

The Effect of Financial Literacy, Motivation, Return to Investment, Social Media, and Fintech on Investment Intention in the Millennial Generation

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ABSTRACT

The pandemic that hit Indonesia around 2019 impacted people's lifestyles and behavior. Large-scale socialization restriction policies that turn close social relationships into distant ones, activities that are usually carried out face-to-face turn online or online through digital systems. This study analyzed the effect of financial literacy, motivation, Return on investment, and social media on investment interest through personal traits. This type of research is quantitative with a descriptive approach. The population in this study is the millennial generation who live in the Special Region of Yogyakarta (DIY), with a sample of 100 respondents. The method used for sampling in this study was non-probability sampling using a purposive sampling technique. Data collection techniques using questionnaires distributed to research objects. Data analysis technique using Smart-PLS. The research shows that: Financial Literacy affects Investment Intention, Motivation affects investment intention; return investment affects investment intention; social media affects investment intention, and; financial technology affects investment intention.

Keywords: financial literacy; personal traits; investment intention; millennial generation.

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1. INTRODUCTION

The pandemic that hit Indonesia around 2019 impacted people's lifestyles and behavior. Large-scale socialization restriction policies that turn close social relationships into distant ones, activities that are usually carried out face-to-face turn online or online through digital systems. More and more activities, such as shopping, school, meetings, worship, and investment activities, are being carried out online. The Directorate General of Telematics Applications of the Indonesian Ministry of Communication and Information notes that 2021 internet users in Indonesia will increase by 11 per cent from the previous year. In addition, a survey conducted by the Indonesian Internet Service Providers Association (APJII) in 2020 shows that the first goal of Internet users in Indonesia is to access social media, namely 51.50%. Social media during this pandemic is not only a platform for socializing but can also be used as an educational medium, ranging from education about health during a pandemic to education about investment.

The increase in investment interest during the COVID-19 pandemic has not been matched by a high level of financial literacy either. The National Financial Literacy and Inclusion Survey (SNLIK) in 2019 conducted by the Financial Services Authority showed a financial literacy index of 38.03%, which means that there are still many Indonesian people who have limited knowledge and understanding of the products and services offered by financial services by formal financial services institutions. An investor's interest in investing, especially in the capital market, can be influenced by various factors, including motivation, technological advances, financial literacy, minimum investment capital, investment return, investment risk, and social media. Motivation in terms of investment can be defined as encouraging investors to take actions related to buying to achieve their goals in investing. The rapid development of technology eliminates limitations and opens up various business opportunities. The internet can potentially connect everyone and everything (Hendriyani & Sam'un, 2019).

According to information from PT Kustodian Sentral Efek Indonesia (KSEI), investment growth during the Covid-19 pandemic increased in 2021 by around 92.99% with 7,489,337 investors (Ksei.co.id, 2023). It turns out that this value is dominated by young people/millennials aged less than or equal to 30 years ($= < 30$). Ages under 30 are included in the age range of the millennial generation. The millennial generation has recently been intensively investing in various digital investment platforms. Reporting from the CNBC Indonesia article - During the COVID-19 pandemic, the number of investors in the Indonesian capital market increased significantly by 65.74% to 6,431,444 investors as of September 2021 from the position in December 2020.

Interestingly, investors from the millennial generation or those under 30 years old are increasingly dominant. This has not been matched by high financial literacy from financial services authorities, so it is feared that the millennial generation will be contaminated with illegal investment products such as trading robots and Binomo. So, the Financial Services Authority's efforts are to continue to increase financial literacy among millennials.

Research on the determinants of investment interest, namely financial literacy, social media, motivation, returns and financial technology, has been carried out, among others, by Fedorova *et al.* (2015) found empirical evidence that financial literacy positively affects investment decisions. This result is supported by the findings of Kourtidis, Chatzoglou, & Sevic (2017), who tested the effect of personality on investment decisions. Sivaramakrishnan *et al.* (2017) also found empirical evidence that financial literacy affects investment interest; their findings also state that good economic conditions influence investor decisions/behavior. The study's results said that men had better literacy levels than women. Berliana *et al.* (2022) found empirical evidence that financial literacy

and social media influence investment interest. Meanwhile, research by Aliyah *et al.* (2021) found empirical evidence that financial literacy does not affect investment interest.

Based on the phenomena and gap research above, the author is interested in re-examining the determinants of investment interest of the millennial generation in Yogyakarta. The reason why the research was set in Yogyakarta is that Yogyakarta is a student city which is a destination for students and college students, so it is worthy of research because most of the millennial generation in Yogyakarta constitutes a quarter of the population of the city of Yogyakarta. (Population census, 2020). From the census results above, it can be concluded that the millennial generation in Yogyakarta makes up 23.42% of the total population in Yogyakarta. This shows that the millennial generation in Yogyakarta has an essential role because almost $\frac{1}{4}$ of the total population in Yogyakarta is the millennial generation.

2. LITERATURE REVIEW

2.1 Theory of Planned Behavior

The Theory of planned behaviour discusses the relationship between a person's Attitude and behaviour. Although this theory originated from the study of social psychology and was developed by a professor in the field of social psychology, it can be applied and used as a theoretical basis for conducting research in various areas, including financial behavior. Ajzen (2005) states this theory clearly describes the relationship between beliefs, attitudes, will, and behavior. This theory is based on the assumption that humans are rational beings and use the information they obtain and think is possible for them systematically. This theory emphasizes the rationality of human behaviour and the belief that the target of behavior is controlled by human consciousness. Behavior does not only depend on an individual's intention or desire but also on other factors that are not under that individual's control, such as the availability of resources and opportunities to display this behavior

2.2 Investment Intention

Interest or intention in the Big Indonesian Dictionary is a high tendency of the heart towards a passion or desire. Interest is an encouragement that comes from within a person or a factor that can effectively generate interest or attention, which causes the choice of an object or activity that is profitable, enjoyable, and will bring satisfaction. Interest is closely related to personality and always contains affective, cognitive, and volitional elements. Kusumawati (2011) adds that the characteristics of someone interested in investing can be determined by how much they try to find out about a type of investment, starting from the advantages, disadvantages, investment performance, etc. According to Dew and Xiao (2014), there are four main things in measuring financial management behavior, namely: (1) consumption; (2) cash flows; (3) savings and investment; (4) credit management.

2.3 Financial Literacy

Financial literacy is critical at the micro and macro levels, especially for households, the financial system, the national economy, and monetary policy. Financial literacy leads individuals and families to budget for rights and savings, manage their assets and debts well, and reasonably use their savings in financial markets. Increased financial inclusion leads to an increase in liquidity, trade size, and a variety of financial products on financial markets, contributing to the development of the financial system (Bayar & Sazmas, 2017).

Meanwhile, Brigham and Houston (2019) stated that financial literacy occurs when individuals can utilize existing resources to achieve the expected goals. Financial literacy can help provide an understanding of how to manage finances to achieve a prosperous life in the future.

Fedorova *et al.* (2015) examined the effect of financial literacy on the stock market. The study used data from 1,006 participants. Survey instruments are used to collect data from respondents. Demographic information such as income, age, gender, education, and job designation was sought from the respondents. The research findings show that financially literate investors participate proactively in the stock market. Bayar & Sazmas (2021) and Mendoza *et al.* (2023) also support the hypothesis, so the hypothesis is:

H1: Financial literacy affects millennial investment intention.

2.4 Motivation

According to Robbins (2017), motivation is a process explaining a person's strength, direction, and persistence to achieve a goal. So it can be concluded that motivation in investing is an encouragement in an investor to take actions related to investment to achieve his goals in investing. Motivation in an investor is characterized by an individual urge to make a move, a change in individual behaviour, starting to make investment plans, intention to invest, and determination and consistency in investing. Biggita *et al.* (2022) found empirical evidence that motivation, social media and returns affect investment intentions. This finding is supported by research by Cahya & Nila (2019), so the partial hypothesis is:

H2: Motivation influences investment intention

2.5 Return Investment

Demonstrating the value of social programs is increasingly important to ensure efficient and impactful allocation of resources and prove to finders that they are getting a return on their investment (Arvidson *et al.*, 2010). According to Jogiyanto (2013), Return is the result obtained from investing in stocks in the form of realized returns (returns that have occurred) or expected returns (returns that have not occurred but are expected to occur in the future, which can be calculated from historical data). According to Jones (2017), investors with more courage will choose a higher investment risk with the hope of a high rate of Return as well. Biggita *et al.* (2022) found empirical evidence that motivation, social media and returns affect investment intentions. This finding is supported by research by Cahya & Nila (2019), so the partial hypothesis is:

H3: Return Investment influences investment intention

2.6 Social Media

Social media is defined by Khatik *et al.* (2021) as a means on the internet that allows users to interact, collaborate, share, communicate with other users, and form social bonds virtually. The development of social media is currently increasing rapidly because the role of technology cannot be separated from every human life, especially during the current COVID-19 pandemic, which limits each individual from meeting face to face. Social media is an online-based media with convenience for users in carrying out various activities such as creating forums, sharing and creating content through blogs, social networks, wikis, discussions, and creating virtual worlds.

H4: Social media influences investment intention

2.7 Financial Technology

Based on research by Hamza & Arif (2019), fintech can increase household savings where savings are included in financial management behavior. Meanwhile, Mukti *et al.* (2022) research shows that fintech payments positively influence financial behavior due to the maximum understanding and utilization of fintech. In addition, Erlangga and Krisnawati's (2020) research also shows that financial technology payments positively and significantly influence students' financial management behavior. Based on this explanation, the research hypothesis can be formulated, namely:

H5: Financial Technology Affects Investment Intention

3. METHOD

This study uses an exploratory approach to analyze the theoretical relationships between concepts, followed by developing hypotheses (Hair *et al.*, 2019). Data was obtained through a survey using a questionnaire. The type of data used is primary data. This study analyzes the effect of financial literacy, motivation, Return, and social media on investment interest mediated by personality traits. The research uses a survey on the millennial generation in Yogyakarta who carry out financial, saving, and investment activities. The sampling technique in this study used a purposive sampling method with criteria: age between 29 and 39 years, millennial generation who live in Yogyakarta, have a customer fund account, and interest in investing. The sample used was 100 respondents obtained using the Cohran formula (Sekaran and Bogie, 2016). From the results of the questionnaire distributed online, 100 respondents were obtained according to the required sample with a response rate of 100%. From the results of the questionnaires distributed online, 100 respondents were obtained. The measurement scale in this study uses a Likert Scale. To test the hypothesis, this study uses Smart-PLS with the Structural Equation Model (SEM) approach.

3.1 Characteristics of Respondents

This research uses 100 respondents who are the value generation in the Special Region of Yogyakarta. There were 66 male and 34 female respondents, while the respondents were 21-23 years old, 38 respondents, and 27-24 years is 21 respondents.

Table 1. Respondent's Demographic Profile

		Frequency (f)	Per cent (%)
Age	21-23	38	38%
	24-26	41	41%
	27-30	21	21%
Gender	Female	34	34%
	Male	66	66%
Occupation	College	43	43%
	Private Employee	49	49%
	Entrepreneur	8	8%
Income	< Rp. 1.000.000	27	27%
	IDR 1.000.00-Rp. 2.500.000	23	23%
	IDR 2.500.000 – Rp 5.000.000	29	29%
	>Rp. 5.000.000	21	21%

Investment Instruments	Stock	53	53%
	Reksadana	43	43%
	Bonds	4	4%

Based on Table 1 above, it can be seen that most respondents were men (66%) and women (34%). Most respondents' employment status is private sector workers 49%, followed by students 43% and entrepreneurs 8%. In general, the respondents of this study are dominated by men aged 25-29 years and work as entrepreneurs with an income of around 2.5 million-5 million and an interest in investing in shares.

3.2 Hypothesis Testing Results

Hypothesis testing in this study uses the Partial Least Square (PLS) method. PLS is an alternative method of analysis with Structural Equation Modeling (SEM) based on variance. The advantage of this method is that it does not require assumptions and can be estimated with a relatively small number of samples. The tool used is the Smart PLS Version 3 program, specifically designed to estimate structural equations on a variance basis. The results of the path analysis can be seen in Figure 1 and Table 2.

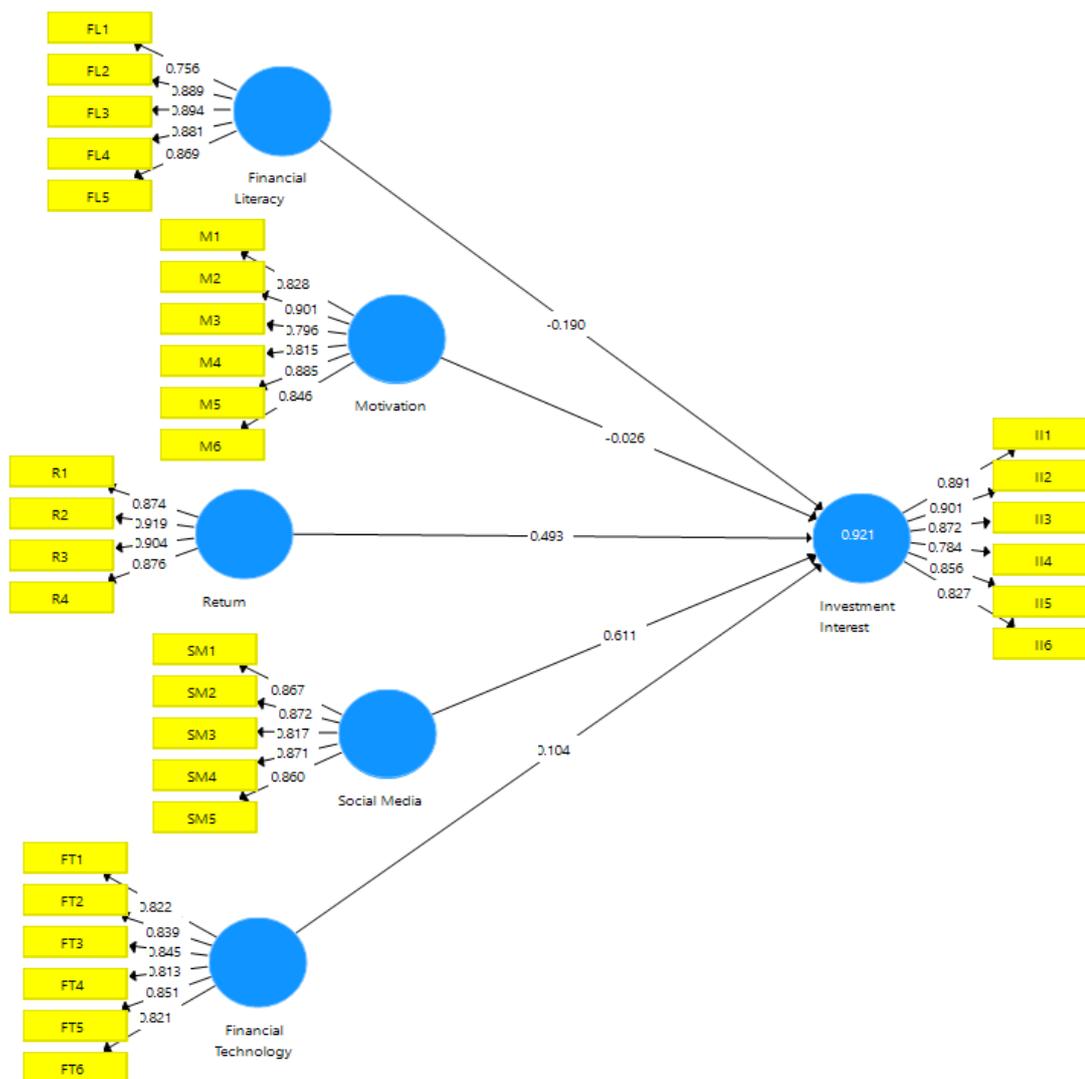


Figure 1. Path analysis

Operational Definition of Variables

The definitions of this research's variables are provided as follows:

1. Financial literacy with indicators: general knowledge about personal finance, insurance, savings and investment
2. Motivation with indicators of individual encouragement to invest, investment intentions, and determination to consistently invest
3. Return with expected and actual return indicators
4. Social media with social media indicators that can educate about investment
5. Financial technology, the ease of using financial instruments will encourage investment interest

Table 2. Path Coefficients (Mean, STDEV, T-Values, P-Values)

	Original Sample (O) Coefficient	Standard Deviation (STDEV)	T Statistics (O/STDEV)	P Values
Financial Literacy → Investment Interest	0.194	0.149	2.314	0.003
Motivation → Investment Interest	0.495	0.053	9.281	0.000
Return → Investment Interest	0.277	0.036	23.707	0.000
Social Media → Investment Interest	0.322	0.084	3.281	0.001
Financial Technology → Investment Interest	0.452	0.076	5.201	0.000

4. DISCUSSIONS

Table 2 shows that the relationship between the variables analyzed partially shows a significant relationship with a T-statistic of > 1.96 and a p-value < 0.05 . Only one relationship is not significant because it has a p-value > 0.05 . The first hypothesis states that Financial Literacy affects Investment Interest. The results of this study indicate that the millennial generation has a general knowledge of personal financial management. This is consistent with the first point of the Theory of Planned Behavior, namely attitudes towards behavior, which is a subjective evaluation of events, objects, or people, both positive and negative. The availability of basic investment information can influence students' assessment of investment decisions. Financial literacy also causes individuals and households to spend their money smarter and encourages them to save. The results of this study are supported by research (Pay & Sazmas, 2021; Sivaramakrishnan *et al.*, (2017); Fedorova *et al.* (2015), Mendoza *et al.* (2023)) which states that financial literacy influences investment intentions.

The second hypothesis states that motivation influences investment interest is supported. This shows that millennials are very enthusiastic about learning more about investment. The reason for investing can be influenced by the student environment, such as investment seminars, student investment galleries, or people closest to them who have benefited from investing. In this study, some students felt compelled to invest when they saw their friends benefit from investing. This is supported by research (Biggita *et al.*, 2022), which states that motivation influences investment interest. The third hypothesis states that Return affects investment interest, which is supported. The results of this study support the findings of Biggita., *et al.* (2022), which says that respondents in this study who are millennials living in Yogyakarta expect profits from dividends and capital gains

in investing.

The fourth hypothesis, which states that Social Media affects Investment Interest, is supported. This shows that social media as a means of campaigning about stock investment, providing the latest information about stock investment, and providing information on how to invest in stocks greatly influences interest in investing in the capital market. The results of this study support previous research by Biggita., *et al.* (2022) that social media affects investment intentions. In recent years, the popularity of mobile devices has led to the growth of mobile payment services. However, mobile payment still challenges consumer adoption and use (Chen & Lai, 2023).

The fifth hypothesis states that financial technology affects investment interest, which is supported. This shows that the millennial generation in Yogyakarta often uses financial technology because financial services make it easier and faster to make transactions. This speed is critical because capital market prices also change very quickly. Financial technology has the potential to win or lose in that case. Students can use financial technology to help them manage their finances and increase their knowledge about financial products that can benefit them. The results of this study are supported by Bayar & Sasmaz (2017) and Chen & Lai (2022), who argue that financial technology significantly influences investment intentions. Technology also influences the financial industry, where the era of financial literacy is coming from.

The implications of this research are: 1). for the Indonesian Stock Exchange (BEI) and the Financial Services Authority, it is hoped that the results of this research can be used as material for consideration in formulating the development of the Indonesian capital market with high investment interest, especially among domestic retail investors from millennial circles in Indonesia., 2). For potential investors, the results of this research are expected to provide information and insight into investing in the capital market. They can encourage potential investors to start investing in the capital market.

5. CONCLUSION AND CONTRIBUTION

Based on the research and discussion results, it can be concluded that financial literacy, motivation, Return on investment, and social media influence investment intentions through personal traits in the millennial generation in the Special Region of Yogyakarta. Factors driving financial development and savings can potentially contribute to economic growth indirectly. Financial literacy can affect economic growth by increasing savings and developing the financial sector. The suggestion for the Financial Services Authority is to increase financial literacy for millennials in particular so that investment growth will increase. Financial inclusion is a country's population that can effectively use banking's financial products and services. Financial inclusion is essential to the country's economic growth (Damodaran, 2016). Financial products and services include facilities, such as saving money in banks, borrowing money from banks, transferring money, investing and having insurance (World Bank, 2010). Financial products and services can be accessed more effective if the services provided are responsible, convenient and affordable. Accordingly, financial inclusion means sending banking services at affordable prices (Damodaran, 2016).

6. LIMITATIONS AND SUGGESTIONS FOR FURTHER RESEARCH

This study has two research limitations. First, students who are respondents are not differentiated by the study program. Researchers only want to increase the generalization

of the results of their research. However, this has limitations because social sciences and engineering students have different needs for face-to-face and online learning. Therefore, suggestions for developing and expanding research related to financial literacy, the formation of social media shares, and their impact on investment decisions to recognize when technology is getting more advanced and easily accessible. Information. In addition, other factors can be used as a reference in conducting research related to investment decisions.

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REFERENCES

- [1] Ajzen, I. (1991). The Theory of planned behavior. *Organizational Behavior and Human Decisions Processes*. 50(2).pp. 179-211
- [2] Altaf, Hadiya & Jan, Anisa. (2023). General Theory of behavioral biases in investment behavior. *Borsa Istanbul Review. Science Direct*.
<https://doi.org/10.1016/j.bir.2023>
- [3] Arvidson, M., Lyon, F., McKay, S., & Moro, D. (2010). "The ambitions and challenges of SROI". *ePapers Repository*.
<http://www.tsrc.ac.uk/LinkClick.aspx?fileticket=QwHhaC%2br88Y%3d&tabid=500>
- [4] Bayar, Y., Sezgin, H. F., Öztürk, Ö. F., & Şaşmaz, M. (2017). Impact of financial literacy on personal saving: A research on Usak university staff. *Journal of Knowledge Management Economics and Information Technology*, 6(6), 1-19.
- [5] Berliana, B., Ambarwati, S. D. A., & Yacobus, A. (2022). "Determinants Of Capital Market Investment Interest In The Millenial Generation In The Covid-19 Pandemic". *International Journal of Economics, Business and Accounting Research*, 6(2), 1600-1612.
- [6] Brigham, Eugene F. and J.F. Houston. (2019). *Fundamentals of Financial Management*. 15ed. Cengage Learning
- [7] Chen, C. L., & Lai, W. H. (2023). "Exploring the Impact of Perceived Risk on User's Mobile Payment Adoption". *Review of Integrative Business and Economics Research*, 12(1), 1-20.
- [8] Damodaran, Akhil. 2016. *Financial Inclusion: Issues and Challenges*. *Akgec International Journal of Technology*, Vo. 4, No.2
- [9] Digman, J. M. 1990. Personality structure: Emergence of the five-factor model. *Annual review of psychology*, 41(1), 417-440.
- [10] Dew, J. dan Xiao, J.J. (2011). "The financial management behavior scale: Development and validation", *Journal of Financial Counseling and Planning*, 22(1), 43-59.
- [11] Fedorova, E. A. E., Nekhaenko, V. V., & Dovzhenko, S. E. E. (2015). "Impact of financial literacy of the population of the Russian Federation on behavior on financial market: Empirical evaluation". *Studies on Russian Economic Development*, 26, 394-402. <https://doi.org/10.1134/S1075700715040036>

- [12] Fishbein, M., & Ajzen, I. (2005). "Theory-based behavior change interventions: Comments on Hobbis and Sutton". *Journal of health psychology*, 10(1), 27-31.
- [13] Hair Jr, J. F., Howard, M. C., & Nitzl, C. (2020). Assessing measurement model quality in PLS-SEM using confirmatory composite analysis. *Journal of Business Research*, 109, pp 10-110, <https://doi.org/10.1016>
- [14] Hmaza, Nasrullah, and Arif.Imtiaz. (2019). Impact of Financial Literacy on Investment Decision: The mediating effect of big-five personality Traits Model. <https://www.researchgate.net>
- [15] Hendriyani, C., & Raharja, S. U. J. (2019). "Business agility strategy: Peer-to-peer lending of Fintech startup in the era of digital finance in Indonesia". *Review of Integrative Business and Economics Research*, 8, 239-246.
- [16] Jones, Charles. P. (2013). "*Investments Analysis and Management*". 12 ed. Willey & Sons
- [17] Khatik, Joshi, Rahul., Kumar, Adwani. (2021). Inferring The role of social media on Genn Z's Investment Decisions. *Journal of Content, Community and Communication*. Vol. 14
- [18] Kourtidis, D., Chatzoglou, P., & Sevic, Z. (2017). The role of personality traits in investors trading behaviour: Empirical evidence from Greek. *International Journal of Social Economics*, 44(11), 1402-1420. <https://doi.org/10.1108/IJSE-07-2014-0151>
- [19] Kusmawati. (2011). "The Effect of Motivation on Interest in Investing in the Capital Market with Investment Understanding and Age as Moderate Variables". *Journal of Economics and Accounting Information*. 1(2). 103-117
- [20] Mendoza, Desiree, Padernal A, Pante E, Magbatta E, and Mandigma Ma. Belinda. 2023. Big Five Personality Traits and Financial Literacy: Effect on Risk Tolerance of Filipino Investors from Higher Education Institutions in Metro Manila. *Review of Integrative Business and Economics Research*, 12(2), 235-251.
- [21] Sari, W. G. I., & Ovami, D. C. (2021). "The effect of motivation and financial literacy on the interest in investing in the Islamic capital market". In *National Conference on Applied Business, Education, & Technology* Vol. 1, No. 1, pp. 78-89. <https://doi.org/10.46306/ncabet.v1i1.7>
- [22] Sekaran, Uma, and Bougie, R. (2016). *Research Methods for Business: A Skill-Building Approach*. 7th Edition, *John Wiley & Sons, Haddington*.
- [23] Sivaramakrishnan, S., Srivastava, M., & Rastogi, A. (2017). "Attitudinal factors, financial literacy, and stock market participation". *International journal of bank marketing*, 35(5), 818-841. <https://doi.org/10.1108/IJBM-01-2016-0012>