

## Islamic Financial Literacy and its Influence on Investment Decisions Through Student Financial Behavior

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**Abstract.** *The Financial Services Authority survey 2019 shows an Islamic financial literacy rate of 8.93% and has not been evenly distributed in every sector, especially in the capital market. The capital market Islamic financial inclusion index also has the lowest among other sectors. This study aims to analyze the level of Islamic financial literacy of students of the FEM IPB University and its influence on investment decisions through financial behavior with descriptive analysis and SEM-PLS methods. The results show the average level of Islamic financial literacy of respondents is 81.17%. Islamic financial literacy influences investment decisions and financial behavior. Then, financial behavior directly influences investment decisions. It also mediates the influence of Islamic financial literacy on investment decisions. The other finding indicates that gender has no influence, while income has a positive and significant effect on investment decisions.*

**Keywords:** *financial behavior; investment decision; Islamic financial literacy; SEM-PLS*

**Abstrak.** *Survei Otoritas Jasa Keuangan 2019 menunjukkan tingkat literasi keuangan syariah sebesar 8,93% dan belum merata di setiap sektornya terutama pada pasar modal. Indeks inklusi keuangan syariah pasar modal juga memiliki nilai terendah di antara sektor lain. Penelitian ini bertujuan menganalisis tingkat literasi keuangan syariah mahasiswa FEM IPB University dan pengaruhnya terhadap keputusan investasi melalui perilaku keuangan dengan metode analisis deskriptif dan SEM-PLS. Hasil penelitian menunjukkan rata-rata tingkat literasi keuangan syariah responden adalah 81,17%. Literasi keuangan syariah berpengaruh terhadap keputusan investasi dan perilaku keuangan, kemudian perilaku keuangan berpengaruh langsung terhadap keputusan investasi dan mampu memediasi pengaruh literasi keuangan syariah terhadap keputusan investasi. Ditemukan pula bahwa jenis kelamin tidak memiliki pengaruh, sementara pendapatan berpengaruh positif dan signifikan terhadap keputusan investasi.*

**Kata kunci:** *literasi keuangan Syariah; keputusan investasi; perilaku keuangan; SEM-PLS*

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## Introduction

Islam in its teachings attaches great importance to knowledge. The virtue of knowledge is widely explained in the Qur'an and Hadith, one of which is in the hadith "Seeking knowledge is obligatory for every Muslim male and female Muslim" (HR. Ibn Abdil Barr). A Muslim is obliged to study as a guide in every aspect of life, both in worship and muamala, including in financial transactions (Biplob and Abdullah 2019). For this reason, financial knowledge in Islam is an important aspect to consider to maintain Islamic maqasid (Lahsasna 2016).

Financial literacy according to the Financial Services Authority (FSA) is insight, skills, and trust that affect the quality of decision-making and financial management to achieve prosperity (OJK 2016). From an Islamic perspective, financial literacy is a person's knowledge and understanding of the concepts of money, debt, savings, spending, zakat, and transactions that are allowed and prohibited (Lahsasna 2016).

The FSA National Survey of Financial Literacy and Inclusion (NSFLI) in 2019 showed growth in Indonesia's financial literacy rate, from 29.7% in 2016 to 38.03%. Likewise, the level of Islamic financial literacy grew from 8.1% to 8.93%. These results can be interpreted that out of every 100 Indonesian people, only about 9 people have good knowledge of Islamic finance (well literate) (OJK 2016).

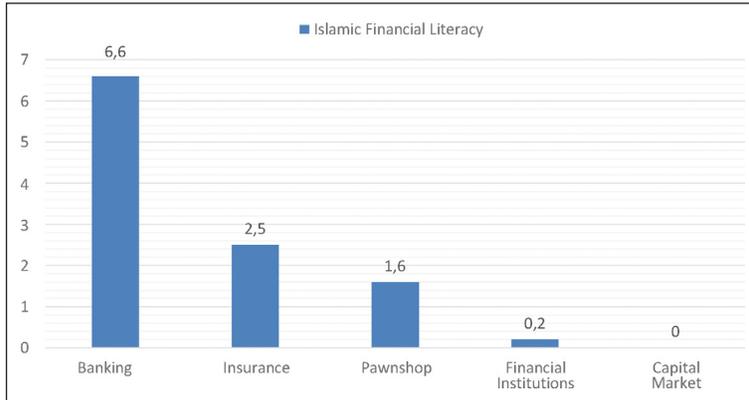
Geographically, the level of Islamic financial literacy in Indonesia is still not evenly distributed in each region. The Islamic financial literacy index in the provinces in the Sumatra and Java islands is mostly better than other regions. On the island of Java itself, West Java Province is in the last position of the Islamic financial literacy index, even below the national average of 4.7% (OJK 2016). In addition, when viewed based on the financial services sector, the results of the 2016 FSA NSFLI also show the inequality of the Islamic financial literacy index in each sector. Banks have the highest Islamic financial literacy index of 6.6. Then followed by the insurance sector, pawnshops, and financial institutions. The capital market sector is the sector with the lowest literacy index as visualized in Figure 1.

As a country with a Muslim majority population, Indonesian people's understanding of Islamic finance is still very limited, especially in the capital market sector. This will have an impact on financial behavior because a person's financial behavior is influenced by their financial knowledge (Xiao et al., 2007).

Financial behavior relates to how individuals use, control, and treat their financial resources. Financial literacy and behavior determine a person's financial

decision-making, including investment decisions. The relationship between financial literacy and investment decisions is significant and positive. This means that with a low level of understanding, financial behavior in making investment decisions will also be worse (Pranyoto et al., 2018).

Figure 1: Islamic Financial Literacy Index by The Financial Services Sector



Source: Financial Services Authority, 2016

The ratio of Islamic investors based on data from the Indonesia Stock Exchange (IDX) in mid-2020 was 6.1% of the total investors on the IDX. This figure has increased but is still relatively low, considering the total Muslim population of Indonesia which reaches 87% (BPS 2010). The Directorate of Islamic Capital Markets at FSA formulated a Roadmap for the Islamic Capital Market for the period 2020 to 2024 as a strategy for developing the Islamic capital market. There are four points of development direction in the roadmap, one of which is increasing the literacy and inclusion of the Islamic capital market. The action plan in the program is to provide education and assistance through seminars and workshops. In addition, FSA also cooperates with several universities in issuing the Islamic Capital Market Module for Higher Education, with the hope of increasing student understanding and preparing competent graduates to meet the needs of the Islamic capital market industry in Indonesia (OJK 2020). Students are also expected to be able to have a role in increasing capital market investment because they tend to have basic investment knowledge (Nursing and Son 2015).

West Java ranks third in the number of students after Banten and East Java (Kemenristekdikti 2019). IPB University is a State University in Bogor, West Java with the number of registered students in 2019 reaching 28,015 with 16,711

undergraduate students (IPB University, 2019). In addition, IPB University is also in the first position of the best Indonesian campus based on the results of the higher education clustering of the Ministry of Education and Culture so it is expected to have a good level of financial literacy (Kemendikbud 2020).

Several studies regarding the level of financial literacy of IPB students include research Fadly (2019), which shows that the level of financial literacy of IPB undergraduate students is classified as sufficient literate. Then research Purba (2020) regarding capital market literacy, also shows that the capital market knowledge of IPB undergraduate students is 51% or is classified as sufficient literate. However, the two studies discussed conventional financial literacy, not focusing on Islamic financial literacy.

Different from previous research, this study intends to analyze the level of Islamic financial literacy of students and their influence on investment decisions through financial behavior. More specifically, this research is focused on students of the Faculty of Economics and Management (FEM) IPB University. This is because in this faculty students have been equipped with general economics and management knowledge. In this faculty, there is also a Department of Islamic Economics, which is one of the universities that participated in compiling the Islamic capital market module with FSA. The rest of the paper is organized in the following sequence: in the next section, the literature review. The research method and data, on which the analysis is conducted, are presented in Section 3. Section 4 discusses the results. Lastly, section 5 concludes the paper.

## **Literature Review**

According to Financial Services Authority Regulation Number 76 financial literacy is knowledge, skills, and beliefs, which influence attitudes and behavior to improve the quality of decision making and financial management to achieve prosperity. Islamic financial literacy is the development of financial literacy by paying attention to Islamic law (POJK 2016). According to Rahim (2016) Islamic financial literacy is the ability of individuals to apply financial insight, as well as the ability to control their financial resources so as not to violate Islamic teachings (Rahim et al. 2016).

Several indicators in assessing Islamic financial literacy were adapted from Chen and Volpe's financial literacy indicators, namely basic knowledge of Islamic finance, knowledge of Islamic savings and loans, knowledge of Islamic insurance, and knowledge of Islamic investment (Chen and Volpe 1998). Financial literacy

is important because a high level of financial knowledge will have implications for one's expertise in optimizing the time value of money. This will then have implications for increasing profits so that they can improve their standard of living (Yushita, 2017). Financial literacy will also affect a person's financial behavior (Xiao et al., 2007).

According to Ricciardi and Simon (2000) financial behavior is a combination of three disciplines, namely psychology, sociology, and finance. Financial behavior relates to how individuals use, control, and treat their financial resources. The more responsible a person's financial behavior is, the more effective his financial management will be, such as preparing a budget, saving and managing expenses, investing, and paying bills on time (Nababan and Sadalia 2012). A person's financial literacy and behavior influence individual financial decisions, including investment decisions (Pranyoto et al. 2018).

An investment decision is a decision to distribute funds in a certain form of investment, to generate profits within a certain period time. Investment decisions are closely related to the process of choosing a form of investment that is considered more profitable from several existing options. In the consumer decision model, there are several stages in the decision-making process (Bray 2008) namely need recognition, information search, alternative evaluation, purchase decision, consumption, post-consumption evaluation, and divestment. In investment decisions, the three basic investment decisions of a person are return, risk, the relationship between return and risk (Tandelilin 2012).

In addition to knowledge and behavior, demographic factors also influence investment decisions. Baruah and Parikh (2018) identified six demographic factors, namely age, gender, marital status, education, profession, and income. Meanwhile, according to Lewellen, Lease and Schlarbaum (1977) in (Ariadi et al. 2015), which includes demographic factors are gender, income, age, and education. The demographic factors that will be examined in this study are gender and income.

Confidence in men when investing is relatively greater than women. In addition, women's divided focus on many things also makes women have a lower risk tolerance than men (Violeta and Linawati 2019). Individual investor data in the 2019 FSA Islamic capital market development report shows that there are more male individual investors than female investors in each Islamic capital market instrument (OJK 2019).

Ikeobi and Arinze's research found that income is one of the most influencing factors of all investment objectives. Merawati and Putra (2015) also stated that

income is a consideration in investment decisions in students. This is due to the higher the amount of income, the interest in investing someone also tends to increase. So does research Ariadi et al. (2015) which indicates a significant relationship between student income obtained from parents and investment.

## Methods

The data used in this study is primary data sourced from the results of distributing questionnaires to respondents by google form. The questionnaire is one of the data collection instruments, which is obtained through filling out questions or research statements by respondents (Sugiyono 2013). Secondary data is used as support and obtained from literature studies through various references such as journals, previous research, OJK publications and other sources related to research topics.

The location for data collection was adjusted to the respondents, namely on the IPB campus located on Dramaga, Bogor, West Java and online. Data collection took place from March 2021 to April 2021. The research sample used a purposive sampling technique. According to Sugiyono (2013) Purposive sampling is one of the sampling techniques through certain considerations. The provisions of the research sample are active undergraduate students of the Faculty of Economics and Management IPB University, have completed the general competency education program, Muslim, and are willing to be respondents. The number of samples obtained based on the Slovin formula is a minimum of 96 people.

Before the research, it is necessary to do some questionnaire testing. A Validity test is used to determine whether or not an indicator in the questionnaire is valid. The Validity test is carried out through SPSS software by calculating the correlation coefficient ( $r$ ) and comparing it with the value of  $r$  table, if  $r$  count  $>$   $r$  table then it is valid. Meanwhile, reliability is a test conducted to measure the consistency or reliability of a questionnaire in measuring a research variable. The instrument reliability test criteria use a limit of 0.6 if cronbach alpha is greater than 0.6 then the question is declared reliable (Sugiyono, 2013). The results of the validity and reliability tests are presented in Table 1.

Communality is the percentage of item variance that can explain the construct of the measure. This test is carried out for each indicator of the latent variable. The value of the tested indicator must meet the requirements of communality, which is more than 0.5 (Widhiarso 2009). Based on the results

of the communality test, two items have a communality value  $< 0.5$ , namely a statement regarding the understanding of maysir and a statement regarding financial behavior in providing emergency funds so that both items must be removed from the model.

Table 1: The Results of The Validity and Reliability Test

Variable	Number of Questions	Number of Valid Questions	Cronbach's Alpha
Islamic Financial Literacy	20	17	0.741
Financial Behavior	6	5	0.651
Investation decision	7	7	0.684

Source: Primary data, processed 2021

## Descriptive Statistical Analysis

Descriptive statistics is a statistical analysis by interpreting the obtained original data without making conclusions (Sugiyono, 2013). Descriptive analysis in this study is useful for describing research variables, namely Islamic financial literacy based on respondents' answers. The category of Islamic financial literacy level of FEM IPB students refers to three categories of financial literacy by Chen and Volpe (1998) namely low, medium, and high. The selection of the reference category is adjusted to the indicators used in this study because the Chen and Volpe indicators cover financial knowledge in various sectors. In addition, the research subjects at Chen and Volpe are also students so that it is matched with this study. Determination of categories based on respondents' answers with the weight distribution for each category is presented in Table 2.

Table 2: Category of Islamic Financial Literacy Level

Islamic financial literacy category	Percentage
<i>High</i>	80.00
<i>Medium</i>	60.00-79.00
<i>Low</i>	<60.00

Source: Chen dan Volpe (1998)

## Partial Least Square Analysis - Structural Equation Model (SEM-PLS)

Ghozali (2008) in Haryono (2016) defines the structural equation model (SEM) as a second-generation multivariate analysis technique that can measure the relationships between complex variables to describe the overall model comprehensively. In general, SEM is divided into two types, namely covariance-based SEM and variant-based SEM.

Table 3: SEM-PLS Model Assessment Criteria

Model test	Output	Criteria	
<i>Outer model</i> (indicator)	<i>Convergent validity:</i> <i>Loading factor</i>	> 0.7 but the value of 0.5 – 0.6 is still tolerable	
	<i>Average Variance Extracted (AVE)</i>	> 0.5	
	<i>Discriminant validity:</i> <i>Cross loading</i>	The value of loading the target construct > the value of cross-loading with other constructs	
	<i>Composite reliability</i>	> 0.7	
	SRMR	< 0.1	
<i>Inner model</i> (Hypothesis testing)	Parameter coefficients and T-statistics	T-statistics >1.65 and >1.96 at a significance of 10% and 5%, respectively.	
	R-square	0.67 good 0.33 moderate 0.19 weak	
	Q2 . prediction relevance	Q2 > 0	
	F-square	0.35 big 0.15 moderate 0.02 small	
	Overall model	<i>Goodness of Fit (GoF)</i>	0.36 big 0.25 moderate 0.1 small

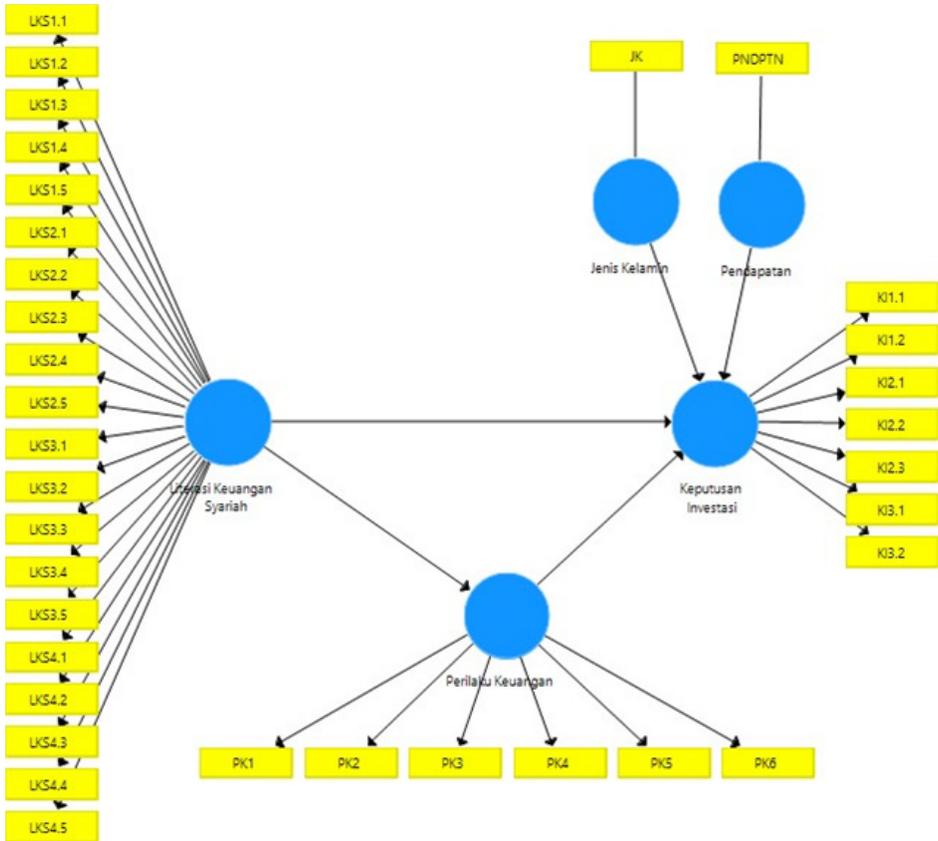
Source: Haryono (2016), Cock (2020)

The type of SEM used in this study is variant-based SEM with Partial Least Square (PLS) technique. The purpose of SEM-PLS is to test the prediction of the relationship between latent variables, based on the existence of a relationship or

influence between these latents. SEM-PLS is not based on many assumptions such as the assumption of normality, wherein research on attitudes, human behavior data normality is difficult to fulfill (Haryono 2016). In addition, the sample size does not have to be large. In the SEM-PLS two types of models that must be evaluated. First, the measurement model or outer model to measure the relationship between latent variables and their indicators. Second, the structural model or inner model is a simultaneous regression model consisting of several variables, either exogenous, endogenous, intervening, or moderating (Haryono 2016). The assessment criteria for each model are presented in Table 3.

The research model is visualized in Figure 2.

Figure 2: Research Model



## Results and Discussion

### Characteristics of Respondents

The respondents of this research are active students of the Faculty of Economics and Management, IPB University. The number of respondents who filled out the research questionnaire was 148 people. However, 18 of them are invalid, so that the remaining 130 respondents are eligible for analysis. Characteristics of respondents include gender, study program, income, investment gallery membership, and investment behavior.

Table 4: Characteristics of Respondents

Characteristics	Information	Amount (person)	Percentage (%)
<b>Gender</b>	Male	32	24.6
	Female	98	75.4
<b>Study program</b>	Islamic Economics	72	55.4
	Non-Islamic Economic	58	44.6
<b>Income</b>	< Rp800,000	46	35.4
	IDR 800,000 - IDR 1,000,000	37	28.5
	IDR 1,000,001 – IDR 1,500,000	24	18.5
	IDR 1,500,001	23	17.6
<b>Investment gallery membership</b>	Yes	9	6.9
	Not	121	93.1
<b>Investment behavior</b>	Yes (Islamic)	36	27.7
	Yes (Conventional)	16	12.3
	Yes (Both)	13	10
	Not	65	50
<b>Islamic investment instruments</b>	Islamic Mutual Funds	30	41.7
	Islamic Stock	18	25
	Islamic Deposit	14	19.4
	Sukuk	7	9.7
	Others	3	4.2

Source: Primary data, processed 2021

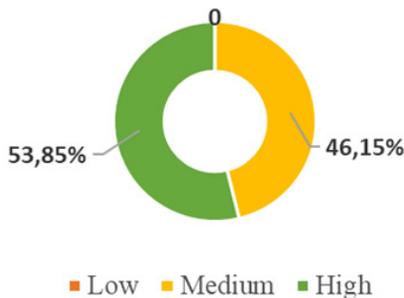
Based on Table 4, the majority of respondents are female, namely 98 people or 75.4%, while male respondents are 32 people or 24.6%. Most of the respondents came from the Islamic economics study program, amounting to 72 people or 55.4%, while the respondents from non-Islamic economics study programs amounted to 58 people or 44.7%. Then for the average income per month, most respondents are in the range of less than Rp. 800,000.00 with a total of 46 people or 35.4% and the least in a range of more than Rp. 1,500,001.00, namely 23 people. or 17.6%.

In the investment gallery membership characteristics, only 9 respondents (6.9%) are members of the investment gallery while the remaining 121 respondents (93.1%) are not members of the investment gallery. The percentage of respondents who have not invested is 50% and those who invest purely in Islamic are 27.7%. This means that the interest of FEM IPB University students in investing still needs to be increased. Of the types of Islamic investment instruments owned by respondents, the most popular instrument is Islamic mutual funds, which is 41.7%, followed by Islamic shares at 25%, Islamic deposits at 19.4%, then sukuk at 9.7% and other instruments at 4.2%.

### Islamic Financial Literacy for FEM IPB University Students

The level of Islamic financial literacy of FEM IPB University undergraduate students was obtained from filling out questionnaires by 130 respondents who were then grouped based on Chen and Volpe's criteria. The results of the Islamic financial literacy level of S1 FEM IPB University students are presented in Figure 3.

Figure 3: The Level of Islamic Financial Literacy of FEM IPB University Students



Source: Primary data, processed 2021

Based on Figure 3, the level of Islamic financial literacy of FEM IPB University students is shown in a donut diagram and is divided into three categories. The donut chart shows that there are 53.58% of students belonging to the high category which is dominated by respondents who come from the Islamic economics study program, income Rp. 80.000,00 - Rp. 1.000.000.000,00. Individuals with a high level of financial literacy can be interpreted that individuals who are able to make financial decisions and are responsible for their actions (Chen and Volpe 1998).

Meanwhile, 46.15% of students belonging to the medium category are dominated by students who come from non-Islamic economics study programs, have an income of less than Rp. 800,000.00 and do not invest. Individuals who fall into this category are considered to have an understanding of finances but their financial management abilities are still limited (Akmal and Saputra 2016).

Investment gallery membership status hardly gives any difference in respondents' Islamic financial literacy. 56% or five of the nine respondents who are members or have been members of the investment gallery have high Islamic financial literacy, while the remaining 44% have medium Islamic financial literacy. Of the respondents who are not members of the investment gallery, 54% of respondents have high Islamic financial literacy and the remaining 46% are medium.

From the results of this study, there were no FEM IPB University students in the low category, which was defined as individuals who tended to think negatively about finances and make wrong decisions. The average level of Islamic financial literacy for undergraduate students of FEM IPB University is 81.17%. This shows that the level of Islamic financial literacy of FEM IPB University students is in the high category but is still close to the minimum limit of the high category. The highest score obtained by the respondents was 96.88% and the lowest score was 67.19%. The average Islamic financial literacy based on indicators can be seen in Table 5 below.

Based on Table 5, the average Islamic financial literacy level of students based on basic knowledge of Islamic finance is 92.31% or classified as the high category. From the two aspects of the statement, the majority of respondents answered correctly. This is because all respondents are Muslim so they already have knowledge of the legal basis and principles in Islamic finance.

Table 5: Islamic Financial Literacy of Respondents Based on Financial Literacy Indicators

No	Statement	Financial literacy rate (%)		
		<i>Low</i> < 60	<i>Medium</i> 60 - 79	<i>High</i> 80
<b>Basic knowledge of Islamic finance</b>				
1.	LKS1.1			96.54
2.	LKS1.2			88.08
	<b>Average</b>			<b>92.31</b>
<b>Knowledge of Islamic savings and loans</b>				
1.	LKS2.1			89.42
2.	LKS2.3			83.65
3.	LKS2.4			80.77
4.	LKS2.5		73.85	
	<b>Average</b>			<b>81.92</b>
<b>Knowledge of Islamic insurance</b>				
1.	LKS3.1			90.00
2.	LKS3.2		70.77	
3.	LKS3.3			82.12
4.	LKS3.4			82.12
5.	LKS3.5			84.81
	<b>Average</b>			<b>81.96</b>
<b>Knowledge of Islamic investment</b>				
1.	LKS4.1			87.50
2.	LKS4.2			94.23
3.	LKS4.3	47,50		
4.	LKS4.4			92.69
5.	LKS4.5	54.62		
	<b>Average</b>			<b>75.31</b>

Source: Primary data, processed 2021

The average level of Islamic financial literacy based on knowledge of Islamic savings and loans is in the high category (81.92%) but is close to the minimum threshold for the high category. The LKS2.1 statement regarding Islamic savings products has the highest value of 89.42% this is because Islamic savings products are in great demand by students. Meanwhile, the aspect of the financing system (LKS2.5) has the lowest score of 73.85% or is classified as a medium category. Of the four existing statements, students' knowledge of Islamic savings is higher than knowledge of loans or financing.

The knowledge of Islamic insurance for FEM IPB University students has an average of 81.96% which is classified as high but is still close to the minimum limit for the high category. The highest value is found in the principle aspect of Islamic insurance (LKS3.1) which is 90.00%. Meanwhile, aspects regarding the concept of Islamic and conventional insurance (LKS3.2) have the lowest score of 70.77% and are still classified as medium. This can be interpreted that students have knowledge of Islamic insurance but do not understand the difference in concepts between Islamic insurance and conventional insurance.

The last indicator is Islamic investment knowledge. The average Islamic investment knowledge of FEM IPB University students is 75.31% and is still in the medium category. The highest score was obtained from the aspect of Islamic capital market principles (LKS4.2), which was 94.23%. Meanwhile, the aspect of Islamic investment supervision (LKS4.3) and Islamic stock index (LKS4.5) are still classified as the low category with respective values of 47.50% and 54.62%. Overall, the indicator of Islamic investment knowledge in FEM IPB University students has the lowest average so that it needs to be improved.

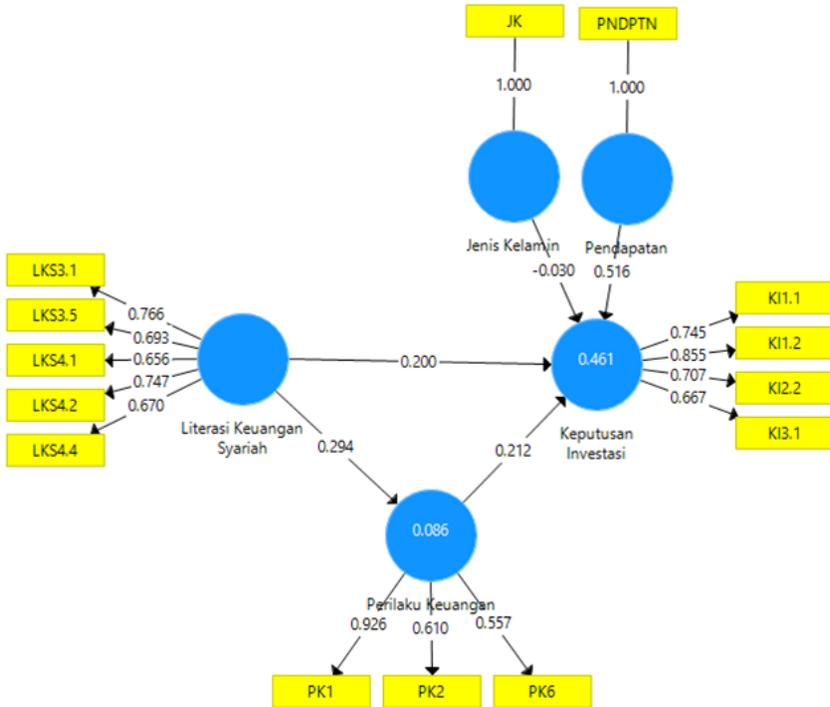
## **Structural Equation Model Analysis – PLS (SEM-PLS)**

### **Measurement Model Evaluation (Outer Model)**

#### ***Convergent Validity***

*Convergent validity* the model is evaluated based on the value of the loading factor with an assessment criterion of  $> 0.7$  but if the value ranges from 0.5 to 0.6 it can still be tolerated (Haryono, 2016). The loading factor describes the correlation of the indicator to the latent variable, the higher the correlation, the better the level of validity of the indicator. After testing, the model with indicators that meet the criteria is presented in Figure 4.

Figure 4: Loading Factor Test Results



Source: Primary data, processed 2021

Next, looking at the Average Variance Extracted (AVE) value with a value criterion of  $> 0.5$ . The test results show that the AVE value of all variables meets the criteria with the largest value of 1,000 on the gender and income variables and the smallest value of 0.501 on the Islamic financial literacy variable. So based on the loading factor and AVE values, the model meet the criteria for convergent validity.

1. Discriminant Validity

The assessment of discriminant validity is seen based on the cross-loading value which is declared good if the correlation value of the indicator with the intended latent must be greater than the correlation value of the indicator with other latents. Based on the test results, all indicators meet the criteria for discriminant validity.

2. Composite Reliability

The latent variable reliability test is carried out by measuring the composite reliability value with the criteria must be  $> 0.7$ . From the test results, the

composite reliability value of all variables is above 0.7 so it can be concluded that all variables have good reliability.

Table 6: Composite Reliability Test Results

	<b>Composite Reliability</b>
Islamic financial literacy	0.833
Gender	1,000
Income	1,000
Investation decision	0.833
Financial behavior	0.750

Source: Primary data, processed 2021

3. *The Standardized Rootmean Square Residual (SRMR)*

The SRMR value is used to see the approximate fit of this research model. Model fit criteria if it has an SRMR value of at least less than 0.1. The SRMR value in this research model is 0.088, so it can be said that this study has a good model.

Structural Model Evaluation (Inner Model)

1. Path Coefficient

The significance value in this study is 5% or 0.05. A variable is said to have a significant relationship if it has a p-value of less than 0.05 or t-statistic value greater than the t-table of 1.96. The results of the path coefficient test of the research model are shown in Table 7.

Table 7: Path Coefficient Test Results

	<b>Original Sample (O)</b>	<b>T Statistics ( O /STDEV)</b>	<b>P Values</b>
Islamic financial literacy → Investment decisions	0.200	2,627	0.009
Islamic financial literacy → Financial behavior	0.294	3,398	0.001
Financial behavior → Investment decisions	0.212	3.042	0.002
Gender → Investment decision	-0.030	0.470	0.638
Income → Investment decisions	0.516	7,210	0.000

Source: Primary data, processed 2021

Based on Table 7, it is concluded that out of the five variable paths, there is one path variable that is not significant, namely the gender variable to the investment decision variable because its t-statistic value lower than 1.96 and a p-value of more than 0.05. While the other four variable paths are significant.

2. R-square test

The R-square value serves to explain how much the endogenous variable can be explained by the exogenous variable (Haryono, 2016). The standard R-square value consists of several categories, namely the value of 0.67 is good, 0.33 is moderate, and 0.19 is weak. The R-square value of the financial behavior variable is 0.086, meaning that the Islamic financial literacy variable can explain its influence on the financial behavior variable by 8.6% while 91.4% is explained by other variables outside the model studied. The investment decision variable has an R-square value of 0.461, meaning that the variables of Islamic financial literacy, financial behavior, gender, and income can simultaneously explain its influence on investment decisions by 46.1% and the remaining 53.9% is explained by other variables outside the model. researched.

3. Q-square Prediction Relevance

Q-square results are said to be good if the value is more than zero, meaning that the exogenous variable is good or able to predict the endogenous. Based on the test results, the Q-square value of the investment decision variable is 0.242 and the financial behavior variable is 0.026 so it can be concluded that all variables have good predictive relevance.

4. f-square test

The f-square test is used to see whether the effect of the exogenous latent variable on the endogenous latent variable has a substantive effect(Haryono, 2016). The criterion value is the value of 0.02 small effect, 0.15 moderate effect, and 0.35 large influence. The results of the f-square values are presented in Table 8.

Table 8: f-square Test Results

	<b>f-square</b>
Islamic Financial Literacy → Investment Decision	0.066
Islamic Financial Literacy → Financial Behavior	0.095
Financial Behavior → Investment Decision	0.075
Gender → Investment Decision	0.002
Income → Investment Decision	0.447

Source: Primary data, processed 2021

Combined Model Evaluation (Goodness of Fit (GoF))

The GoF index value ranges from 0 to 1 with an interpretation of 0.1 GoF small, 0.25 moderate GoF, and 0.36 large GoF (Haryono, 2016). The GoF calculation is as follows:

$$GoF = \sqrt{AVE \times R^2} = \sqrt{0,714 \times 0,273} = 0,441$$

From the results of these calculations, it can be concluded that the GoF value of the model belongs to the large GoF category. This means that this research model is strong enough to explain research variables and is able to validate the overall model.

**Hypothesis Interpretation**

After the model meets the evaluation criteria for each model, it can be continued to interpret the research hypothesis. The output to be interpreted is the result of the bootstrapping model on SmartPLS which is presented in Table 9 below.

Table 9: *Bootstrapping Results*

	Original Sample (O)	T Statistics ( O STDEV)	P Values
<b><i>Path Coefficients</i></b>			
Islamic financial literacy → Investment decisions	0.200	2,627	0.009
Islamic financial literacy → Financial behavior	0.294	3,398	0.001
Financial behavior → Investment decisions	0.212	3.042	0.002
Gender → Investment decision	-0.030	0.470	0.638
Income → Investment decisions	0.516	7,210	0.000
<b><i>Specific Indirect Effects</i></b>			
Islamic financial literacy → Financial behavior → Investment decisions	0.062	2.044	0.042
<b><i>Total Effects</i></b>			
Islamic financial literacy → Investment decisions	0.263	3,444	0.001

Source: Primary data, processed 2021

Testing the path coefficients of Islamic financial literacy towards investment decisions shows significant results with a t-statistic value of 2.627 or greater than

1.96. The direction of the relationship seen from the original sample is positive with a value of 0.200. This means that with increasing knowledge of Islamic finance, the investment decisions of FEM IPB University students will also increase. The results are consistent with Kurniawan et al (2019) and Upadana and Herawati (2020). Pranyoto et al (2018) also found the same thing, namely financial understanding has direct implications for individual investment decision making.

The second hypothesis related to the relationship between Islamic financial literacy and financial behavior resulted in a significant relationship with a t-statistic of 3.398 ( $> 1.96$ ) and a p-value of 0.001 or less than 0.05. Then from the original sample value, it is known that the direction of the relationship between the two is positive with a coefficient of 0.294. Research Atmaningrum et al (2021) also show similar results, namely that there is a unidirectional and significant relationship between financial knowledge and financial behavior. As in Dwiastanti (2015), when the individual's knowledge of finances is good, their financial management will also be better so that they can achieve prosperity. Therefore, adequate financial literacy is needed as a guide to financial behavior.

In the path coefficients of financial behavior on investment decisions, the t-statistic value is 2.212 or greater than the t-table 1.96. That is, the investment decisions of FEM IPB University students are significantly influenced by their financial behavior. Then, the direction of a positive relationship is also obtained, namely the more positive the student's financial behavior, the more appropriate investment decisions are made. Research Kurniawan et al (2019) and research Upadana and Herawati (2020) also identify the same.

In the path coefficients results, obtained results that are not significant on the gender path to investment decisions because the t-statistic value is 0.638 or less than the t-table 1.96. This means that there is no gender difference in the investment decisions of FEM IPB University students. This result contradicts the research Violeta and Linawati (2019) and Ariadi et al. (2015) which shows that gender influences a person's investment decisions. However, several studies agree with the results of this study, such as Wahyuni and Pramono (2021) and Senda et al (2020), that there is no influence between gender and one's investment decisions. In this study, this could be due to the similarity of the age range and level of education taken by both male and female respondents, so that the information obtained tends to be the same.

The path coefficient test of income on investment decisions shows significant results with a t-statistic value of 7.210 and a p-value of 0.000. The direction of the influence of income on investment decisions is positive at 0.516, meaning

that the increase in respondents' income will be accompanied by an increase in investment decisions. These results are in line with research Violeta and Linawati (2019). Likewise in research Safryani et al (2020).

Testing the intervening variable relationship is done by looking at the specific indirect effects output. The results of specific indirect effects in Table 22, show a significant positive influence of Islamic financial literacy on investment decisions through financial behavior with a t-statistic value of 2.044. In this study, Islamic financial literacy affects investment decisions either directly or through financial behavior. Therefore, it can be concluded that financial behavior is able to mediate the effect of Islamic financial literacy on investment decisions partially (partial mediation). The total effect seen through the total output effects indicates the relationship of Islamic financial literacy to investment decisions is significant with a t-statistic value of 3.444 and the original sample value has increased from 0, 200 becomes 0.263. These results are supported by research Kurniawan et al (2019) and research Audini et al (2020) who found that financial behavior was able to mediate the effect of financial literacy on investment decisions with a positive influence.

## **Conclusion**

Based on this study, it can be concluded that the level of Islamic financial literacy of FEM IPB University students is divided into two categories, namely 46.15% of students belonging to medium and 53.85% of students belonging to high. The average level of Islamic financial literacy for FEM IPB University students is 81.17% or classified as high category, but still close to the minimum limit of high category. Islamic financial literacy has a positive and significant effect on investment decisions and financial behavior. Then financial behavior has a positive and significant direct effect on investment decisions and is able to mediate the influence of Islamic financial literacy on investment decisions in part (partial mediation). In addition, it was also found that the demographic factor of gender had no significant effect on investment decisions. Meanwhile, income has a positive and significant effect on investment decisions.

With this research, OJK and IPB University can make FEM students, especially from Islamic economics study programs as educational agents for students and other communities with Islamic financial literacy that is relatively high. But before that, the equalization of Islamic financial literacy for each financial services sector also needs to be considered. Islamic investment companies

can cooperate with universities to increase the interest in Islamic investment of students, one is through the use of investment galleries. The further research can be developed by expanding the scope of research, as well as adding variables that are not included in this study such as religiosity, psychological factors, or other demographic factors.

## References

- Akmal, H. & Saputra, Y. E. K. A. (2016). Analisis Tingkat Literasi Keuangan. *Jurnal Ekonomi dan Bisnis Islam*, 1(2), 235–244.
- Ariadi, R., Malelak, M. I. & Astuti, D. (2015). Analisa Hubungan Financial Literacy dan Demografi Dengan Investasi, Saving dan Konsumsi. *Finesta*, 3(1), 7–12.
- Atmaningrum, S., Kanto, D. S & Kisman, Z. (2021). Investment Decisions: The Results of Knowledge, Income, and Self-Control. *Journal of Economics and Business*, 4(1), 100–112. DOI: <https://doi.org/10.31014/aior.1992.04.01.324>
- Audini, A. F., Mus, A. M. & Sjahrudin, H. (2020). Pengaruh Literasi Keuangan Terhadap Keputusan Investasi Dengan Perilaku Keuangan Sebagai Variabel Moderasi. *Niaga*, 9(2), 102. DOI: <https://doi.org/10.24114/niaga.v9i2.19035>
- Badan Pusat Statistik. (2010). Jumlah dan Distribusi Penduduk Menurut Kelompok Umur dan Agama yang dianut. Available at: <https://sp2010.bps.go.id/>
- Baruah, M. & Parikh, A. K. kumar. (2018). Impact of Risk Tolerance and Demographic Factors on Financial Investment Decision. *International Journal of Financial Management*, 8(1). DOI: <https://doi.org/10.26643/gis.v13i5.3270>
- Biplob, H. & Abdullah, M. F. (2019). The Importance of Islamic Financial Literacy for Muslims: A General Review. *Islam and Civilisational Renewal*, 10(1), 106–117.
- Bray, J. P. (2008). *Consumer Behaviour Theory: Approaches and Models*.
- Chen, H. & Volpe, R. P. (1998). An Analysis of Personal Financial Literacy Among College Students. *Financial Services Review*, 7(2), 107–128.
- Dwiastanti, A. (2015). Financial Literacy as The Foundation for Individual Financial Behavior. *Journal of Education and Practice.*, 6(33).
- Fadly, F. A. (2019). *Literasi Keuangan dan Faktor–Faktor yang Memengaruhi Literasi Keuangan Mahasiswa S1 Institut Pertanian Bogor* [Institut Pertanian Bogor].

- Haryono, S. (2016). *Metode SEM Untuk Penelitian Manajemen dengan AMOS 22.00, LISREL 8.80 dan Smart PLS 3.0*. Bekasi: PT. Intermedia Personalia Utama.
- Ikeobi, N. R. & Arinze, P. E. (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.
- IPB University. (2019). *Jumlah Mahasiswa IPB University 2011-2019*. available at: <https://infografis.ipb.ac.id/>
- Kementerian Pendidikan dan Kebudayaan. (2020). *Klasterisasi Pendidikan Tinggi*. Available at: <http://klasterisasi-pt.kemdikbud.go.id/>
- Kementerian Riset, Teknologi, dan P. T. (2019). *Statistik Pendidikan Tinggi 2019*. Available at: <http://repositori.kemdikbud.go.id/18009/>
- Kock, N. (2020). Using indicator Correlation Fit Indices In PLS-SEM : Selecting The Algorithm With The Best Fit. *Data Analysis Perspectives Journal*, 1(4), 1–4.
- Kurniawan, H., Nurwati, S. & Sarwala, R. (2019). Pengaruh Literasi Keuangan Terhadap Keputusan Keuangan Dan Perilaku Keuangan Sebagai Variabel Intervening Mahasiswa Fakultas Ekonomi Dan Bisnis Universitas Palangka Raya. *Jurnal Manajemen Sains Dan Organisasi*, 1(1), 01–15.
- Lahsasna, A. (2016). Framework of Islamic Financial Education and Literacy.pdf. In *Journal of Wealth Management & Financial Planning* (Vol. 3, pp. 1–12).
- Merawati, L. K. & Putra, I. P. M. J. S. (2015). Kemampuan Pelatihan Pasar Modal Memoderasi Pengaruh Pengetahuan Investasi dan Penghasilan Pada Minat Berinvestasi Mahasiswa. *Jurnal Ilmiah Akuntansi Dan Bisnis*, 10(2).
- Nababan, D. & Sadalia, I. (2012). Analisis Personal Financial Liteacy dan Financial Behavior Mahasiswa Strata I Fakultas Ekonomi Universitas Sumatera Utara. *Media Informasi Manajemen*, 1(1), 1–16.
- Otoritas Jasa Keuangan. (2016). *Survei Nasional Literasi dan Inklusi Keuangan 2016*. Available at: <https://www.ojk.go.id/>
- Otoritas Jasa Keuangan. (2019). *Laporan Perkembangan Pasar Modal Syariah 2019*. Available at: <https://www.ojk.go.id/>
- Otoritas Jasa Keuangan. (2020). *Roadmap Pasar Modal Syariah 2020-2024*. Available at: <https://www.ojk.go.id/>
- Peraturan Otoritas Jasa Keuangan, Nomor 76 /POJK.07/2016 Tentang Peningkatan*

- Literasi dan Inklusi Keuangan di Sektor Jasa Keuangan Bagi Konsumen dan/ atau Masyarakat.* (2016). Available at: <https://www.ojk.go.id/>
- Pranyoto, E., Siregar, N. Y. & Depiana. (2018). Keputusan investasi masyarakat di pasar modal. *Jurnal Bisnis Darmajaya*, 04(01).
- Purba, S. A. (2020). *Literasi Pasar Modal dan Pengaruhnya Terhadap Perilaku Investasi Mahasiswa S1 IPB* [Institut Pertanian Bogor].
- Rahim, S. H. A., Rashid, R. A. & Hamed, A. B. (2016). Islamic financial literacy and its determinants among university students: An exploratory factor analysis. *International Journal of Economics and Financial Issues*, 6(S7), 32–35.
- Ricciardi, V. & Simon, H. K. (2000). What Is Behavioral Finance? *Business, Education and Technology Journal*.
- Safryani, U., Aziz, A. & Triwahyuningtyas, N. (2020). Analisis Literasi Keuangan, Perilaku Keuangan, Dan Pendapatan Terhadap Keputusan Investasi. *Jurnal Ilmiah Akuntansi Kesatuan*, 8(3), 319–332. DOI: <https://doi.org/10.37641/jiakes.v8i3.384>
- Senda, D. A., Rahayu, C. W. E. & Tri Rahmawati, C. H. (2020). The Effect of Financial Literacy Level and Demographic Factors on Investment Decision. *Media Ekonomi Dan Manajemen*, 35(1), 100–111. DOI: <https://doi.org/10.24856/mem.v35i1.1246>
- Sugiyono. (2013). *Metodelogi Penelitian Kuantitatif Kualitatif dan R&D*. Bandung: Alfabeta.
- Tandelilin, E. (2012). Dasar-dasar Manajemen Investasi. *Manajemen Investasi*, 1–34.
- Upadana, I. W. Y. A. & Herawati, N. T. (2020). Pengaruh Literasi Keuangan dan Perilaku Keuangan terhadap Keputusan Investasi Mahasiswa. *Jurnal Ilmiah Akuntansi Dan Humanika*, 10(2), 126–135. DOI: <https://doi.org/10.23887/jiah.v10i2.25574>
- Violeta, J. & Linawati, N. (2019). Pengaruh Anger Traits, Anxiety Traits, Dan Faktor Demografi Terhadap Keputusan Investasi. *Jurnal Manajemen Pemasaran*, 13(2), 89–96. DOI: <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. *Jurnal Akuntansi Berkelanjutan Indonesia*, 4(1), 73–91.
- Widhiarso, W. (2009). Estimasi Reliabilitas Pengukuran Dalam Pendekatan Model Persamaan Struktural. *Buletin Psikologi*, 17(1), 33–38.

- Xiao, J. J., Shim, S., Barber, B. & Lysons, A. (2007). *Academic Success and Well-being of College Students : Financial Behaviors Matter (TCAI Report)*.
- Yushita, A. N. (2017). Pentingnya Literasi Keuangan Bagi Pengelolaan Keuangan Pribadi. *Jurnal Nominal*, 6(1).