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Behavioural Finance Bias Reflections

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ABSTRACT:

The purpose of this thesis is to observe, critically analyze, and examine the impact of selected behavioural finance biases within the context of investment decision-making. Traditional financial theories assume that rationality always occurs. Traditional finance theories such as Efficient Market Hypothesis (EMH) and Modern Portfolio Theory (MPT) predict the assumption, that investors only act by pure rationality and utilize all the available information towards best possible solution.

Behavioural finance challenges the notions of solely observing rational factors and note the humanity principles of decision-making. The study field highlights the cognitive limitations and emotional factors which often might lead individuals to deviate from rational behaviour. As a literature review this thesis focuses on four selected behavioural biases: herding mentality, overconfidence bias, anchoring and adjustment, and loss aversion. The thesis demonstrates that these biases frequently lead to suboptimal financial outcomes, formation of price bubbles and overall market inefficiencies. Acknowledgement and understanding of the practical implications of these behavioural finance bias affections are important for both individual investors and financial advisors. Recognizing and mitigating such a tendency can help to lead more stable and informed investment strategies and decisions.

This thesis will also address the criticisms and limitations of the behavioural finance. These topics include methodological concerns regarding to experimental validity and the lack of unified theoretical framework. The thesis concludes that the acknowledgment and understanding of behavioural finance biases may not eliminate the risk of falling for biases, it still provides tools for framing financial decisions more rationally and enhancing overall market stability.

KEYWORDS: behavioural finance, cognitive biases, decision-making, investment behaviour, market inefficiency

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1 Introduction

Behavioural finance has developed a new field of finance since its awareness has risen during the revolution of digitalization bringing all the information closer to everyone who has access to internet. The field of behavioural finance pursues to analyse and survey the psychological affections of the humanity principle that has a critical impact of the decision-making. Psychological influences and biases assume that investors are not purely rational on the decision-making progress while choosing how to function at the financial markets.

Traditionally thinking financial decision-making based on financial theories is purely based on rational factors. Traditional financial theories that have been around for a long-term are some to name for example Efficient Market Hypothesis (EMH) and Modern Portfolio Theory (MPT). These theories evaluate and assume that investors base all their actions to rationality, and the decisions are made only with all the information available.

The results of numerous studies already made regarding to the psychological affections have proven and demonstrated the fact, that investors typically tend to be influenced by biases. Irrational decisions driven by cognitive and emotional biases have and potentially could lead to suboptimal decision-making leading to market inefficiency situations.

This thesis as a literature review, pursues to point out and explain some of the behavioural finance biases that have been proven and demonstrated in various studies made of the topic. These decisions made by the implication of cognitive and emotional biases have various affection towards the inefficient market that construct the financial markets to the form they appear.

Examining the behavioural finance biases and the ability to adopt as well as understand the behavioural finance bias affections could potentially offer advantaged position within financial markets. That way of understanding the impacts of the actions might offer insights for the financial advisor as well as for regular investors.

Understanding, offers investors and financial advisors' additional tools to recognize and mitigate the effects of the biases leading to better investment-decisions by potentially avoiding some of the behavioural biases occurring. The perception of these behavioural tendencies offers crucial sentiment for more informed financial decision-making. The affections might occur for example as an improved investment strategies and enhanced financial market stability.

1.1 Purpose of the study

The purpose of this thesis is to observe, critically analyse and examine the impact of behavioural biases within the context of decision-making. This thesis reflects its implications from multiple perspectives considering both the implications for an individual as well as the implications for the whole financial market as a unit.

Financial decision-making has been throughout the years leaning on the principle of rational decision-making. The assumption has stated that investment decisions are made purely based on rational factors. In contrast the newly examined behavioural finance segment has brought a new point of view to the classical finance sector. Traditionally thinking market participants are rational and always seek to optimize the market utility. Behavioural finance perspective has brought the angle of humanity as a corresponding factor that observes the cognitive limitations and emotional factors which often could lead to systematically deviate the actions from rationality.

The aim of this thesis is to point out the growing acknowledgement spread regarding to the psychological factors affecting to the investment decision-making. This thesis focuses on four selected behavioural biases. The selected biases are herding mentality bias, overconfidence bias, anchoring and adjustment bias and loss aversion bias. This thesis undergoes more deeply how these tendencies impact and manifest the overall investment decision-making behaviour and the impact towards market outcomes.

1.2 Structure of the study

This thesis is structured in a following way. The first chapter includes the introductory part. The introductory part itself consists of three different parts which are the introduction, purpose of the study and structure of the study. In the first section the thesis purpose and motivation will be addressed.

Second chapter concentrates on explaining the foundation for understanding the key principles of behavioural finance. This chapter discusses the main theories and introduces several cognitive and emotional biases which are affecting the financial decision-making progress.
The part 2.1 outlines the main theories from the field of behavioural finance and is contrasting them with traditional financial theories. The part 2.2 goes more into details with specific selected cognitive and emotional biases. These selected biases for this study are herding mentality, overconfidence bias, anchoring and adjustment and loss aversion bias.

Chapter three constructs the importance of the biases within the financial markets. The main purpose of this chapter is to explore the importance and significance of these behavioural biases and how they affect towards the financial markets and overall investment decision-making. Sub-paragraph 3.1 is opening the key bias reflections from the field of behavioural finance. Sub-paragraph 3.2 undergoes and discusses how the biases might shape the investment decisions and contribute to market anomalies. Sub-paragraph 3.3 highlights the practical implications for investors and financial advisor.

Chapter four examines the criticisms and limitations related to the behavioural finance segment. The chapter outlays the potential weaknesses and alternative viewpoints which are not considered while reviewing the decisions solely from the behavioural finance perspective. The sub-paragraphs 4.1, 4.2 and 4.3 are discussing the critical perspectives of behavioural finance by assessing the applicability more to real-world financial market movements.

Chapter five summarizes the key findings of the thesis and highlights the implications within the financial decision-making.

2 Overview of Behavioural Finance

Behavioural finance as a subfield of financial economics examines how psychological and overall human factors influence the investment decision-making. Behaviour finance consists cognitive and emotional biases which are impacting, once considering the situations in which the decisions are made by an individuals and institutions. Classical thought of finance bases its imagery under throughout of always relying on rational factors which construct the conception of Efficient Market Hypothesis (EMH) as the study by Brown (2010) demonstrates.

As opposed to Efficient Market Hypothesis (EMH) the cognitive and emotional biases can affect the decisions to lead to market anomalies and inefficiencies. The opposite of psychological factors effecting to the decisions, is ignoring the effects which is the foundation of the traditional financial theories. The rational line of thought supports the knowledge of assuming that investors behave rationally apart from the surroundings. Once investors act rationally, the markets are efficient, and all the available data is instantaneously affecting accurately to the pricing of assets.

Key principle of behavioural finance is to build up an understanding of the factors affecting towards the decision-making. The suggestion of behavioural finance supports the information utilization of the real-world principles. Financial behaviour as behaviour in general deviates its rational and ideal market theories due to human limitations. Humanity principle of cognition, emotion, social influence does affect as a surrounding principle once the decisions are made.

2.1 Key Theories in Behavioural Finance

The foundation of behavioural finance was created as a countermeasure to Efficient Market Hypothesis (EMH) which assumes rational behaviour regardless of the surroundings. Efficient Market Hypothesis (EMH) which was presented by Fama, E. F. (1970) assumes,

that the market pricing always reflects to all the information and data available on the market.

Nonetheless market anomalies as momentum affections, excessive price fluctuation and market pricing bubbles exists and effect. The Efficient Market Hypothesis (EMH) have not provided sufficient theories nor data to support why such reflections nonetheless tend to occur; due to these behavioural biases the Efficient Market Hypothesis (EMH) model has been questioned and challenged.

Behaviour finance basic principles utilize the understanding of psychological and humanity factors. Substantially the cognitive psychological effects such as heuristics and framing effects. Real-world experimental economic phenomenon support and explain the investor decisions which deviate from the rational systematic behaviour.

The two key research branches characterize the study momentum of behavioural finance these science orientations are the principle of “Limits to Arbitrage” and “Investor Psychology” according to Barberis, N, and Thaler, R. (2003).

The key research branch of Limits to Arbitrage by Shleifer and Vishny (1997), over goes the possibility realism of how rationally one can act. According to their study even the rational arbitrageurs cannot always notice all the data reflecting to the possible mispricing situations. Proceedings such as market frictions, overall risks and constraints as for example short-selling costs cannot always be projected and calculated once forming a rational conclusion of the ensemble.

Another key research branch focuses on Investor Psychology. The main idea and founding lie on systematic biases as well as in investor heuristics in use while the decisions are made. Some theme related noteworthy models to name which explain phenomena such as over- and underreaction to news are, Barberis, Shleifer and Vishny (1998), Daniel,

Hirshleifer and Subrahmanyam (1998) and Hong and Stein (1999). All these above-mentioned studies argue considering the aspect of behavioural finance.

The most developed and topical tendencies of behavioural finance do also consider the aspect of for example corporate managers being overconfident while making financial decisions such as capital structure decisions. The factors potentially reflecting to financial decision-making contain social affections as well as institutional factors as for example local bias and herding bias.

2.2 Cognitive and Emotional Biases in Decision-Making

The main core of the behavioural finance aspect is to be able to identify specific biases and reflections, that are affecting the decision-making process of investment decisions. These various biases do bright up several kinds of different reflections, which might lead to predictable errors in human judgement. These predictable errors of judgement may lead one to suboptimal financial outcomes based on the challengingness of avoiding biases without understanding the theoretical realization. The biases selected to this thesis contain, “herding mentality”, “overconfidence bias”, “anchoring and adjustment” and “loss aversion” biases.

2.2.1 Herding Mentality

Herding mentality is one of the behavioural biases, that exist. Herding mentality can also be presented as herding behaviour. Herding behaviour describes an action where investors mimic the decisions made by others. While someone is herding, they do not rely on their own independent data analysis or judgement once making financial decisions. On financial markets herding behaviour tends to happen when a group of investors make same kind of investment decisions based on mass phenomenon on the market. These actions tend to happen into the same direction within the financial markets as well as

they are within similar timeframe. This kind of action causes collective behaviour, which may cause the assets diverge from their fundamental asset valuations.

The concept of herding behaviour can be illustrated through two main perspectives. First one of these is informational herding. Informational herding happens when individuals suppose that other investors are holding superior data and information regarding to their investment decisions. The belief of others carrying some more current and more correct information leads the individual to follow the investment actions made by those individuals. The imitation then leads to herding phenomenon.

Second of these main perspectives is called reputational herding. Reputational herding is happening when institutional investors or other professional analysts are copying the actions made by other investors despite the fact, that their private information would suggest otherwise. These actions are typically made to protect their creditability or future career prospects so, that they are not negatively standing out alongside others.

According to study made by Kumar and Goyal (2016) herding mentality increases while the market instability increases. During the periods of unclear future and volatile market, the investors tend to favour herding situation with the majority, rather than being the only one incorrect during time of changes. A larger phenomenon of this kind of behavioural tendency can lead to create price bubbles. Abnormal trading cycle and excessive trading might eventually push financial markets to market crashes.

The study made by Kumar and Goyal (2016) also states, that herding is not necessarily emotional and irrational. Under uncertainty such as within conditions where information data is limited or when investor is making short investment decision, the ultimate investment strategy might also be following the market movements. In these kinds of circumstances herding behaviour is rational choice and not irrational nor tensional.

In the study made by Spyrou (2013) the herding behaviour is categorized to two main categories of herding. These categories are spurious and intentional herding. Spurious herding is behaviour where the investors intentionally react and adapts in line with the majority with the shared available public information.

On the other hand, intentional herding is behaviour where investor actively decides to imitate the decisions made by others due to the strategical or psychological motives. The difference between these two herding habits is critical once evaluating whether the actions are affecting towards market inefficiency or informational efficiency. An example of the differences could be illustrated by situation where private information spread is helping the prices to adjust towards the actual fundamental value. Whilst about the herding behaviour leaning towards mimicking trends may lead to excessive market volatility and mispricing on the market.

The study made by Baddeley et al., (2012) emphasizes the herding normality among investors. The herding is behaviour which happens within both individual investors and institutional investors. Baddeley et al., (2012) findings demonstrate that herding behaviour is prevalent behaviour. The study also evidences that the herding mentality bias does weaken significantly the rational investment decision-making. This behaviour is likely to occur among investors who are less experienced or avoid more risk taking.

According to the study made by Lin (2011) also the demographical factors might also effect on the probability tendency to be more likely to follow herding behaviour. The demographical factors the study points out are for example age and gender. According to the study younger and female investors were more likely to show greater susceptibility to this herding bias.

Madaan and Singh (2019) state in their study, that empirical findings support the vision of herding mentality being one of the most powerful biases once measuring the effectiveness towards investment decisions. Their research results deduce, that herding

behaviour becomes stronger during market anomalies and during crises. This kind of behaviour might lead to more similar investment behaviour and that can often lead to significant losses in overall well-being.

Madaan and Singh (2019) states that financial intermediaries and financial advisors should prepare and educate investors to prevent such a bias happening. This kind of preparation could support investors to be more independent and rational regarding to investment decision-making.

In conclusion herding mentality is a powerful psychological bias which might have an impact towards market efficiency and individual investment outcomes. Even though sometimes herding behaviour might be considered and planned it is also more than just a rational act by some investors. The prevalence of herding behaviour highlights the importance of understanding and being aware of such a psychological bias which might affect to both personal and institutional financial decision-making. Understanding, recognizing and mitigating the herding tendencies can lead to more stable, rationally made and diversified investment decisions and strategies.

2.2.2 Overconfidence Bias

Overconfidence bias is a behavioural finance related bias. Overconfidence bias is a psychological tendency which might affect to a decision-making made by an individual. Overconfidence bias refers to individuals' unrealistic faith of one's capability of accuracy and knowledge towards overall abilities or in ability to predict.

In financial economy the overconfidence occurs in decision-making. Embodiment of such a behaviour arises when investors overestimate their understanding and knowledge of market conditions, underestimate the risks regarded to actions or have a belief that they are consistently able to outperform the market. This kind of cognitive distortion might lead to excessive trading, low diversification of investment portfolios, which ultimately tends to lead to underperforming return for the investments.

Kahneman and Tversky (2002) made research about the affection of psychological reflections. In their study they identified overconfidence as key deviation once assessing the impacts of rational decision-making. The framework of overconfidence contains three main entities which are: overestimation, over placement and over precision. These are different kind of beliefs and conditions which all lead to fell for overconfidence bias leading to potentially poor investment decisions.

Overconfidence entities all are slightly different from each other. The deviation of overestimation is a belief where an individual sees their level of performance better than it is. Over placement is affiliated to the comparison with other investors. In over placement an individual believes that their acknowledgement and ability to perform is in better level than others. Over precision on the other hand is an excessive ability to forecast and excessive certainty in one's beliefs.

In study made by Chen et al. (2007) they analysed the investor behaviour in China. Their empirical research contributes towards the existence of overconfidence bias. The study considers the chain of events leading to overconfidence bias and over goes the consequences for the individual investors.

Chen et al. (2007) discovered that overconfident investors were more active on the market and traded more frequently. Overconfident investors also diversified less their assets and concentrated more of their assets to investment instruments and products they believed in. This kind of behaviour was affiliated to smaller returns compared to average market returns.

The research made by Chen et al. (2007) also discovered, that there was always no correlation between ability to avoid overconfidence and the length of investor experience. Some of the examples even demonstrated a situation were experienced investor had

stronger liaison towards the overconfidence bias, likely due to previous successful practise of earlier trades.

Study made by Mishra and Metilda (2015) examined the overconfidence bias reflection among the influential factors of gender, education and investment experience. The results Mishra and Metilda (2015) got, exhibited data which showed, that overconfidence bias was more likely to happen for men than women. The study also found a connection with the likeliness and level of education as well as with investor experience.

According to the findings of the study, knowledge accumulation does not always lead to more effective for rational investment behaviour. According to the research made by Mishra and Metilda (2015), increased level of knowledge might even highlight more the propensity to fell for the cognitive biases for as example the bias of overconfidence.

In additional for findings already presented Mishra and Metilda (2015) found a strong connection between overconfidence bias and self-attribution bias. The self-attribution bias is another psychological bias where an individual takes credit from successful actions but blames external factors in situations of failures. This kind of behaviour refers to create a perpetual loop were the functions feed each other and breed the overconfidence phenomenon.

According to Malmendier and Tate (2005) behaviour finance bias of overconfidence does not only limit to individual investors. The impact of overconfidence bias is also affecting to the level of corporate executives. In their study Malmendier and Tate (2005) discovered the investment behaviour of overconfident CEOs.

In their results Malmendier and Tate (2005) examined, that overconfident CEOs are more probable to captivate excessive investment decisions. This behaviour is emphasized once internal financing is a possibility. The results of the CEOs behaviour according to the study formed a conclusion, that they tend to overvalue their own company by

undervaluing its market price on the market. This kind of chain of reasoning resulted in a situation where CEOs were avoiding external financial opportunities.

The belief of undervalue on the market frequently leads to inefficient capital allocation, which leads to decrease in the value of the company. The findings of the study made by Malmendier and Tate (2005) provide evidence, that overconfidence might cause delusions which can affect in corporate strategic decisions. This kind of behaviour might end up being critically harmful in the long run of organizational performance.

At the year 2021 Grežo studied the overconfidence bias with more data-oriented view. The study made by Grežo (2021) conducted a meta-analysis concluding 34 different studies. The results of the study confirmed a coherent positive, although moderate correlation between the bias of overconfidence and the action of financial decision-making. The findings bring up an element of difficultness to identify the overconfidence phenomenon from your own behaviour.

According to the data conducted by Grežo (2021) the liaison between overconfidence bias and recognition of it, seemed to be difficult since the study managed to gather more proven evidence of the bias via the frequency of trading or investment aggressiveness rather than from the self-assessment questionnaires, which an individual filled.

These finding advocate, that the behaviour of overconfidence might typically occur below the conscious awareness. This aspect makes it difficult for investors, corporates executives and all investors to identify in themselves and after, that react since without understanding of felling for a bias it makes it difficult to react and adapt, if they do not even become impossible.

Overconfidence bias seems to have more implications to personal and institutional financial context than people tend to understand. The overconfidence bias steers towards excessive trading and might favour under-diversification leading potentially to poor

performance outcomes. No one is immune for overconfidence bias without actions and understanding the existence of the possibility according to study made by Barber and Odean (2001).

For efficient and successful decision-making even experienced and highly educated investors could use objective tools to recognize and mitigate the phenomenon of overconfidence bias. Such a tools could be use of evaluation metrics and encourage feedback loops. Also, framework which consider behavioural related vulnerabilities could be implemented to support the decision-making process.

2.2.3 Anchoring and Adjustment

Behavioural finance bias about anchoring and adjustment is a bias which has been discovered and much researched. The studies have produced a lot of material about the phenomenon. In the anchoring and adjustment bias an individual relies strongly on an initial reference point called anchor. In this bias an individual fails to adjust and adapt to new available information once anchoring from the previously true data.

Within financial markets the phenomenon might appear in a context where investors anchor their believes to past prices, earnings or professionally made analyst estimates when even more recent or relevant new information and data could have been available. If an investor is affected by the bias it can lead to systematic and continuous errors in forecasting, valuation and more broadly to investment behaviour.

Anchoring and adjustment bias was firstly presented by Tversky and Kahneman (1974) and it has been studied extensively after it. The main financial aspect is to explore the efficacy of the bias towards economic and financial decision-making surroundings.

Especially markets with a lot of uncertainty tend to rely on the anchoring and adjustment bias due to the lack of new information available. In these markets investors use the prior price levels, historical estimates and previous analyst expectations as a cognitive

shortcut to form the expectations for future returns events such as returns and price levels.

Kaustia, Alho and Puttonen (2008) did a study about the anchoring and adjustment bias influence. Their research was conducted as a controlled assessment to gather data and understand better the effect of anchoring. The study group was formed from Scandinavian finance professionals and business students. In the study the main purpose was to experiment the extent of anchoring in stock return expectations.

The outcome of the study revealed that students were more prone to be affected by anchoring and adjustment bias. Despite the fact, that finance professionals were less susceptible to be affected by the anchoring and adjustment bias, the bias persisted even among experienced finance professional investors. The finance professionals were prone to anchor their expectations of future returns and presume, that the historical figures provided significant impact for the future events.

During the experiment Kaustia, Alho and Puttonen (2008) discovered, that the professional investors were often unaware of the influence these anchors had towards their decisions. This kind of study results indicates the subconscious nature of the whole bias of anchoring and adjustment.

As the research study by Kaustia, Alho and Puttonen (2008) prove, even the experienced finance professionals were tending for the bias and not even the background of knowledge or expertise provide a full immunity from the bias of anchoring and adjustment.

The study made by Andersen (2010) examines the real-world impacts of decision results based on anchoring and adjustment bias. The empirical study results conclude and confirm that the correlation between the hypothesis of anchoring and adjustment bias influence and the real occurrence exist, and the bias does effect on investment decisions.

In the study Andersen (2010) illustrates the evidence of anchoring effects in the financial markets throughout trading algorithms and outlining the market participant behaviour towards the reasoning once making trading decisions.

Andersen (2010) examined, that the recent price levels where perceived as a normal prices and the present moment decisions were influenced by the “normal” previous price. Such a behaviour perfectly describes the anchoring phenomenon. This kind of behaviour might sequel to price inertia, under reactiveness to new available data and new, ultimately leading to mispricing of assets. The effectiveness of the phenomenon is more likely to happen in less efficient and thinly traded smaller markets. According to Andersen (2010) the anchoring and adjustment bias realization offers arbitrage opportunities and overall challenges the notion of consistently efficient or rational markets.

Owusu and Laryea (2023) studied the anchoring and adjustment bias implications at emerging markets. Their study proves, that the bias is also evident within different kind of market situations. More precisely Owusu and Laryea (2023) studied the Ghanian mutual fund markets and investigated from the perspective of anchoring and adjustment bias phenomenon.

The researchers observed, that regardless of the expertise and prior financial knowledge, the investors tended to be influenced by the anchoring and adjustment bias. Despite the expertise the past fund performances such as prices formed predictions of the future prices even with the group of finance professionals.

Owusu and Laryea (2023) detected in their research, that even in some examples the greater the financial knowledge was, the more prone some of the investors were to fall for the bias. Also, the demographic factors such as gender relation towards being susceptible to influence was studied.

Owusu and Laryea (2023) observed, that female investors were more likely to anchor compared to their male counterparts. The findings of the study propose, that anchoring, and adjustment bias is not just a general phenomenon that effects similarly to everyone. The study examines, that such as demographic factors influence to the bias intensity, which challenges and complicates the understanding process as well as the attempts to mitigate the effects of the anchoring and adjustment bias.

The anchoring and adjustment bias behaviour has also been discovered in other emerging markets, Bouteska and Regaied (2020a) studied the reflection of the phenomenon in Tunisian stock market. According to their findings Bouteska and Regaied (2020a) found, that financial analysts typically anchored on past earnings once constructing future predictions and forecasts. This type of behaviour lead to insufficient adjustments despite new and more relevant company performance data and information could have been available.

The analysis made by Bouteska and Regaieg (2020a) discovered, that in the phenomenon of anchoring and adjustment the analysts displayed asymmetrical reactions dependent of was the new news positive or negative ones. The reaction to positive news were over-reaction and the reaction to the negative news was under-reaction. Both reactions effectuated occurrence of anchoring and adjustment bias. The occurrence of the bias contributed to prediction malfunctions and challenged the market expectancy accuracy possibilities.

Anchoring behaviour is also affiliated to behavioural finance phenomenon of disposition effect. In disposition effect investors are unwilling to sell their losing investments, partially due to the purchase price acting as psychological anchor of notion. This kind of behavioural finance bias behaviour does not only misshape solely the individual outcomes. The actions of singular actions might also aggregate into mass market phenomena once the quantity amount is sufficiently significant and that way create market effects. This kind of market effect can create variation of actions such as delayed price

corrections and increased volatility levels once the informational uncertainty is present on the market.

Anchoring and adjustment bias does effect on the behavioural finance field, and it does create a psychological tendency. The bias affects to investors with and without expertise and it might be even stronger among professional investors and once knowledge levels has risen. So even financial education and investor experience from the market does not protect from the bias to be affective as the study by Kaustia et al. (2008) illustrates.

The bias keeps creating challenges in to forecasting, valuation and investors trading behaviour. Understanding and awareness of the presence of the anchoring and adjustment bias and its influences, does offer essential assistance once considering how an individual can improve on investment decision-making process. Also, the objectivity ensemble of financial analysis does become more relevant once understanding the affection of the bias related to the financial decision-making process.

2.2.4 Loss Aversion

Behavioural finance bias of loss aversion describes the tendency of an individual to experience the pain from losses greater than the enjoyment of equivalent gains from the investments. Loss aversion bias was first presented by Kahneman and Tversky (1979) in their study about the framework of prospect theory. The concept of loss aversion implies on a phenomenon where an individual requires greater potential gain, in contrast to potential financial loss. So, the risk levels of, how big of a financial risk they are willing to take compared to potential profits. Once the willingness to accept the risk regarding to the potential losses is not on the line with the desire to gain profits, the risk yield factor is probably not synchronized.

In the field of behavioural finance this bias related to the financial decision-making drives the investors to act conservatively, avoid necessary risks and in its entirety react

asymmetrically to potential losses and profitable gains. This kind of behaviour occurs even when these kinds of reactions are not based and justified by fundamental factors.

The core of loss aversion ties around the idea of reference point comparison. The investors believes that the utility is defined by the reference dependent factors and investors assess outcomes relative to a reference point rather than is absolute fundamental terms. By reference point in this scenario is meant the initial investment value or previous peak value point of a price. The study made by Merkle (2020) overgoes the core illusion of financial loss aversion. According to the findings the investors tend typically to overestimate the emotional negative impact of losses before even facing them.

The phenomenon of loss aversion also exists in institutional corporate behaviour and is reflected in financial decision-making. Neel (2025) researched the loss aversion effect of an investors and managers. The study was conducted from a financial reporting analysis which was made across 49 countries.

The findings of the research by Neel (2025) present, that especially with countries that are most keen on avoiding the losses appear to be profit interruptions. The study also found out that a lot of companies also reported small profits rather than small loses, which propose the financial behaviour of active loss avoidance.

This kind of behaviour is also linked with managerial opportunism or performance smoothing which strives to avoid negative reactions from external investors on the financial markets. Also, the market pressure directs into direction where market penalties from zero earnings appear to be higher in loss aversion environment. This kind of surroundings directs to pressure in financial performance resulting into behaviour were loss-aversion theme reflects in reporting practises.

Loss aversion bias reflections practically appear in financial decision-making once talking for example about asset allocation spread. Also, the strength of risk preference is a factor where the loss aversion bias can be observed.

Benartzi and Thaler (1995) discovered in their study, that loss aversion investors are demanding higher risk premiums to accept investments with potential downside risk. This kind of behaviour does create a phenomenon called equity premium puzzle. In this kind of phenomenon institutional investors may adjust their investment portfolios to be safer due to the loss aversion bias and fearing the risk of losing. This kind of behaviour might happen especially during times of unstable market conditions. The behaviour might be a protection tool to avoid losses and preserve reputational standing.

Study made by Haigh and List (2005) examines the loss aversion bias affections among institutional investors. Their study proves that institutional investors might act dynamically and become more conservative on their financial behaviour after experiencing some losses. This kind of reactivity based on emotion might carry the investors cycle in to more short-term portfolio declines due to emotional overreaction. Above-described dynamic behaviour confirms the loss aversion bias affection and construct understanding of its fluctuating and experience related context linkage rather than being static and permanent feature.

Neel (2025) argues that loss aversion bias does not always end up appearing as a negative phenomenon. Neel agrees that it has its downsides, but despite its drawbacks it might also genuinely push for better performance. The factors Neel (2025) point out are related to some cultural and economic settings.

According to Neel (2025) loss aversion bias acting as psychological factor alongside behavioural tendency has a possibility to lead to higher quality earnings. If this could happen, the reasoning would be due to managers striving towards better results while motivated by the forcing power to avoid potential losses. Once the fear of loss aversion bias

is present the tendency to be more motivated might after all turn out to be better financial outcome rather than just being distorted by the fear manipulation of loss aversion bias.

The loss aversion bias is an influential bias among the field of behavioural finance biases. The affection of loss aversion bias reaches both the institutional managers, investors and corporate level decision-makers as well as individual investors. The loss aversion effect is an emotional occurrence and happens when an individual emotionally against rationality reacts to market losses according to the study made by Tversky and Kahneman (1991). Loss aversion bias phenomenon is often exaggerated by forecasting and tend to create bigger impact than would be necessary.

Once able to recognize and understand this phenomenon it might help to avoid the negative impacts which it might have. The help can be critical and cumulated by decisions based on investment strategy, risk assessment and financial reporting. Once awareness only will not eliminate the possibility of falling for loss aversion bias, it still can help to recognize it. Once aware of it, an individual might be able to frame their decisions more rationally and avoid mistakes caused by psychological bias tendencies.

3 Importance of Biases in Financial Markets

Behavioural biases serve as a key explanatory principle for market outcomes that differ significantly from the assumption of rationality. Traditional financial theory assumes that investors make decisions based on comprehensive information that has been processed and carefully considered to maximize expected return.

Behavioural finance research has broadened this view by highlighting additional factors that influence it. Psychological distortions frequently impact financial decision-making and shape investment behaviour. This kind of behaviour might systematically lead to unpredictable departures, considering the traditional financial theory, which predicts rational decision-making. Behavioural finance biases can affect and contribute to mispricing, excessive trading, volatility, and persistent market anomalies.

3.1 Reflections on Key Biases in Behavioural Finance

A study by Bouteska and Regaieg (2020b) analyzes the impact of behavioural bias on investors' decisions by evaluating their market performance on the US stock markets. In the study, the loss aversion stood out.

The loss aversion phenomenon refers to the greater emotional impact of losses compared to equivalent gains within financial markets. The empirical evidence from a study conducted in US stock markets shows that loss-averse investors tend to hold onto depreciating assets in the hope of a potential future recovery. The effect also occurs when profits are prematurely realized, which ultimately limits the performance and efficiency of asset reallocation.

Simultaneously, overconfidence bias leads to beliefs where investors overestimate their accuracy and abilities to predict the financial market behaviour. The research made by Bouteska and Regaied (2020b) shows that overconfidence behaviour might lead up to heterogeneous effects. These effects might have both positive and negative impacts. The

effect might improve performance within some contexts by encouraging to risk-taking while concurrently prompting excessive trading and misjudged asset valuation in others.

According to the study by Bouteska and Regaied (2020b), the biases have different impacts on success, varying depending on the industry differences. Overconfidence has shown a positive influence in industrial market sections, whereas within service-oriented firms, the overconfidence has reflected negatively. These examples illustrate the differences in different areas of market industries.

The study made by Padmavathy (2024) analysed the anchoring bias and its effect on decision-making when investors are highly dependent and rely heavily on historical reference points. The anchoring bias distorts the relevance of new available data and information, rendering these data points as irrelevant information.

Herding behaviour, as a behavioural bias, on the other hand, emerges when an individual strives to mimic the behaviour made by others rather than conducting their own independent market analysis, according to Padmavathy (2024). This kind of behaviour exacerbates speculative market cycles, which may be based solely on beliefs. The existence of the herding behaviour supports the formation of market anomalies and volatility. These kinds of actions challenge the principle of efficient market conditions.

3.2 How Biases Shape Investment Decisions

A study by Padmavathy (2024) demonstrates that behavioural finance biases have a direct impact on investment decisions. The portfolio collection is dependent on various factors. Biases are affecting, for example, overall stock picking, trading frequency cycles, and market participation dynamics.

According to Padmavathy (2024) the loss-averse investors tend to adopt to defensive strategies more frequently. The thought of earning and profiting is a weaker emotion compared to the fear of losing capital. The main purpose of investors affected by the

loss-averse bias is capital preservation. This kind of behaviour tends to lead to reluctance to make changes to the portfolio or to exit loss-making investment instruments.

Padmavathy (2024) notes that herding behaviour can also exacerbate asset mispricing. When collective optimism gathers, it can advance the market movements once collective optimism creates price bubbles, while the pessimism around the market conditions spreads and accelerates the market downturns.

Behavioural finance bias of overconfidence prompts an individual to overestimate their own ability and accuracy within the market. The biased affection stimulates investors to develop frequent trading habits and reduces their reliance on external information sources.

Ranjan (2025) demonstrates that evidence suggests such tendencies are not only occurring within retail participants but also within both parties, including financial professionals and banking managers, who may also be prone to overconfidence bias in their risk assessments and strategic decision-making.

Furthermore, anchoring distorts the investment judgment by encouraging investors to rely on historical price levels. This kind of behaviour hinders the accuracy of market valuation and hinders timely adjustments to new available market information.

Behavioural finance biases all illustrate a view of humanity in decision-making. Once an individual is involved in decision-making, the impact of objective financial indicators is not the only factor influencing the final decision-making. The human principle brings with it cognitive perspectives, such as emotional responses and social influences.

3.3 Practical Implications for Investors and Financial Advisors

Acknowledging behavioural biases offers a notable advantage for decision-making in the financial markets. Once understanding market behaviour patterns and the influences of

market power, it provides new perspectives for investment strategy-making and other advisory practices.

For an individual investor, improved knowledge helps achieve a better understanding of the dynamics that shape financial markets. Awareness of these propensities can help reduce the risk of being affected by biases such as loss aversion and overconfidence. The ability to detect and react to biases can help create disciplined long-term financial strategies.

To stabilise individuals' market behaviour, approaches such as diversification, rule-based portfolio rebalancing, and automatic savings mechanisms may help reduce emotional reactions during periods of market volatility.

For financial advisors and professionals, acknowledging and using the field of behavioural finance enhances communication, risk profiling, and strategic planning. The study by Ranjan (2025) indicates that once the advisory framework recognizes the behavioural finance aspect, including more detailed cognitive and emotional tendencies, it strengthens the client's trust and reinforces the development of more suitable financial solutions.

Once the institutional contexts are considered, the use of behavioural finance principles and their practical application support organisational resilience and performance. Ways to apply these behavioural principles are applicant for instance in credit evaluations, risk assessments and managerial decision-making.

4 Criticisms and Limitations of Behavioural Finance

The subfield of behavioural finance and economics has raised awareness of the psychological factors that affect financial decision-making. However, despite its growing influence and recognisability in practice and academia, opposing beliefs also exist among researchers. Püce (2019) argued in her study that the field also has its limitations. The criticisms and limitations raised concern the ideological foundations, methodological rigour, and practical applicability of the behavioural finance concepts.

Püce (2019) categorised these different areas of criticism into three primary dimensions. These dimensions are ideological, evidence-based, and practical. Each of these categories reflects the challenges that may affect the credibility and applicability of behavioural finance principles in modern financial markets.

4.1 Ideological Criticism

One of the main reasons for ideological criticism is concern about the lack of a unified theoretical framework for behavioural finance. The field of behavioural finance consists of various models and explanations for multiple psychological phenomena, but the foundation lacks consistency and an overarching theory that would integrate these perspectives into a united and coherent paradigm, according to a study made by Fudenberg (2006).

The polarization of the theoretical framework around the behaviour finance challenges its predictive consistency. McChesney (2014) argues that the field of behaviour finance is primarily descriptive and focuses on illustrating the behavioural decision making of people rather than focusing on how people should behave.

Behavioural finance enhances the level of understanding of the realism but only provides limited normative guidance to improve individuals' decision-making. In addition, sceptics argue that the market inefficiencies occurring and identified by the behavioural

finance theories may only be temporary, as rational investors often correct from irrational patterns (Fama 1998).

Largely ideologically the criticism around behavioural finance leans on the challenges related to coherent structure that would explain the factors when and why certain biases are able to dominate the financial behaviour of an individual.

4.2 Evidence-Based Criticism

Evidence-Based criticism builds around the methodological aspects of the studies made around the theoretical framework. The methodological critics point up the limitations in the experimental validity. According to Henrich et al., (2010) many of the behavioural studies rely on laboratory experiments with only small, non-representative samples, which affects the external validity by weakening the trustability.

The consistency in research results also raises some concerns according to Levitt and List, (2007). They argue in their study that results of the behavioural finance studies may vary depending on the framing or context. This kind of variation raises concerns about the replicability and robustness.

In addition of these according to Püce (2019) study, Resnick wrote 2018 about the affection of publication bias has accumulated to a point where the selective reporting validates more the positive results which contributes to a wider replication crisis within behavioural finance research.

These challenges underscore the need for a larger real-world datasets and transparent methodologies to completely validate the behavioural finance theoretical framework and meet the reliability requirements of a financial theory.

4.3 Criticism of Practical Application

The critic towards practical application includes the actions that may affect to an individual. Within the behavioural finance framework especially nudging phenomena raises concerns on its ethical and practical scrutiny. According to Angner (2016), critics warn that nudging may be promoting paternalism and this way subtly manipulating individuals' choices once trying to develop welfare improvement.

The risk of unfavourable or poorly designed nudges may also occur due to lack of competence. The policymakers and financial advisors may in advertently apply behavioural interventions which conflict with the individuals' best interest. These situations may occur dues to self-interest, general lobbying influence or limited competence in behavioural finance design as Whitman and Rizzo argued in 2007.

Researchers argue that financial education and transparency are more eligible to present sustainable solutions than behavioural manipulation according to Gigerenzer (2015). According to Loewenstein and Ubel in 2010 behavioural interventions typically have limited long-term effects. According to study for these reasons behavioural interventions would be more suitable foundation for being complementary not a replacement for any regulatory measures.

5 Conclusions

This thesis has described, observed, critically analysed and examined the phenomenon of behavioural finance and its reflections to real world situations around the financial decision-making process. The thesis is conducted by synthesizing existing literature.

The study has illustrated the humanity principle and factors of the rational financial industry. Behavioural finance strives to consider the encompassing cognitive limitations and emotional factors which are affecting to decision-making process and impact systematically to deviate decisions made from purely rational actions which are predicted by the traditional financial theories.

Traditional financial theory framework like the Efficient Market Hypothesis (EMH) presume that all the available information is processed and rationally considered to optimize the utility. The thesis found support from studies that psychological distortions are fundamental and tend to affect towards financial decision-making. Critical and contrary thoughts were also found from studies that mentioned the occasional inconsistency and the short-term affections which manoeuvre the financial decision-making of investors by external interests.

The research focuses on four of the primary biases. These biases are herding mentality bias, overconfidence bias, anchoring and adjustment bias, and loss aversion bias. These behavioural finance tendencies are solely not affecting to individual market outcomes. The impact of the biases can aggregate into mass phenomena that could contribute to market inefficiencies and persistent anomalies.

For an individual investor the recognition and understanding of the biases and their propensities is crucial information to develop disciplined long-term strategies. The understanding of the biases and their impact can also mitigate the emotional responses during times of volatility. Financial professionals and advisors also benefit once they can integrate behaviour finance phenomena into risk profiling. This knowledge might strengthen

the client communication and build trust, and optimally also lead to development of more resilient financial solutions.

Critics argue that despite of the valuable insights provided by the field of behavioural finance it is also important to acknowledge the academic criticisms around the phenomena. According to critics the ideological and methodological foundations around behavioural finance lacks a single unified theoretical framework. The behavioural finance field often relies on experimental foundations which are fully not able to reflect to the complexity of global financial markets. Critics also bring up the use of behavioural interventions which might raise some ethical concerns regarding to paternalism and the long-term efficacy of the measures.

Even though there are still contrary interpretations to the financial field of behavioural finance and its biases, this thesis concludes that while the awareness alone does not eliminate the risk of falling for psychological biases, acknowledging and understanding the tendencies enables more rational decision-making while making decisions. Behavioural finance is an essential supportive tool in addition to traditional and rational financial models. Fundamentals of behavioural finance guide to navigate through the inherent irrationality of human-driven markets.

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