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EMPIRICAL REVIEW OF THE INEVITABLE BIASES IN HUMANS INFLUENCING FINANCIAL DECISIONS

GITONGA CELESTINE GATABI[1]
Ph.D. Finance Student at the Department of Accounting,
Finance and Economics, School of Business, KCA University

MICHAEL MUSYOKA MUEMA[2]
Ph.D. Finance Student at the Department of Accounting,
Finance and Economics, School of Business, KCA University

OREKO NYAKOI GODFREY[3]
Ph.D. Finance Student at the Department of Accounting,
Finance and Economics, School of Business, KCA University

IBRAHIM TIRIMBA ONDABU[4]
Senior Lecturer in the Department of Accounting,
Finance and Economics, School of Business, KCA University

ABSTRACT
This review study aimed at conducting a critical review of the various behavioral finance human biases and how they influence financial decisions. Initially the study identified 139 articles for inclusion but after a tentative scrutiny for relevance and omissions based on repetition of communicable content, the study was able to narrow down to only 51 articles and which formed the study report. The various biases that the study reviewed were the survivorship bias, selective perception bias, blind spot bias, availability heuristics bias, bandwagon bias, choice support bias, ostrich bias, outcome bias, and placebo bias. The study concludes that these biases results in investors overestimating their chances of success, underestimating the associated risks and thus making decisions based on their preconceived notions and which is dangerous for investing as possibly wrong decision may arise. The study recommends that it is important for investors to acknowledge the existence of these biases and as the first step towards acceptance and that once they take cognizance of their existence, they also need to be more careful by ensuring that they conduct proper analysis before jumping to conclusions. By being aware of these cognitive biases, investors can make more informed and rational decisions, and avoid the pitfalls of poor decision-making.

KEYWORDS: Behavioral biases, decision making, financial markets.

1. Introduction

Behavioral finance utilizes psychology to understand how investors make financial decisions, individually and, while challenging, the rationality, self-interest, and perfect information of traditional economic theory (Gazley & Guo, 2015). The field of behavioral finance asserts: Rather than "rational," human behavior is driven by fear and greed. Rather than "self-interest," people can be self-destructive, charitable, religious, and inclined to volunteer to help others (Zahera & Bansal, 2018). Rather than "perfect information," people today are exposed to virtually an infinite amount of information and often do not read the most relevant or important market data (Jain, Walia & Gupta, 2020).

Human decision-making is always prone to certain biases, which have the potential of resulting in poor judgment and flawed decision-making. In the context of financial markets, these inevitable biases can have surmountable consequences, possibly impacting investment returns and the general market performance (Lovallo & Sibony, 2010; Kahneman, 2011). Therefore, understanding these biases and knowing how to avoid them is crucial for profitable decision-making in the financial market sector.

The financial market sector is a complex and dynamic sector of the economy, which requires a great deal of knowledge and skill to navigate successfully. This is a sector where the smallest details can have a profound impact on investment decisions, it is important to be aware of the inherent biases that can influence investment decisions (Abatecola et al., 2022). Recognizing and minimizing the effect of these biases on investments can be challenging in practice, as investment decisions must be based on a combination of rational and emotional factors.

In this paper, we discuss some of the most vital inevitable biases of human decision-making biases, their effect on decision-making, and how to avoid them. The biases that we focused on include survivorship bias, selective perception bias, blind spot bias, availability heuristics, bandwagon effect/bias, choice supportive bias, ostrich bias, outcome bias, and placebo bias.

2. Behavioral Biases and how they influence decision making.

This section reviews the literature on various behavioral biases and how they influence decision-making. Survivorship bias, selective perception bias, blind spot bias, availability heuristics bias, bandwagon bias, choice support bias, ostrich bias, outcome bias, and placebo bias.

2.1 Survivorship Bias

This is a form of selection bias that occurs when people focus overly on optimistic beliefs because multiple failures are overlooked thus leading to overestimation of profitable outcomes (Bodnaruk & Simonov, 2015). For example, business and financial analysts frequently assess the financial health of firms and investment returns. By assessing only surviving business analysts will record positively biased financial and investment information. Therefore, with this positive information, investors may choose to invest in a company's stocks without due diligence to ascertain possible failures.

Reyna (2018) identified survivorship bias as the most prevalent human decision-making bias in the financial industry, particularly when evaluating security markets. For instance, when Dow Jones Industrial Average- the 30 stock securities that are used to calculate the index are frequently changed, eliminating securities that have performed badly and replacing them with better-performing securities. By only looking at the remaining securities in the index, investors may perceive the stock market as less risky than actually is. The tendency is to focus on successful

entrepreneurs and ignore the countless failed entrepreneurs who tried to start similar businesses (Cruciani, 2017). This bias can be dangerous because it can lead to overconfidence and poor decision-making.

2.2 Selective perception bias

It is the tendency not to notice and quickly forget the stimuli that cause emotional discomfort and contradict one's beliefs (Comes, 2016). It occurs when people only see what they want to see and ignore information that conflicts with their pre-existing beliefs (Comes, 2016). For example, if an investor believes that company X stocks perform well in the security exchange market, they will invest in it and ignore any information suggesting a potential drop in the stock price of company X. This bias can lead investors to make decisions based on incomplete or biased information.

Claeys and Coombs (2020) established that selective perception bias can be observed in the attention given to specific news events and security price movements. He further contends that investors are often influenced more by news in the media than by the statistics underlying investments. For instance, if there is positive headline news about a certain security, investors might interpret that as an endorsement of the security, even if the headline is baseless. Similarly, Ceschi et al. (2019) observed that investors may be more likely to buy when there is an uptick in the stock market, even if the increase is likely to be temporary.

2.3 Blind spot bias

It occurs when an individual can identify more cognitive biases in others than in oneself (Cristofaro, 2017). Similarly, Scopelliti et al. (2015) described blind spot bias as the tendency of people to underestimate the impact of their own biases on decision-making. It is caused by a variety of other biases and self-deception (Wegrich, 2019). For example, an investor's preference for company X may lead him to invest in the stocks of the company even after knowing company Z whose stocks are performing well in the stock exchange market. This bias can lead to investors to overlook significant information and make suboptimal investment decisions.

Bach and Wegrich (2019) pointed out that blind spot bias occurs when an investor may be sure that he/she is making a rational decision about a stock purchase but fails to recognize their emotional attachments to the company, or their own biases towards a particular industry. This bias leads to investors thinking that their analysis is better than that of other investors or that exceptional performance reflects their intuition and ability (Wagner & Eidenmuller, 2019). A belief such as this can lead to underestimating the risks of investments, overlooking red flags, and overestimating the returns. Haghani and Sarvi (2019) noted that investors who are susceptible to blind spot bias are also likely to be partial to high-risk investments, believing they are the only ones that provide large returns. This bias can lead to overconfidence and poor decision-making.

2.4 Availability heuristics bias

Availability heuristics bias is a cognitive and information processing bias, where investors use a shortcut, based on how familiar the outcome appears in their life (Khan, 2017). According to this bias, investors may perceive easily recalled possibilities as the best choices, even when that may not be the case (Morewedge et al., 2015; Harrison et al., 2015).

For instance, if an investor only reads news stories that report on the successful performance of a particular asset class, they may be more likely to invest in that asset class, even if it is not the most appropriate investment for their portfolio. Availability heuristics can also lead to an overestimation

of the likelihood of rare events if they are reported frequently in the media (Jain, Jain, & Jain, 2015).

2.5 Bandwagon bias

This is a psychological phenomenon in which people do something primarily because other people are doing it regardless of their own beliefs (Borowa, Zalewski & Kijas, 2021). Here, investors may have little knowledge of the underlying value of the investment but see it as an established trend that everyone else is following (Chang & Lin, 2015). A perfect example is when a company decides to lower its prices to match the competitor's prices without considering their quality and cost of production. This bias is in many a time driven by a fear of missing out (FOMO) on an investment opportunity (Riaz & Iqbal, 2015).

Another example: If all a person's friends are investing in a particular stock, they may feel pressure to do the same, even if they haven't done their research and analysis. The bandwagon effect can also occur in investment markets, where investors buy or sell based on the actions of other investors, rather than based on a fundamental analysis of the securities involved (Farneti & Dishman, 2016).Kang and Park (2019) illustrated the bandwagon bias surrounding the hype in crypto currency. As Bitcoin grew in popularity, so too did the bandwagon effect. Some investors who had less interest in crypto currencies became drawn to them because of the media attention and the number of investors who were buying them. This led to an enormous increase in the price of Bitcoin in 2017, which eventually resulted in a decline in the crypto currency market (Abatecola, 2022). The rise of digital currencies continues to attract investors, and bandwagon bias remains a key concern in the space.

2.6 Choice support bias

It is also known as post-purchase rationalization. It is the tendency to retroactively ascribe positive attributes to an option that one has selected or to demote the forgone option (Bihari et al., 2022). For example, having purchased stocks of company X an investor will convince himself that it is the best investment decision since he does not want to admit potential investment mistakes that he may have made. This bias can be dangerous because it can lead people to hold onto investments that are performing poorly, rather than making a new and potentially more beneficial decision (Usman, 2018).

Waldman (2020) illustrates choice support bias in the paradigm shift from fossil fuels to renewable energy. He contends that the investors who were supportive of renewable energy may overweight investments in sustainable energy infrastructure companies, even though these investments may not be financially sound. This bias can lead to unrealistically bullish assessments of the industry and its prospects for growth in the future (Masterton et al., 2022).

2.7 Ostrich bias

It is a financial bias that owes its name to the false belief that ostriches hide their heads in the sand to ignore danger or pretend that it does not exist as a way of protecting themselves (Kasdan, 2018). It is a matter of people's brain tendency to ignore negative information at a time of risk and danger trusting that everything will go well (Polman, 2019; Alhusri, 2021). For example, an investor who has invested in stocks may avoid following reports on the risks associated with those stocks, because they don't want to be reminded of the potential downside. This bias can be dangerous because it can lead to a lack of adequate diversification and a concentration of risk (Dewan & Dhami, 2019).

In addition, Kasdan (2018) describes ostrich bias as the tendency of people to ignore or avoid negative information. According to him, this bias can be observed in the financial markets when investors avoid studying poor-performing stocks or choose to disregard negative economic indicators. Meyer and Kunreuther (2017) provide an example of ostrich bias as observed in the tech bubble of the late 1990s. Some people ignored the warning signs that the security market was becoming overvalued, choosing to focus on the optimism surrounding tech securities. When the bubble eventually popped, investors who had ignored negative information were caught off-guard, resulting in significant financial losses.

2.8 Outcome bias

This is a cognitive and information processing bias, where investors decide based on the outcome and not based on the process that led to that result (Kumar & Goyal, 2016). An example of outcome bias would be when investors focus only on the recent 3- or 5-year track record of return when selecting an investment manager, rather than analyzing the process of that investment manager that led to that return.

Outcome bias can lead to excessive risk-taking. Investors should look at MPT risk statistics, the investment process, the number of securities purchased, and other fundamental factors when selecting an investment manager. This bias can be dangerous because it can lead people to make decisions based on hindsight bias, rather than on sound analysis (Abatecola, Caputo & Cristofaro, 2018; Althubaiti, 2016).

2.9 Placebo bias

This bias occurs when people decide based on false information (Enax & Weber, 2015; Hertz et al., 2016). This is likely to lead individuals to lose their previous investment's value (Hoffmann, Lewis & Maher, 2020). Forexample, investors may be attracted to a company’s stock due to fake information concerning high dividend payments. This bias can be dangerous because it can lead people to make decisions that are not in their best interests, and that may result in significant losses. According to Yan et al. (2018), placebo bias in the financial market arises when investors often tend to have a positive perception of the securities they invest in, and this perception can significantly influence their decisions when making investment choices. They further illustrate that an investor may choose to invest in a particular security because he believes the security is a top-performing security in the sector. Based on this belief, the investor may continue holding the security, even when the security performance is deteriorating, due to the belief that the stock would recover its value (König-Kersting et al., 2021).

3. How to avoid the biases?

Spotting and avoiding biases in investment decision-making can help investors and other financial analysts make more accurate and informed decisions (Bodnaruk & Simonov, 2015). Strategies for doing so may include seeking out diverse sources of information (Reymen et al., 2017), questioning assumptions and biases (Dimara et al., 2019), and considering different perspectives (Marda, 2018) and potential outcomes of a decision (Mohanani et al., 2019).

In addition, the role of technology in the financial markets is gaining prominence. Algorithmic training is a rapidly growing area of the financial industry whereby intelligent algorithms, embedded with decision-making rules, are developed to make trading decisions in milliseconds while dealing with massive amounts of data (Cabrera et al., 2018). Despite various challenges, algorithmic trading is outgrowing traditional forms of trading, as it offers greater speed and precision in the way it trades (Malgieri & Comandé, 2017). However, Burton et al. (2020) pointed

out that algorithmic trading could amplify human biases if the rules embed is flawed or even slightly biased.

4. Conclusion and Recommendations

In conclusion, investment decisions can be impacted by a range of inherent biases. The biases include survivorship bias, selective perception bias, blind spot bias, bandwagon bias, choice support bias, and ostrich bias. These biases can lead investors to overestimate the chances of success, underestimate the associated risks, make decisions based on their preconceived notions, overlook important information, invest solely because other investors are buying, indulge in unrealistically bullish assessments, and ignore or avoid negative information.

While it is difficult to eliminate biases from investment decisions, the first step towards minimizing their impact is to acknowledge their existence. Investors who are aware of these biases and understand their impact can make more informed investment decisions. It is overly evident that cognitive biases influence greatly how investors make investment decisions, and therefore, proper analysis and understanding of the situation can enable investors to make informed and profitable investment decisions. By being aware of these cognitive biases, investors can make more informed and rational decisions, and avoid the pitfalls of poor decision-making.

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