DELHI SCHOOL OF BUSINESS

By Vivekananda Institute of Professional Studies-TC

“Impact of Behavioural Finance on Investment Decision Making: A Systematic Literature Review and Future Research Directions”

By

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Capstone Project Report

submitted in partial fulfilment of

PGDM Programme 2022-24

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DECLARATION

We hereby declare that this report "**Impact of Behavioural Finance on Investment Decision Making: A Systematic Literature Review and Future Research Directions**' is our own work, to the best of our knowledge and belief. It contains no material previously published or written by another person nor material which to a substantial extent has been accepted for the award of any other degree or diploma of any other institute, except where due acknowledgement has been made in the text.

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CERTIFICATE FROM FACULTY GUIDE

This is to certify that work entitled ‘**Impact of Behavioural Finance on Investment Decision Making: A Systematic Literature Review and Future Research Directions**’ is a piece of work done by ‘Isha Chaubey and Kanishka Garg’ under my guidance and supervision for the partial fulfilment of degree of PGDM at Delhi School of Business To the best of my knowledge and belief this study embodies the work of the candidate. This requirement of the rules and regulations relating to the ‘Capstone Project’ of the institute, is up-to the standard both in respect of content and language for being referred to the examiner.

Signature

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Table 1: Acronyms

Acronym	Full Meaning
EMH	Efficient Market Hypothesis
MPT	Modern Portfolio Theory
ESG	Environmental Social Governance
FOMO	Fear Of Missing Out

Abstract

This paper delves into the realm of behavioural finance, exploring how human behaviours intersect with financial decision-making. It challenges traditional theories by highlighting the impact of biases, emotions, and mental shortcuts on investment choices, contrary to the assumption of purely rational decision-making. The study aims to review existing literature to identify key factors driving investor behaviour and their implications for financial markets. Through a systematic literature review, the paper examines various behavioural biases, individual differences, socio-economic factors, and contextual influences on investment decisions. Moreover, this paper delineates the current research the behavioural finance with the technologies, the cross-cultural study and the advanced analytical techniques. It also points out the inherent defects of the review and keeps an eye on the future research.

Keywords: Behavioural Finance, Behavioural Biases, Investment decision making

Introduction

Over recent years, the discipline of finance has come to be reframed by behavioural finance, which shifts financial approaches to reconsider assumptions that investors are rational and efficient, and replaces them as a field that embraces the subconscious role of biases, emotions and 'heuristics' accumulated in our experiences and learning. Behavioural Finance is an approach that considers every decision that we make reflects biases, emotions and 'heuristics', which could have far-reaching effects on investments and markets.

Financial theories such as the Modern Portfolio Theory (MPT) and the Efficient Market Hypothesis (EMH) assume that individuals will always make perfectly rational decisions, using all available information to maximise their profits. But research shows that people frequently do not behave as these theories predict. For example, investors often overestimate their own skill, become too risk-averse, follow the crowd, or become overly focused on one part of a problem (eg, risk). Given these and other biases, investors very often make choices that they would regret later on.

To have any hope of understanding how markets work and how best to operate within them, it is fundamental that you understand just how narrow the conceptual space in which you can operate really is. From the effects of behavioural finance on everyday investment decisions, to their visible contribution to price bubbles and crashes, it is essential that we incorporate insights from behavioural finance into our financial models and mechanisms of decision. Only in this way will our investors and policymakers make better decisions.

We review the most relevant recent behavioural finance and investment choice research to uncover the drivers of investor behaviour and their influence on financial markets. As well as identifying areas that are under-researched, we offer a roadmap of fruitful directions for future research, which can improve our theoretical and practical understanding of the role of psychology in finance, and help to develop better decision-making strategies.

Behavioural finance literature focuses on how investors' decisions are influenced. It discusses various investment biases that influence individual investors' behaviour and the market in general. This essay will focus on how behavioural finance literature can help us understand why investors make certain decisions and how it can affect investment choice. It will not discuss any particular investment strategies or financial products.

Improving our understanding of how psychology and finance intersect, particularly in how our behaviour influences the decisions we make when investing and by uncovering new insights that can benefit both investors and policymakers, this study has the potential to help people make better choices in the financial world and ultimately improve investment results for everyone involved.

Research objective and Motivation

Humans tend to let their biases influence their investment choices, which can often result in less-than-ideal outcomes. It's important to delve into the reasons behind these biases and what they mean for making better investment decisions. Behavioural finance is a diverse field that combines psychology, economics, and finance to understand these biases. By conducting a thorough review of existing research, we can consolidate what we already know and pinpoint areas where more research is needed in this field.

Following are the objective of the study:

- Perform a thorough analysis of the body of research to determine how behavioural finance theories and principles affect the process of making investment decisions.
- Explore how individual differences, such as personality traits and cognitive abilities, interact with behavioural finance concepts to shape investment strategies and outcomes.
- Examine how demographic and socioeconomic variables affect an investor's vulnerability to behavioural biases during the investing process.
- Identify and categorize the key behavioural biases documented in the literature that influence investors' decisions in financial markets.

Research Questions:

RQ 1: are the key behavioural biases identified in the literature that significantly affect investment decisions, and how do they impact investment outcomes?

RQ 2: How do individual differences, such as personality traits and cognitive abilities, interact with behavioural finance principles to shape investment decision-making strategies?

RQ 3: What role does emotion play in investment decision-making under the lens of behavioural finance, and how can emotional intelligence be leveraged to mitigate biases?

RQ 4: What are the shortcomings and gaps in the existing body of knowledge about the influence of behavioural finance on investment decision-making, and what directions may future research take to fill these shortcomings?

Research Methodology

The goal of this research is to thoroughly examine how behavioural finance affects investors' decision-making. Drawing on insights from various scholarly sources, the review will explore the factors influencing investment decisions and performance within the realm of behavioural finance.

IDENTIFICATION

Topic Selection
On latest developments in behavioural finance, and business practices in behavioural finance

↓

Formulation of Research Questions
Formulating research questions to guide the systematic literature review (SLR)

↓

Selection of Database
Scopus is selected as the main research database for reasons related to its large and global coverage of scholarly papers

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Keywords Selection

“behavioural” AND “finance” AND “investment” AND “decision” AND “making”

↓

SCREENING

First Level Screening
N = (Keywords “behavioural” AND “finance” AND “investment” AND “decision” AND “making”)

↓

Data Collection and Filtering
Criterion for inclusion – articles only, publication stage is final, source type is peer-reviewed journal, English language articles, and exact-word selection

↓

Studies after exclusions

N1 = (Keywords and Articles Only)
N2 = (Keywords, Articles, and Publication Stage “Final”)

SELECTION

Refinement

N5 = (Keywords, Articles, Publication Stage “Final”, Source Type “Journal”, Language “English”, and Exact-Keyword “Neuromarketing”)

↓

1. Topic Selection:

The topic "Impact of Behavioural Finance on Investment Decision-Making" was chosen based on the relevance and significance of understanding how human behaviour affects financial choices. Addressing the increased interest in behavioural aspects influencing investing decisions, it seeks to add to the body of information already available in finance.

2. Formulation of Research Questions:

The research questions guiding this literature review are designed to explore:

- What are the key behavioural biases identified in the literature that significantly affect investment decisions, and how do they impact investment outcomes?
- How do individual differences, such as personality traits and cognitive abilities, interact with behavioural finance principles to shape investment decision-making strategies?

3. Selection of Database:

The primary database selected for this literature review is Scopus, known for its comprehensive coverage of scholarly research across various disciplines. Scopus was chosen for its extensive collection of peer-reviewed journals, ensuring the inclusion of high-quality academic sources relevant to behavioural finance and investment decision-making.

4. Keywords Selection:

The choice of keywords that would ensure a wide coverage of the concepts inherent in behavioural finance and the selection-making in investing is pursued. Here, it is worth mentioning that such keywords are behavioural finance, selection-making in investing, and behavioural biases. It is possible to note that their selection took several trials and error rounds and discussions with professionals in the area to secure the comprehensiveness and relevance of these terms.

5. Data Collection and Filtering:

After identifying the research questions and criteria, the next step during the screening process is a thorough and meticulous search of the results for available articles that meet the desired descriptions. It can include articles from scholarly journals, those that focus on investment decision-making and behavioral finance. To enable the latest information, I select articles that have been published in the last ten years.

6. Journal Selection:

The journals' criteria for selection are rigorous peer-review policies and direct relation to the field of behavioural finance. The list consists of leading journals, covering various research in finance, economics, and psychology, to ensure respective referencing to be conducted.

7. Refinement and Final Selection:

After the first sorting stage, the selected papers are additionally checked to be sure they correspond to the established criteria while being pertinent to the research questions. The final list depends on the quality of the research methodology used, the empirical findings, and the resulting fit with the topic of behavioural finance and investment decision making.

8. Data Analysis and Synthesis:

In order to delve into the understanding of how people make decisions of investing, we focus on a specific body of research papers. The analysis process involves structuring and synthesising the research results and answering specific research questions to provide an overall description of current literature.

9. Report and Documentation:

The literature review is presented towards the end in an organised form, bringing in evidence from developed articles, methodologies noted, and possible directions for future research. This offers a useful resource to scholars, practitioners, and policymakers on the extent to which behavioural finance influences investment decisions and the financial setup.

Literature Review

The ration investors' idea gets questioned during the study of behavioural finance including emotional along with the social characteristics of the investment selection by individual or group. This study will help in examining how decision making is influenced by behavioural finance. After examining in the paper, the most common factor affecting the investment decision making and performance rational are heuristic, prospect, market, and herding behaviours.

(Cao et al. 2021) examined that the anticipated factor has effective impact on the investment decision making and performance with heuristic, herding and market factor following closely behind.

Behavioural factors such as mental health, overconfidence, anchoring, loss aversion and regret has a lot of impact on investment rational of an individual. (Ahmad et al., 2022) showed that investors often use cognitive heuristics to reduce the risk of losses in uncertain situations, which leads to judgment errors and irrational decisions that can lead to market inefficiency. Heuristics, which comprise of overconfidence, uncertainty, representatives, availability, anchoring and adaptation, character influence, mental calculation, gambler's fallacy, and herd bias have a significant influence on investment decisions and study results, emphasizing positive and negative impact on investor decisions.

Heuristic-based biases according to Sachdeva et al. (2021) can impair investment decisions and subsequent performance. It is important for investors to also analyse both non-financial as well as financial aspects when making investment choices. Accounting information in this case entails expected earnings, past performance, and marketability of the investment. On-financial factors include image of the company, ethical behaviour in business as well as social interaction effects, among others. These concepts were proposed by professionals and participants from finance industry which means that they are contextual. They can be classified into five main groups: accounting information, neutral information, legal recommendations, personal financial needs, and corporate reputation.

(Lchal et al., 2023) found that all these factors significantly influence investment decisions. The company's reputation has the most influence, and the lawyer's recommendation has the least influence. As a result, companies are encouraged to understand the disclosure requests of investors and consider non-financial aspects such as environmental and social initiatives. Investment advisers must prepare information in an understandable form and consider the special needs and preferences of investors when preparing portfolios. Individual investors can benefit from understanding the various underlying factors to make more informed and rational investment decisions.

(Souza et al. 2023) in a study discovered that having overconfidence have a positive relationship with the decision-making process as feeling sure of oneself can make investors feel more confident in their choices, leading to more decisive decision-making. Another factor that can influence decision-making in a positive way is anchoring, where the value of an asset is determined based on past data. Nevertheless, the usage of these mental shortcuts carefully is critical as both positive as well as negative outcomes can be a result of overconfidence, and investors might not consider new or relevant information as a result of anchoring.

As per the study (Argan et al., 2022) there is a positive association between envy and FoMO, proposing that FoMO is induced by Envy. Furthermore, the research results in a conspicuous and positive association between FOMO and investment activity along with the investment commitment. This implicated that people who undergo FOMO are more likely to become involved in and commit to financial investments. Also, as per the analysis both investment and commitment play a prominent role in forecasting satisfaction with the single financial investment.

(Lchal et al. 2023) examined the consequence on separate investor group in terms of business-related, political, and economic influences. This emphasis the significance of looking at a range of contextual factors beyond simply financial aspects while inspecting investment decision. Corporate image has a powerful influence on investment decisions suggesting that investor conduct, and decision-making process depends more on how a company's reputation and position in the market is recognized.

In order to make well informed investment decision along with fully appraising a complete landscape of investments, these contextual factors should be considered. This methodical literature review furnishes valuable insights regarding how behavioural finance is operational about investment decision making process being complexed.

It shows the importance of contextual factor, behavioural biases, personality traits, and emotional responses in taking investment decisions as part of behavioural finance.

While research sheds light on behavioural finance and its impact on investment decision making, there are several gaps that need to be addressed for further research.

• The study shows continued disagreement about the effectiveness of cognitive heuristics in investment management and market performance. Additionally, learning about the complex relationships between cognitive biases, decision-making processes, and market behaviour can provide valuable information for refining investment strategies and improving overall market performance. Therefore, further clarification of this area is necessary to advance our understanding and guide more informed financial decision-making practices.

- The study highlights the need for future research to investigate individual investors in other nations and cultures, as well as to explore other aspects such as scarcity and impulsivity in their behaviour. The future should also include the demographic factor along with behavioural component to get a better analysis of factors impacting investment decision making.

- The study has looked at factors like heuristics, prospect theory, market trends, and herding behaviour. Future studies could examine the precise ways in which these characteristics impact investing choices and results. Examining the interactions between these behavioural characteristics and the state of the external market as well as the potential influence of psychological or demographic factors on the behaviour of individual investors would be valuable.

Future directions

Future study in behavioural finance has an abundance of possibilities. The relationship between technology advancement and behavioural finance is one important area for research. With technology playing a big role in financial transactions, it's worth investigating how digital platforms, robot-advisors, and AI impact investors' behaviour and decision-making. Conducting cross-cultural studies is another important research route to understand how cultural differences affect risk preferences, investing strategies, and bias susceptibility in various societies.

Furthermore, as controlled experiments allow researchers to establish causal relationships between behavioural factors and investment decisions, longer-term studies that monitor individuals' investing decisions may provide a more comprehensive understanding of how behaviour changes and adapts to changing market circumstances, individual experiences, and external factors. This can also analyse the role of intervention in behavioural biases while making investment. Also, analysis tool like machine learning can used to identify a particular pattern while making any decision by mapping a pattern. Further study can be done in the emerging topic of Environmental, Social and Governance (ESG) and their impact on investment if there is any. Research can also be done on the behavioural bias such as herd behaviour, and cognitive biases on investment choices while investing the cryptocurrency. This can provide a valuable analysis and fill the research gaps. In the end, this greater comprehension may increase investor welfare and financial market efficiency.

Limitations

The literature review offers important insights into different aspects of behavioural finance; however, this study has certain limitations as it is based of secondary data being a Systematic Literature Review (SLR) and hence a possibility of bias can arise on basis of selection of paper. This Literature review focuses on different aspects which miss out the focus on few categories.

Publication bias might have occurred which has likely overlooked certain negative factors to focus on few topics with significant positive or negative impact.

This review may lack in synthesizing literature thus causing inconsistencies or gaps in analysis. Also, a clear structure for the organisation of literature is missing which can be challenging for the readers.

The lack of methodological detail on search strategies, inclusion criteria and data acquisition processes further limit the review's transparency and reproducible.

More, the analysis done does not accept or addresses the prospective limitations of individual studies and conflicting results in the literature that may affect the overall reliability and validity of the consolidated evidence.

Conclusion

This study has so far provided a detailed description of the relationship between investing decision-making and behavioural finance. A review of literature has exposed that investor behaviour is influenced by various factors including contextual factors, emotions, and cognitive biases. The findings demonstrate the difficulty people face in making financial decisions and the importance of integrating behavioural finance theories into financial models as well as decision-making process. This paper seeks to address several research questions which will guide us through important issues in behavioural finance. These include individual differences in investment strategies, impact of cognitive biases on investment decisions, socioeconomic and demographic determinants of investor behaviour.

Basically, some important areas for future research in behaviour are the influence of technological advancements on investor behaviour; cross-cultural studies to determine cultural influences on investment decisions; and the effectiveness of mitigation measures against bias. Moreover, future research may apply sophisticated methods of analysis and consider environmental, social and governance perspectives in the investment context. Nevertheless, it is crucial to recognize certain inherent limitations that come with such a literature review.

These encompass probable sectional and interpretational biases within the literature that were reviewed as well as the broad nature of this review and lack of any systematic way used in synthesising this literature. Overcoming these limitations through further research will enhance reliability and validity in behavioural finance studies. This paper contributes to our understanding of how psychology affects finance by providing practical implications for investors, policymakers, and practitioners. Increasingly efficient financial markets can be achieved by recognizing that human beings make irrational choices when making investments leading to suboptimal outcomes both at individual and institutional levels.

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