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Do Financing and Investment-Based Courses Influence the Gen-Z Investment?

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ABSTRACT

The number of young investors in Indonesia has grown significantly in recent years, marking a notable shift in the country's investment landscape. Although the total assets of younger investors are smaller compared to those of older investors, their increasing participation has positively influenced the development of the investment sector and improved financial literacy among younger generations. Based on this phenomenon, the **purpose** of this study is to examine the attitudes of Generation Z as the young investors towards business and management programs, the use of investment applications, and robo-advisor services. The research focuses on two distinct groups: students who have had prior exposure to finance and investment-related courses, and those who have not had such courses. The **method** used was structured focus group discussions to explore students' knowledge and experiences, then supplemented with a survey questionnaire to validate findings and provide deeper insights. The research **concluded** that there were no significant differences between the two cohorts regarding their interest in understanding and the importance of investments. Some participants had already started investing without formal financial education, while others explored unconventional investments such as collectible hobby items. Moreover, participants generally trusted risk assessments provided by robo-advisors, but many of them were hesitant to follow the recommendations. They expressed a greater confidence in their ability to make independent investment decisions.

Keywords: finance; investment; gen-z; investor; financial literacy

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ОРИГИНАЛЬНАЯ СТАТЬЯ

Влияют ли курсы по финансированию и инвестициям на инвестиционную активность поколения Z?

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АННОТАЦИЯ

За последние годы число молодых инвесторов в Индонезии значительно выросло, что свидетельствует о заметных изменениях в инвестиционной сфере страны. Несмотря на то, что совокупные активы молодых инвесторов меньше, чем у более зрелых инвесторов, растущее участие молодых инвесторов положительно повлияло на развитие инвестиционного сектора и повысило финансовую грамотность молодого поколения. Исходя из этого, целью данного исследования является изучение отношения представителей поколения Z, т.е. молодых инвесторов, обучающихся по программам в сфере бизнеса и менеджмента, к инвестированию, использованию инвестиционных приложений и услуг робоэдвайзинга. Исследование сосредоточено на двух группах: студентах, которые ранее изучали курсы по финансам и инвестициям, и тех, кто не изучал такие курсы. В качестве метода исследования использовались структурированные фокус-группы для изучения знаний и опыта студентов, которые дополнялись анкетированием для подтверждения полученных результатов и получения более глубокой информации. Исследование показало, что между этими двумя группами нет существенных различий в том, что касается их интереса к инвестициям и понимания их важности. Некоторые участники уже начали инвестировать, не имея формального финансового образования, в то время как другие рассматривали нетрадиционные варианты инвестирования, например, коллекционирование предметов для хобби. Кроме того, участники в целом доверяли оценкам рисков, предоставляемым робоэдвайзерами, но многие из них не спешили следовать их рекомендациям. Они больше уверены в своей способности принимать самостоятельные инвестиционные решения.

Ключевые слова: финансы; инвестиции; поколение Z; инвестор; финансовая грамотность

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INTRODUCTION

According to the press releases from the Indonesia Central Securities Depository for 2022, the number of Single Investor Identification (SID) has increased by 31.85%, or 9.87 million investors, compared to 2021 of 7.49 million investors, which was dominated by young investors under 30 years (58.91% or 5.81 million young investors). Although the total asset is still dominated by the age above 60 years old with 584.07 trillion Rupiahs compared to young investors with only 52.77 trillion Rupiahs, this escalation gives a sign that young people in Indonesia are becoming more aware of investing, especially in capital market.

For some reason, the growing number of young investors in Indonesia is influenced by several factors. Firstly, the accessibility and ease of opening an online account have made it easier for individuals to become investors in the capital market. Additionally, the infrastructure development such as AKSES (Securities Ownership Reference) and EASY (Electronic General Meeting System) has further facilitated investor activities within the Indonesian capital market by providing convenience and real-time access. Secondly, the proliferation of selling agents for fintech-based mutual funds has significantly contributed to the growing number of investors. According to the Indonesia Central Securities Depository's report for 2022, 78.10% of mutual fund investors opened their accounts with these agents. Additionally, there has been an increase in the number of distribution networks of the Indonesia Stock Exchange (IDX) throughout Indonesia, which included 30 representative offices, 710 campus investment galleries, and 448 investment communities in 2022. The concept of investment galleries was not only introduced by IDX, but also by universities and securities companies to provide a platform for academic communities to explore and conduct research on financial studies.

Based on the growing number of young investors, especially in the academic environment, this research aims to gain an in-depth understanding of investment attitudes, the use of investment apps, and robo-advisor services among students in business and management schools, which is defined as Generation Z. We use the term "Gen Z" to refer to individuals born between 1997 and 2012, or currently estimated to be aged between 10 and 26 in 2023. These ages are categorized as "youth" based on the Republic of Indonesia's Law No. 40 concerning youth 2009, which states that youth are Indonesian citizens aged 16–30 years who are entering a critical period of growth and development.

As part of this study, focus group discussions (FGDs) were conducted with students from the

School of Business and Management (SBM) at the Bandung Institute of Technology (ITB) from different academic years, including those who started studying in 2020 and 2021. The differences of these academic years allow us to capture a range of perspectives and experiences related to investment. To ensure a robust investigation, a semi-open questionnaire survey was also administered to gather additional information that could not be captured during the FGDs. The results indicate differences in investment attitudes between students in these two academic years, with later students exhibiting more diverse investment preferences. For instance, some students made investments using collectible items as a means of investing. Interestingly, many students in both groups used financial investment apps such as robo-advisors, but refused to follow their recommendations.

Furthermore, this research represents a pioneering exploration of investment and financial robo-advisor adoption among young investors in Indonesia, and contributes to the existing literature by adding a distinct perspective on the variation in investment knowledge across different academic years and utilizing FGDs of students in business and management schools to gain deep insights directly from Gen Z investors.

This research paper is structured as follows: a literature review will be presented in the next section, followed by methods, findings, discussion, conclusion, limitations, and further research.

LITERATURE REVIEW

Retail Investor

During the COVID-19 pandemic, retail investors played a significant role in the financial market. By working from home and with government stimulus measures in place, foreign institutional investors left the market, while retail investors became the key buyers and beneficiaries of the rebound [1]. The surge of retail investors also impacted countries with a larger younger generation population due to the increasing popularity of mobile trading applications [2]. This shift led to changes in stock market participation, with retail investors taking over the market in Turkey, controlling 66% during the pandemic compared to 35% before; meanwhile, the participation of foreign institutional investors declined from 53% to just 6% [3]. Furthermore, the surge in stock and index trading activity during the pandemic was particularly notable among older male investors [4]. In contrast, retail investors during COVID-19 were more concerned with managing household fears and uncertainties rather than seeking information about potential stock investments [5].

The limited capabilities of retail investors make them use their resources to survive in the financial markets. They utilize financial information and investment advice sourced from financial intermediaries, family members, and business and financial media [6]. Other sources, such as Key Investor Information (KIDs), provide the main characteristics of financial products [7], and a psychological contract that involves financial literacy and trust [8] reveals that when novice retail investors gain greater knowledge and become more financially literate, they have higher expectations and require more explicit agreements or contracts to maintain their trust in financial markets.

In financial decision-making, retail investors consider factors such as risk, expected returns, and personal confidence. Japanese retail investors display a distinctive behavioral pattern where they are more likely to realize profits quickly when in a gain position, but are prone to delay selling in loss-making situations [9]. In Australia, these investors typically place greater emphasis on subjective beliefs and demonstrate lower risk aversion. They also exhibit a tendency towards impatience and often choose to sell stocks quickly rather than buy. Notably, female investors show a tendency to refrain from trading, irrespective of stock market returns or volatility levels [10]. This behavior is similar to that of female investors in India who exhibit greater anxiety and caution in investment decisions compared to their male counterparts [11]. However, women with the ability to earn money and manage their own finances have the ability to make their own decisions [12].

Gen-Z and Financial Literacy

Financial literacy and digital knowledge are important for effective money management, especially among Gen Z. In France, the lack of financial training for Gen Z in financial training can lead to a lack of knowledge about finances. Individuals with lower risk tolerance tend to have lower levels of financial literacy [13]. Research in Hungary has found that Gen-Z members perceive a trade-off between their digital attitudes and financial literacy; being open to banking service innovations but still relying on traditional services, and preferring moderate-level risks in their finances [14]. In India, the Gen Z's financial literacy has a positive impact on investment intentions and attitudes towards investment, as well as perceived behavioral control [15]. Although they are motivated by positive attitudes influenced by social pressure and the ongoing development of personal attitudes [11]. Moreover, the low knowledge about digital finance in India impacts the level of their financial

literacy [16]. Similarly, Gen Z in Thailand also displays a high level of overall financial literacy and proficiency in financial management [17]. In addition, the Gen Z in Finland uses social media in their smartphones to gather information about investment options and value, and influencers to follow, which can increase their financial literacy [18], and improve digital financial inclusion [19]. However, in Russia, low knowledge about digital finance impacts the low level of financial literacy, which leads to many influencers exaggerating their knowledge about crypto investment [20].

Despite Gen Z having strong skills in managing finances, higher levels of financial literacy have been associated with reduced payday loan usage and improved financial planning among young students in the US [21]. Furthermore, financial literacy is positively correlated with share ownership, as it helps individuals overcome information costs and encourages their participation in the stock market [22, 23].

Robo-advisor as Investment Apps Service

The rise of financial technology has greatly transformed payment management, financial investments, and the way people seek the financial advice [24]. The rapid development of Fintech offers individuals enhanced convenience in their financial transactions and empowers them to make better-informed decisions about investments and their financial well-being. Consequently, the increasing presence of Fintech selling agents has contributed to a surge in young investors in Indonesia, with mutual fund-based robo-advisors emerging as prominent and reputable Fintech platforms in the country. Robo-advisors aim to assist users by allocating assets based on market conditions and risk profiles, offering cost-effective and flexible services. These features are expected to attract retail investors across different generations and contribute to an improvement in financial literacy [25–29]. Hence, the regulatory authorities must oblige financial firms to educate their customers on the risks and benefits of using robo-advisors [30]. Furthermore, robo-advisors have diversified their services to include retirement funds, mortgages, exchange-traded funds, health insurance, tax payments, and other financial products [31].

In Indonesia, non-banking institutions like Bibit and Bareksa have introduced robo-advisor services that are expanding rapidly among millennials and Gen Z. These generations are attracted by the convenience and extensive advertising of investment apps, the use of digital payments, and knowledge about bond and stock information [32].

METHOD

Study Design

This study utilized a qualitative approach through focus group discussions (FGDs) to explore the investment attitudes, the use of investment apps, and robo-advisor services among young people. A thorough review of existing literature indicates that there is a lack of prior research investigating this topic specifically in Indonesia. To gain fresh insights into investments among Gen Z, structured questions were used during the FGDs (*Table 1*) to encourage students to share their knowledge and experience in the different batches. Data was collected via audio recordings and handwritten notes.

Participants

The research investigates the topic among college students at the School of Business and Management at Bandung Institute of Technology. The discussion group is divided into different academic batches, namely 2020 and 2021. The main difference between these groups is that the 2020 batch comprises students who have taken finance and investment-based courses, such as Financial Management (mandatory courses) or Capital Market (elective courses), known as the FIBC group. On the other hand, the 2021 batch consists of students who have not yet taken financial and investment courses, called the non-FIBC group. A total of 36 participants volunteered for this study, with 16 from the FIBC group and 20 from the non-FIBC group.

Data Analysis

This research uses an inductive content analysis approach to analyze the results of the FGD that conducted. This approach was used because there had been no previous research [33], which discussed investment in Gen Z by exploring valuable information more intensively. Content analysis is a method used to analyze written, verbal, or visual communication messages with the aim of obtaining a concise and broad picture of phenomena, and understanding the meaning of communication [34].

To enhance the robustness of this research, a questionnaire survey was conducted to further validate the findings and gather more detailed information from participants. The questionnaire was distributed one week after the focus group discussion was conducted. It included various types of question, such as yes/no questions, open-ended questions, multiple-choice questions, and Likert-scale questions tailored to address the research inquiries. For instance, yes/no questions were utilized to assess the importance of investment; open-ended

responses solicited information about individuals who influenced the participants' investment decisions, while Likert-scale questions measured satisfaction with the investment applications.

Ethical Consideration

The study was approved by the Academy of Management Code of Ethics in March 2011, in accordance with Chancellor's Decree No. 024/SK/K01/PL/2011. Prior to conducting the discussions with FIBC and non-FIBC groups, participants were verbally informed one week prior to FGD about the informed consent. The discussion forum was open to all SBM ITB students in the classes 2020 and 2021. Before the discussion began, we had asked the permission from participants to record and document their statements, while ensuring participant anonymity during FGD. The verbal consent was used with the consideration that this research had low risk, where the information we expected was not confidential. During the survey, emphasis was placed on keeping responses confidential and not revealing the identity of respondents. This procedure allowed participants to freely express their opinions, share their knowledge, and recount their experiences with financial investments.

FINDINGS

This study utilized a focus group discussion and a survey consisting of five questions related to investment attitudes and four questions related to investment apps. The FGDs were conducted smoothly for both the FIBC and non-FIBC groups. However, despite not taking any financial or investment courses, the non-FIBC group showed great enthusiasm during the discussions. In contrast, the FIBC group provided more mature responses, possibly due to their higher level of knowledge and experience with investing. The combination of the FGD and survey data was used to enhance the research findings presented in subsequent sections of the study.

Demographics

The demographic of this study, as shown in *Table 2*, found that the FIBC group is dominated by males at 62.50%, while the non-FIBC group had a similar proportion of males and females. The participants in this group were aged between 18 and 21, suggesting that they were Gen Z. Regarding the income, the average income in the FIBC group ranged from 192 USD to 256 USD, while the non-FIBC group ranged from 128 USD to 192 USD. Both groups' income came from their parents, although some

Table 1

Focus Group Discussion Questions

Investment Attitude Questions	Investment Apps and Robo-advisor Service
1. What is the purpose of investing? 2. How important is it to invest? 3. What type of investment is used? 4. Who teaches you investment? 5. Feedback after learning about the financial market?	1. What is the reason for using the investment apps? 2. How long have you been using the investment apps? 3. Are you satisfied with the investment apps? 4. Is the risk profiling appropriate for you?

Source: Compiled by the authors.

earned extra income from full-time or part-time work, scholarships, trading activities, apprenticeships, or winning competitions.

Table 2

Demographics

Investment Attitude

The Focused Group Discussion involved 36 students, but only 30 participants completed the questionnaires and made investments (15 FIBCs and 15 non-FIBCs). Six participants chose not to complete the questionnaires due to their lack of investment experience. The purpose of the FGD and survey was to gain insights into the participants' perspectives on investment choices. The questionnaire results are tabulated in Table 3.

Regarding the purpose and importance of investing, both the FIBC and non-FIBC groups recognized that investment was crucial. According to the questionnaire results of Table 3, 66.67% of respondents from both groups considered investment to be highly important on a scale from four to five. The participants in the focus group discussions also stated that investing can increase wealth, act as asset hedging, serve as an emergency fund, and generate passive income. In line with the survey results, most participants (from both FIBC and non-FIBC) agreed that investments can be used to make extra money. This indicates that participants have a good understanding of the purposes and benefits of investing.

Regarding the various investment options, discrepancies were observed between the FIBC group and the non-FIBC group. The survey revealed that 42.11% of individuals in the FIBC group chose to invest in stocks, while 34.62% of those in the non-FIBC group opted for mutual funds as their preferred investment choice. The FIBC group focused on practical investments such as stocks, mutual funds, bonds, gold, and property (housing and shops). On the other hand, the non-FIBC group provided a wider range of responses, including traditional investments like stocks, mutual funds, gold, and property as well as some unconventional choices like a photocard of a Korean idol, a game account, agate, an anime

Demographics	Categories	FIBC, %	Non-FIBC, %
Gender	Male	62.50	50.00
	Female	37.50	50.00
Age	18 years old	0.00	5.00
	19 years old	18.75	80.00
	20 years old	68.75	15.00
	21 years old	12.50	0.00
Income (pocket money)	<= 64 USD	18.75	20.00
	64 USD until 128 USD	6.25	20.00
	128 USD until 192 USD	12.50	40.00
	192 USD until 256 USD	37.50	10.00
	256 USD until 320 USD	12.50	0.00
	>= 320 USD	12.50	10.00
Income Sources	Only Parents	50.00	70.00
	Parent, Apprenticeship	25.00	5.00
	Parent, Student Reporter	6.25	0.00
	Parent, Part-timer	12.50	5.00
	Parent, Full-timer	0.00	5.00
	Parent, Trading	0.00	10.00
	Parent, Contest	0.00	5.00
	Apprenticeship	6.25	0.00

Source: Compiled by the authors.

Table 3

Investment Attitude

Investment Attitude	Categories	FIBC, %	Non-FIBC, %
The important of investment	Scale 3 (Neutral)	6.67	0.00
	Scale 4 (Important)	33.33	26.67
	Scale 5 (Very Important)	60.00	73.33
Investment Purpose	Hedging	23.08	22.50
	Prepare funds for other needs	26.92	27.50
	Emergency fund	15.38	15.00
	Earn extra money	34.62	35.00
Kind of Investment	Game account	5.26	3.85
	Deposit	10.53	0.00
	Gold	5.26	15.38
	Business Investor	0.00	3.85
	Photo card Idol	0.00	7.69
	Property	5.26	0.00
	Mutual Funds	31.58	34.62
	Stock	42.11	30.77
	Government Bond	0.00	3.85
Investment Inspiration	Father	11.11	15.38
	Mother	16.67	15.38
	Siblings	0.00	3.85
	Friends	38.89	26.92
	Community	16.67	11.54
	Others (social media)	16.67	26.92
The feedback after learning finance and investment based in the courses.	Haven't taken the course yet	0.00	46.67
	Financial Accounting course helps me	0.00	6.67
	Not interested in investing and do not want to practice it	6.67	0.00
	Feel different after learning the course	6.67	0.00
	Not because of the course	6.67	0.00
	Yes, and I practice it	46.67	40.00
	Yes, but I don't want to practice it yet	33.33	0.00
	Yes, but don't want to invest in the crypto asset	0.00	6.67
Total Investment	<= 64 USD	40.00	20.00
	64 USD until 160 USD	6.67	26.67
	160 USD until 320 USD	20.00	6.67
	320 USD until 480 USD	6.67	6.67
	480 USD until 640 USD	0.00	6.67
	>= 640 USD	26.67	33.33

Source: Compiled by the authors.

action figure, and movie directing. The students who mentioned these unconventional investments explained their reasons for investing in them and how they saw potential for generating income. For instance, some students view photo card trading as a valuable investment in the K-pop fandom. It can be traded, sold, and bought as a collectible item. A game account is also considered a potential investment if it reaches a high level with rare items. Some respondents also invest in movie directing with a potential 40% return on each production. In general, the survey results indicated that 42.11% of the FIBC group invested in stocks, while 34.62% of the non-FIBC group invested in mutual funds.

When it comes to who influenced the students to invest, both FIBC and non-FIBC groups mentioned that their families (father, mother, siblings), friends, student investment communities, and content on social media were sources of inspiration. However, for the FIBC group specifically, friends were the primary source of influence (38.89%), while family members (fathers, mothers, and siblings) were more influential for the non-FIBC group (34.62%).

In addition, only the FIBC group reported positive feedback after participating in finance and investment courses. They found that these courses, such as Financial Management and Capital Markets (elective), helped them calculate potential investments and make informed choices, promoting a cautious approach to investing. In contrast, the non-FIBC group relied on social media for their financial education. It is worth noting that some FIBC participants also used investment content to supplement their knowledge in this area. The results indicated that 46.67% of FIBC participants recognized the benefits of finance and investment courses by applying their newfound knowledge in practice.

Furthermore, the survey revealed that 40.00% of participants in the financial literacy program had investments totaling less than 64 USD, whereas 33.33% of non-participants had investments exceeding 640 USD.

Investment Apps and Robo-advisor Service

This section presents the findings from a forum discussion group and a survey (Table 4) about investment apps that involve both FIBC and non-FIBC groups. Both the FGD and the survey, the participants reported using various investment apps, including Bibit, Ajaib, Bareksa, IPOT, etc. Among these apps, Bibit was the most commonly used by both FIBC and non-FIBC groups. Interestingly, IPOT was the second-most used app for FIBC participants, while Ajaib was the second most popular choice

Table 4

Investment Apps

Investment Apps	Categories	FIBC, %	Non-FIBC, %
Investment Apps	Ajaib	0.00	23.53
	Bank Digital	8.33	0.00
	Bareksa	8.33	0.00
	Bibit	50.00	47.06
	BIONS	0.00	5.88
	Go Trade	0.00	5.88
	I POT	25.00	5.88
	Neo Hots	8.33	0.00
	POST	0.00	5.88
	Welma BCA	0.00	5.88
Time using the app	0 year until < 1 year	50.00	35.71
	1 year until < 2 year	40.00	50.00
	2 year until < 3 year	10.00	14.29
Reason for using the app	Low admin fees	0.00	4.00
	Apps ads often appear on social media	15.79	20.00
	Apps ads of the appear on television	5.26	4.00
	Friend recommendation	15.79	8.00
	Investment influencer recommendation	5.26	8.00
	Required app from bank	0.00	4.00
	Family recommendation	5.26	4.00
	Easy to use	47.37	48.00
	Alternative other service	5.26	0.00
Investment app satisfaction	Scale 1 (Very Dissatisfied)	0.00	6.67
	Scala 3 (Neutral)	40.00	6.67
	Scale 4 (Satisfied)	40.00	60.00
	Scale 5 (Very Satisfied)	20.00	26.67

Source: Compiled by the authors.

among non-FIBC participants. Bibit and Bareksa are also well-known in Indonesia for their robo-advisory services for investments.

The duration of usage of investment apps is shorter for FIBCs (less than one year) compared to non-FIBCs (between one and two years), according to the findings from focus group discussions and questionnaires. Both groups cited user-friendly interfaces and extensive advertising on various Internet platforms as the primary reasons for using investment apps. Additionally, some participants mentioned using IPOT and Ajaib for their stock features, which Bibit does not provide.

The participants in the study expressed satisfaction with the Bibit investment app, citing its user-friendly interface and convenience. Some participants in the FIBC group mentioned that they had switched to more advanced apps, such as IPOT, after realizing slow returns from mutual funds. Overall, the participants agreed that Bibit was a suitable investment app for laypeople, particularly millennials, Gen Z, and elderly people who were investing for the first time. Furthermore, both the FIBC and non-FIBC groups reported high levels of satisfaction with the apps they used for investment.

The results of the risk profiling in the investment apps, especially robo-advisors, for both the FIBC and non-FIBC groups are shown on the Table 5. The FIBC group indicated 40% appropriateness, while the non-FIBC group indicated a higher percentage, 46.67%, indicating very high appropriateness. However, despite this alignment, many participants chose to disregard the robo-recommendation and rely on their intuition when selecting investment products. This finding was consistent with the questionnaire results as well. Some participants followed the robot's recommendation initially, but later decided to base their product choices on their own progress and confidence. Additionally, some participants expressed concerns about changes in Bibit investment product offerings, making them reluctant to rely solely on recommendations, and preferred to trust their own judgment.

DISCUSSION

This study examines investment attitudes and the use of investment apps among college students, specifically categorizing them into two groups: FIBC (students who have taken Finance or Investment Based courses) and non-FIBC (students who haven't taken Finance and Investment Based courses). The research contributes to the existing literature on investments by presenting several significant findings.

Firstly, our study indicates that investment has gained widespread acceptance among both FIBC and

non-FIBC groups. These groups have acquired their investment knowledge through formal education as well as social media content, including from various investment apps. Bibit stands out among the various apps for its robo-advisor service, and it is particularly popular among the younger generation. This finding aligns with previous studies [32, 35], which highlight the growing use of robo-advisors by young investors. Our focus group discussions also show that many students acquire financial knowledge not only through academic courses, but also through online resources on finance and investment. In line with C. D'Hondt and colleagues [36], this research reveals that investors who benefit from following a robo-advisor strategy tend to have lower income. The findings show that both FIBC and non-FIBC participants utilizing robo-advisors do not currently have stable income sources. They receive money from their parents, although some of them also earn money from part-time jobs or internships.

Secondly, our study demonstrates that despite the participants' trust in the robo-advisor's risk profiling, many refused to follow the its recommendation and preferred to use their own judgment in choosing mutual funds. This finding contradicts the idea that robo-advisors have the potential to hinder efforts aimed at improving financial literacy and education [37]. However, it aligns with prior studies [38, 39] which highlight individuals' aversion to algorithms and preference for rejecting robo-advisor usage even when algorithms are less likely to make errors compared to themselves or expert investors. Additionally, convenience alone does not suffice for effective investment advice [30].

Thirdly, our study reveals that risk profiling questions have a limited impact on an investor's risk categorization. This is because an investor's appetite for risk must be related to their investment objective, but this can be challenging due to their biases [40].

Lastly, we discovered that both the FIBC and non-FIBC groups utilize investment tools beyond traditional options such as stocks, mutual funds, bonds, or deposits. Interestingly, they also invest in collectible items like idol's photo cards, game accounts, action figures, or agate. This finding highlights the diversity of investments among younger individuals and suggests potential for further research into alternative investment options for this demographic group.

CONCLUSION

This study aims to examine the investment attitudes and behaviors of two groups of students at SBM-ITB: those enrolled in the Finance and Investment-Based

Table 5

Robo-Advisor Risk Profiling

Robo-Advisor Risk Profiling	Categories	FIBC, %	Non-FIBC, %
Suitability for risk profiling in the robo-advisor	Scale 1 (Very Inappropriate)	0.00	6.67
	Scale 2 (Inappropriate)	20.00	6.67
	Scale 3 (Neutral)	30.00	6.67
	Scale 4 (Appropriate)	40.00	33.33
	Scale 5 (Very Appropriate)	10.00	46.67
Whether the recommendation of robo-advisor followed?	Yes	40.00	40.00
	No	60.00	53.33
	The investment does not use apps	0.00	6.67

Source: Compiled by the authors.

course from the 2020 student batch, and those in the non-FIBC group from the 2021 student batch. The data gathering methods included focus group discussions and a questionnaire survey, which provided insights into students' perceptions of investment attitudes and apps.

Our findings show that there are notable variations in investment attitudes between the FIBC and non-FIBC groups. The former group demonstrates a more sophisticated approach to selecting investment products, which may be attributed to knowledge gained from the course. In contrast, the non-FIBC group, although they haven't taken the course yet, show familiarity with investments through financial and investment content on social media. They also invests in collectible items as alternative investment options for younger generations. Moreover, our findings indicate that the younger generation tends to deviate from robo-advisor recommendations, even when their risk tolerance aligns with recommended portfolios. Many of these individuals believe that they possess superior investment decision-making abilities compared to those provided by robo-advisors.

This research contributes to understanding the investment attitudes of Gen-Z in Indonesia, providing valuable insights for educators, policymakers, and industry professionals seeking to better cater to their specific investment needs and preferences.

LIMITATION AND FURTHER RESEARCH

This study has some limitations. Firstly, it only focuses on the Generation Z population within a specific university. To obtain a more representative sample, future studies should consider including a larger and more diverse population. Secondly, it is important to acknowledge that investment attitudes may vary depending on the context of different environments. Thus, exploring this phenomenon

in various settings would be beneficial for further research. Lastly, this study used focus group discussions and semi-open questionnaire surveys to explore investment attitudes and reactions towards robo-advisor apps. Future research could benefit from incorporating quantitative methods to develop a comprehensive model of investment attitudes and their relationship with investment app usage, specifically robo-advisors.

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