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The Effect of Financial Literacy, Income, And Financial Planning on Stock Investment Decisions

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Abstract

This study examines the effect of financial literacy, income, and financial planning on stock investment decisions. The population in this study uses young workers who are members of the Beginner Stock Investor (ISP) community. This study used a questionnaire distributed to members of the ISP community in East Java as a sample, with 100 respondents. Sampling using non-probability sampling with a purposive sampling approach. This study uses descriptive and multiple linear regression analysis to test the hypothesis. From the multiple linear regression analysis results, the researchers found that financial literacy, income, and financial planning affect stock investment decisions.

Keywords *Financial Literacy, Income, Financial Planning, Stock Investment Decisions*.

INTRODUCTION

The phenomenon of the recovery of the capital market in Indonesia after experiencing a decline during the 2020 pandemic can be seen at the end of 2021 the Composite Stock Price Index (IHSG) reached a position of 6,581 or an increase of 10.1% (www.idx.co.id). The development of the JCI was followed by an increase in the number of investors in Indonesia, as evidenced by the current phenomenon. Based on the demographic data of domestic investors listed at the Indonesian Central Securities Depository (KSEI), it is noted that the number of investors or Single Investor Identification (SID) in the domestic capital market by the end of 2021 has reached 7.48 million investors. This figure increased by 92% compared to the position at the end of 2020.

The increase in the number of investors proves that investment activity in Indonesia has increased. This is related to investment decision-making. Investment is one of the development instruments needed by a country to improve the welfare of its population, including the state of Indonesia, and a source of additional income to carry out the primary financial goal, namely financial independence (Gedminienė & Visockaitė, 2016; Timotheus & Widanaputra, 2016).

Financial literacy makes individuals wiser and more competent in managing finances so that they can assist in making investment decisions based on relevant information to provide benefits in individual finances in the short and long term (Garg & Singh, 2018; OECD, 2016; Yushita, 2017). The results of the National Literacy and Inclusion Survey (SLNKI) conducted by OJK in 2022 show that the level of financial literacy in Indonesia has increased to 49.68%. This figure shows a significant increase from the previous survey in 2016.

The decision to invest in stocks can also be influenced by demographic factors, one of which is income because an investor needs to determine the proportion of income that can be invested (Isidore R & Christie, 2019). Investors with more income perform better in investing and dealing with financial problems (Hassan Al -Tamimi & Anood Bin Kalli, 2009). Before starting an investment, every individual needs to assess the financial situation, the goals to be achieved, and the period and pay attention to the level of risk to obtain the desired profit (Sundjaja, 2010). Therefore, with financial planning, an investor can quickly determine the proportion of income to be invested, making it easier to make investment decisions.

Previous studies such as Garg & Singh (2018) analyzed the level of financial literacy of young people around the world based on previous studies that focused on socioeconomic and demographic factors; the results of their research revealed low levels of financial literacy among young people and various socioeconomic factors and Demographics such as age, gender, income, marital status, and education level affect the level of financial literacy of young people. The results of this study are supported by research conducted by Hassan Al-Tamimi & Anood Bin Kalli (2009) and Jayaraman & Jambunathan (2018). Raut (2020) explores the importance of financial literacy in investment decision-making for individual investors in India and examines the validity of the theory of planned behavior. Agarwal et al. (2015) examined India's financial literacy and financial planning. In addition, several other studies have also explained the relationship between demographic factors such as income on investment decisions (Bairagi & Chakraborty, 2018; Senda, Rahayu, & Tri Rahmawati, 2020).

This research is motivated to further examine the extent to which knowledge of financial literacy influences investment decision-making behavior in young workers. Of the total number of capital market investors, almost half are under 30; in other words, 70% of capital market investors in Indonesia are young people (KSEI). The age range that will be used in this research object is the age range of 25-34 years because, in that age range, a person experiences a transition from financial dependence to independence, so learning financial management skills will most likely influence the decisions they make (Shim et al., 2009). The novelty of this study uses a population of young workers who are members of the Beginner Stock Investor (ISP) community spread across East Java.

Financial literacy is the level of financial understanding and knowledge regarding concepts and risks, including ability, motivation, and confidence when applying them in making decisions that lead to prosperity (Garg & Singh, 2018), one of the critical decision tools used to strengthen decision making and obtain satisfactory returns (Alaaraj & Bakri, 2020) and encourage rational and quality decisions that lead to sustainable investment performance and profitable decision making (Ahmad & Shah, 2020). Behavioral finance describes an understanding of the discipline of financial science by combining psychological concepts (cognitive and emotional) to see the response and the impact of the results of making investment decisions made by investors (Ahmad & Shah, 2020). The results of Mouna & Anis's research (2017) show that low levels of financial literacy tend to refrain from investing in the stock market. In general, stock investment decision-making is influenced by a high level of financial literacy. The results of this study are supported by research by Agarwal et al. (2015), Jayaraman & Jambunathan (2018), and Rare (2020).

H1: Financial literacy influences stock investment decisions

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Isidore R & Christie (2019) explained that differences in income levels will affect how individual patterns manage income proportionally. Higher-income tends to avoid the disposition effect (the tendency of investors to sell superior-maintaining stocks too quickly and hold inferior-performing stocks too long) and forms overconfidence because investors have better access to financial advisors. The results of research by Hassan Al-Tamimi & Anood Bin Kalli (2009) show that residents in the UAE who have more income use these funds to invest and seek investment opportunities. In addition, several other studies also explain the relationship between demographic factors such as opinions that have an influence on investment intentions (Bairagi & Chakraborty, 2018; Lutfi, 2010; Senda, Rahayu, & Rahmawati, 2020).

H2: Income influences stock investment decisions

According to Yushita (2017), personal financial planning is one of the most basic competitions modern society needs because consumer choices increasingly affect one's financial security and standard of living. The research results by Silvy & Yulianti (2013) show that financial management attitudes will increase investment planning behavior because its implementation will impact future welfare. In their research, Gedminienė & Visockaitė (2016) said the importance of personal financial management is financial planning so that each individual has enough money for the necessities of life; besides that, they can invest appropriately to obtain sufficient returns with the chosen level of risk.

H3: Financial planning influences stock investment decisions

METHOD

Based on the theoretical basis and research hypothesis, there are 4 variables used:

1. Investment Decision

   Investment decisions are things in which a financial manager (individual) can allocate funds in the form of investment to gain more profit (Senda, Rahayu, & Rahmawati, 2020; Wardani & Lutfi, 2016). Investment decision variable indicators are risk and return.

2. Financial Literacy

   Financial literacy can be interpreted as knowledge and understanding of financial concepts and risks and confidence to apply knowledge and understanding to make effective financial decisions and improve financial well-being (Xue et al., 2019). The indicators used in financial literacy variables are financial attitude, financial behavior, and financial knowledge (Atkinson & Messy, 2012; Hamza & Arif, 2019)

3. Income

   Income can be interpreted as the result obtained from a person's efforts at work and is assessed at a certain level or value and length of work (Davar & Gill, 2007; Susanti, 2016). This variable is measured using the amount of wages/salaries earned based on income class. The Central Bureau of Statistics (BPS, 2013) differentiates income into 4 categories, namely:

   Very high class : more than IDR 3,500,000 each month

High class : IDR 2,500,000 – IDR 3,500,000 each month
Medium class : IDR 1,500,000 – IDR 2,400,000 each month
Lower class : less than IDR 1,500,000 each month

4. Financial Planning

Financial planning is a means to guide financial decisions and highlight the consequences of these financial decisions. Sound planning allows individuals to deal with financial problems carefully (Boon et al., 2011). Indicators for measuring this variable use financial planning and managing investment steps (Boon et al., 2011).

The design of this research is explanatory research. The population used is young workers from the Beginner Stock Investor (ISP) community members. The sample taken includes the ISP community in the East Java region using a purposive sampling technique. Some criteria used are aged 25-34 years, having worked for at least 1 year, and having invested in stocks.

This study uses primary data. Primary data sources were obtained from research respondents through online questionnaires with a 5-point Likert scale measurement. The data collection technique used in this study was in the form of questionnaires distributed via Google Forms.

Summary of Respondent Characteristics

Table 1 Age of Respondents

No	Age	Percentage (%)
1	25 years	5
2	26 years	18
3	27 years	24
4	28 years	11
5	29 years	10
6	30 years	9
7	31 years	7
8	32 years	8
9	33 years	5
10	34 years	3
	Total	**100**

Source: Processed data (2023)

Based on the age of the respondents, it shows that the age of 27 is the dominant age of the respondents. At this age, there were 24 respondents. While the age that is a minority is the respondent aged 34 years, with a total of 4 respondents.

Table 2 Length of work

No	Length of work	Percentage
1	1-3 years	25
2	3-5 years	35
3	> years	40
	Total	**100**

Source: Processed data (2023)

The results showed that 35 respondents had worked for 3 to 5 years, while the least work experience was 1 to 3 years, namely 25 respondents. In work experience > 5 years, there are as many as 40 respondents.

Tabel 3 Respondent Income

No	Income	Percentage (%)
1	< Rp 1.500.000	0
2	Rp 1.500.000 – Rp 2.400.000	16
3	Rp 2.500.000 – Rp 3.500.000	35
4	> Rp 3.500.000	49
	Total	**100**

Source: Processed data (2023)

Most of the income this study's respondents earned was from young workers with a total income of more than Rp. 3,500,000, with a percentage of 49%, and the least were respondents with a total income of Rp. 1,500,000 – Rp. 2,400,000, with a percentage of 16 %. The respondents with an income of IDR 2,500,000 – IDR 3,500,000 are 35%.

Results Description of Research Variables

Table 4 Descriptive Statistics

Variable	N	Min	Max	Mean	Std. Deviation
Financial Literacy	100	29	45	36.66	3.173
Income	100	4	10	8.05	1.527
Financial planning	100	22	37	30.91	3.679
Investation decision	100	11	15	13.28	1.164

Source: Processed data (2023)

Based the results of the description, it shows that the accumulation of questionnaire results from 100 respondents that the financial literacy variable has a minimum value of 29 and a maximum value of 45, with an average value of 36.66. The income variable questionnaire results have a minimum value of 4, a maximum of 10, and an average value of 8.05. The financial planning variable has a minimum value of 22, a maximum of 37, and an average value of 30.91. The dependent variable, namely investment decisions, has a minimum value of 11, a maximum value of 15, and an average of 13.28.

Classical Assumption Test Results

The results of the residual normality test using the Kolmogorov-Smirnov test in this study obtained a significance value of 0.063 so that a significance value of more than 0.05 ($p > 0.05$) means that the residual follows a normal distribution and the normality assumption is met. The results of the multicollinearity test using the VIF test, the VIF value of financial literacy is 1.88, income is 1.87, and financial planning is 2.05. The VIF value for each independent variable is less than 10 ($VIF < 10$), meaning there are no multicollinearity problems in the model, so the multicollinearity assumption is met. Based on the results of the heteroscedasticity test using the Glejser test, the significance value for each independent variable was more than 0.05 ($p > 0.05$), meaning that there were no heteroscedasticity problems in the model, so the assumption of heteroscedasticity was fulfilled.

Multiple Linear Regression Analysis Test Results

The sales results of multiple linear regression between the variables of financial literacy, income, and financial planning on investment decisions are presented as follows:

$$\mathbf{Y = 5.324 + 0.099X1 + 0.228\ X2 + 0.081\ X3 + e}$$

From the results of the sale, a constant value (a) of 5.324 indicates that without the influence of financial literacy, income, and financial planning, it can be predicted that the value of investment decisions is 5.324. The influence of financial literacy on investment decisions obtained a regression coefficient of 0.099 with a t statistical value of 2.745 and a significance value of 0.007, indicating a significant positive effect. The income variable on investment decisions obtains a regression coefficient of 0.228 with a t-statistic value of 3.056 and a significance value of 0.003, indicating a significant positive effect. The influence of financial planning variables on investment decisions obtained a regression coefficient of 0.081 with a statistical value of 2.487 and a significance value of 0.015; these results indicate a significant positive influence.

RESULTS AND DISCUSSION

Based on the simultaneous test results, there is a significant influence between financial literacy, income, and financial planning on stock investment decisions. Financial literacy has a significant influence on stock investment decisions taken by members of the ISP community, which means that the better one's knowledge and ability to manage their finances, the more effective investment decisions will be. This shows that the respondents have good financial literacy. Therefore, this study is on the prospective theory of financial behavior; the more knowledge a person has, the better financial behavior, such as managing and solving problems in making investment decisions (Aminatuzzahra, 2014). The results of this study are supported by the research of Alaaraj & Bakri (2020); Sabri (2016); Safryani et al. (2020), who, in their research, concluded that the financial literacy variable has a significant influence on stock investment decisions.

Based on the research data, most respondents were 27 years old with very high-income groups, namely > IDR 3,500,000. But some pay < IDR 3,000,000. From the above data, members of the ISP community have high incomes, which influences the members' stock investment decisions. The results of this study follow the phenomena that occur; based on KSEI data, the phenomenon of investment in the capital market is in demand by Indonesian residents aged < 30 years. Having adequate income supported by good literacy will give you a significant investment consideration. From the income side, the higher the income, the more profitable one's investment decisions are. The results of this analysis are consistent with the research by Senda, Rahayu & Rahmawati (2020), where demographic factors significantly affect investment decisions. The higher the income, the more likely he will choose profitable investment decisions.

The results of the regression test on the effect of the planning variable on the stock investment financial decisions of ISP community members show that this variable has a significant positive effect on the stock investment decision variable. Personal financial planning is managing individual finances to achieve personal economic satisfaction. This planning process can help individuals control their financial condition. Every individual and family has different circumstances, so each has specific needs and goals in planning their finances. The results of this study support research conducted by researchers Aminatuzzahra (2014), where there is a significant positive influence between financial attitude variables on investment decision-making. The results of this study also support the research of A. Robb & S. Woodyard (2011) someone more confident about financial knowledge and financial circumstances influences better financial behavior. Thus the results of this study are from previous studies that financial planning has a significant positive effect on stock investment decisions.

CONCLUSION

This study examines the effect of financial literacy, income, and financial planning variables on stock investment decisions. The results of the first hypothesis indicate a positive and significant influence between financial literacy and stock investment decisions. Having knowledge and understanding of investments makes investors or potential investors more informed in making investment decisions. The second hypothesis shows a significant positive effect between income and stock investment decisions. The greater the income, the greater the desire to invest, making it easier to make decisions. Furthermore, according to the results of the third hypothesis, research planning has a positive and significant influence on finance and stock investment decisions, meaning that the better a person's financial planning, the better the individual plans his investment decisions.

Although the results obtained in this study are quite significant, there are still some deficiencies. Therefore it is suggested for further research if using the same population, it is better if the respondents are more spread out in several other areas, with that the researcher can see more respondents who have an interest in investing. Future research can also add other variables besides financial literacy, income, and financial planning. In addition, researchers can also add the characteristics of respondents between those who have just made an investment and those who have invested a long time, making it easier to analyze the research results. The diversity of capital market products used must be more attractive and diverse so that they do not rely on a single capital market product such as stocks. Subsequent studies using income variables can change indicators of income variables with UMR according to the research location.

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