

INFLUENCES OF KNOWLEDGE AND TECHNOLOGY ON STUDENT INVESTMENT INTERESTS: A STRUCTURAL EQUATION MODELING APPROACH

Risa Asti Nur Fadilah ¹⁾, Dadang ²⁾, Rizky Ridwan^{3*)}, Dede Riswandi⁴⁾ Dewi Ratnasari Astuti⁵⁾

^{1),2),3)4)5)}Accounting Study Program, Faculty of Economics and Business, Cipasung Tasikmalaya University

e-mail: rizkyridwan@uncip.ac.id

ABSTRACT

This empirical research at Universitas Cipasung Tasikmalaya explores the impact of investment motivation, foundational investment knowledge, and technological advancement on student investment interest, a critical component in the evolving economic landscape. The primary goal is to analyze how each factor influences students' inclinations toward the capital market, which is increasingly relevant in the modern economic framework. The study sampled 100 students from the Faculty of Economics & Business, surveyed through an online questionnaire during the 2022-2023 academic year. Data were analyzed using a quantitative approach with Structural Equation Modeling (SEM) processed via the SMART PLS application. The findings carry critical educational implications, underscoring the urgent need to integrate comprehensive investment principles and technology-based frameworks into curricula to develop financially literate students. This study serves as an indispensable blueprint for educational institutions and policymakers to design strategies that align with digital market trends, fostering a generation skilled in the digital financial environment. The research provides insights into key factors affecting student investment interest: although investment motivation did not show a significant positive impact, both basic investment knowledge and technological progress significantly enhanced student investment interest. This highlights the importance of educational strategies focused on basic investment literacy and the integration of advanced technology to cultivate more investment-savvy students.

Keywords: Motivation, Knowledge, Technological Advancements, Investment Interest

1. Introduction

Background Student investment interest is a multifaceted area influenced by various factors. Research has shown that financial literacy and financial efficacy play significant roles in shaping students' interest in investment (Pangestika and Rusliati 2019). Additionally, investment knowledge, capital market training, minimal investment capital, and risk perception have been identified as key determinants of student investment interest (Listyani, Rois, and Prihati 2019). Investment motivation and digital literacy also positively affect investment interest among university students (Mentari, Carina, and Putra 2022). Furthermore, the influence of subjective norms, perceived returns, and financial literacy on female students' interest in investing in shares has been studied (Purnamawati 2021). The impact of attitudes, subjective norms, and behavioral control based on the theory of planned behavior on investment interest in Sharia fintech among students has also been explored (Puspitasari, Meifindasari, and Kusuma 2021).

Moreover, during the COVID-19 pandemic, the effects of investment motivation and financial literacy on investment interest were significant, as technological progress played a crucial role in influencing students' investment decisions (Mutasowifin 2022). Perceptions and lifestyle also impacted investment interest in Islamic mutual funds during the pandemic (Megawati and Djamaludin 2023). In the era of Society 5.0, factors such as investment knowledge, technological advancements, and motivation are pivotal in shaping

students' interest in investing (Djaelani and Zainuddin 2021). Studies have highlighted the necessity for comprehensive programs to augment knowledge and confidence in participating in the capital market (Aisa 2021), emphasizing the role of the social environment and online facilities in students' investment choices (Nustini et al. 2021). Understanding these factors is crucial for fostering a culture of informed and strategic investment among students in the evolving landscape of Society 5.0.

2. Literature Review

Student investment interest is a multifaceted area influenced by various factors. Research has shown that financial literacy and financial efficacy play a significant role in shaping students' interest in investment (Pangestika and Rusliati 2019). Additionally, investment knowledge, capital market training, minimum investment capital, and risk perception have been identified as key determinants of student investment interest (Listyani et al. 2019). Furthermore, investment motivation and digital literacy have been found to positively affect investment interest among university students (Mentari et al. 2022). The influence of subjective norms, perceived returns, and financial literacy has also been studied in relation to female students' interest in investing in shares (Purnamawati 2021).

The impact of attitudes, subjective norms, and behavioral control based on the theory of planned behavior on investment interest in Sharia fintech among students has been explored (Puspitasari et al. 2021). Additionally, the role of financial behavior, attitudes, and literacy in affecting student investment decisions has been investigated (Sorongan 2022). Research has delved into the effects of investment motivation and financial literacy on investment interest during the COVID-19 pandemic (Paranita and Agustinus 2020). It has been found that investment motivation and technological progress positively influence students' interest in investing during challenging times (Mutasowifin 2022). The influence of perceptions and lifestyle on investment interest in Islamic mutual funds during the pandemic has also been examined (Megawati and Djamaludin 2023). Several studies have investigated the factors influencing student interest in investing. (Wiguna and Indraswarawati 2022) explored the relationship between motivation, investment knowledge, and technological advances on student investment interest. (Romadon 2023) emphasized the importance of intrinsic and extrinsic motivation in fostering investment interest among students. (Abni and Trisnawati 2022) studied the impact of investment knowledge, minimal investment capital, and technological developments on students' interest in investing in the capital market, finding a positive effect.

(Utami, Sudiana, and Putra 2022) examined the relationship between investment knowledge, minimum investment capital, and advances in information technology on student investment interest in the capital market. (Aisa 2021) delved into the impact of investment motivation, financial literacy, and technology on investment interest during the COVID-19 pandemic. (Aisa 2021) did not find a significant influence of technological advancement on students' interest in investing, (Aisa 2021) found that investment motivation and technological progress positively influenced students' interest in investing during challenging times. Student investment interest in the era of Society 5.0 is a multifaceted phenomenon influenced by various factors. Research has indicated that factors such as investment knowledge, technological advancements, and motivation are pivotal in shaping students' interest in investing (Djaelani and Zainuddin 2021).

The theory of planned behavior has been utilized to examine the intention to invest among economics and business students, illustrating how investment behavior has integrated into the daily lifestyle of modern society (Nurhayani et al. 2022). Studies have also explored the impact

of financial literacy and technology on investment intention, highlighting the necessity for comprehensive programs to augment knowledge and confidence in participating in the capital market (Aisa 2021). The evolution of information technology has been found to notably impact the investment interests of millennials, underscoring the significance of keeping pace with technological advancements in making investment decisions (Negara and Febrianto 2020). Furthermore, the influence of the social environment, minimum investment capital, and online facilities on investment decisions has been investigated, emphasizing the role of external factors in students' investment choices (Nustini et al. 2021).

Moreover, the mediating effect of investment interest in enhancing investment decisions has been emphasized, highlighting the interconnected nature of various factors in the investment decision-making process (Yutama, Maghfiroh, and Prakoso 2022). In conclusion, student investment interest in the era of Society 5.0 is shaped by a combination of factors including financial literacy, technological advancements, motivation, social environment, and investment knowledge. Understanding these factors and their interactions is crucial for fostering a culture of informed and strategic investment among students in the evolving landscape of Society 5.0.

The novelty of this research lies in its comprehensive analysis of the interplay between investment knowledge, technological advancements, and student investment interest using Structural Equation Modeling (SEM). Unlike previous studies that typically focus on isolated factors, this study integrates multiple determinants, including intrinsic and extrinsic motivations, to provide a holistic view of what drives investment interest among students. The inclusion of technological advancements as a key variable is particularly innovative, reflecting the digital transformation's impact on investment behaviors (Mentari et al. 2022; Mutasowifin 2022)

By focusing on a population from Universitas Cipasung Tasikmalaya, this research adds a unique cultural and educational context to the broader discourse on student investment interest, which has often been dominated by studies from Western contexts (Listyani et al. 2019; Pangestika and Rusliati 2019). Additionally, the use of SEM with SMART PLS offers a robust methodological approach, enhancing the validity and reliability of the findings. This study not only contributes to academic literature but also provides actionable insights for educators and policymakers to foster a culture of informed investment among students in the digital era, aligning with the needs of Society 5.0 (Djaelani and Zainuddin 2021; Nurhayani et al. 2022).

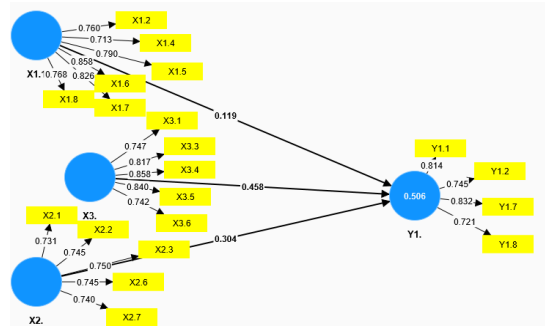
3. Methodology

This study employs a quantitative approach using Structural Equation Modeling (SEM) to analyze data from 100 students at the Faculty of Economics & Business, Universitas Cipasung Tasikmalaya, during the 2022-2023 academic year. Data were collected via an online questionnaire measuring investment motivation (X1), basic investment knowledge (X2), technological advancements (X3), and investment interest (Y1).

Descriptive statistics showed high investment motivation (mean = 4.63), moderate basic investment knowledge (mean = 3.47), and technological advancements (mean = 3.49). Investment interest had a mean of 4.35. Validity and reliability tests confirmed the accuracy of the measurement instruments, with AVE values exceeding 0.50 and Cronbach's Alpha and Composite Reliability scores above 0.70. Hypothesis testing revealed that investment motivation (H1) did not significantly influence investment interest ($p = 0.261$), whereas basic

investment knowledge (H2) and technological advancements (H3) had significant positive influences ($p < 0.000$ for both).

This structured methodology ensures the validity and reliability of the findings, highlighting the key factors influencing student investment interest.



The provided image is a path diagram from a Structural Equation Modeling (SEM) analysis. Here's an explanation of the components and relationships depicted in the diagram. The SEM path diagram illustrates the relationships between investment motivation (X1), basic investment knowledge (X2), and technological advancements (X3) on investment interest (Y1). Technological advancements (0.458) and basic investment knowledge (0.304) significantly influence investment interest, explaining 50.6% of its variance. Investment motivation (0.119) has a weak, non-significant effect.

4. Results and Discussion

The results of this study, which analyzed the factors influencing student investment interest using Structural Equation Modeling (SEM), provide valuable insights into the roles of investment motivation, basic investment knowledge, and technological advancements. The analysis was conducted with data from 100 students at the Faculty of Economics & Business at Universitas Cipasung Tasikmalaya, collected during the 2022-2023 academic year.

4.1. Descriptive Statistics:

Descriptive statistics for the study's variables showed that investment motivation ranged from 2 to 5, with a mean of 4.63, indicating a generally high motivation among respondents. Basic investment knowledge ranged from 1 to 5, with a mean of 3.47, reflecting a moderate level of knowledge. Technological advancements had values ranging from 2 to 5, with a mean of 3.49, suggesting a general agreement on the positive impact of technology on investment behaviors. Investment interest ranged from 3.0 to 5.0, with a mean of 4.35, indicating a high level of interest in investing among the students.

4.2. Validity and Reliability Tests:

The validity of the measurement instruments was confirmed through Average Variance Extracted (AVE) values, all of which exceeded 0.50. This indicates that the constructs used in the study captured the variance in the data adequately. Reliability was also confirmed, with Cronbach's Alpha and Composite Reliability scores all exceeding 0.70, demonstrating that the measurement instruments were consistent and reliable.

4.3. Hypothesis Testing:

The hypotheses were tested using SEM with the SMART PLS application. The results are as follows:

H1: Investment motivation positively influences student investment interest.

- a. This hypothesis was rejected, as the path coefficient for the relationship between investment motivation and investment interest was 0.119, with a p-value of 0.261, indicating a non-significant influence.

H2: Basic investment knowledge positively influences student investment interest.

- a. This hypothesis was accepted. The path coefficient was 0.304, with a p-value of less than 0.000, indicating a significant positive influence of basic investment knowledge on investment interest.

H3: Technological advancements positively influence student investment interest.

- a. This hypothesis was also accepted. The path coefficient was 0.458, with a p-value of less than 0.000, indicating a significant positive influence of technological advancements on investment interest

4.4. Discussion

The findings reveal that basic investment knowledge and technological advancements are significant predictors of student investment interest, whereas investment motivation does not significantly influence investment interest.

4.4.1. Investment Motivation

Despite the high mean score for investment motivation, the non-significant relationship with investment interest suggests that other factors might be mitigating its impact. This aligns with previous research indicating that while motivation is essential, it must be accompanied by knowledge and tools to translate into actual behaviour (Mentari et al. 2022).

4.4.2. Basic Investment Knowledge

The significant positive influence of basic investment knowledge on investment interest highlights the importance of financial literacy. This finding supports the work of (Pangestika and Rusliati 2019), who emphasized that financial literacy is crucial in shaping investment behaviors. Educators and policymakers should prioritize incorporating comprehensive investment education in curricula to enhance students' understanding and interest in the capital market.

4.4.3. Technological Advancements

Technological advancements emerged as the most substantial predictor of investment interest. This underscores the pivotal role of digital tools and platforms in modern investment practices. The positive impact of technology on investment interest is consistent with previous studies (Negara and Febrianto 2020)(Mutasowifin 2022). Students' familiarity with online trading platforms and investment apps facilitates easier access to investment opportunities, thereby boosting their interest.

Conclusion : The study's findings suggest that enhancing basic investment knowledge and leveraging technological advancements are effective strategies for increasing student investment interest. While investment motivation alone may not be sufficient, combining it with practical knowledge and digital tools can significantly influence students' investment behaviors. These insights are crucial for educators, policymakers, and financial institutions aiming to foster a culture of informed and proactive investment among students. Future research could explore additional factors that might influence investment motivation and its translation into behavior. Investigating the role of psychological factors, peer influence, and real-world investment experiences could provide a more comprehensive understanding of what drives student investment interest. Additionally, longitudinal studies could help ascertain the

long-term impact of financial education and technological integration on investment behaviors.

Conclusion

This study at Universitas Cipasung Tasikmalaya investigated the influences of investment motivation, basic investment knowledge, and technological advancements on student investment interest. Using Structural Equation Modeling (SEM) with the SMART PLS application, we found that basic investment knowledge and technological advancements significantly enhance investment interest, while investment motivation did not show a significant impact. These results suggest that integrating comprehensive investment principles and technology-based frameworks into educational curricula is crucial for developing financially literate students (Listyani et al. 2019; Mentari et al. 2022; Pangestika and Rusliati 2019). The significant positive effects of investment knowledge and technological advancements highlight the need for educational strategies that emphasize basic investment literacy and the integration of advanced technology. This approach will help cultivate more investment-savvy students who can navigate the modern digital financial environment, thus fostering a culture of informed and strategic investment in the evolving economic landscape (Aisa 2021; Djaelani and Zainuddin 2021; Nurhayani et al. 2022). Understanding these factors and their interactions is essential for promoting and nurturing students' interest in investment opportunities, especially in the context of Society 5.0.

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