EMPOWER INVESTMENTS | Tom Cafmeyer, Investment Analyst

Are our brains working against us?

A timely review of several concepts from the field of behavioral finance

- Economists contend that most people usually make decisions that are rational and in their best interest.
- Researchers in the field of behavioral finance believe that people import emotional and cognitive biases into our decision-making.
- We provide evidence suggesting that such biases indeed influence the behavior of retirement savers.
- We believe that recognizing these tendencies may help retirement savers cope with ongoing market volatility, and we have provided several suggestions on how to mitigate the impact of such tendencies.

Given recent market volatility, we thought it might be prudent to review some behavioral finance concepts and how they might affect the decision-making of investors. Biases that affect our investment habits can roughly be broken down into two camps: emotional and cognitive.

Losses hurt more: Exploring loss aversion

Recent market volatility associated with the pandemic and the subsequent recovery has pressured investors across virtually all asset classes. That has placed one of the most significant biases identified by behavioral finance — **loss aversion** — on prominent display. Simply put, loss aversion is an emotional bias in which investors place greater value on avoiding losses than earning gains by roughly a 2:1 factor. As an example, for many investors the negative feelings associated with a 15% loss in investment value can feel roughly the same as the positive feelings from a 30%-40% gain.

This desire to avoid emotional pain is why many investors tend to sell irrationally during down markets even though that often proves to be self-defeating. For example, we have noticed a tendency among some of the retirement investors with whom we work to move unnaturally large portions of their accounts into lower-risk investments when market volatility appears. That tendency, together with a closely related phenomenon termed "the disposition effect" (wherein investors tend to sell their winners too early but hold on to losers to avoid the emotional pain of recognizing losses), can lead to excessive trading or create an undiversified portfolio while limiting potential upside (a trap, by the way, that can ensnare professional investors as easily as novices).

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Overconfidence bias: Living in a town where everyone is above average

Have you noticed that almost everyone thinks they're a better driver than everyone else on the road? The behavioral finance equivalent is termed **overconfidence bias**, the tendency of investors to believe they are smarter than or enjoy some other advantage over "average" investors. A related phenomenon, **self-attribution bias**, allows these same overconfident investors to credit their investment successes to this supposed edge while simultaneously blaming their failures on things like poor external advice or simple bad luck.

As with loss aversion, investors subject to these biases can trade too often, hold poorly diversified portfolios, and potentially subject themselves to lower returns or excessive risk. While it can be difficult to find empirical evidence of this kind of behavior in the data, we're confident that it exists (see what we did there?).

For sufferers of such afflictions, one potential remedy is to think probabilistically. Rather than choose investments on the basis of a preconceived notion that "this is certainly what will happen next," for example, investors can create a few different scenarios. Many professional investors establish a bull case, a base case, and a bear case for each potential investment. Following their lead can lay bare the overconfident assumptions many investors may make when allocating their investments. After the fact, an investor can keep an investment journal detailing why they made certain decisions and consult it regularly, like a coach watching game film on Monday morning.

A final danger in this category — **status quo bias** — results when investors fail to make reasonable changes to their investments under the assumption that decisions that were once optimal will remain so forever. For example, investors who fail to update equity-heavy allocations that may have been perfectly appropriate early in their savings careers may find their portfolios uncomfortably (and unwittingly) risky as they age — particularly given the tendency of stocks to grow faster than bonds over time. Investors who recognize this tendency in their own behaviors but are unwilling to compensate for it may be well suited to target date funds, which adjust their allocations automatically as participants age.

Mental shortcuts: Exploring cognitive biases

Emotional biases influence how we view our investments and the world around us. They are deeply rooted in our personal inner psychology and can be difficult to recognize, but understanding that they exist and acknowledging when they appear in our own actions can take us a long way toward neutralizing their impact on our financial well-being.

Similarly, cognitive biases impact our decision-making in ways that may not be readily apparent without deeper analysis of our own motives and individual proclivities. Among the most powerful is **conservatism bias**, which prevents us from quickly incorporating new information or challenging a pre-existing worldview even when presented with compelling new information. Examples include investors who are stubbornly wed to one investment style (such as "value" or "growth") and refuse to even consider alternatives as market conditions evolve. Closely related to this is **confirmation bias**, which causes us to seek out only information that reinforces our preset notions of how the world works while preventing us from incorporating data that challenges it.

Meanwhile, **recency bias** represents the other side of the same coin. It sometimes causes investors to over-emphasize new information at the expense of longer-term information. Each of these biases belie a stubbornness and mental inflexibility that can be self-defeating in the long run. Finding a balance between these extremes is a difficult — but potentially valuable — exercise.

Other cognitive biases to watch for include **hindsight bias**, which occurs when a past event that was truly unpredictable is, in hindsight, viewed as likely (or even inevitable). The global financial crisis of 2008-2009 provides a convenient example: Very few investors saw it coming, and virtually no one understood the scale of the event or predicted how it would work its way through the global economy like a contagion. But today, when that financial crisis is viewed under the bright lights of hindsight, it's easy to imagine that everyone from the barber to the baker to the investment banker saw it as inevitable. This kind of rear-view-mirror thinking makes it all that much easier to engage in other behavioral vices, like overconfidence, loss aversion, and conservatism.

There are of course other examples of how our cognition can get in the way of prudent financial decisions, including things like **anchoring bias** (the tendency to "anchor" one's point of view to past observations about price or value and refusing to alter that assumption) or **mental accounting** (which, among other things, creates a tendency to be more aggressive with money earned as a result of one's investment decisions than with money from a paycheck). And then there's **home country bias**, a tendency to invest exclusively in one's region or country of residence, which can prevent an investor from taking full advantage of diversification opportunities that lie elsewhere.

But at the end of the day, what probably matters most is not so much cataloging the various ways that our own brains can complicate the path to financial success but recognizing that our emotional responses can present hidden obstacles to achieving our goals. By identifying some of these tendences and suggesting ways to help mitigate them, it's our hope that we've given you the necessary mindset to view your own actions with a healthy skepticism and even prevent your brain from becoming its own worst enemy.

We are our own worst enemy: Behavioral biases

Emotional biases

	What it is	What's the downside?	How to mitigate it
Loss aversion	Investors fear losses more than the value gains (by a 2:1 margin)	Can lead to panic selling, excessive trading, undiversified portfolio	Resist giving in to temptation to react
Overconfidence bias	"I know, for certain, that this will happen next"	Might subject investors to lower returns or generate excess risk	Think probabilistically, seek out conflicting viewpoints
Status quo bias	Irrational belief that a decision that was once optimal will remain so forever	Failure to rebalance or react to changing financial circumstances, resulting in too much (or too little) risk	Review asset allocation and risk tolerance at least annually

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Cognitive biases

	What it is	What's the downside?	How to mitigate it
Conservativism bias	Focusing too much on the past while ignoring new information	Might underreact (or fail to react at all) to new information	Resist giving in to temptation to react
Confirmation bias	Only seeking out information that confirms your prior beliefs	May create a poorly diversified portfolio and exclude opportunities beyond "what you already know"	Seek out data that challenges your beliefs
Recency bias	Overly focusing on recent experience at the expense of the historical record	Selecting investments based only on past performance, only to see performance revert to average	Stick to a diversified asset allocation and rely less on past performance
Hindsight bias	Believing dramatic events in the past were predictable or inevitable	Can lead to overconfidence bias and encourage other self-defeating and emotional behaviors	Keep an investment journal; ask, "Am I remembering the past inaccurately?"
Anchoring	Stubbornly refusing to admit changing circumstances by tying one's point of view to past observations about price/value	May lead to missed investment opportunities or cause adherence to an incorrect or poorly performing strategy	Remind yourself that portfolios spend 96% of the time below their high-water marks
Mental accounting	Treating investment gains ("house money") differently than contributed capital ("table stakes")	May become too conservative with contributed capital (or too aggressive with investment gains)	View your asset allocation holistically instead of focusing on its source
Home country bias	Allocating too much to one's own country of residence	Can lead to under-diversification and exclude compelling opportunities	Diversify globally
Naive diversification	Naively choosing investments without considering their individual characteristics	Creates a false sense of diversification (i.e., choosing 5 investments at random and allocating 20% to each: the "1/N rule")	Carefully consider the individual attributes of each investment and asset class, including correlations

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