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Financial Literacy and Cognitive Biases in Investment Decision-Making: An Analysis of Their Influence on Investor Behaviour

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Abstract
Investment decisions are shaped by both financial knowledge and psychological factors, yet the relationship between financial literacy and cognitive biases remains insufficiently understood. This study examines how financial literacy and cognitive biases jointly influence investment decision-making through a qualitative synthesis of literature from finance, behavioural economics and psychology. The analysis indicates that higher financial literacy improves analytical reasoning, financial judgement and the quality of investment decisions, but does not eliminate cognitive biases, which arise from inherent psychological processes. Investment behaviour is therefore shaped by the interaction between financial knowledge and behavioural influences. By integrating financial and psychological perspectives, this study offers a broader understanding of investor behaviour and highlights the importance of combining financial education with behavioural awareness to promote more rational investment decision-making.
Keywords: Cognitive Bias, Heuristic, Investor Psychology, Financial Literacy

Introduction

Every investment decision is a choice that can either build long-term wealth or permanently erode financial value, which makes the ability to allocate financial resources effectively essential. As financial markets become more accessible through digital trading platforms and investment applications, individuals must evaluate complex financial products under conditions of uncertainty. Traditional financial theory assumes that investors make rational decisions by objectively analysing all available information. However, empirical evidence suggests that investment decisions are often shaped by imperfect information, emotions and psychological factors, leading to systematic errors in judgement. Consequently, financial literacy has emerged as an important determinant of investment decision quality, enabling individuals to understand financial concepts, evaluate risk and make informed investment choices.

Existing literature recognises financial literacy and cognitive biases as two major influences on investment behaviour, although the two are generally examined from different disciplinary perspectives. Research indicates that higher financial literacy is associated with greater investment participation, better diversification and sounder financial decision-making, whereas behavioural finance shows that cognitive biases such as overconfidence, loss aversion and confirmation bias continue to influence investor behaviour despite increased knowledge. This suggests that financial knowledge alone may not fully explain the quality of investment decisions. This study therefore examines how the two factors interact, drawing on insights from

both fields.

Theory

Financial literacy and behavioural finance provide the theoretical foundation for understanding investment decision-making. Financial literacy refers to the ability to understand and apply financial concepts such as interest rates, inflation, risk diversification and investment planning when making financial decisions. Existing literature suggests that financially literate individuals are generally better equipped to interpret financial information, evaluate investment alternatives and manage financial risk, thereby improving the quality of their investment decisions. [1][3]

In contrast, behavioural finance challenges the assumption that investors are always rational, recognising that decision-making is frequently influenced by heuristics and cognitive biases. Psychological theories propose that individuals rely on mental shortcuts to simplify complex financial decisions, which often results in systematic errors such as overconfidence, loss aversion, confirmation bias and anchoring. These biases can influence investment behaviour even when investors possess adequate financial knowledge. [4][5][6]

Collectively, these theoretical perspectives suggest that investment decision quality is determined not only by financial knowledge but also by the interaction between analytical reasoning and psychological influences. Together, they provide the conceptual framework through which investor behaviour is examined in this study. [1][4]

Experimental

This research adopts a qualitative comparative literature review to examine the relationship between financial literacy and cognitive biases in investment decision-making. Rather than conducting primary data collection or statistical analysis, the study synthesises established theories and empirical findings from finance, behavioural economics and psychology to evaluate how financial knowledge influences investor behaviour. [1][4][5]

The literature selected for analysis includes foundational studies on financial literacy, behavioural finance and cognitive psychology. Key sources examine the relationship between financial literacy and investment behaviour, the influence of cognitive biases on financial decision-making, and the interaction between analytical reasoning and psychological processes. The findings from these studies were subsequently compared and analysed to identify common patterns, differences and implications for investment decision quality. [1][2][3][4][5][6]

Result

The comparative analysis of the selected literature identified three consistent findings regarding the relationship between financial literacy and cognitive biases in investment decision-making. First, the literature consistently indicates that higher financial literacy improves investment decision quality by enhancing investors' understanding of financial concepts, information processing, risk evaluation and portfolio diversification. Financially literate individuals were also found to participate more actively in financial markets and to make more informed investment decisions than less financially literate investors. [1][3]

Second, the literature demonstrates that cognitive biases continue to influence investment decisions irrespective of financial knowledge. Behavioural finance research identifies heuristics such as overconfidence, loss aversion, confirmation bias and anchoring as systematic influences on investor behaviour. These psychological tendencies were observed among both inexperienced and experienced investors, indicating that financial knowledge alone does not completely eliminate irrational decision-making. [2][4][5][6]

Finally, the comparative analysis suggests that financial literacy and cognitive biases jointly influence investment decision-making rather than acting as independent determinants. While greater financial literacy improves analytical reasoning and reduces errors arising from inadequate financial knowledge, behavioural biases remain capable of influencing investment decisions through inherent psychological processes. Consequently, investment decision quality appears to be determined by the interaction between financial knowledge and behavioural influences rather than either factor in isolation. [1][2][3][4][5][6]

Discussion

The findings indicate that financial literacy and cognitive biases should not be viewed as competing explanations of investment behaviour, but as complementary factors influencing the quality of investment decisions. Financial literacy enhances investors' ability to interpret financial information, evaluate risk and compare investment alternatives, thereby reducing errors arising from inadequate financial knowledge. However, the literature also demonstrates that cognitive biases originate from inherent psychological processes, meaning that greater financial knowledge alone cannot completely eliminate irrational decision-making. [1][3][4][5][6]

The comparative analysis further suggests that different cognitive biases are influenced by financial literacy to varying degrees. Biases associated with inadequate financial understanding, such as poor diversification or uninformed investment choices, appear to diminish as financial literacy improves. In contrast, behavioural biases such as overconfidence, confirmation bias and loss aversion persist because they arise from the way individuals process information rather than from a lack of financial knowledge. Consequently, increasing financial literacy may improve analytical reasoning while also raising investor confidence, which can reinforce overconfidence, highlighting the need for behavioural discipline alongside financial education. [2][4][5][6]

Collectively, the literature suggests that effective investment decision-making depends upon the interaction between financial knowledge and psychological self-awareness. Financial literacy provides investors with the analytical capability to make informed decisions, whereas recognising and managing cognitive biases enables those decisions to remain rational under uncertainty. Therefore, improving investor outcomes requires not only greater financial education but also increased awareness of the behavioural factors that continue to influence investment behaviour. [1][2][3][4][5][6]

Conclusion

This study demonstrates that investment decision-making cannot be fully understood through financial knowledge or psychological theory in isolation. While financial literacy equips investors with the analytical capability to evaluate financial information and investment opportunities, cognitive biases continue to shape judgement because they arise from inherent psychological processes that influence how information is perceived, interpreted and acted upon. Consequently, rational investment behaviour depends not only on what investors know, but also on how they think.

By integrating financial and psychological perspectives, this study provides a more comprehensive understanding of investor behaviour and highlights the importance of considering both analytical reasoning and behavioural influences when evaluating investment decisions. The findings suggest that financial education should extend beyond developing technical knowledge to include greater awareness of cognitive biases, enabling investors to recognise and manage the psychological factors that continue to influence decision-making under uncertainty.

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