# Do Demographic and Financial Literacy affect Investment Decision?

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**Abstract.** This study aims to test the demographic variable (gender, age, and marital status) and financial literacy on investment decision. The study employ questionnaire to obtain the data. The results show that gender and financial literacy have significant effect on investment decision. Male investor are more likely to make good investment decision compared to female investors. And also, investor with good financial literacy will have good investment decision. Financial literacy helps in managing financial resources effectively

Keywords: gender, financial literacy, investment decision, financial market.

## **1** Introduction

Data collected by OJK through the 2019 National Survey of Financial Literacy and Inclusion (SNLIK) shows that the conventional financial literacy of Indonesian society is generally 90.28%. According to [1] explains that Financial literacy is the capacity to gather information and make sound judgements about the usage and management of one's personal finances. Financial literacy has several dimensions, namely financial literacy, financial attitude and financial attitude. Financial literacy is the education of personal financial management skills for future economic independence. Financial literacy is knowledge about many things related to finance. Financial literacy includes general knowledge of personal finance, savings and credit, insurance, and investments.

Developments in research in finance have begun to distinguish between traditional finance and behavior ([2]). This difference lies in the assumption that traditional finance focuses on rationality while behavioral finance assumes that investors often experience deviations in making decisions. Making investment decisions is an important and complex process that can be influenced by several factors.

Previous research has shown that financial literacy plays a role in influencing investors to make investment decisions [3]. Financial literacy is described as the capacity to successfully apply financial information and skills in making good investment decision for individual well-being. Financial literacy is a key consideration while making financial decisions..

Incomplete financial information distorts the decision-making process and generates ambiguity [4]). Financial literacy aids in the proper management of financial resources. This research

suggests that investors with low financial literacy are more prone to make irrational or unproductive investment decisions [5] and are more likely to incur high levels of debt.

Apart from financial literacy, demographic factors can also influence investors in making investment decisions [3]. Demographic factors such as age, marital status, education, income, investment experience, and employment have an influence on investment decision making [3]. Various researchers have documented that male investors are more confident than female investors [6].

This research looks at the impact of financial literacy and demographic characteristics on investment decisions. Age, occupation, education, and gender are among the demographic parameters that will be investigated in this study. As a result, the goal of this study was to investigate the impact of financial literacy and demographic characteristics on investment decision making.

# 2 Literature Review

Demographic Factors and Investment Decisions

Demographic parameters including gender, age, and marital status may be associated to investor behaviour. Investors' investment behaviours in relation to specific individuals' experiences vary greatly. According to [7], men investors are risk takers, whereas female investors are risk averse. Investor knowledge and decisions can be improved at retirement age. Investors with an older age range have better knowledge than young investors. So, in making investment decisions, older investors have better investment decisions [8]. Marital status influences risk tolerance in investment decision making. Investors who are single or not married have more freedom in making financial decisions, while making investment decisions is a challenge for investors who are married because they need to discuss the financial plans that will be carried out, including investment decisions taken to minimize potential risks

H1a: demographic factors (gender) influence investment decisions positvely

H2b: demographic factors (marital status) influence investment decisions positvely

H2c: demographic factors (age) influence investment decisions positvely

Financial Literacy (FL) and Investment Decisions (Investment)

Financial literacy aids in the proper management of financial resources. This research suggests that investors with little financial literacy make irrational or unprofitable investing decisions. ([5]) and are more likely to acquire extreme levels of debt. Researchers discovered that investors with low financial literacy avoid stocks and have non-diversified portfolios [9]. The idea that persons with low income and financial literacy are more likely to make poor investment decisions [5] nd policymakers contemplating financial education as a treatment for poor investment decisions, but whether it changes behaviour is unclear. Investors invest depending on available financial information and knowledge. Behaviour is an individual component that evolves dependent on the information and knowledge they receive. An educated investor can overcome biases and make solid financial judgements [5]. Several survey studies have also attempted to illustrate the significance of financial literacy in making sound investing decisions.  $H_2$ : financial literacy has a positive effect on investment decisions

# 3 Research Methodology

#### Data and Sample

The research data was obtained from a structured questionnaire and divided into 3 parts to measure each research variable, namely the first part contains demographic information, the second part is financial literacy, and the third part is about investment decisions. Questionnaires were distributed online to respondents with the criteria being individuals who had invested in the capital market. Respondents in this study were 73 respondents.

Research variable

This study aims to examine the effect of demographic variables such as status, age, and gender and financial literacy on investment decisions. The demographic status variable is given a value of 1 if married and a value of 0 if not married. The age variable is given a value of 1, 2, 3, 4, 5 if the respondent's age is (15-20 years); (21-30 years); (31-40 years); (40-50 years); (>50 years). The gender variable is given the value 1 if male and the value 0 if female.

The FINLIT variable aims to test respondents' understanding and perceptions regarding statements related to investment. The number of question items for the FINLIT variable is four items adopted from [10], [11]. Measurements were made using a Likert scale with a value of 1-5 ranging from strongly disagree to strongly agree.

The INVEST\_DEC variable has 3 question items [12]. Measurements were made using a Likert scale with a value of 1-5 ranging from strongly disagree to strongly agree.

This study uses multiple regression tests to test the research hypothesis with the following research model

 $INVEST\_DEC = \alpha + \beta_1 AGE + \beta_2 STATUS + \beta_3 GENDER + \beta_3 FINLIT + e$ (1)

Testing of the instrument is carried out by testing the validity and reliability of the instrument. Then, the next test is the classic assumption test before testing the hypothesis.

### 4 Result

The profile of respondents was obtained from a questionnaire distributed through an online platform and filled by 73 respondents. The gender of the respondents was 56% female and 44% male on the other hand. The descriptive statistics in table 1 shows that 45% of the respondents are married and the remaining 55% are not married. This indicates that most of the respondents involved in investment activity are married individuals compared to unmarried individuals. Table 1 also shows the age of the respondents with the most age group 31-30 as much as 44%. As for educational background, 41% holds bachelor's degree and 37% holds master's degree. Respondents' work profiles were divided into seven categories namely Lecturer, Private Sector, BUMN, Civil Servant (non lecturer), Entrepreneur, students, Others as much as 14%, 34%, 7%, 10%, 15%, 7%, and 14% respectively.

	Frequency	%
Gender		
Female	41	56%
Male	32	44%
	73	100%
Marital Status		
Married	33	45%
Unmarried	40	55%
	73	100%
Age		
15-20	6	8%
21-30	5	7%
31-40	32	44%
41-50	16	22%
>50	14	19%
	73	100%
Education Background		
High School	9	12%
Diploma	7	10%
Bachelor	30	41%
Master	27	37%
Doctoral	0	0%
	73	100%
lop		
Lecturer	10	14%
Private Sector	25	34%
Public Sector	5	7%
Sivil Servant	7	10%
Entrepreneur	11	15%
students	5	7%
Others	10	14%
	73	100%

Table 1. Profil Responden

Table 2 shows the results of the validity and reliability tests. The results of the validity test showed that all question items for the FINLIT variable were declared valid at a significance level of 1%. The question instrument for the INVEST\_DEC variable is also declared valid at the 1% significance level.

The Cronbach's alpha results for each variable were 0.737 and 0.700 respectively and these values were greater than 0.7 so that the research instrument was declared reliable.

Table 2. Validity and Reliability Test Result					
Financial Literacy (FINLIT)					
Item			Cronbach's		
			alpha		
1	0.718***	Valid	0.737		
2	0.555***	Valid			
3	0.798***	Valid			
4	0.489***	Valid			

Validity and Reliability Test Results

Investment Decision (INVEST_DEC)			
Item			
1	$0.888^{***}$	Valid	0.700
2	0.665***	Valid	
3	0.802***	Valid	

This study used multiple regression tests to test the research hypothesis and tested the classical assumptions first before testing the hypothesis. The results of the normality test stated that the data were normally distributed, not heteroscedasticity, not multicollinearity, and not autocorrelation.

Table 3. Hypothesis Test Results

Dependent Variabel: Investment Decision (INVEST\_DEC)

1				
	В	Std. Error	t	Sig
Constant	5.709	2.484	2.298	0.025**
GENDER	1.117	0.619	1.805	0.075*
AGE	0.259	0.615	0.421	0.675
STATUS	-0.163	0.272	-0.600	0.551
FINLIT	0.307	0.138	2.227	0.029**
R-square	0.112			
Obs	73			

To evaluate the effect of demographic variables namely GENDER, AGE, STATUS and FINLIT on INVEST\_DEC, multiple linear regression tests were performed. From the results of multiple linear regression tests, it was found that the variables GENDER and FINLIT had a significant positive effect on INVEST\_DEC at the 10% and 5% significance level respectively. Thus, Hypothesis 1a which states that gender has a positive effect on investment decisions is accepted. Hypothesis 2 which states that financial literacy has a positive effect on investment decisions is accepted.

Hypothesis 1b is rejected since it states that age has a beneficial effect on investing decisions. Hypothesis 1c, which claims that marital status influences investing decisions, is also rejected.

#### Discussion

Hypothesis 1a states that gender has a positive effect on investment decisions. These result indicates that male has a more important role in investing than women. [3] stated that men are more confident in terms of investment knowledge compared to women. The results of this study support these findings and show that male participates more in investments, especially investing in the capital market. Women are considered to lack confidence in making investment decisions [3].

The Financial Services Authority (OJK) defines financial literacy as a set of processes or activities aimed at increasing customers' and the general public's knowledge, skills, and confidence in managing their personal finances. Financial literacy is tied not just to knowledge but also to each individual's behaviour and attitudes. According to[1]) that financial literacy is the ability of a person to obtain information and make the right decisions regarding the use and management of his personal finances. The results of this study indicate that FINLIT has a positive effect on INVEST\_DEC, so hypothesis 2 is supported.

Financial literacy relates to an individual's ability to be able to make good investment decisions. The result of this study indicates that individuals who have good financial literacy will also have good investment decisions. This ability is related to understanding financial concepts which can be improved with financial literacy and can assist investors in making the right investment decisions [13]. Literasi keuangan juga membantu investor untuk membangun cara berpikir yang dalam mengambil keputusan investasi, selain itu financial literasi membuat investor untuk membuat keputusan investasi yang rasional [11]

# 5 Conclusion

The purpose of this study is to examine the effect of gender, marital status, age, and financial literacy on investment decision. There are two main findings in this research. The first findings show that male investor tend to be involved in investment decision because male investor are more likely to be confident than female investor. The second findings is financial literacy has a positive effect on investment decision. Financial literacy helps investors in making rational and right investment decision. The implication of the findings is investors should improve their financial literacy in order to make good investment decision.

There are some limitations on this research. First, the number of sample employed in this research is very limited. Second, the indicator used to examine the financial literacy does not does not differentiate between investors' financial literacy abilities such as basic and advanced knowledge.

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