

# Behavioral finance

## Do you have a behavioral bias?



Wealth Management  
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Navigating the markets is not an exact science, and an element of art is often required when making investment decisions. For example, an investor might think a particular stock is overvalued because the company's market capitalization exceeds the sum of all its competitors. On the flip side, another investor might say the same stock is undervalued because the company has the potential to disrupt its industry.

Both of these views could be subject to behavioral biases, which in turn could lead to suboptimal investment decisions. In this commentary, we highlight some common biases, examine their potential consequences, and suggest strategies to mitigate suboptimal outcomes.

### Cognitive biases

Cognitive biases are typically driven by an individual's personal beliefs and/or irrationality when it comes to processing information. The good news is that these biases can often be corrected through better information, education, and advice.

#### Scenario 1

*Brad and Karen have been married for 23 years and are high-ranking executives in a real estate development company. They would describe themselves as having an average risk tolerance and a long investment horizon, with a preference for dividend-paying securities. From a household perspective, the couple earns about \$500,000 in after-tax income annually, have no debts, and maintain a modest lifestyle. The bulk of their wealth is held within registered accounts, and they max out their RRSP and TFSA contributions on an annual basis, placing the remainder into a high-interest savings account.*

*They've been happy with the performance of their equity investments, with a particular emphasis on the strength and stability of their holdings in the Financials sector. At the same time, they've been hearing talk about an impending recession and the risks to the financial system. However, they are comforted when one of their financial-*

*industry colleagues tells them, "The banks lend to everyone, they're too big to fail!". Later, during lunch, one of their close friends convinces them that they need to minimize their market exposure because companies will likely go bankrupt, just like in the Great Financial Crisis. Their only child, John, who graduated at the top of his class, has also mentioned that Canadian households are highly indebted and that they should have some exposure to Bitcoin to diversify away from the Canadian dollar.*

*Brad and Karen are not familiar with cryptocurrency, but their recent portfolio returns have been better than expected and therefore they would be comfortable allocating their gains into Bitcoin. They also have noticed that their holdings in real estate investment trusts (REITs) have underperformed due to higher interest rates—but as real estate developers, they are confident this sector will ultimately rebound because Canadians have a strong attachment to real estate, and therefore they have decided to double down.*

In the scenario above, Brad and Karen might be subject to several cognitive biases. We identify these biases in the following sections, and suggest ways investors may be able to correct or reduce their effects.

The cognitive biases that might affect Brad and Karen's investment decision making process include:

**Confirmation bias:** A tendency to overvalue information that supports existing thought processes or beliefs, and to undervalue information that appears to contradict what one already believes.

**Consequence:** Brad and Karen are concerned about an impending recession and its potential impact to their Financials-sector exposure. However, they choose to place a larger emphasis on their colleague's opinion that the banks are "too big to fail".

**Mitigation:** Confirmation bias can be corrected or reduced by actively seeking information that challenges existing thought processes. For instance, Brad and Karen could

look for an analysis that determines reserve levels of the banks versus potential loan losses.

**Framing bias:** An information processing bias in which the way a situation is presented skews the interpretation or response.

**Consequence:** During lunch, Brad and Karen were convinced that the next recession could result in a market selloff like the one that occurred during the Great Financial Crisis in 2008. The risk is that they might not be making an apples-to-apples comparison.

**Mitigation:** Framing bias can be corrected or reduced by asking more specific questions. For instance, “The 2008 crisis was driven by elevated housing risks and poor lending practices; is the same scenario playing out today?”.

**Mental accounting:** Mentally dividing money into different “buckets” even though money is fungible, which may lead to suboptimal investment decisions.

**Consequence:** Brad and Karen have no experience with cryptocurrency, but they believe having some exposure makes sense in light of the recommendation from their son. Furthermore, they appear to have a lower attachment to this investment because the capital is funded from recent gains; even if Bitcoin doesn’t work out, they’re okay taking a loss because it wasn’t “their money” to begin with.

**Mitigation:** Recognize that money is fungible, whether it comes from employment income or capital gains. Once capital is earned, it becomes a component of Brad and Karen’s net worth and should be utilized in a manner that aligns with their financial goals and objectives.

**Representative bias:** A tendency to extrapolate from past experiences and outcomes when processing new information.

**Consequence:** Brad and Karen’s REIT holdings have underperformed, but their personal experience is that investors have benefitted from buying the dip during every pullback in recent memory. Therefore, they are not concerned about their REIT exposure.

**Mitigation:** Representative bias can be corrected or reduced by analyzing a larger amount of evidence and looking for subtle differences between past events, such as changes in interest rates. For example, one could compare historical affordability rates, accounting for average home prices and income levels across various time periods.

**Gambler’s fallacy:** Believing a future outcome is more or less likely due to past outcomes.

**Consequence:** Brad and Karen’s decision to double down on their REIT holdings might be biased because it is based on the robust growth in real estate prices in recent

years. Furthermore, they might believe they have an edge because they both work in the industry.

**Mitigation:** Gambler’s fallacy bias can be corrected or reduced by recognizing that seemingly related events are often independent of one another. Brad and Karen should recognize that the macroeconomic environment and consumer behaviors have shifted meaningfully in a short time. For instance, the shift to hybrid/remote work is likely structural in nature, and this is likely to negatively impact the prospects for office REITs going forward.

## Emotional biases

Emotional biases are those in which an individual’s reasoning is influenced by feelings or emotion. These biases typically stem from impulse or instinct, and affect the way one perceives or acts on information. It is often easier to recognize and adapt to emotional biases when making decisions, rather than trying to eliminate them.

### Scenario 2

*John is 23 years old, works full time, and regularly contributes to his investment accounts. He has begun to feel dissatisfied with how his stocks are trading, with one of his holdings down 35% on the year due to a structural change in company fundamentals. John hates losing money, so he is determined to hang onto this stock instead of selling at such a steep loss. To combat this feeling of loss, he begins selling his winners as soon as they are in the green in order to crystalize any gains and avoid recreating the situation he is in with respect to his poorly performing holding.*

*One day, John is chatting with some friends, and they convince him that a certain digital coin that was recently launched is the next crypto to buy. Convinced that the price will multiply many times in a matter of months, John decides to stray from his long-term plan of investing in high-quality, value-oriented stocks in order to buy this coin and get rich quick. Unfortunately, it soon becomes clear that the new coin was propped up by the rumor mill. After seeing his investment lose almost 95% of its initial value, John falls behind his annual savings goals.*

*As John does not seem to be able to navigate the market very well, he decides to move his money to an investment advisor. John’s parents want to help him get back on track after his recent poor decisions, and have gifted him shares in a company that were purchased by his great-grandfather. After careful consideration of John’s strategic asset allocation, his new advisor has decided to sell the shares to further diversify John’s portfolio. But John disagrees—he thinks there is no way the shares are only worth \$30,000, and believes they can move much higher. This is obvious to him, as his parents must have had great conviction to hold onto them for so long!*

In Scenario 2, above, John might be subject to the following emotional biases:

**Loss aversion:** The tendency to prefer avoiding losses as opposed to achieving gains. This leads to selling winners too soon and holding losers too long, as losses are significantly more emotionally powerful than gains.

**Consequence:** John refused to sell his losing position in a significantly underperforming stock, and instead sold his best performers before giving them a chance to fully appreciate. This resulted in a sub-optimal investment portfolio.

**Mitigation:** Having an up-to-date investment policy statement, followed by discipline in the investment process to ensure the risk profile remains within targeted allocation ranges.

**Self-control bias:** Failing to act in pursuit of long-term goals in favor of short-term satisfaction.

**Consequence:** John wanted to make money fast, and thought he could do this by straying from his investment strategy in order to achieve quick gains. This has resulted in him taking on excess risk and ultimately falling behind in his goals.

**Mitigation:** Strictly following an investment policy statement, as well as having an up-to-date financial plan to quantify goals and the actions needed to reach them, are good ways to remain focused on long-term goals.

**Endowment bias:** Valuing an asset more than market value solely because you own it.

**Consequence:** John is placing a premium valuation on the shares bought by his great-grandfather only because they were gifted to him and he now owns them. This leads him to deviate from his strategic asset allocation, and could be setting up his portfolio to exceed his risk tolerance by failing to diversify appropriately.

**Mitigation:** Endowment bias can be reduced by adhering to an investment plan to reach desired goals, as well as asking yourself important questions like “Would I buy this in my current portfolio if I did not already own it?”

## Conclusion

As an investor, it can be difficult to separate one's behaviors from logical and judicious decision making. We believe being aware of biases, and bringing them to the forefront of client conversations or self-evaluation, will often produce better investment outcomes.

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