

14th ISCA 2024

The Factors Influencing Investment Decisions Among Investors in Purwokerto City

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ABSTRACT

Investment in the capital market has emerged as a key option for individuals to manage their finance and grow their assets. In Indonesia, individual participation in capital market investments has seen significant growth in recent years, driven by factors such as increased financial literacy, technological advancements that facilitates access to market information and transactions, and initiatives by the government and financial institutions to promote public involvement. The city of Purwokerto, located in Central Java, has experienced similar trend, with a rising number of individual investors and diversification in investment instruments. However, making investment decisions is complex and influenced by various interrelated factors, including psychological, demographics, social, and economic aspects. Prior research indicates that investors behavior is often not fully rational and can be subject to various psychological biases. Demographics Factors such as age, gender, education level, and income also play a critical role in shaping investment decisions. This study aiming to analyze the factors influence individual investment decisions in the capital market, focusing on a case study of investors in the city of Purwokerto. The research adopts a qualitative approach, employing in-depth interviews and thematic analysis to explore the psychological, demographic, social, and economic factors that affect investment decisions. Additionally, the study investigate the role of financial literacy in moderating these influences. The findings of this research are expected to contribute to the academic literature in financial management and offer practical insights for individual investors, financial institutions, and policymakers. These insights aim to enhance investment participation and performance in the capital market, particularly in the context of Purwokerto, Thereby supporting local economic growth and improving community well- being.

Keywords: capital market; investment decisions; psychological factors; demographic factors; financial literacy; Purwokerto.

1. Introduction

Investing in the capital market has become one of the play alternatives for individual in managing their finance and increasing their assets. In recent years, individual participation in capital market investment in Indonesia has increased significantly. This growth is driven by various factors, including increased financial literacy, technological developments that facilitate access to information and transactions in the capital market, as well as various initiatives from the government and financial institutions to encourage public participation.

The city of Purwokerto, as one of the developing cities in Central Java, has also experienced an increase in public participation in capital market investment. This increase can be seen from the growing number of individual investors, as well as the diversification of the investment instruments they have. This phenomenon shows that there is a greater interest and awareness from the people of Purwokerto on the importance of investment to achieve long-term financial goals.

However, individual investment decisions are not simple. This decision is influenced by a variety of complex and interrelated factors. These factors include psychological, demographic, social, as well as economic aspects. For example, investors may be influenced by different risk perceptions, confidence levels in making investment decisions, as well as influence from family, friends, and the media. In addition, economic factors such as market conditions, interest rates, and inflation also play an important role in investment decisions.

Previous research has shown that investor behavior is often not entirely rational and can be influenced by a variety of psychological biases. For example, Thaler (1999) in behavioral finance theory states that investors are often influenced by heuristics and biases such as overconfidence and herd behavior. This bias can cause investors to make less than optimal decisions and deviate from traditional financial theories that assume full rationality.

In addition, demographic factors such as age, gender, education level, and income also influence investment decisions. Research by Graham, Harvey, and Huang (2009) shows that older investors tend to be more conservative in their investment decisions compared to younger investors. The level of education and financial knowledge also plays an important role in determining how an individual manages his or her investment portfolio.

In the context of the city of Purwokerto, it is important to understand the specific factors that influence individual investment decisions. The city has unique demographics and socio-economic characteristics, which can influence the investment behavior of its people. For example, the level of financial literacy in Purwokerto may differ from other major cities in Indonesia, and access to financial information and services may also differ.

Therefore, this study aims to analyze the factors that affect individual investment decisions in the capital market with a case study on investors in Purwokerto City. This research is expected to provide deeper insights into the investment behavior of individuals in this city, as well as contributing to the development of literature in the field of financial management. Additionally, the results of this study can also provide practical recommendations for individual investors, securities companies, and policymakers to improve investment participation and performance in the capital market.

This research is important because it can help identify the obstacles and opportunities faced by individual investors in Purwokerto. By understanding the factors that affect investment decisions, more effective strategies and policies can be developed to support investment growth in the capital market. This, in turn, can contribute to local economic growth and community welfare. Based on this background, the researcher is interested in conducting research with the following title: "The Factors Influencing Investment Decisions Among Investors in Purwokerto City"

2. Literature Review

2.1. Basic Theories

2.1.1 Behavioral Finance Theory

Behavioral finance is a field of study that combined economics and psychology to understand how investors make financial decisions. Thaler (1999) stated that investors are often influenced by bias and heuristics in decision making. Some common bias in financial behavior include:

- **Overconfidence:** Investors tend to be overconfident in their abilities to choose the right investments, which often leads to less than optimal decisions.
- **Herd Behavior:** Investors often follow actions taken by the majority without conducting in-depth analysis, which can lead to a bubble or market crash.
- **Anchoring:** Investors trend to get too fixed on specific initial information or references when making investment decisions. Research by Barberis and Thaler (2003) concluded that these biases can cause investors to make irrational decisions and deviate from traditional financial theory.

2.1.2 Utilities Theory

Utility theory, introduced by Von Neumann and Morgenstern (1944), is the base of decision making in economics and finance. This theory states that individual make decisions to maximize the expected utility. In the context of investment, utility reflect the satisfaction or benefits obtained from the investment results. Investors will choose a portfolio that offers maximum utilities according to their risk preferences.

2.1.3 Modern Portfolio Theory

Harry Markowitz (1952) introduced modern portfolio theory which emphasizes the importance of diversification in managing investment risks. The main the principle of this theory is that the combination of various unrelated assets can reduce the overall risk without reduce the expected return. This theory also introduces the concept of efficient frontier, which is a collection of optimal portfolios that provide the highest returns for a given level of risk.

2.1.4 Psychological Factors

Several studies show that psychological factors have a significant influence on investment decisions. For example, research by Graham, Harvey, and Huang (2009) found that overconfidence can cause investors to trade more frequently and less optimally. In addition, research by Barber and Odean (2001) shows that investors who follow herd behavior trend to incur greater losses during periods of market volatility.

2.1.5 Demographic Factors

Demographic factors such as age, gender, education level, and income too influence investment decisions. Research by Lusardi and Mitchell (2007) found that higher levels of financial literacy correlated with more rational investment decisions. In addition, research by Sunden and Surette (1998) shows that gender differences can influence risk preferences, where women tend to be more conservative compared to men.

2.1.6 Social and Economic Factors

Social factors such as the influence of family, friends, and the media can also be influence investment decisions. Research by Hong, Cubic, and Stein (2004) found that who have a wider social network investors tend to be more active in investing. In addition, macroeconomic factors such US market conditions, interest rates, and Inflation also plays an important role in individual investment decisions. Research by Fama (1981) shows that macroeconomic variables can affect investment returns and risk expectations.

3. Research Methods

3.1.1. Research Approach

This study uses a qualitative approach to explore the factors that affect individual investment decisions in the capital market. The qualitative approach was chosen because it is able to provide a deep understanding of complex and dynamic phenomena, as well as allowing researchers to explore individual perspectives and experiences in depth.

3.1.2. Research Design

This study uses a case study design with a focus on individual investors in Purwokerto City. Case studies allow researchers to study phenomena in real life contexts and obtain rich and in-depth data. This design also makes it possible to explore factors that may not be visible in quantitative research.

3.1.3. Data Collection Techniques

- Searching

The search process will be conducted on electronic databases such as Elsevier, Google Scholar and ScienceDirect. Search keywords will include terms such as “Investors behavioral factors,” “investment,” “stock market decision making,” and “behavioral investment.” Keyword combinations will be adjusted using Boolean operators (AND, OR) to optimize search results.

- Study Selection

Studies found from the initial search results will go through a screening process to identify relevant studies. This process will include:

- De-duplication.

Examination of titles and abstracts for compliance with inclusion and exclusion criteria. Examination of full text of screened articles to ensure relevance to this study.

- Data Collection and Analysis

- Once studies are selected, information will be extracted from each article, including:
 - Basic information (author, year, study location).
 - Description of the SLR method used in the research.
 - Main results on factors influencing technology acceptance.
 - The data collected will be analyzed qualitatively and, where possible, quantitatively to find emerging patterns.

- Synthesis of Results

After the data is analyzed, the results will be synthesized to answer the research questions related to behavioral factor implementation on investment. The synthesis process will focus on key findings related to behavioral factors, key factors influencing investment decision making, and existing research gaps.

By using this method, the research is expected to provide a significant contribution in understanding how behavioral factors are implemented in investment and what factors influence the investment decision making.

4. Results

This study uses a qualitative approach with the systematic literature review (SLR) method. SLR is a research method that aims to identify, evaluate, and interpret all relevant research results related to a particular topic. In this case, the study focuses on factors that influence investment decisions among investors in Purwokerto.

The database search was conducted from 2014 to 2024, and the search included all articles that met the search criteria mentioned above. We found several articles based on our search criteria. Of these articles, we considered Noura et al (2015) because this paper explains the effects of overconfidence and disposition, and therefore we independently classified it under both biases. Table 4.1 shows our database search protocol. Finally, the author chose 12 comprehensive journals to conduct a Systematic Literature Review which can be seen in Table 4.1.

Table 4.1. Previous Research

Title and Author	Method	Results
How financial literacy moderates the association between behavior biases and investment decisions? Mohd Adil, Yogita Singh and Mohd. Shamim Ansari (2022)	Hierarchical regression analysis	Research result This show that factors psychological like risk aversion, herding, overconfidence, and disposition have different influences on decisions investment men and women. In addition, financial literacy also plays an important role in influencing investment decisions.
Psychology of Muslim Investors in Stock Market During COVID-19 Pandemic (2020) Full Moon Ramadani Silalahi, Muhammad Hafizh, Salman Nasution, Sugianto (2020)	Path Analysis	The psychology of Muslim investors in stock investment during the COVID-19 pandemic is influenced by irrational and intuitive factors, as well as religious values. Muslim investors tend to take risks and cut losses, but also consider religious aspects in decision making.
The Influence of Behavioral Factors on Retrieval Individual Financial Investment Decisions Anita Khalisa, Charpri Kurnia Karismasari, Hirzi Hikmatul Ikhsan, Niken Saraswati (2020)	Structural Equation Modeling	Investors in the Jakarta capital market are still heavily influenced by emotional factors and external information in making investment decisions. They tend to follow market trends, overreact to news, and rely less on in-depth analysis.
The influence of online information on investing decisions of reward based crowdfunding Sheng Bi, Zhiying Liu, Khalid Usman (2017)	SPSS	signal quality and e-word of mouth have significant influence to decision investment in Chinese crowdfunding context. However, the relative influence of these two types of information may vary depending on the project category.
The Impact of ESG Management on Investment Decisions: Institutional Investors' Perceptions of Country-Specific ESG Criteria So Ra Park 1 and Jae Young Jang 2 (2021)	Analytical Hierarchy Process (AHP)	Institutional investors in South Korea have different priorities in assessing companies based on ESG factors. Environmental and governance factors are considered more important than social factors. In addition, South Korea-specific factors also have a significant influence.
The Effect of Financial Literacy on Investment Decision Making in Southern Lebanon Hassan Alaaraj, Ahmed Bakri (2020)	SPSS	significant positive relationship between financial literacy and investment decision making. Further research is recommended to expand the study to other regions in Lebanon over a longer period of time in addition to applying other variables.
The influence of risk perception, risk tolerance, overconfidence, and loss aversion towards investment decision making Nadya Septi Nur Ainia, Lutfi Lutfi (2019)	Structural Equation Modeling	perception risk, tolerance risk, and overconfidence have significant influence to decision investment. While that, reluctance loss No own significant influence. This shows that psychological factors play an important role in the investment decision-making process.
Factors That Influence Stock Investment Decision Making	Partial Least Squares -	Psychological and cognitive factors such as financial literacy, locus of control, experience,

Title and Author	Method	Results
Nyoman Suprasta and Nuryasman, M. (2020)	Structural Equation Modeling (PLS-SEM) research method	and emotion (regret) have a significant influence on individual investment decisions. In other words, not only economic factors influence investment decisions, but also non-economic factors such as psychology and behavior.
Impact Of Behavioral Factors On Investors' Financial Decisions: Case Of The Egyptian Stock Market Noura Metawa, M. Kabir Hassan, Saad Metawa, M. Faisal Safa (2018)	Structural Equation Modeling	factor Investor behavior such as sentiment, overreaction, underreaction, overconfidence, and herd behavior have significant influence to decision investment. In addition, the factors demographic like age, gender, and education also play a role important. Although experience does not have a significant direct influence, it can help investors overcome emotional factors.
Attitudinal factors, financial literacy, and stock market participation Sreeram Sivaramakrishnan, Mala Srivastava, Anupam Rastogi, (2017)	Structural Equation Modeling	Clear and effective communication about regulations and operational convenience can help address the risk of investor avoidance. Governments and financial institutions need to work together to create a more attractive and efficient investment environment.
Financial statement analysis as a tool for investment decisions and assessment of company's performance Aminu Abdulrahim Olayinka (2022)	Structural Equation Modeling	FSA is an important tool for decision-making in various fields, not only in investment. Companies need to use FSA appropriately and comprehensively to obtain valuable information about their financial performance.
Overconfidence heuristic-driven bias in investment decision-making and performance: mediating effects of risk perception and moderating effects of financial literacy) Maqsood Ahmad and Syed Zulfiqar Ali Shah (2020)	Structural Equation Modeling	overconfidence can impact negative on decision investment and performance, but literacy finance and perception risk can help reduce the negative impact.

Source: Previous Research, 2024.

5. Discussion

Several studies have shown that investment decisions are influenced by various factors, including psychological, behavioral, and external factors such as financial literacy and online information. Financial literacy is an important factor that moderates the relationship between behavioral bias and investment decisions, as found in the studies of Mohd Adil et al. (2022) and Hassan Alaraj and Ahmed Bakri (2020), where high literacy helps investors make more rational decisions. Psychological factors, such as loss aversion, overconfidence, and herd behavior, also play an important role in investment decisions, as seen in the studies of Khalisa et al. (2020) and Metawa et al. (2018), which show that emotions and behavior following market trends without in-depth analysis often drive investor decisions.

In addition, in the context of the pandemic, Silalahi et al.'s (2020) research highlights that Muslim investors consider intuition and religious values in their investments, revealing that religious aspects also influence decisions. In terms of online information, Bi et al. (2017) showed that the quality of information signals and e-word of mouth significantly influence investment decisions in the context of crowdfunding. Demographics also play a role, as found in the research of Metawa et al. (2018) and Suprasta and Nuryasman (2020), where factors such as age, gender, and experience influence investor behavior. In institutional investors,

Park and Jang's (2021) research shows that environmental, social, and governance (ESG) factors are the main considerations in investment decisions, with environmental and governance factors being prioritized over social factors.

Finally, Sivaramakrishnan et al. (2017) emphasized that clear communication regarding stock market regulation can help overcome investors' risk fears, encouraging wider market participation. Overall, investment decisions are influenced not only by economic considerations, but also by behavioral biases, financial literacy, and socio-cultural aspects.

Several studies have shown that financial statement analysis (FSA) plays an important role in investment decision making and assessing company performance. Aminu Abdulrahim Olayinka (2022) revealed that FSA is not only used in the context of investment, but also in various other business aspects. Proper and comprehensive use of FSA can provide important information regarding the company's financial health, which in turn influences investment decisions. In addition, research by Maqsood Ahmad and Syed Zulfiqar Ali Shah (2020) highlights that overconfidence bias can have a negative impact on investment decisions and company performance. However, they also show that financial literacy and risk perception act as moderating factors that can reduce the negative impact of overconfidence bias. This shows the importance of financial literacy in helping investors make more rational decisions and avoid behavioral biases that can be detrimental.

6. Conclusion

- **Role of Financial Statement Analysis (FSA):** FSA plays an important role in investment decision making, as it provides information on the financial health of a company that influences investment decisions.
- **Wide Utilization of FSA:** FSA is not only relevant in the investment context, but is also used in various other aspects of business, thus providing more comprehensive insights for investors.
- **Impact of Overconfidence on Investment Decisions:** Overconfidence bias can have a negative impact on investment decisions and company performance, which can cause investors to make less rational decisions.
- **The Role of Financial Literacy and Risk Perception:** Financial literacy and risk perception act as important moderating factors in reducing the negative impact of overconfidence bias, helping investors make more rational decisions.
- **Importance of Financial Literacy:** Financial literacy plays a vital role in avoiding behavioral biases and improving the quality of investment decision making.

References

- Adil, M., Singh, Y., & Ansari, M.S. (2022). How does financial literacy moderate the association between behavior biases and investment decisions?. *Asian Journal of Accounting Research*. Vol. 7 No. 1, 2022, pp. 17-30.
- Ahmad, M., & Shah, SZA (2020). Overconfidence heuristic-driven bias in investment decision-making and performance: Mediating effects of risk perception and moderating effects of financial literacy. *Journal of Economic and Administrative Science*.
- Ainia, NSN, & Lutfi, L. (2019). The influence of risk perception, risk tolerance, overconfidence, and loss aversion towards investment decision making. *Journal of Economics, Business, and Accountancy Ventures* Vol. 21, no. 3, 401 - 413.
- Alaaraj , H., & Bakri, A. (2020). The effect of financial literacy on investment decision making in Southern Lebanon. *International Business and Accounting Research Journal*. Volume 4, Issue 1, January 2020, 37-43.

- Barber, B. M., & Odean, T. (2001). Boys Will Be Boys: Gender, Overconfidence, and Common Stock Investment. *Quarterly Journal of Economics* , 116(1), 261-292.
- Barberis, N., & Thaler, R. (2003). A Survey of Behavioral Finance. *Handbook of Economics of Finance* , 1, 1053-1128.
- Bi, S., Liu, Z., & Usman, K. (2017). The influence of online information on investing decisions of reward-based crowdfunding. *Journal of Business Research*. Volume 71, 10–18.
- Body, Z., Kane, A., & Marcus, A. J. (2014). *Investments* . McGraw-Hill Education .
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology* , 3(2), 77-101.
- Brigham, E.F., & Houston, J.F. (2019). *Fundamentals of Financial Management* . Cengage Learning.
- Creswell, J. W. (2014). *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches* . Sage Publications.
- Fama, E. F. (1981). Stock Returns, Real Activities, Inflation, and Money. *American Economic Reviews* , 71(4), 545-565.
- Gitman , L. J., & Zutter, C. J. (2015). *Principles of Managerial Finance* . Pearson.
- Graham, J. R., Harvey, C. R., & Huang, H. (2009). Investor Competence, Trading Frequency, and Home Biased. *Management Science* , 55(7), 1094-1106.
- Hong, H., Cubic, J. D., & Stein, J. C. (2004). Social Interaction and Stock Market Participation. *Journal of Finance* , 59(1), 137-163.
- Khalisa, A., Karismasari , CK, Ikhsan, HH, & Saraswati, N. (2020). Influence of behavioral factors to taking decision investment financial individual . *Indonesia Business Journal Review*. Vol. 3. No. 1.
- Lusardi, A., & Mitchell, O. S. (2007). Financial Literacy and Retirement Preparedness: Evidence and Implications for Financial Education. *Business Economics* , 42(1), 35-44.
- Markowitz, H. (1952). Portfolio Selection. *The Journal of Finance* , 7(1), 77-91.
- Metawa, N., Hassan, MK, Metawa, S., & Safa, MF (2018). Impact of behavioral factors on investors' financial decisions: Case of the Egyptian stock market. *International Journal of Islamic and Middle Eastern Finance and Management*.
- Olayinka, A. A. (2022). Financial statement analysis as a tool for investment decisions and assessment of companies' performance. *International Journal of Financial, Accounting, and Management/ Vol 4 No 1*, 49-66.
- Park, S. R., & Jang, J. Y. (2021). The impact of ESG management on investment decisions: Institutional investors' perceptions of country-specific ESG criteria. *International Journal of Financial Studies*. Volume 9, pp. 48-54.
- Patton, M. Q. (2015). *Qualitative Research & Evaluation Methods: Integrating Theory and Practice* . Sage Publications.
- Shiller, R. J. (2000). *Irrational Exuberance* . Princeton University Press.
- Silalahi, PR, Hafizh, M., & Salman. (2020). Psychology of Muslim investors in stock market during COVID-19 pandemic. *Tazkia Islamic Finance and Business Review*. Volume 14(1), 2020, 65-90.
- Sivaramakrishnan, S., Srivastava, M., & Rastogi, A. (2017). Attitudinal factors, financial literacy, and stock market participation. *International Journal of Bank Marketing*. Vol. 35 Issues:
- Sunden, A.E., & Surette, B.J. (1998). Gender Differences in the Allocation of Assets in Retirement Savings Plans. *American Economic Reviews* , 88(2), 207-211.
- Suprasta , N., & Nuryasman , M. (2020). Factors that influence taking decision investment shares . *Journal of Economics/Volume XXV, No. 02*: 251-269.
- Thaler, R. H. (1999). The End of Behavioral Finance. *Financial Analysts Journal* , 55(6), 12-17.
- Von Neumann, J., & Morgenstern, O. (1944). *Theory of Games and Economic Behavior* . Princeton University Press.