

A Closer Look of How Individual Investor Make Investment Decision: Systematic Review

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Received: August 15, 2023

Revised: November 07, 2023

Accepted: September 29, 2023

Abstract

The aim of this study is to examine the existing literature on the factors that influence the investment decisions made by individual investors. The employed methodology is a systematic literature review conducted using the PRISMA approach. The choice of Scopus as the information source was based on its status as the largest and well reputable scientific database. We obtained data from internet databases that contain extensive collections of scholarly studies, journal articles, and conference papers. These resources are written in English and are readily available to the authors. Using a predetermined string, 275 articles were extracted from Scopus. Ultimately, 137 papers were found to fit the criteria for analysis in discussing the factors that determine investing decisions for individual investors. The result show that there are five main determinant of investment decision for individual investor: Financial literacy, emotional biases, gender, generation y and long-term orientation. The implications of this study will be discussed later.

Keywords: Investment Decision, Determinant, Systematic Literature Review, Individual Investor.

DOI : <https://doi.org/10.57178/atestasi.v6i2.728>

p-ISSN : 2621-1963

e-ISSN : 2621-1505

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Introduction

Real estate and stock market investments have been a significant topic in recent years. An increasing number of individuals are allocating their funds towards investments in equities and real estate. The purpose of this is to safeguard funds for future need, such as post-retirement income sources. Given the recent global financial crisis, making investment decisions is now regarded as a crucial aspect of everyday life. To comprehend the causes that drive individual investors to make investing decisions, it is imperative to gain an understanding of these various elements. The aim of this study is to ascertain the fundamental elements that influence investors' inclination to invest. Several scholars have examined the conduct of investors and endeavored to improve comprehension of individuals who oversee investments through various approaches.

Upon reviewing the existing literature, it becomes evident that investing decision-making is mostly influenced by human qualities (M. N. Akhtar et al., 2011).

The discussion has focused on the influence of psychological elements and individual behavior during investment decision-making. Multiple empirical investigations have been carried out on the psychology of investment. Several psychological elements, including as beliefs, preferences, and psychological biases, have been discovered, including attitudes towards saving and risk. A significant number of private investors take ethical factors into account when making judgments about purchasing stocks. Decision-making is an intricate process that plays a crucial role in the realm of behavioural finance. Investor behavior is influenced by other factors beyond market volatility and the potential for maximizing profits (Ahmed et al., 2021).

The traditional finance paradigm operates under the premise that both investors and markets exhibit complete rationality (Kumar and Goyal, 2015). They carefully evaluate all relevant facts when making investing selections. However, empirical evidence suggests that investors tend to depart from complete rationality while making financial decisions (Daniel et al., 2002). They form their judgments based on own convictions, inclinations, or previous occurrences. When confronted with uncertainty, investors make decisions influenced by irrationality, inconsistency, and ineptitude (Al Mamun et al., 2015). The emergence of behavioral finance, a novel field in the realm of finance, became evident during the 1990s through its presence in several academic journals, newspapers, and business magazines. This area of finance is based on principles from psychology, sociology, and finance. Behavioral finance aims to enhance our understanding of investor behavior by examining how psychological errors influence the decision-making process of investors. (Lin, 2011) argue that investors' investing decisions are not consistently rational. Instead, the decisions are influenced by cognitive aspects related to how investors think and emotional factors related to how investors feel, which are together referred to as behavioural biases.

Therefore, it is crucial to examine the process by which investors make their investment decisions. This study specifically tries to discover the factors that influence investment decisions, particularly for individual investors. As far as we know, no research has been conducted yet to analyse the factors influencing investing decisions for individual investors through a systematic literature review. The objective of this study is to address the lack of information in existing literature by developing the research questions in the following manner:

RQ: What are the determinants of investment decision for individual investor?

Research aimed at identifying the determinants of investment decisions for individual investors holds significant importance. It provides valuable insights into the factors that influence how individuals make investment choices, which, in turn, can have several practical implications for their financial well-being.

Understanding these determinants empowers individual investors to make more informed and rational investment decisions. It allows them to tailor their investment strategies to align with their specific financial goals, risk tolerance, and personal circumstances. For instance, someone with a higher risk tolerance might choose more aggressive investments, while someone with a lower risk tolerance might opt for more conservative options. Moreover, this

research helps investors recognize and mitigate potential cognitive biases and emotional influences that can lead to poor investment decisions. By being aware of these psychological factors, individuals can strive to make decisions that are based on objective analysis rather than emotions or impulsive reactions.

Research Methods

The systematic literature review was conducted between August 2023 and September 2023, adhering to the PRISMA reporting requirements. PRISMA, also known as Preferred Reporting Items for Systematic Reviews and Meta-Analyses, is a set of essential elements based on evidence. Its purpose is to assist scientific authors in reporting various systematic reviews and meta-analyses. It is generally used to evaluate the advantages and disadvantages of a healthcare intervention. PRISMA emphasises methods for authors to provide a clear and comprehensive documentation of this particular type of investigation (Page et al., 2021). The PRISMA standard replaced the previous QUOROM standard. It provides the capacity to reproduce the results of a systematic literature review. Researchers must determine study objectives that address the research issue, specify the keywords, and establish a set of exclusion and inclusion criteria. During the review phase, pertinent items were sought and extraneous ones were eliminated. Articles are examined based on predetermined categories.

As per the PRISMA reporting criteria, this study involves multiple sequential steps: The procedure involves four key steps: 1) establishing the criteria for inclusion; 2) identifying the sources of information; 3) selecting the studies to be included; and 4) collecting the necessary data. Figure 1 illustrates the sequential process of doing a systematic review using the PRISMA flow diagram. Prior to initiating the initial stage of determining the criteria, it is essential to explicitly formulate the research question for this study. The research question was formulated based on the research issues elucidated in the preceding chapter. Therefore, we can formulate the research question as follows: What are the determinants of investment decision for individual investor?

Defining Eligibility Criteria

The following inclusion criteria (IC) were defined for the review guidelines:

IC1: Article written in English;

IC2: Original and peer-reviewed Journal articles and Conference papers; and

IC3: Only Studies aimed at investigating factors that influence investment decision for individual investor

EC1: Study discussed determinant of investment decision for organizational investor

The English (IC1) language was chosen because to its widespread usage among researchers in the scientific world. The selection of original and peer-reviewed publications was based on the aim of obtaining scientific contributions from reliable sources such as peer-reviewed journals and conference papers. Therefore, the dataset does not include materials such as book chapters, books, newspapers, letters, and editorials. The IC3 were incorporated to address the research inquiries pertaining to the determinants or factors influencing investment

decisions made by individual investors. Conversely, we will disregard any research that examine the factors influencing investment choices for institutional investors (EC1).

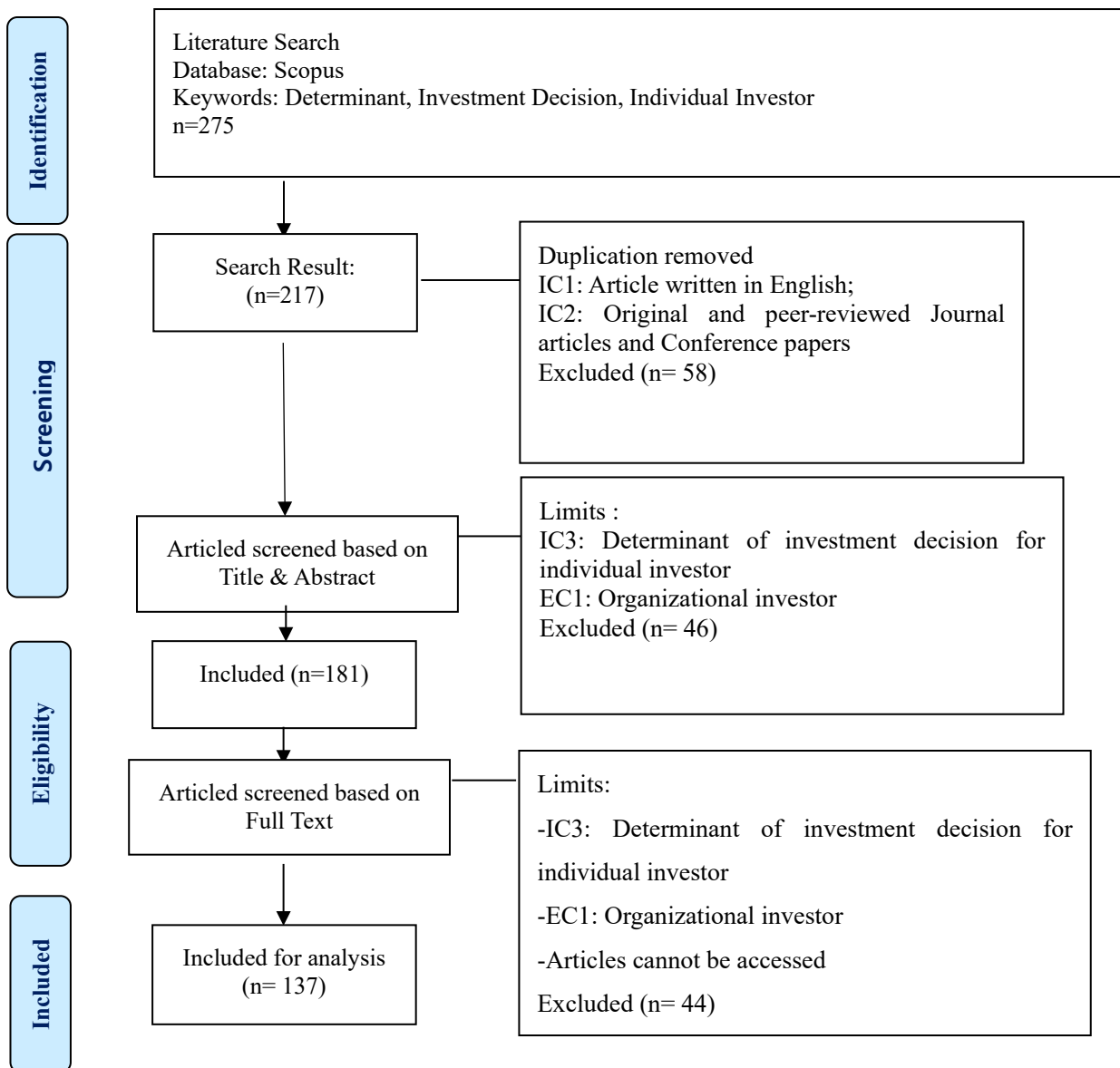


Figure 1: PRISMA Flow diagram of the search strategy (Zakaria et al., 2021)

Defining Information Source

The search for information was carried out on an online database with largest repositories of academic studies, namely Scopus, with more than 23,500 peer-reviewed journals. Not fully accessible articles were also excluded in this research. Scopus has a substantial number of double-blind peer-reviewed publications published in journals with high impact factors (Ucci et al., 2022). This analysis extensively searches the Scopus database, which provides a comprehensive picture of global research output across several fields such as science, technology, medicine, social science, and the arts and humanities. Scopus is the most extensive compilation of abstracts and citations for scholarly literature in many topic fields, when compared to Web of Science (WoS). Scopus includes 84 percent of the titles available in WoS, however WoS only includes 54 percent of the papers available in Scopus (Pranckutė, 2021).

Scopus is often used and recommended as a reliable source for systematic review because to its extensive coverage and high-quality publications.

Study Selection

Study selection was conducted in three stages as follows:

1. By employing search keywords aligned with the research objectives, specifically focusing on the factors influencing investment decisions for particular investors or related keywords found in similar reports:
(TITLE-ABS-KEY(*determinant OR factor OR driver OR variable OR challenge OR barrier OR "behavio* finance" OR "psychological" OR "personalit*" OR bias OR gender OR "Gen* Y" OR "long term" OR "long term orientation"*) AND TITLE-ABS-KEY(*"investment decision*" OR "investment behavior" OR "investment intention"*) AND TITLE-ABS-KEY(*"individu* investor" OR "individu* investment" OR "small investor" OR "non-professional investor"*)) AND (LIMIT-TO (SRCTYPE , "j") OR LIMIT-TO (SRCTYPE , "p")) AND (LIMIT-TO (DOCTYPE , "ar") OR LIMIT-TO (DOCTYPE , "cp")) AND (LIMIT-TO (LANGUAGE , "English"))
2. Evaluating and choosing the article titles and abstracts based on the specified criteria for inclusion and exclusion.
3. Conducting a comprehensive review of all articles that were not excluded in the previous selection, ensuring that all articles are read in their entirety and meet the eligibility criteria.

Data Collection Process

The data were manually collected through content analysis-based data extraction. This involved gathering information such as article type, journal name, year of publication, topic, title, research methodology, respondents/research data, country of research location, variables related to determinants of investment decision, and research results presented as determinant of investment decision for individual investors. After data has been collected then data will be analysed and synthesis to answer the research question proposed in this study.

Results and Discussion

A total of 275 articles have been sourced from the recognised and high-quality database, Scopus. There was 58 articles that did not meet the requirements, such as not in English language (IC1), not Journal articles or Conference papers (IC2), and being duplicates, were discarded. Only 217 publications that did not include full text were included in the screening phase, as shown in Figure 1. In addition, 217 papers that did not contain the complete text were reviewed and screened based on their title and abstract, resulting in 181 articles that were deemed relevant to the research topic. Therefore, about 46 items that did not include the complete text were eliminated. During the eligibility phase, a total of 175 publications were included in the study since they met the criteria of being full-text articles. Subsequently, the complete text of the article is examined and evaluated to determine its viability. As a result, 42 full text articles were excluded due to their irrelevance or lack of discussion on the determinant of investment choice (IC3). The content is unsuitable for the subject matter or does not align with the research inquiries. Out of all the complete texts and non-repeated articles, a total of 42 studies satisfy the criteria for inclusion and exclusion. These studies are analysed to examine the factors that influence investment decisions made by individual investors. Studying the

elements that determine investment decisions is crucial for comprehending the influences on investment choices made by individual investors. Research on the factors influencing investment decisions offers useful insights that can guide decision-making for firms, investors, financial institutions, and governments, ultimately leading to more efficient and prosperous economies.

Financial Literacy

There is a strong and meaningful correlation between Financial Literacy (FL) and an investor's decision-making behaviour about investments. The previous findings corroborate these results (Ahmed et al., 2021). The research from established economies also confirms that FL has a major influence on equities investment, retirement planning, wealth management, saving, and financial performance. Studies have shown that financial awareness has a significant impact in the investment decisions of investors in developing nations such as China, UAE, India, and Sri Lanka. Furthermore, (M. Akhtar et al., 2011) discovered that in order to achieve success in the stock market, online traders must possess a higher level of knowledge and information compared to other investors. This is because they lack access to internal stock market information and are at risk of falling victim to information asymmetry. Financial literacy has a crucial role in determining investment intention and is also a significant influence in long-term investment decisions. This is consistent with prior study undertaken by (Bayar et al., 2020) who reported that theoretically, the level of financial literacy is supposed to impact individuals' investment decisions, as higher financial literacy enables individuals to make better informed choices regarding financial investments. The study's conclusions have great importance for policy makers and financial institutions, considering the favourable economic impacts associated with the development of the financial sector. According to (Hassan Al-Tamimi & Anood Bin Kalli, 2009), There exists a strong and meaningful correlation between the level of financial knowledge and the investment choices made by investors from the United Arab Emirates in Abu Dhabi. Nevertheless, the current degree of financial literacy falls significantly short of the required standard. The investor's investment knowledge is often insufficient. Financial knowledge plays a crucial role in making investing decisions. In the context of Pakistan, financial literacy enables investors to acquire a comprehensive understanding of financial services, products, and intricate ideas, hence facilitating informed investment decisions. This study found that investors lacking financial literacy exhibit a diminished inclination to engage in financial decision-making, such as retirement planning, insurance, real estate investments, emergency fund management, and funding children's education (Naiwen et al., 2021). Therefore, a greater degree of financial literacy leads to more accurate decision-making on saving and investment.

Emotional Biases

The field of behavioral finance seeks to provide a more accurate picture of investor behavior by detailing how investors' mental biases influence their choices. (Baker et al., 2021) propose that investing decisions made by investors are not consistently rational. Instead, decisions are influenced by behavioral biases, which are emotional aspects related to how investors feel. Behavioral biases, often known as emotional biases, are attributed to emotions in academic literature. Emotional biases emerge as a result of irrational thinking prompted by different emotional intuitions or impulses. This aligns with the principles put out by researchers in the fields of behavioral finance and psychology. (Lubis et al., 2015) argued that the irrational thinking and emotions of investors are the root source of defects in their financial behavior, which in turn affects the behavior of investors. According to the findings of the current study, the reasoning and calculating skills of investors are not the only factors that influence

their decision-making process; rather, the emotions that investors experience have a more significant influence on the choices that they make about their investments.

When it comes to making decisions about investments, investors may not always act in a completely sensible manner. The findings of the current investigation provided evidence that supported this belief. Investors' mental capacities to digest all of the information that is accessible to them have an impact on their financial behavior (Pradhan, 2021). Investors often seek assistance from friends, colleagues, and brokers instead of conducting a thorough analysis of the available information. Investors acknowledge that their investment decisions are influenced by emotions and objectives. Due to the presence of irrational thinking, cognitive biases arise. These biases can be addressed by the provision of accurate information, sound guidance, and investor education. However, emotional biases are more challenging to fix. Until now, the endeavor to enhance investment performance has been ascribed to the enhancement of financial literacy. However, it is now imperative for both financial advisors and investors to comprehend that they must undergo training to mitigate the influence of their emotions. According to (Ritika & Kishor, 2022), emotional biases are exogenous variables primarily influenced by five endogenous variables: regret-aversion bias, loss-aversion bias, status quo bias, overconfidence bias, and self-control bias. An emotional bias refers to a cognitive and decision-making distortion that can cause a previously effective investing plan to fail as a result of emotional influences.

Gender

The investing decision of individual investors was significantly influenced by gender (Geetha & Selvakumar, 2016). The gender of individual investors plays a considerable role in determining their risk tolerance level compared to the standard heuristic. Therefore, it is risky for investment managers to base their investment strategy for clients on broad heuristics. Several factors significantly influence investors' investment decisions. This aligns with previous study conducted by (Hemalatha, 2019) who has assessed the impact of gender on investment choices in Chennai, India. He discovered that gender plays a significant effect in investing decision-making. Gender exerts an impact on individuals' confidence levels, leading to the tendency for males to overestimate the likelihood of success for a new business venture, while women tend to make fewer substantial investment choices. Women exhibit higher levels of engagement in retirement plans and demonstrate a lower propensity to invest in business stocks, resulting in more optimal decision-making outcomes within their context. In addition, the study found that men, on average, allocate greater sums of money compared to women. Conversely, we observe contrasting outcomes for stocks and fixed-income securities. Men allocate a greater amount of their financial resources towards equity investments compared to women, whereas women tend to allocate a larger portion of their resources towards bond investments. This disparity aligns with the notion that men allocate greater resources towards high-risk assets, such as equity, while women tend to allocate fewer resources towards safer assets, such as bonds (Hervé et al., 2019). Nevertheless, research on the influence of gender on investment decision-making has yielded varied results contingent upon the specific circumstances. (Alquraan et al., 2016) stated that demographic variables, such as gender, did not have a major impact on the investor's decision, except for the variable of education, which did have a substantial effect. The study of (Kannadas, 2021) suggests that gender has no influence on short and long-term investing. In the other hand, (Metawa et al., 2019) sought to demonstrate that demographic factors, such as gender, had significant and favorable impacts on the investing choices made by individual investors. (Kumar & Goyal, 2016) determined that gender plays a substantial role in the investment decision-making process. Male investors are more susceptible to the influence of investor overconfidence.

Generation Y

Generation Y individuals are commonly referred to as digital natives, as opposed to digital immigrants (Rahman & Gan, 2020). The digital environment has been the sole backdrop for Generation Y, the first generation to have experienced this during their whole lives. Consequently, their way of life and work is significantly influenced by information technology. There is a lack of consensus regarding the precise beginning and ending dates for Generation Y. Moreover, the study proposes that a crucial defining trait for Generation Y is their early and frequent exposure to technology, which has both positive and negative effects on cognitive, emotional, and social development. For example, they heavily depend on technology and engage in social interactions. Generation Y wields significant purchasing power, amounting to around \$600 billion annually, and exerts a substantial influence on parental spending. Furthermore, this current generation possesses a greater amount of expendable income in comparison to any previous cohort, potentially resulting in additional assets that can be allocated for personal investments. Generation Y makes a substantial contribution to the GDP and has considerable purchasing power in comparison to Generation X and baby boomers. They have recently garnered the interest of numerous researchers. Nevertheless, in Malaysia, the younger generation, known as Generation Y, has a strong aversion against engaging in the stock market (M. T. I. Khan et al., 2019). The primary factors contributing to the hesitancy of Malaysian youngsters to participate in the stock market are a fear of failure, limited awareness, and insufficient information. The significance of saving and investments sometimes becomes apparent to individuals only during the later phases of their lives. Millennials may opt to engage in various assets, such as mutual funds and the stock market, instead of saving for a pension fund. This approach allows them to produce passive income and work towards their long-term financial objectives.

In order to boost the degree of engagement among generation Y and improve their capacity to make investment decisions, there are two primary concerns that need to be addressed by relevant stakeholders. One objective is to enhance understanding and awareness of financial concepts and techniques, specifically related to basic and technical analyses. The second objective is to enhance psychological behavior, which can aid in the prevention of imprudent or erroneous investing choices. To enhance the investment behavior of individual investors in a country, it is vital to comprehend the existence and characteristics of behavioral biases. (Putri & Rahyuda, 2017) discovered that financial knowledge and financial behavior have a substantial impact on investment decision-making. According to (Jaiyeoba et al., 2018), the process of making investment decisions can be forecasted by considering the attitude of individual investors. Therefore, in recent years, several research studies have been conducted in various nations to examine human behaviors and investment decision-making, focusing on diverse behavioral biases. The study carried out by (Rahman & Gan, 2020) reported that there is a negative correlation between Generation Y's overconfidence and their investing decisions in Malaysia. What this means is that investors' investing judgments are less accurate when they exhibit higher levels of overconfidence. Overconfident people don't give themselves enough room to make mistakes. Overconfident investors tend to exaggerate a company's capabilities, achievements, and the likelihood that the information is accurate. For the simple reason that overconfidence bias affects investing choices in relation to volatility and trading volume.

Long Term Orientation (LTO)

Long-term orientation examines how individuals from many cultural backgrounds view and manage time, including the present, past, and future. The culture prioritizes long-term orientation, placing greater weight on the future rather than the present or the past. Moreover, these cultures highly prioritize time and allocate significant resources and financial investments

towards attaining long-term objectives (Bonna & Awobgo-Moah Amoah, 2020). The promotion of thrift, savings, and long-term investments is something that these cultures encourage in order to strengthen and improve future lifestyles. Accordingly, we contend that investors in cultures that are focused on the long term will devote a greater amount of time and resources to making the best possible investment decision in order to accomplish their long-term objectives. We incorporate and synthesize the cultural beliefs of Pakistani retail investors regarding one of the five cultural dimensions (i.e. long-term orientation) in order to investigate the relationships between long term orientation and investment decisions. This is done by making use of the theoretical cultural context that was developed by (Bhagat & Hofstede, 2002).

The cultural component of Hofstede's culture model serves as an illustration of the theoretical connection between culture and finance (Hofstede, 1994), which is a term that has lately been used in the field of behavioral finance research to characterize the behavior of investors in a variety of cultural settings. The cultural component plays a significant part in the process of making decisions regarding investments. This is due to the fact that investors adhere to the principles of maintaining their personal relationships within the societies to which they belong, both individually and collectively (Ellison & Fudenberg, 1993). Mounting evidence from studies in behavioral finance and sociology indicates a strong correlation between an investor's conduct and their cultural background. This perspective suggests that individual investment behavior can be predicted based on their cultural features. Hofstede's theory posits that cultural values held by civilizations can influence the behavior of their people. We explore pertinent cultural factors that influence the investment behavior of investors. Nevertheless, our study primarily emphasizes long-term perspective. Academics have predominantly utilized Hofstede's theory, namely the long-term orientation (LTO) culture dimension, to assess time orientation in their research endeavors (Bond, 2002). Long-term orientation is a cultural feature that has an impact on the decision-making process of individuals (Bearden et al., 2006). According to (Hofstede, 1994), Individuals with long-term orientation have a high level of determination in pursuing their goals. They prioritize the principles of frugality, perseverance, and long-term thinking. Long-term orientation involves making sacrifices in the now to ensure favorable outcomes in the future (I. Khan et al., 2020). Based on these points, we contend that investors in the Pakistan stock market prioritize future benefits when considering LTO. They perform meticulous and comprehensive analysis for their investment decisions and refrain from using heuristics and other cognitive shortcuts during the investment decision-making process. Investors that possess LTO (long-term orientation) have a willingness to dedicate additional time to thoroughly understand and carefully choose the most advantageous investment option. They demonstrate patience in pursuing long-term benefits.

Conclusion

For individual investors, research that identifies determinants of investment decisions can have several practical implications. Firstly, it can help them make more informed and rational investment choices by understanding the key factors that influence investment behavior, such as risk tolerance, financial goals, and market conditions. This knowledge can enable individuals to align their investment decisions with their personal objectives and risk preferences, ultimately leading to a more successful investment portfolio. Additionally, such research can help investors recognize potential biases and psychological factors that may cloud their judgment, allowing them to make more objective decisions and avoid common pitfalls like emotional trading. In essence, understanding the determinants of investment decisions empowers individual investors to build more diversified, balanced, and resilient investment portfolios that better reflect their financial needs and aspirations.

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