

## **DETERMINE OF DEMOGRAPHIC FACTOR, FINANCIAL LITERACY, AND INTERNAL LOCUS OF CONTROL ON THE INVESTMENT DECISION OF INDIVIDUAL INVESTOR**

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### **Abstrak**

Tujuan dari penelitian ini adalah untuk mengkaji dan menganalisis faktor demografi, literasi keuangan, dan locus of control dalam memprediksi keputusan investasi. Pengambilan sampel penelitian ini dilakukan dengan metode non- probability sampling yaitu purposive sampling, dan pengumpulan data dilakukan dengan kuesioner. Penelitian ini menggunakan SmartPLS versi 3.3.3 untuk mengolah data yang terkumpul. Penelitian ini menggunakan analisis regresi data panel dengan faktor demografi, literasi keuangan dan locus of control sebagai variable independen serta keputusan investyasi sebagai variabel dependen. Jenis data menggunakan data sekunder yang berasal dari laporan keuangan. Hasil penelitian ini adalah terdapat pengaruh secara signifikan Faktor Demografi, Literasi Keuangan, dan Locus of Control terhadap keputusan investasi pada Bursa Efek Indonesia.

**Kata Kunci :** Faktor Demografi, Literasi Keuangan, Locus of Control, Keputusan Investasi

### **Abstract**

The purpose of this study is to examine and analyze demographic factors, financial literacy, and locus of control in predicting investment decisions. Sampling in this study was carried out using a non-probability sampling method, namely purposive sampling, and data collection was carried out using a questionnaire. This study uses SmartPLS version 3.3.3 to process the collected data. This study uses panel data regression analysis with demographic factors, financial literacy and locus of control as independent variables and investment decisions as the dependent variable. This type of data uses secondary data derived from financial reports. The results of this study are that there is a significant influence of Demographic Factors, Financial Literacy, and Locus of Control on investment decisions on the Indonesia Stock Exchange.

**Keywords:** Demographic Factors, Financial Literacy, Locus Of Control, Investment Decisions

## Introduction

The condition of the COVID-19 pandemic has shaken the financial aspects of the whole world including Indonesia, causing investors to lose quite a lot in just a short time (Zhang *et al.*, 2020). The decline in this economic aspect has had a significant impact on society, up to 70.53% of people experiencing a decrease in income (Pluang, 2020) which can have an impact on the global stock market industry experiencing quite strong pressure in terms of decreased investment interest from investors. Even though there was a decline in investor interest, there has been an increase in the number of investors and an increase in the number of companies conducting initial public offerings (IPOs) (KSEI, 2021). This is because many companies need an injection of funds as well as investors who are of the view that the shares of a company that has just been IPO can provide enormous profits, but behind these large profits, of course, there are also considerable risks.

According to Shah *et. al* (2018) investment decision as a process in which we invest money in the hope of getting a profit in the future. Investment decisions can be influenced by financial attitude, financial literacy, financial behavior, locus of control, demographic variables, and others. These things play a role in making investment decisions so that they can influence the good and bad of investment decisions. Investment decisions can also be influenced by various factors such as education level, marital status, age, gender, age, income, type of work and employment status, which factors are included in demography. Ikeobi & E. Arinze (2016) argue that demographic factors can describe a person's level of investment, such as research conducted by Khurram *et al* (2019) who conducted research related to demographic factors with investment decisions and suggested that there is a positive and significant relationship with the type of Gender is shown by women making investment decisions to reduce financial risk more than men.

Technological developments have also made financial markets and financial products more complex (Lusardi & Mitchell, 2014), meaning that technological advances will produce more varied financial products. To balance the complexity of financial markets and financial products, an investor must have more financial knowledge and be able to make the right decisions. Investors generally expect maximum returns in making investment decisions. With expecting a high rate of return, there is also a high level of risk. Investors need knowledge and skills known as financial literacy (Lusardi, 2008). Then, Arif (2015) stated that interest in financial literacy has been increasing in recent years. Increased interest in financial literacy is also due to new investment products, increasingly complex financial markets, and changes in political, demographic and economic factors (Hassan Al-Tamimi & Anood Bin Kalli, 2009). With financial literacy, investors will be able to make rational investment decisions. This is also supported by several previous studies which state that there is a significant relationship between financial literacy and rational investment decisions (Hassan Al-Tamimi & Anood Bin Kalli, 2009; Sabri, 2016). Although there are also some who state that the relationship is not significant (Arianti, 2018). But on the contrary, according to Rasheed *et al.* (2018), in reality investors act irrationally.

In addition to the variables above, this study also involved an internal locus of control. Several previous studies stated that there was a significant relationship between internal locus of control in moderating the representative bias relationship (Dangol & Manandhar, 2020; Ikram, 2016) and availability bias (Dangol & Manandhar, 2020) with irrational investment decisions. Thus, the existence of an internal locus of control will increase confidence in this bias which will lead to investment decisions.

Investment is a process of investing money with the hope of return that should be done rationally to make the investment successful (Ikram, 2016). Using appropriate analysis on various investment alternatives can help investors think rationally in making decisions. Investment decisions are problems faced by someone in allocating their funds into forms of investment that will generate profits in the future. The signal theory states that it is important for companies to provide information to investors, the information provided will be a positive signal for investors who want to invest (Warouw *et al.*, 2022). There are two attitudes of investors in making investment decisions, rational and irrational attitudes. A rational attitude is the attitude of

someone who thinks based on common sense, while an irrational attitude is the attitude of someone who thinks that is not based on common sense. An investor with a rational attitude will make a decision based on financial literacy. For example, when someone is going to invest in a certain type of investment, he will use the available information, such as the benefits and risks that exist in that type of investment. Meanwhile, an investor with an irrational attitude will make a decision based on several factors, such as psychology and demographics.

According to Rotter (1966) one of the psychological factors that influence financial behavior is locus of control. Meanwhile, in terms of demographic factors, according to Perry & Morris (2005) race and educational background, ethnicity has a tendency to influence financial behavior. Lutfi (2010) classifies investment types according to their level of risk, namely: bank accounts, capital markets, and real assets. A bank account is an investment in the money market, an investment made in assets included in banking products, such as savings, time deposits and current accounts. The capital market is an investment in the capital market is an investment made in assets such as shares. Real assets are investments in fixed assets which are investments made in assets that can be seen and can be measured clearly, such as houses, land, gold, and so on.

In the industrial era 4.0, technological developments also occurred in the capital market environment. The impact felt is that it is easier for potential new investors to invest in the Indonesian capital market. All forms of convenience in this digital economy era are the main attraction for potential investors to invest, one of which is the presence of financial technology (fintech). Demographic factors have an influence on investment decision making, especially in the digital economy era (Wahyuni & Pramono, 2021). Demographic factors influence investment decisions because they reflect different characteristics of investors in individuals that influence investment decisions. Demographic factors are divided into four, namely gender, age, education, and occupation. These four factors have different directions and influences on investment decision making. Based on data from the Indonesian Central Securities Depository (KSEI), which is a Depository and Settlement Institution in the Indonesian Capital Market, the capital market is currently dominated by 34.08% by young investors with an age range of 21-30 years (KSEI, 2021). According to Melillo (2003) demographic factors are a characteristic or uniqueness of the human population. According to Reed (2016) demographic factors are factors related to living things such as birth, death, location and also the human population. Evans (2012) defines demographic factors as a characteristic that can explain in detail certain groups. From some of the explanations above, it can be concluded that demographic factors are a characteristic of a certain group of people that can describe the character of the majority of that group of people and tend to influence the decision-making process.

According to Violeta & Linawati (2019) the demographic factors of the research show that age, gender, and income have a significant effect on investment decisions. Research by Wahyuni & Pramono (2021) which proves that age and education as demographic factors have an influence on investment decisions. According to Violeta & Linawati (2019) the demographic factors of the research show that age, gender, and income have a significant effect on investment decisions. Research by Wahyuni & Pramono (2021) which proves that age and education as demographic factors have an influence on investment decisions. The relationship between demographic factors (income) and investment decisions in Khurram et al research in (2019) is a negative and significant relationship between income and investment decisions, which means it does not have a direct effect on investment. So the authors propose a hypothesis:

H<sub>1</sub>: there is an effect of financial literacy on investment decisions

Lusardi & Mitchell (2014) state that Financial Literacy is the ability to process economic information in making financial planning decisions, accumulation of wealth, debt, and pension funds based on that information. With that statement financial literacy can be explained as the financial knowledge a person has in making financial decisions. Furthermore, ANZ Banking Groups (2003) defines financial literacy as the ability to make effective money allocation and management decisions based on informed considerations.

There are several factors that affect financial literacy, and then make financial literacy have a significant relationship to investment decisions (Hassan Al-Tamimi & Anood Bin Kalli, 2009; Sabri, 2016). Investment decisions will be more rational with an adequate level of financial literacy of certain individuals. Investors with different financial literacy make decisions based on certain factors from different groups of factors (Arif, 2015). With the financial literacy that is different for each investor, there are various investment decision making based on the financial literacy of each investor. However, in contrast to others, Arianti (2018) argues that there is no significant impact on the relationship between financial literacy and investment decisions. This is not in line with the theory of financial literacy theory, that financial literacy has a positive impact on welfare. Thus the authors propose a hypothesis:

H<sub>2</sub>: there is an effect of financial literacy on investment decisions

Ida and Cinthia (2010) stated that the concept of locus of control was first expressed by a researcher named Rotter in 1966. Locus of control is one's perspective on an event whether one can control the events that occur or not. In its orientation, locus of control is divided into two, namely internal locus of control and external locus of control. Internal locus of control is the perspective of someone who can control the events that occur. Individuals with an internal locus of control will interpret that skills, abilities, and effort determine more what they will get. So an individual who has the belief that the success or failure that occurs in his life comes from the abilities he has, then that person is said to have an internal locus of control. External locus of control is the perspective of someone who cannot control the events that occur. Individuals with an external locus of control tend to think that their lives are determined by forces outside themselves, such as fate, destiny, luck and other people. Lefcourt (1991) states that internal locus of control is belief in the results obtained from one's own actions. Investors who have confidence in what they are doing will not assume that they are affected by bias. Thus, the internal locus of control plays an important role in making investment decisions. Based on the description above, internal locus of control can be defined as the level of investor confidence in his own ability to make investment decisions.

According to Dangol & Manandhar (2020) there is a significant effect of internal locus of control on investment decisions. In contrast, Rasheed *et al* (2018) found that internal locus of control cannot predict investment decisions. Furthermore, Cuandra and Tan (2021) found that internal locus of control has no significant influence on investment decisions. However, Ikram (2016) argues that the internal locus of control significantly positively influences investment decisions.

Investors in this study are investors who put a certain amount of money into certain assets with the hope of getting profits in the future. Investment forms can vary, from stocks, mutual funds, property, gold to digital assets. Individual investors are non-professional investors who buy and sell assets in their own name, not for the benefit of an organization or company. In addition, the number of assets traded is generally much smaller than that of institutional investors. In this case, it can be concluded that individual investors are investors who use personal capital, not on behalf of companies or other people.

This research will be conducted on individual investors who invest in the Indonesia Stock Exchange to describe the relationship between Demographic Factors, Financial Literacy and Locus of Control with investment decisions. Control over Investment Decisions of Individual Investors in the Indonesia Stock Exchange. Based on the description above, the researcher proposes a hypothesis:

H<sub>3</sub>: internal locus of control positively influences investment decisions.

## Methodology

The type of data used is primary data. The population in this study are individual investors who invest in the Indonesian Stock Exchange. In this study, sampling was carried out from 11 June to 09 August 2022. The sampling technique used was non-probability sampling with a purposive sampling method. The required sample size is large enough to represent the study



population, which has been used in a number of relevant studies before. According to Roscoe (1975) in Sekaran & Bougie (2016), in determining the number of samples in a study it is recommended that 10 times the number of variables in a multivariate study, in this study the authors used a sample consisting of 100 respondents. The questionnaire used is in the form of an electronic questionnaire using the Google Form. Then, the questionnaire will be distributed directly to respondents who meet the criteria listed previously. Data was obtained through distributing offline and online questionnaires via the Google form which were then analyzed using SEM with the Partial Least Square (PLS) application.

The independent variables in this study are demographic factors, financial literacy and locus of control, and the dependent variable is investment decisions. All variables examined in this study are latent variables and are unidimensional. The following is the operationalization of each variable in this study.

**Demographic Factors.** Demographic factor is a characteristic of a certain group of people that can describe the character of the majority of that group of people. Demographic factors are divided into several factors, namely gender, age, occupation, income, year of birth, education, marital status and others. In this study only used 3 demographic factors, namely gender, income and education. Gender is a natural difference found in humans. Income can be summed up as a person's income, namely money earned by a person either given from other people or from jobs that provide income. And education as education of a person in receiving the knowledge given. For the purposes of data analysis, the three indicators of this demographic factor variable will be accumulated in the demographic factor variable. Therefore it can be concluded that the indicators that can define demographic factors are as follows:

**Table 1: Operationalization of Demographic Factor Variables**

Variabel	Indicator	Code	Measurement Scale
Demographic Factor	Gender	DF1	Nominal
	Education	DF2	Ordinal
	Income	DF3	Ordinal

Source: Adapted from Baker *et al.* (2011)

**Financial Literacy.** Financial literacy is the ability and knowledge of an investor in making rational and effective financial decisions based on information. The following are indicators for measuring financial literacy in Table 3.1 In the indicators L.K2, L.K5, L.K7, and L.K9 are negative indicators, so a smaller value represents a better value.

**Table 2: Operationalization of Financial Literacy Variables**

Variable	Variable Operationalization	code	Measurement Scale
Financial Literacy	Diversifying investments is done to reduce the risk of losing money.	L.K1	Perceptions of respondents using a Likert scale: 1= strongly disagree 2 = disagree 3= undecided 4 = agree 5= totally agree
	You own 1,000 shares of company A, which is currently trading at Rp. 50 per share. Then, company A announces that it will conduct a two-for-one stock split. Your shares after stock split worth IDR 100,000.	L.K2	
	Beta measures how sensitive a stock is to market movements.	L.K3	
	The par value shows the scope of assets of each equity share in the company.	L.K4	

Source: Adapted from Arif

(2015)	If you buy corporate bonds, you own part of the company.	L.K5
	Common stocks always provide higher returns than bonds or money market investments.	L.K6
	If earnings per share or earnings per share increase, the price-earnings ratio is also expected to increase.	L.K7
	With compound interest, you get interest on your interest as well as your principal savings.	L.K8
	If an investment instrument earns 10% per year, your money will double after seven years.	L.K9

**Investment Decision.** Irrational investment decisions are investors' actions in making decisions that are influenced by other factors, so that the expectation of maximum returns in the future will not be fulfilled. The following are indicators for measuring irrational investment decisions in Table 3.

Table 3: Operationalization of Investment Decision Variables

Variable	Variable Operationalization	code	Measurement Scale
Irrational Investment Decisions	When investing, I trust my own feelings and reactions.	K.I1	Perceptions of respondents using a Likert scale: 1= strongly disagree 2 = disagree 3= undecided 4 = agree 5=totally agree
	I usually invest in investments which I think is suitable for me.	K.I2	
	When investing, I often use instincts.	K.I3	
	When making an investment, it's more important to me to think the investment is the right one, than to have a rationale.	K.I4	
	When making investments, I tend to use intuition.	K.I5	

Source: Adapted from Rasheed *et al.* (2018)

**Internal Locus of Control.** Internal locus of control is the level of investor confidence in his own ability to make investment decisions. The following are indicators for measuring internal locus of control in

Table 4: Operationalization of Internal Locus of Control Variables

Variable	Variable Operationalization	code	Measurement Scale
	Investments made carefully is the key to obtaining satisfactory results.	L.C1	Perceptions of respondents
	Investment losses occur due to investor's own negligence.	L.C2	

Internal Locus of Control	I have the ability to make investment decisions that will generate returns.	L.C3	using a Likert scale: 1= strongly disagree 2 = disagree 3= undecided 4 = agree 5= totally agree
	In the long run, people who take care of their investments will reap the rewards which is satisfying.	L.C4	
	When I create a good investment plan, I will almost certainly succeed.	L.C5	
	I can more or less determine what what will happen to my investment	L.C6	
	I can usually protect my investment interests.	L.C7	
	When I get what I want, it's usually because of the hard work I put in.	L.C8	

Source: Adapted from Rasheed *et al.* (2018)

The data analysis technique used to answer the problem formulation found in the study using PLS-SEM with the help of Smart PLS software due to a limited sample. In the PLS-SEM analysis there are 3 stages, the first stage is the specification of the model, then the second stage is the evaluation of the outer model and the last stage is the evaluation of the inner model.

### Results and Discussion

The sample used in this study was individual investors who invested in the Indonesian stock exchange as many as 100 respondents, because of the 125 who responded to the questionnaire via Google-form, only 100 respondents met the requirements, the rest had never invested individually in the Indonesia Stock Exchange. The author will describe the gender, age, education and income of the respondents.

Table 5: Characteristics of Respondents

<b>GENDER</b>		
Woman	56%	56 people
Man	44%	44 people
<b>AGE</b>		
≤ 25 years	80%	80 people
25 – 40 years	15%	15 people
40 – 55 years	3%	3 people
55 years and over	2%	2 people
<b>EDUCATION</b>		
Elementary School Equivalent	10%	10 people
Middle School/Equivalent	10%	10 people
Senior High School/Equivalent	5%	5 people

Diploma/ Bachelor degree	20%	20 people
Masters	30%	30 people
Doctor	25%	25 people
<b>INCOME</b>		
≤ 5.000.000	7%	7 people
5.000.000 - 10.000.000	5%	5 people
10.000.000 - 15.000.000	15%	15 people
15.000.000 - 20.000.000	31%	31 people
> 20.000.000	42%	42 people

Source: processed from research results

In table 5 above, there are 56% or 56 people who are female and 44% or 44 people who are male, so it can be concluded that the investment decision outcomes for investors who are female and male are almost balanced. This means that there should not be a drastic gap in research on women or men in making investment decisions on the Indonesian Stock Exchange.

The majority of respondents are under 25 years of age and a minority of 40 to 55 years of age. In short, many of the younger generation are investing in the Indonesian Stock Exchange compared to the next generation, this can happen due to the Covid-19 pandemic moment which caused the price of investment instruments to drop drastically, thus raising the awareness of the younger generation to invest.

From the education sector, half of the respondents had a Diploma/ Bachelor degree education level, namely 20 people, then followed by 5 people who had a high school/equivalent education level, then there were as many as 30 people who had a Masters education level and as many as 2 people who had a Middle school/equivalent education. This means that the profile of respondents in this study was dominated by respondents with D3/S1 education.

The income of most respondents is less than 5,000,000 with 7% or the equivalent of 7 people, then followed by 5% or as many as 5 people who have an income level of 5,000,000 – 10,000,000, as many as 15% or the equivalent of 15 people with an income level greater than 15,000,000 and 31% or as many as 31 people who have an income level of 10,000,000 – 15,000,000. In short, the description of the majority of respondents is that the income level is less than 5,000,000.

In the data analysis stage the author uses the Partial Least Square (PLS) approach using SmartPLS 3.0 software. This stage begins with making a structural model or what can be called an inner model to predict whether or not there is a causal relationship between the independent variables and the dependent variable which is a latent variable. In testing the hypothesis, a bootstrapping technique is used with the aim of knowing the effect, both directly and indirectly, with a certain level of significance.

Table 6. Direct Effect Hypothesis

Variables	t-statistik	P-value
Demographic Factors → Investment Decision	6,648	***0,000
Financial Literacy → Investment Decision	5,284	***0,000
Locus of Control → Investment Decision	5,734	***0,000
R Square	0,883	



What is the R-Square on the investment decision variable at 0.883 which indicates that every time there is a change in the independent variable it will have an impact on the investment decision variable by 88.3% while the remaining 11.7% is explained by other variables that are not present in this research.

Based on the results of the direct effect data processing above, it shows that the value of the direct effect on the demographic factor, financial literacy, and locus of control variables on the investment decision variable shows a p-value of 0.000, this means that the three independent variables are demographic factors, financial literacy, and locus of control respectively significant to investment decision variables.

Demographic factors can be used to influence investors' investment decisions in the Indonesia Stock Exchange. It can be concluded that demographic factors such as: gender, income and education have a positive and significant influence on investment decisions. Most investors who are male are more risk-takers or more able to accept risk, whereas female investors tend to be risk-averse or unable to accept risk. This opinion is also supported by research conducted by Khurram *et al.* (2019) that gender has a positive and significant effect shown by women in general spreading investments to reduce risk than men. The same thing also happened in Tanusdjaja's research (2018) where female investors made poor decisions compared to decisions made by male investors. Likewise, investors with large incomes have a better level of decision making compared to investors with lower income levels. This is in line with Baruah and Parikh's research (2018) which found a positive and significant relationship between income and investment decisions, this is evidenced by the increase in income, which can increase the amount of investment. In the same way, it can be concluded that investors with a high level of education have a better level of decision making compared to investors with a lower level of education. This is in line with Tanusdjaja's research (2018) that the demographic factor of education is a factor with a very large influence on investors' investment decisions.

The Financial Literacy factor can be used to influence investors' investment decisions on the Indonesia Stock Exchange. This result is in line with the research of Al-Tamimi and Kalli (2005) which says that financial literacy influences a person's investment decisions. These results also support the theory of financial literacy which states that with a high level of financial literacy, investors can make rational investment decisions to improve their welfare. This result is contrary to several previous studies which stated that it had no significant effect (Arianti, 2018). Thus this study finds that with a high level of financial literacy, investors can still make irrational investment decisions. This means that this research is in line with the statement of Tversky and Kahneman (1974), that experienced investors can still be influenced by heuristics and end up with irrational investment decisions. The results of this study are in accordance with the research of Dewi and Ida (2018), which shows that investment decisions are positively and significantly influenced by financial literacy. As well as Fridana and Nadia (2020), which show that investment decisions are positively and significantly influenced by financial literacy.

Internal Locus of Control can be used to influence investors' investment decisions on the Indonesia Stock Exchange. This result is the same as that of Perry & Morris (2005) which states that internal locus of control influences investment decisions. This means that when a person has a high internal locus of control, he will tend to choose real assets, whereas someone who tends to have a low internal locus of control, he will tend to choose a bank account to invest. In this study, respondents had a high internal locus of control tendency and most respondents chose to invest their funds in real asset stocks. This is because someone with a high Internal Locus of control has high self-confidence to determine all things in his life, with high self-confidence someone will choose a higher risk type of investment, namely real assets.

### **Conclusions and Recommendations**

Demographic factors have a positive and significant effect on investment decisions, financial literacy factors have a positive and significant effect on investment decisions, and Internal Locus of Control has a positive and significant effect on investment decisions.

Financial literacy needs attention, efforts to increase financial literacy are through the implementation of financial education. Education can be pursued through formal, informal or non-formal education. This financial education plays an important role in increasing financial knowledge, spending behavior, budgeting, saving, and using credit cards. Communities can obtain financial knowledge by maximizing it through information sources such as books, the internet, seminars, training or other financial information. It is hoped that this research can also be complemented by other independent variables such as perceived risk, perceived income, investment experience and others which of course can influence and strengthen the dependent variable in order to contribute to improving investment decisions.

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## References

- ANZ Banking Groups. (2003). *ANZ Survey of Adult Financial Literacy in Australia*. May, 182. <https://doi.org/https://www.financialcapability.gov.au/files/anz-survey-of-adult-financial-literacy-2003.pdf>
- Arianti, B. F. (2018). The Influence of Financial Literacy, Financial Behavior and Income on Investment Decision. *European Research Studies Journal*, 20(3), 635–648.
- Arif, K. (2015). Financial Literacy and other Factors Influencing Individuals' Investment Decision: Evidence from a Developing Economy (Pakistan). *Journal of Poverty, Investment and Development*, 12(May), 74–84. [www.surveysystem.com](http://www.surveysystem.com)
- Dangol, J., & Manandhar, R. (2020). Impact of Heuristics on Investment Decisions: The Moderating Role of Locus of Control. *Journal of Business and Social Sciences Research*, 5(1), 1–14. <https://doi.org/10.3126/jbssr.v5i1.30195>
- Evans, A. H. (2012). Self-Efficacy, Job Satisfaction and Demographic Variables in A Nonprofit Organization. *Capella University ProQuest Dissertations Publishing*, December, 1–23.
- Hassan Al-Tamimi, H. A., & Anood Bin Kalli, A. (2009). Financial literacy and investment decisions of UAE investors. *Journal of Risk Finance*, 10(5), 500–516. <https://doi.org/10.1108/15265940911001402>
- Ikeobi, N. R., & E. Arinze, P. (2016). The Influence Of Demographic Factors On The Investment Objectives Of Retail Investors In The Nigerian Capital Market. *European Journal of Business and Management*, 8(11), 147–155. <https://core.ac.uk/download/pdf/234627221.pdf>
- Ikram, Z. (2016). An Empirical Investigation on Behavioral Determinantson , Impact on Investment Decision Making , Moderating Role of Locus of Control. *Journal of Poverty, Investment and Development*, 26, 44–50. <https://core.ac.uk/download/pdf/234695651.pdf>
- Khurram, M., Niazi, S., & Malik, Q. A. (2019). Financial Attitude and Investment Decision Making- Moderating Role of Financial Literacy. *NUML International Journal of Business & Management ISSN*, 14(1), 2410–5392.
- KSEI. (2021). *Statistik Pasar Modal Indonesia*.
- Lefcourt, H. . (1991). Locus of Control. In J. P. Robinson, P. R. Shaver, & L. S. Wrightsman, Measures of Personality and Social Psychological Attitudes. *San Diego Academic Press*. <https://doi.org/10.1016/B978-0-12-590241-0.50013-7>
- Lusardi, A. (2008). Financial Literacy: An Essential Tool for Informed Consumer Choice? *Centre Research Paper Series*, 1–29. <http://ssrn.com/abstract=1336389><http://ssrn.com/abstract=1336389>Electroniccopyavailableat:<http://ssrn.com/abstract=1336389>
- Lusardi, A., & Mitchell, O. S. (2014). The Economic Importance of Financial Literacy: Theory and Evidence. *Journal of Economic Literature*, 52(1), 5–44. <http://dx.doi.org/10.1257/jel.52.1.5>
- Lutfi. (2010). The Relationship between Demographic Factors and Low Birth Weight Infants.

- International Journal of Research in Nursing*, 1(1), 25–28.  
<https://doi.org/10.3844/ijrnsp.2010.25.28>
- Melillo, E. . (2003). Demographic Variables Related to Consumer Spending. *ABI/INFORM Global*.
- Perry, V. G., & Morris, M. D. (2005). Who is in control? the role of self-perception, knowledge, and income in explaining consumer financial behavior. *Journal of Consumer Affairs*, 39(2), 299–313. <https://doi.org/10.1111/j.1745-6606.2005.00016.x>
- Rasheed, M. H., Rafique, A., Zahid, T., & Akhtar, M. W. (2018). Factors influencing investor's decision making in Pakistan Moderating the role of locus of control . Review of Behavioral Finance. *International Journal of Business and Applied Social Science*, 10(1), 70–87. <https://doi.org/https://doi.org/10.1108/rbf-05-2016-0028>
- Reed, R. G. (2016). The relationship between house prices and demographic variables: An Australian case study. *International Journal of Housing Markets and Analysis*, 9(4), 520–537. <https://doi.org/http://dx.doi.org/10.1108/IJHMA-02-2016-0013>
- Roscoe, J. . (1975). *Fundamental Research Statistics for the Behavioral Sciences (2nd Edition ed.)*. Holt, Rinehart and Winston.
- Sabri, N. A. A. (2016). The Relationship between the Level of Financial Literacy and Investment Decision-Making Millennials in Malaysia. *A Contemporary Business Journal*, 6, 39–47. [https://doi.org/http://university2.taylors.edu.my/tbr/uploaded/2016\\_vol6\\_p3.pdf](https://doi.org/http://university2.taylors.edu.my/tbr/uploaded/2016_vol6_p3.pdf)
- Sekaran, U., & Bougie, R. (2016). *Research Methods for Business: A Skill- Building Approach (7th Edition ed.)*. Chichester: John Wiley & Sons.
- Violeta, J., & Linawati, N. (2019). Pengaruh Anger Traits, Anxiety Traits, Dan Faktor Demografi Terhadap Keputusan Investasi. *Jurnal Manajemen Pemasaran*, 13(2), 89–96. <https://doi.org/10.9744/pemasaran.13.2.89-96>
- Wahyuni, A. N., & Pramono, N. H. (2021). Pengaruh Faktor Demografi dan Faktor Psikologi Investor dalam Pengambilan Keputusan Investasi di Era Ekonomi Digital. *JABI (Jurnal Akuntansi Berkelanjutan Indonesia)*, 4(1), 73. <https://doi.org/10.32493/jabi.v4i1.y2021.p73-91>
- Warouw, V., Pangkey, R., & Fajar, N. (2022). Pengaruh Kebijakan Dividen Dan Keputusan Investasi Terhadap Harga Saham Pada Perusahaan Yang Tergabung Dalam Indeks LQ45 Di BEI Periode 2016-2018. *Jurnal Akuntansi Manado (JAIM)*, 3(1), 137–148. <https://doi.org/10.53682/jaim.v3i1.2426>
- Zhang, D., Hu, M., & Ji, Q. (2020). Financial markets under the global pandemic of COVID-19. *Finance Research Letters*, 36, 101528. <https://doi.org/10.1016/j.frl.2020.101528>