Finance

How Behavioural Biases Affect Finance Professionals

By H. Kent Baker, Greg Filbeck, and Victor Ricciardi

In this article the authors discuss how behavioural biases – heuristics, anchoring, framing, to name a few – can negatively impact the decision-making process of finance professionals, and as a result they become their own worst enemies.

In a poster designed to help promote environmental awareness and publicise the first annual observance of Earth Day, held on April 22, 1970, Walt Kelley, the creator of the classic comic strip Pogo, shows a garbage-strewn landscape with the quote: "We have met the enemy and he is us." Under the quote, Pogo, the possum, is seen holding a litter pick-up stick and a burlap bag. The poster depicts the concept of environmental stewardship. That is, everyone must share the responsibility for trashing the planet and do their part to help clean it up. This famous quote can also apply to financial professionals. If behavioural biases negatively affect the decision-making of finance professionals, then they can become their own worst enemies.

The literature documents many behavioural biases in financial markets. For example, individuals are overconfident, prone to the disposition effect, exhibit loss aversion, demonstrate familiarity bias, and are driven by mood and sentiment. As a result of poor decision-making, they tend to underperform the market both before and after fees. However, the extent of the biases differs among investors. Less sophisticated investors such as individual or retail investors tend to make poorer choices with their investment decisions than their more sophisticated counterparts. The following discussion examines whether the same cognitive and emotional biases affect the behaviour of more sophisticated finance professionals: financial planners and advisors, financial analysts and portfolio managers, and institutional investors.

Financial Planners and Advisors

Financial planners and advisors along with their clients reveal a wide array of psychological biases that can result in flawed judgments and decisions. Understanding these biases is important for these professionals to ensure their clients are receiving the best advice.

Heuristics. Finance professionals tend to exclude specific information or process information incorrectly when advising clients. This situation is associated with a cognitive tool of decision-making in which individuals apply *heuristics* or mental shortcuts when processing large amounts of data or statistics that often result in mental mistakes. Financial planners and advisors regularly apply heuristic judgments to assess and forecast investment risk tolerance of their clients. For instance, these professionals may use a heuristic that married individuals are less risk tolerant than singles and recommend more conservative investment products. However, every married investor should not be placed into this risk stereotype because using this heuristic can result in bad outcomes for their clients. Behavioural finance research suggests that many of these heuristics judgments can result in financial mistakes, poor financial advice, and lower investment performance (Ricciardi and Rice 2014).

Anchoring. Anchoring is the tendency for experts to have a belief and then apply it as a reference point for making future judgments. Because finance practitioners often base their decisions on the first piece of information they receive such as a stock's initial purchase price, they have difficulty modifying their assessment to new information. When they anchor on a losing investment as a bad experience, they can become excessively risk- and loss-averse, resulting in underweighting stocks in their client's portfolios.

Perceived Risk. Another theme influencing the decision-making process is the psychology of risk. Subjective factors such as heuristics and emotions influence how finance professionals assess risk. MacGregor, Slovic, Berry, and Evensky (1999) investigate the association between the judgment process and various aspects of investment classes and financial assets, in particular expert perceptions of returns, risk, and

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risk/return relations. The study reveals that three major variables – worry, knowledge, and volatility – explain 98% of the financial advisors' perceived risk for different financial products and services. This result reveals that when assessing and understanding financial risk, risk encompasses both subjective and objective criteria.

Familiarity Bias, Risk, and Return. Financial planners, advisors, and their clients often have a preference to own familiar assets. For instance, investors have an inclination to invest in local securities with which they are more familiar thus over-weighting portfolios in domestic assets. Investors also perceive these familiar assets as less risky and earning a higher rate of return. This tendency may result in under-diversification in their investment portfolios and lower performance.

Trust and Control. Trust is a major issue within the financial planning process and investment management. An important characteristic of the client-advisor relationship is developing a balance between trust and control. Clients often place too much trust in professionals or overly allocate control about decisions to their financial advisors. However, when clients lack trust or are controlling, they are unlikely to listen to financial advice. Investment professionals need to work to establish a balanced relationship of trust and control with their clients

Framing. Framing is how financial planners and advisors present a financial service or investment product to a client based on specific word association. Roszkowski and Snelbecker (1990) examine the influence of the framing process by comparing the gains and losses of 200 financial planners. Although financial professionals commonly exhibit similar framing effects, they are more conservative in their approach to managing the client's investments than their own money. Planners who select the positive frame in the form of a gain reveal risk-avoidance behaviour; other planners who choose the negative frame in the form of a loss are more inclined to risk-seeking behaviour.

Worry. Both finance professionals and their clients commonly suffer from worry. Worry reduces past memories and visions of future decisions that change both short- and long-term judgments about investments. Ricciardi (2011) finds that a large majority of investors associate the term "worry" with stocks rather than bonds. A higher degree of worry for a stock increases its perceived risk, lowers the degree of risk tolerance among investors, and decreases the likelihood of owning the investment.

Financial Analysts and Portfolio Managers

Financial analysts and portfolio managers are susceptible to behavioural biases, which left unchecked can severely damage their performance record, reputation, and level of compensation. This section identifies how these biases are manifested in their recommendations and how to mitigate particular biases. Analysts may produce and portfolio managers may recommend biased reports in certain predictable situations. These professionals experience such common biases as overconfidence, herding, disposition, gender, confirmation, and excessive optimism.

Overconfidence. *Overconfidence bias* is an unwarranted faith in one's intuitive reasoning, judgments, and cognitive abilities and includes both *prediction overconfidence* and certainty overconfidence. Prediction overconfidence occurs when professionals assign too narrow a confidence interval around their investment forecasts. *Certainty overconfidence* occurs when professionals assign too high a probability to their prediction and have too much confidence in the accuracy of their own judgments. Overconfidence bias can lead to concentrated portfolios. Professionals may assume that their perceived superior skills warrant including fewer assets for consideration or to be included in portfolios.

Herding Behaviour. *Herding* refers to disregarding one's opinion or analysis in order to follow the crowd. Financial bubbles and crashes can emerge as a result of herding behaviour. As prices increase from investors capitalising on momentum, professionals may observe their peers investing in these assets and be incentivised to invest in them as well. Analysts and managers face challenges in facing herd behaviour. If they fail to follow, they risk trailing behind their peers. However, if they follow the herd, they may get caught on the wrong side of an artificially attractive trade opportunity.

Loss Aversion and the Disposition Effect. According to Kahneman and Tversky (1979), investors treat the gains and losses in their portfolio differently. *Loss aversion*, also known as *prospect theory*, suggests that managers may overweight losses compared to an equivalent gain relative to a reference point or anchor, and their behaviour depends on which side of the point their position lies. This behaviour results in the *disposition effect* in which professionals recommend

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selling securities to lock in gains too quickly, and recommend retaining securities too long in order to recoup losses. Thus, managers may exhibit both behaviours in monitoring a single security in a portfolio.

Gender Differences. Although women represent only 9% of fund portfolio managers, mutual funds managed by female portfolio managers perform in line with those managed by men (Lutton 2015). Interestingly, funds with mixed gender teams of both male and female portfolio managers exhibit superior performance. Although both genders display overconfidence in their abilities, men are consistently more overconfident than women in their predictions, particularly when related to financial decisions (Barber and Odean 2001).

Confirmation Bias. Professionals may have preferences in how they process information and form beliefs. This preference is known as *confirmation bias*, which suggests that professionals may overweight information that confirms their prior beliefs and underweight information that runs counter to their prior beliefs. The implication is that recommendations may be biased based on previous recommendations.

Optimism in Earnings Forecasts and Stock Recommendations. Empirical research finds that analysts are excessively optimistic in both their earnings forecasts and stock recommendations. For example, Lim (2001) asserts that management prefers optimistic forecasts because these forecasts increase market valuations and therefore management compensation. In support of this belief, Mikhail, Walther, and Willis (2004) find that sell recommendations comprise only 6% of their sample of recommendations, whereas buy and hold recommendations comprise the remaining 94%.

Debiasing the Biases. Analysts should be motivated to reduce behavioural biases if these biases reduce their reputation and therefore decrease their compensation. Analysts have incentives to build and maintain a reputation for objectivity throughout their career. For instance, introducing new information or knowledge, which is used in future judgments and decisions, reduces optimism. Analysts can then receive feedback that is accurate and timely, adjust their performance, and learn from general experience with the task.

Institutional Investors

Institutional investors refer to various professional investors including insurance companies, banks, pension funds, endowment funds, mutual funds, and hedge funds. Evidence indicates that sophisticated investors are less subject to common behavioural biases than novice investors such as individual or retail clients. As Choi, Fedenia, Skiba, and Sokolyk (2016) show, investor sophistication relates to information advantage and subsequent performance. Different institutional types exhibit various levels of sophistication. Hence, some of their trading choices could be symptomatic of behavioural biases, which could partially explain the observed differential in risk-adjusted returns. These biases center on herding behaviour, holding under-diversified portfolios, and using momentum strategies. An important issue is whether these behaviours are value reducing and destabilise financial markets.

Herding Behaviour. Institutional investors display a propensity to herd or to follow each other's trades. If herding is irrational or driven by behavioural motivations such as fads, greed, fear, or reputational concerns, it could destabilise asset prices and move them away from their

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fundamental values. Conversely, herding behaviour could be rational and information-based. If so, it could lead to more efficient markets and/or higher risk-adjusted returns to investors.

Two reasons largely explain why institutional investors engage in herding behavior. First, they infer information from each other's trades. Second, institutional investors analyse similar information and draw the same conclusions about the fair values of specific securities. Hence, herding is unintentional and information driven. Based on their analysis of the existing evidence, Skiba and Skiba (2017) conclude that herding by institutional investors appears to be price stabilising rather than price destabilising. Institutional investors also appear to trade rationally and profit at the expense of individual investors.

Under-diversification. Although portfolio theory indicates that investors should hold diversified portfolios, institutional investors do not always do so. Instead, they often exhibit *home bias*, which is the tendency to invest mainly in domestic equities, despite the purported benefits of diversifying into foreign equities. Various behavioural reasons might explain the irrationality of overweighting in domestic markets including overconfidence, optimism, and familiarity. Overconfident investors overestimate the accuracy of their private information, judgment and intuition. Investors having optimism bias believe that they are less at risk of experiencing a negative event compared to others. Those with familiarity bias trade in the securities with which they are familiar. All three biases can lead to underestimating the amount of risk in the investment and thus not taking the requisite steps to reduce risk, such as diversifying.

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However, under-diversification could be a rational strategy driven by information advantage. If this reason were the case, under-diversification should not lead to deteriorating performance. Choi et al. (2016) find that under-diversified positions earn higher risk-adjusted returns than globally diversified portfolios. Coval and Moskowitz (2001) also find that institutional investors, especially mutual funds, actually outperform when holding locally concentrated portfolios. Thus, under-diversification generally appears to be a rational, not a biased choice of institutional investors.

Momentum Trading. *Momentum trading* refers to an investment strategy that tries to benefit from the continuance of existing market trends. Although all types of institutions engage in momentum trading, evidence shows that they do not do so because of greed, fear, overconfidence, or representativeness bias, but for fundamental reasons. Skiba and Skiba (2017) conclude that using a momentum strategy is actually value generating because institutional investors appear to buy past winners. Moreover, institutional investors are less subject to behavioural biases making markets more efficient.

Concluding Remarks

Behavioural biases can dramatically affect financial behaviour for all types of finance professionals. Understanding fundamental human psychology can assist financial planners and advisors in identifying behaviours that may prevent their clients from achieving their short- and long-term financial objectives. Although financial professionals cannot avoid all cognitive and emotional issues, they can advise their clients how to reduce these biases during the financial planning process. This requires understanding the client's biases, resisting the inclination to engage in such

behaviours, and developing and following financial planning techniques and investment strategies. This will result in their clients having better outcomes and increase the likelihood of them achieving their overall financial goals.

Financial analysts and portfolio managers benefit through greater awareness of possible behavioral biases in their analysis and recommendations. For instance, professional certifications, educational background, and experience may lead to them to be more confident in their work than warranted. Likewise, they must be careful to reach independent conclusions and maintain objectivity, and not feel swayed to follow the crowd.

Evidence reveals that as investor sophistication increases from individual investors to institutional investors, behavioural biases decrease and even disappear. Because institutional investors tend to make rational, information-based decisions, they do not suffer from common behavioural biases displayed by individual investors. Thus, institutional investors help to make markets more efficient. EBR

The article draws on some themes from the authors' book Financial Behavior – Players, Services, Products, and Markets published by Oxford University Press in 2017.

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References

• Barber, Brad M., and Terrance Odean. 2001. "Boys Will Be Boys: Gender, Overconfidence, and Common Stock Investment." *Quarterly Journal of Economics* 116:1, 261–292.
• Choi, Nicole, Mark Fedenia, Hilla Skiba, and Tatyana Sokolyk. 2016. "Portfolio Concentration and Performance of Institutional Investors Worldwide." *Journal of Financial Economics*. Forthcoming.
• Coval, Joshua D., and Tobias J. Moskowitz. 2001. "The Geography of Investment: Informed Trading and Asset Prices." Journal of Political Economy 109:4, 811–841.
• Kahneman, Daniel, and Amos Tversky. 1979. "Prospect Theory: An Analysis of Decision under Risk." *Econometrica* 47:2, 263–291.
• Lim, Terrence. 2001. "Rationality and Analysts' Forecast Bias." *Journal of Finance* 56:1, 369–385.
• Lutton, Laura Pavlenko. 2015. "Women Are Scarce Among Fund Managers." Morningstar Advisor. Available at http://www.morningstar.com/advisor/t/105995619/women-are-scarce-among-fund-managers.htm.
• MacGregor, Donald G., Paul Slovic, Michael Berry, and Harold R. Evensky. 1999. "Perception of Financial Risk: A Survey Study of Advisors and Planners." *Journal of Financial Planning* 12:8, 68–86.
• Mikhail, Mikhail B., Beverly R. Walther, and Richard H. Willis. 2004. "Do Security Analysts Exhibit Persistent Differences in Stock Picking Ability?" *Journal of Financial Economics* 74:1, 67–91.
• Ricciardi, Victor. 2011. "The Financial Judgment and Decision-Making Process of Women: The Role of Negative Feelings." Third Annual Meeting of the Academy of Behavioral Finance and Economics, September. Available at ssrn.com/abstract=1936669.
• Ricciardi, Victor, and Douglas Rice. 2014. "Risk Perception and Risk Tolerance." In H. Kent Baker and Victor Ricciardi (eds.) *Investor Behavior – The Psychology of Financial Planning and Investment*, 327–345. Hoboken, NJ: John Wiley & Sons, Inc.
• Roszkowski, Michael J., and Glenn E. Snelbecker. 1990. "Effects of Framing on Measures of Risk • Tolerance: Financial Planners Are Not Immune." *Journal of Behavioral Economics* 19:3, 237–246.
• Skiba, Alexandre, and Hilla Skiba. 2017. "Chapter 4 Institutional Investors." In H. Kent Baker, Greg Filbeck, and Victor Ricciardi (eds.), *Financial Behavior Players, Services, Products, and Markets*. New York: Oxford University Press.