areas where you don’t have expertise. Be honest when attributing success and failure and set realistic expectations.

"I skate to where the puck is going to be, not where it has been." – Hockey player Wayne Gretzky

Gambler's Fallacy

The role of fate or chance in financial situations is described as the Gambler's Fallacy. It is predicated on the belief that a streak will reverse or continue based on a series of past events. The most common example involves gambling. Think about a roulette game that landed on red an amazing 11 consecutive times. The natural tendency is to bet on black since it's bound to land on it soon, yet in reality the chances are always 50/50, regardless of previous outcomes. Another casino example explains the peculiar behavior of someone rushing to a slot machine after watching someone else dump an endless stream of coins thinking that the machine is now "primed" for the next person. (Hint: slot machines are programmed such that each pull is given an equal probability of winning.) The concept seems easy enough to avoid, yet everyone seems to fall prey to it at one time or another.

In finance, the term Gambler's Fallacy is most often replaced by reversion to the mean. The same mistake holds true with investments: people often assume that outperforming or underperforming securities will somehow revert back to average (the mean) over time. While this does happen, it is not guaranteed – some investments are simply really good or really bad.

Tips and Advice

Try to separate chance from skill. In situations of chance, previous outcomes should have little bearing on your decisions. When viewing past performance, try to understand the drivers of those returns and whether outperformance can continue or underperformance will correct itself.

Herd Mentality

As we've already discussed, people respond most strongly to the newest information, so their reactionary style is not surprising. Add to that some overconfidence or the fear of not keeping up with the Joneses and it leads to herd mentality.

Groupthink – as it is alternatively called – stems from the fact that people feel more comfortable making decisions that they see other people making. This false sense of comfort can lead to suboptimal outcomes. In everyday life, this is visible with fashion fads and TV programming. More dangerous examples of herd mentality are asset price bubbles and crashes, including the most recent housing crisis.

The pressure to conform to social norms can be a strong influence on decisions. It is one thing to fall victim to a fashion faux pas, but quite another to put your wealth at risk because of the action of others.

Tips and Advice

Make decisions based on what is most suitable for your investment style and financial situation. Think like a contrarian by asking what everyone is missing instead of fearing that you are missing out. Do your homework before investing or use an advisor to investigate ideas on your behalf.

Conclusions

Behavioral finance – once thought of as an unconventional theory – is now a mainstream topic of academic exploration. It has broad relevance since it is not only tied to investing but also explains why many common household decisions are made. Some of the biases we have detailed have easy remedies. Others are much more difficult, but simply having a constant awareness of the bias is a step toward success. Financial Advisors can play a key role in this area. At Baird, we take a holistic view when providing recommendations to our clients. Planning for your future is as much about investment management as it is about risk management – and we are prepared to address both.

[1]"Prospect Theory: An Analysis of Decision under Risk." Kahneman, Daniel and Tversky, Amos. March 1979.

[2] Investment options indicated are hypothetical and used for illustrative purposes only.

[3]"Are Investors Reluctant to Realize Their Losses?" Odean, Terrance. December 1998. Journal of Finance.

©2012 Robert W. Baird & Co. Incorporated. Member SIPC. rwbaird.com 800-RW-BAIRD.

MC-34247 First use: 1/12