

# The Impact of Financial Technology, Islamic Financial Literacy, and Behavioral Biases on Investment Decisions in the Sharia Capital Market

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## Abstract

**Background:** The development of the number of investors in the Indonesian Capital Market continues to increase year after year, including investors in the Sharia Capital Market. Indeed, this cannot be separated from the investment decisions that the investors have made.

**Objectives:** This study aims to analyze the effect of Financial Technology, Islamic Financial Literacy, Overconfidence Bias, and Herding Bias on investment decisions in the Sharia Capital Market.

**Novelty:** This study presents a new research treatise or a renewable gap in the scope of Islamic Finance because it is more specifically related to investment decisions in Sharia Capital Market and Muslim Investor samples which are different from previous studies.

**Research Methodology / Design:** This study as a quantitativ research using Partial Least Square-Structural Equation Model (PLS-SEM) analysis with the help of SmartPLS software and used data from 190 respondents that was collected through the questionnaire method.

**Findings:** The result found that Financial Technology, Islamic Financial Literacy, and Overconfidence Bias have positive and significant impacts on Investment Decisions in the Sharia Capital Market, while Herding Bias known to have no positive and significant effects on investment decisions in the Sharia Capital Market.

**Implication:** This paper provides empirical evidence that can contribute to the development of knowledge and insight in the field of Economics and Business Islam through Sharia Financial Management research related to Investment Decisions in the Sharia Capital Market, and it is practically helpful for academics, investors, and researchers.

## Keywords:

Financial Technology, Islamic Financial Literacy, Overconfidence Bias, Herding Bias, Sharia Capital Market

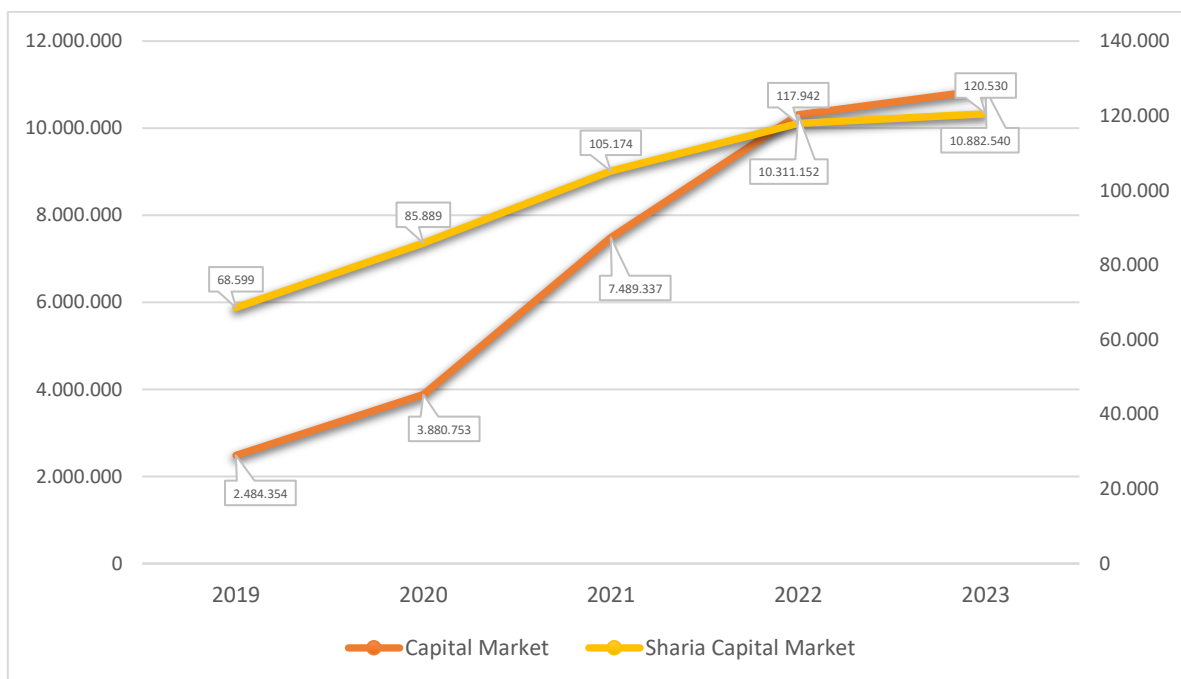
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## A. Introduction

Indonesia is one of the countries that is still feeling the economic impact of the Covid-19 pandemic over the past five years. However, this has not prevented Indonesians from investing in various investment instruments in the Capital Market. The Sharia Capital Market is also slowly increasing from year to year until there are a total of 120,530 Sharia Investors in 2023. There has been a significant increase in the number of investors. This increase proves that although it has not been able to compete with the conventional investment market or the Capital Market in general, people are increasingly aware of investing based on Islamic principles by choosing investment instruments in the Sharia Capital Market such as Sharia Stocks, Sukuk (Sharia Bonds) and Sharia Mutual Funds (IDX Islamic, 2022) This can be proven by the graph that has been processed from the Indonesian Central Securities Depository (KSEI) data listed below:



**Figure 1. The Number of Investors**

The increase in the number of investors shows that many individuals or investors have made investment decisions. In the proses investment decision-making, various factors can influence individuals or investors (Santoso & Djazuli, 2020). The Financial Services Authority (OJK) states that Financial Technology is a significant factor in increasing Sharia investment activities in Indonesia, as 78.10% of Sharia mutual fund investors reportedly opened their investment accounts through Financial Technology-based mutual fund selling agents. Financial Technology is a technological innovation in the financial system that can produce new products, services, and business models by offering security and ease of payment that can affect investment decision-making. (Junianto et al., 2020). The development of Financial Technology in Indonesia is advancing very rapidly, especially robo-advisory technology, which makes it easy for investors to transact quickly through online digital platforms such as Bibit, Bareksa, Tanamduit, Ajaib, or through online trading systems (Kusumahadi & Utami, 2022).

Investment decisions are also indicated to be influenced by person's financial literacy level. The Financial Services Authority (OJK) periodically measures the level of public literacy every three years through the National Survey of Financial Literacy and Inclusion (SNLIK). Based on the latest measurement in 2022, SNLIK reported that the level of financial literacy in Indonesia increased by 49.68% compared to 2019, which was only 38.03%. Then, the level of Islamic Financial Literacy of the Indonesian people also increased from 8.93% in 2019 to 9.14% in 2022 (OJK, 2022). It indicates that Islamic Financial Literacy among Indonesian people has also developed very well. The problem arises when the psychological state can also influence every decision made by humans, so it can also create changes in individual behavior, which then impacts investment decisions. The study conducted by Daniel et al., (1998) revealed that the increasing trend of investment makes the Theory of Behavioral Finance more focused on discussing the psychology of investors when making investment decisions. For example, when investors make investment decisions on one of the available investment types, subjectivity, emotions, and other psychological factors may influence the process. That often causes investors to behave irrationally or deviate from the assumption of rationality so that they make mistakes in making investment decisions. This behavior is commonly referred to as Behavioral Biases.

Behavioral Biases is defined as variations in behavior in responding to or assessing a problem, which can lead to altered perceptions, inaccurate judgments, and illogical interpretations (Jain et al., 2019). Behavioral Biases can occur in all types of investors, both professionals and beginners as part of fundamental human nature. One type of behavioral Biases commonly found in investors is Overconfidence Bias, which is someone who has high self-confidence and feels more competent compared to others, so they often ignores the actual situation and conditions. Another type of Behavioral Biases that is quite interesting to discuss is Herding Bias, the tendency of an investor to follow another investor's investment decision and not use prior analysis (Novianggie & Asandimitra, 2019). The study by Sabilla & Pertiwi, (2021) found that the variables Overconfidence Bias and Herding Bias positively and significantly impact investment decisions. However, on the contrary, according to the research findings of Qasim et al., (2019) and Sari et al., (2021) Overconfidence Bias and Herding Bias have no significant effect on investment decisions. Based on this research, it can be concluded that Overconfidence Bias and Herding Bias are the Behavioral Biases with many differences of opinion and inconsistent results. This makes these two Behavioral Biases require reassessment in a different context, namely whether they are experienced by Muslim Investors when making Sharia Investment Decisions.

The investors can have a good level of financial literacy because they have adequate internet access, especially in utilizing Financial Technology through existing digital platforms. However, only some investors can always be careful and use their rational thinking to make investment decisions. Thus, this research needs to be conducted to present warning signs for Muslim Investors in the Sharia Capital Market in order to avoid unwanted things and so Muslims will be able to invest by the principles that have been taught in Islam, especially making rational decisions in every way of life. This study will be more specific in the context of Sharia to enrich and complement the previous study in the same fields with two main problem statements. First, the impact of the ease and usefulness of Financial Technology, Islamic Financial Literacy of Muslim Investors on Investment Decisions in the Sharia Capital Market, and whether they experience

Behavioral Biases such as Overconfidence Bias and Herding Bias in their decision-making as the issue of investment trends is increasing quite aggressively. Second, this study aims to solve the contradictions in previous research studies to fill the gap in previous findings, as explained above.

## **B. Literature Review**

### **B.1. Theoretical Framework**

#### *Sharia Capital Market*

The Sharia Capital Market can be defined as activities in the capital market that do not conflict with Sharia principles. In Indonesia, The Sharia Capital Market system, known as a whole, has the same principles. It is just that there are some unique characteristics such as the products and transaction mechanisms in the Sharia Capital Market must not conflict with Islam principles, which aim to guide investors who want to invest their funds under the Islamic values (Nurlita, 2014). According to the Financial Services Authority (OJK), Sharia Capital Market product instruments are as follows:

1. Sharia stocks are a form of company ownership accompanied by proof of capital participation, where shareholders have the right to participate in the company's business results that are not contrary to sharia principles;
2. A Sharia Mutual Fund is defined as a forum for accumulating investment funds and its implementing regulations whose management does not conflict with the Principles in the Sharia Capital Market
3. Sukuk are securities or sharia bonds that can be traded with the concept and application under the rules of Islam.

#### *Investment Decision-Making*

Investment decisions can be defined as the process of choosing certain alternatives from many investment alternatives available to commit personal resources or capital made at this time, hoping to generate future returns (Tandelilin, 2017). (Herlina et al., 2020) define investment decision as a process carried out by investors where the decision is taken based on the information collected.

#### *Theory of Behavioral Finance*

According to Statman, (2014), Behavioral Finance is a science that aims to explore the behavior of investors and managers directly and indirectly by examining needs, problems, and behavioral preferences through questionnaires and field experiments. With the increasing investment activities and trends in the world, Behavioral Finance focuses on investor behavior and their investment decision-making process (Liu et al., 2015). The father of Behavioral Finance, Richard Thaler (2003) mentioned that the Theory of Behavioral Finance is a theory that explains how psychological factors can encourage investors to act irrationally in the decision-making process. Moreover, Daniel Kahneman (1974) explained that humans can produce Behavioral Biases under certain conditions, so investment assessments and decisions can be made irrationally. Then, Shefrin (2007) declared that Behavioral Biases are the tendency of investors to make prediction errors in investment decision-making. Behavioral Finance is a study in finance that aims to

combine psychological approaches with economics in decision-making (Copur, 2015).

Further, Pompian, (2012) classified Behavioral Biases into two, namely Cognitive Bias and Emotional Bias. Cognitive Bias is based on errors in receiving various kinds of information or knowledge. While, Emotional Bias is based on impulses or intuitions within the person. It comes from feelings or human emotions. In the development of Behavioral Finance theory, Montier (2003) also introduced a taxonomy or type of Behavioral Biases based on investors's social interactions, namely Herding Bias; a condition where an investor tends to imitate the other investors because they are unable to make their own decisions (Raheja & Dhiman, 2020). Meanwhile, Kumar & Goyal, (2016) explained that Herding Bias refers to an individual's tendency to follow the crowd's decisions (majority) because the decisions made by many people are considered the most correct.

### *Theory of Acceptance Model*

Theory of Acceptance Model or TAM is a theory commonly used to understand a person's behavior in using and accepting specific information systems. Theoretically, TAM is useful for explaining usage behavior in implementing information technology (IT). The founder Theory of Acceptance Model (TAM), Davis (1989) explained that user behavior towards the adoption of information systems (actual system usage) is based on their intention to use the system (intention to use) so that it overrides or ignores the existence of subjective norms described in the Theory of Reasoned Action (TRA). The individual's intention is influenced by attitude (attitude towards the behavior), which is formed by the perceived usefulness, namely the extent to which a person believes that using a particular system will improve his work and perceived ease of use, namely the extent to which a person believes that an information system or technology is easy to use. Perceived usefulness and perceived ease of use are the two most important factors to explain technology usage (Lee et al., 2022).

In this study, the Theory of Acceptance Model (TAM) is used to explain Muslim Investors' behavior in utilizing Financial Technology in Indonesia. Financial Technology (Fintech) is a modern innovation in financial services that implements technological sophistication to facilitate humans in practical financial activities. Bank Indonesia classifies Financial Technology (Fintech) into four categories namely, 1) Crowdfunding and Peer-to-Peer (P2P); 2) Market Aggregator; 3) Risk and Investment Management and Payment; 4) Settlement, and Clearing (Marginingsih, 2021),

### *Islamic Financial Literacy*

Islamic Financial Literacy is different from conventional financial literacy. Islamic Financial Literacy is an individual's ability to use their knowledge, skills and determine attitude toward managing financial resources based on Islamic values (Rahim et al., 2016). To measure Islamic Financial Literacy (IFL), four factors can be discussed, namely Islamic financial behavior, Islamic knowledge, Islamic attitudes, and Islamic awareness (Dinc et al., 2021).

## **B.2. Hypothesis Development**

### *Financial Technology on Investment Decisions in the Sharia Capital Market*

Financial Technology is a software-based business and modern technology that provides financial services that can be accessed via the Internet easily (Restianti et al., 2022). In investment activities, Fintech not only offers conventional financial instruments but also offers investment instruments that comply with Islamic principles in the Sharia Capital Market (Yustati, 2017). In addition, Muslim Investors maintain every financial transaction based on Sharia principles (Misissaifi & Sriyana, 2021). When the principles expected by Muslim Investors can be fulfilled through the services provided by Financial Technology, they will not hesitate to make investment decisions, especially investment in the Sharia Capital Market (Setiawan et al., 2020). Based on the explanation overhead, the research hypothesis proposed is as follows:

H1: Financial Technology positively and significantly affects Investment Decisions in the Sharia Capital Market.

### *Islamic Financial Literacy on Investment Decisions in the Sharia Capital Market*

Islamic Financial Literacy can be defined as awareness of knowledge related to attitudes and behavior in investment decision-making under Islamic principles (Khasanah, 2019). Yusuff and Mansor (2016) in Din et al., (2021) indicated that Islamic Financial Literacy plays a major role in encouraging Muslims to make Sharia investment decisions. It was because someone with a high level of Islamic Financial Literacy will tend to place their assets in Sharia investment instruments. In line with the results of (Aghniarrizqi, 2021), shows that Islamic Financial Literacy positively impacts Investment Decisions in Islamic stocks. In this case, the knowledge and all the information each maintains influences someone's decision to do something in their financial management. If someone has sufficient religious ability, they will be urged to study Islamic education comprehensively, including in the financial field (Ilfita & Canggih, 2021). Based on the explanation above, the research hypothesis proposed is as follows:

H2: Islamic Financial Literacy positively and significantly affects Investment Decisions in the Sharia Capital Market.

### *Overconfidence Bias on Investment Decisions in the Sharia Capital Market*

Psychologists have found that humans often have irrelevant confidence in making decisions in life. In finance, Overconfidence Bias is a part of Behavioral Biases that be able to impact investors. A study by (Puspawati & Yohanda, 2022) revealed that investors with Overconfidence Bias strongly believe that by investing, investors will get high returns and low risk, while this is not guaranteed. The results of Puspawati & Yohanda (2022) indicated that Overconfidence Bias has a positive and significant effect on Investment Decisions and is considered unfavorable because investors seem not careful. In the same results by Sari et al., (2021), it showed that Overconfidence Bias has a positive and significant effect on Islamic stock investment decisions, where if Overconfidence Bias increases, investment decision-

making also increases. The number of Sharia Capital Market investors in Indonesia has increased significantly since the pandemic, so it can be assumed that Overconfidence Bias has also influenced Muslim Investors in making investment decisions in the Sharia Capital Market. Based on the explanation above, the research hypothesis proposed is as follows:

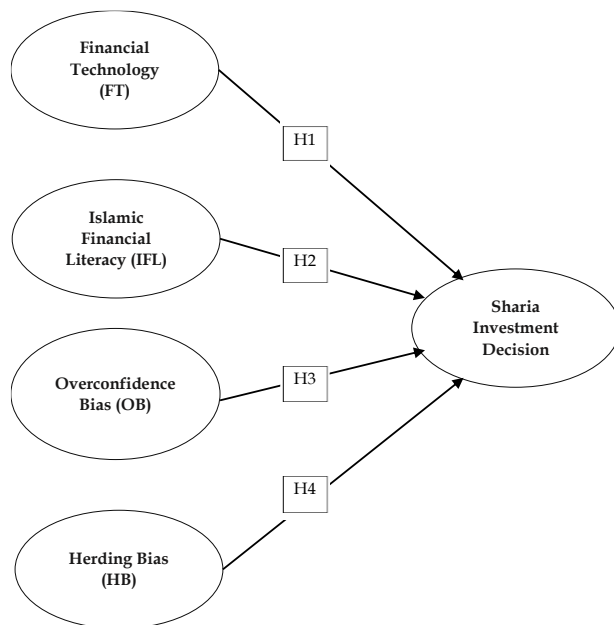
H3: Overconfidence Bias positively and significantly effects Investment Decisions in the Sharia Capital Market.

*Herding Bias on Investment Decisions in the Sharia Capital Market*

Classical economic theory says that investors are rational; they evaluate all information before making decisions. However, in the reality of life, many of them make investment decisions irrationally. For example based on the decisions of other people such as friends, colleagues, family members, or something the masses are concerning (trends) (Herlina et al., 2020). The results of Pinglu et al., (2021) show that Herding Bias significantly and positively effects investment decisions. This study shows that Herding Bias behavior often occurs in passive investors in the Capital Market. In previous studies, many researchers also proven that Herding Bias positively and significantly affects investment decisions (Qasim et al., 2019). Moreover, Situngkir et al., (2021) and Madaan & Singh, (2019) also conclude that Herding Bias strongly influences individual investors' investment decisions. But, the study from Fitriyani & Anwar, (2022) found that Herding Bias does not influence Investment Decisions in Sharia Stocks. Based on the explanation above, the proposed research hypothesis is as follows:

H4: Herding Bias positively and significantly affects Investment Decisions in the Sharia Capital Market.

The model created to test the impact between exogenous variables (independent), namely Financial Technology (X1), Islamic Financial Literacy (X2), Overconfidence Bias (X3) and Herding Bias (X4), toward the endogenous variable (dependent), namely Investment Decisions in the Sharia Capital Market (Y).



**Figure 2. The Research Model**

**C. Research Methodology**

This research is classified as quantitative research, where measurements are made using numerical data (Qoyum, 2021). This research design in explanatory research intends to explain the influence between variables. The population of this study is all investors in Indonesia or individuals who have been involved in investment activities use non-probability sampling techniques, namely purposive sampling type, which does not provide equal opportunities for each data or there are considerations, sizes, and criteria that have been determined (M. Yusuf, 2019). This research is focused on the phenomenon of a Muslim's investment decision, so three criteria must be fulfilled as they should be a Muslim, over 18 years old, has been investing in Indonesian Sharia Capital Market instruments (Sharia stocks, sukuk, Sharia mutual funds), and also active users of Financial Technology services such as Mobile Banking, Ovo, GoPay, Bibit, Bareksa, Ajaib, Investree, and others.

**Table 1. Constructs, Indicators, Items, and Main References**

Constructs	Indicators	Items	Source
<b>Sharia Investment Decision (SID)</b>	Rate of return on investment Risk The time factor	5	(Tandellin, 2013; W. W. Putri & Hamidi, 2019)
<b>Financial Technology (FT)</b>	Perceived usefulness Perceived ease of use	10	(Lee et al., 2022)



<b>Islamic Financial Literacy (IFL)</b>	Islamic Financial Behavior Islamic Financial Knowledge Islamic Financial Attitude Islamic Financial Awareness	10	(Dinc et al., 2021)
<b>Overconfidence Bias (OB)</b>	My ability to predict future market prices is better than anyone else's I feel very experienced in investing I feel that the knowledge I have affects the return on investment I am more confident with the results of my own analysis than those of other people I believe that my skills and knowledge of the Islamic Capital Market can predict market conditions	5	(Puspawati & Yohanda, 2022)
<b>Herding Bias (HB)</b>	My investment decisions depend on the investment decisions of other investors	5	(Rona et al., 2021; Kudryavtsev., 2014)
	I react quickly to changes in other investors' investment references		
	I am interested in investing because I see the benefits that other people get		
	more interested in investing in investment products/instruments that are of interest to many people		
	It's easy for me to invest because of the advice and support from other investors		
	<b>Numbers of Items</b>	35	

Source: Authors (2023)

Data sourced from questionnaire answers will be processed using the Structural Equation Model (SEM), which is a second-generation multivariate data analysis method that allows researchers to process unobservable variables to be measured by indicators of explanatory variables (Chin, 1998). With the type of Partial Least Square-Structural Equation Model (PLS-SEM) analysis in the data process, researchers used SmartPLS software version 4. There are three reasons why this analysis is used. First of all, this is because it follows the research objectives, namely to predict the unobservable and the theory used is still tentative (Haryono, 2016). Second of all, this study uses PLS-SEM because the model allows small sample to be analyzed with reflective and formative measurement models. Third, this study determined the amount of data from the questionnaire based on previous studies that have been collected and adjusted to the objectives of this study that can be seen in the Table 1 above. Model evaluation in SmartPLS includes two stages, namely the evaluation of the measurement model or outer model, which includes basic testing of data validity and reliability and the second stage is evaluating the structural or inner model to determine the path coefficient and drawing conclusion.

## D. Result & Discussion

### Results

#### Data Collections

After more than one month of distributing questionnaires and screening data, 190 respondents' data were processed. According to Hair et al., (2022), the guideline for calculating the minimum sample size of research processed with SEM-PLS is five times the number of latent variable indicators where the minimum number said to be good if it is 100 samples or more. More detailed description of the characteristics of the respondent profile explained in the following Table 2 below:

**Table 2. Respondents Profile**

Category	Frequency	Percentage
<b>Gender</b>		
Male	85	44%
Female	150	55%
<b>Age Group</b>		
18 – 25 years old	138	73%
26 – 35 years old	48	25%
> 35 years old	4	2%
<b>Educational Background</b>		
Senior High School	89	47%
Associate's Degree	8	5%
Undergraduate	87	46%
Postgraduate	5	3%
<b>Monthly Income/Allowance for Student</b>		
< Rp1000.000	45	24%
Rp1.000.000 - Rp3.000.000	79	42%
Rp3.000.000 - Rp5.000.000	26	14%
> Rp5.000.000	40	21%
<b>Sharia Capital Market Instrument (one or more choices)</b>		
Sharia Stocks	120	44%
Sharia Mutual Funds	115	42%
Sukuk	36	13%
<b>Investment Experience</b>		
< 1 Year	71	37%
1-3 years	99	52%
> 3 years	20	11%
<b>Domicile</b>		
Special Region of Yogyakarta	55	29%
West Java	49	26%
Central Java	23	12%

Category	Frequency	Percentage
East Java	13	7%
Special Capital District of Jakarta	13	7%
Outside Java	25	13%
<b>Type of Financial Technology Used (one or more choices)</b>		
Crowdfunding dan Peer-to-Peer	46	23%
Investment Management	164	82%
Payment Gateway	152	76%
Market Aggregator	6	3%

Source: Authors (2023)

These respondents are Muslim Investors from the general public, with more female respondents than male. Furthermore, most respondents are aged 18-25 years, which can be said to be productive age. In addition, it can be seen that of the 190 respondents who have filled out the questionnaire, it can be concluded that the respondents in this study are Muslim Investors who live in Java with the latest educational background dominated by graduates of Senior High School (SMA). And from the monthly income description of the respondents, most of the income respondents are in the range of IDR 1,000,000 to IDR 3,000,000 per month. Then, from the type of investment instrument selection in the Sharia Capital market, most Muslim Investors tend to invest in Islamic stocks, followed by Sharia Mutual Fund and then Sukuk or Sharia Bond type instruments. Moreover, The Muslim Investors who have filled out the questionnaire are categorized as novice investors because most of them invested in the Sharia Capital Market in less than one year.

#### *Measurement Model Testing*

The measurement model stage aims to see whether the indicators on each variable reflect the research variables or constructs with Convergent Validity and Discriminant Validity Tests and Reliability Tests. The Convergent Validity can be seen from the Loading Factor or Outer Loading value of each construct in the study. Where based on the Rule of Thumb Hair, (2019) the Loading Factor value is valid if it is above > 0.70. However, the Loading Factor value between 0.40 and 0.70 is acceptable if it still produces a good value in subsequent tests. Therefore, this study determined to remove several items or indicators on the Loading Factor from a total of 30 indicators that built each variable. Some indicators of the Financial Technology are FT9 and FT10, Islamic Financial Literacy variable are IFL1, IFL2, IFL4, IFL5, IFL6, and the Herding Bias variable is the HB4 indicator. So that the Loading Factor results are obtained as follows:

**Table 3. Assessment of the measurement quality of the model's constructs**

Variables	Items	Loadings	AVE	CA	CR
Sharia Investment Decision (Y)	SID1	0.626	0.511	0,765	0,785
	SID2	0.653			
	SID3	0.743			
	SID4	0.791			
	SID5	0.747			
Financial Technology (X1)	FT1	0.746	0.501	0,857	0,889
	FT2	0.639			
	FT3	0.704			
	FT4	0.659			
	FT5	0.695			
	FT6	0.74			
	FT7	0.711			
	FT8	0.759			
Islamic Financial Literacy (X2)	IFL3	0.619	0.514	0,764	0,839
	IFL7	0.625			
	IFL8	0.713			
	IFL9	0.792			
	IFL10	0.812			
Overconfidence Bias (X3)	OB1	0.771	0.616	0,851	0,889
	OB2	0.75			
	OB3	0.783			
	OB4	0.778			
	OB5	0.838			
Herding Bias (X4)	HB1	0.800	0.629	0,814	0,871
	HB2	0.734			
	HB3	0.846			
	HB5	0.788			

Source: Authors (2023)

The Average Variance Extracted (AVE) value in the Table 3 also shows that it fulfills the relevant criteria standards that should be above or more than (>) 0.5, so it was convergent valid. Furthermore, testing discriminant validity can be seen from the Heterotrait-Monotrait Ratio (HTMT) value. According to (Henseler, 2010) if the HTMT threshold value of each variable is below (<) 0.90, then the research variable or construct has completed the discriminant validity requirements. In the Table 4 below, the Heterotrait-Monotrait Ratio (HTMT) value for all variables or constructs has a threshold value below (<) 0.90, so it was valid discriminant.

**Table 4. Outcomes of HTMT**

Constructs	FT	HB	KIS	LKS	OB
FT					
HB	0.121				
KIS	0.647	0.154			
LKS	0.517	0.236	0.545		
OB	0.443	0.326	0.460	0.458	

Source: Authors (2023)

Then, in the Table 3 also presents the reliability test results conducted to see the strength, consistency, and accuracy of the measuring instrument used. The Cronchbach's Alpha and Composite Reliability values in each Table 3 have completed the criteria set according to Hair et al., (2017), that Cronchbach's Alpha and Composite Reliability value between 0.60-0.90 declared reliable or has a good consistency in measuring research data.

#### *Structural Model Testing*

Table 5 At the Structural model stage, the relationship between exogenous variables and endogenous variables is estimated. The first thing can be seen from the Adjusted R-Square value which serves to determine the explanatory power of each construct with the assessment criteria consisting of three classifications, namely a value of 0.67 which means substantial (strong), a value of 0.33 means moderate and a value of 0.19 means weak (Hair et al., 2022). The Adjusted R-Square ( $R^2$ ) results shown in the table are 0.370 or 37% so it can be concluded that the exogenous variables in this study, namely the variables of Financial Technology (FT), Islamic Financial Literacy (IFL), Overconfidence Bias (OB), and Herding Bias (HB) can explain the endogenous variables, the Investment Decision in the Sharia Capital Market (KIS) at a medium or moderate level. Then, In measuring how much the ability of exogenous variables to predict endogenous variables, testing the Q-Square Predictive Relevance value is also examined. The results of data processing given by Table 5 show that the  $Q^2$  value is 0.170 or ( $>$ ) 0, meaning that each construct in this study each has a fairly good predictive power.

**Table 5. Outcomes of  $R^2$  and  $Q^2$** 

Constructs	$R^2$	$Q^2$
KIS	0.370	0.170

Source: Authors (2023)

Variance Inflation Factor (VIF) testing is also carried out to check whether there is a collinearity problem in the research construct. If the value is below ( $<$ ) 5, there is no collinearity problem and if the Variance Inflation Factor (VIF) value is more than ( $>$ ) 5, there is a collinearity problem (Hair et al., 2022). Based on Table 6 it can be seen that there is no collinearity problem in this study because each construct produces Variance Inflation Factor (VIF) value or score below ( $<$ ) 5. Furthermore, F-Square testing to assess the effect (Effect Size) of exogenous variables on endogenous variables is also carried out. As a rule of thumb, the F-Square value = 0.02 (small), 0.15 (medium), and 0.35 (large). While values below 0.02 are considered to have no measurable effect (Hair et al., 2017). The results given from the Table 6 reflected that the F-Square value for the exogenous variable, namely Financial Technology (FT), on the endogenous variable, namely the Investment Decision in the Sharia Capital Market (KIS) is 0.176 (medium). At the same time, the Islamic Financial Literacy both with Overconfidence Bias are worth 0.055 and 0.042 (small). Another case with Herding Bias, the results show a value of 0.008 which

means that it has absolutely there is no effect on Investment Decisions in the Sharia Capital Market (KIS).

**Table 6. Assessment of the structural of the model’s constructs**

Hypothesis	VIF	$f^2$	Original Sample (O)	Standar Deviation	t- Value	p- Value	Conclusion
H1 : FT → KIS	1.378	0.176	0,387	0,061	6,328	0,000	Accepted
H2 : HB → KIS	1.098	0.008	0,213	0,079	2,690	0,007	Accepted
H3 : LKS → KIS	1.342	0.055	0,185	0,064	2,886	0,004	Accepted
H4 : OB → KIS	1.305	0.042	-0,008	0,094	0,085	0,932	Rejected

Source: Authors (2023)

As the finale of the Partial Least Square-Structural Equation Model (PLS-SEM) analysis, the Table 6 presents the results of testing the hypotheses that have been built. Three hypotheses are accepted in this study, namely H1, H2 and H3. Futher explained, Financial Technology (FT), Islamic Financial Literacy (IFL), and Overconfidence Bias (OB) have positive and significant effect on Investment Decisions in the Sharia Capital Market (KIS). This is because for each hypotheses, the beta coefficient or Original Sample (O) shows positive values, the t-statistics value is above (>) 1.96, and the significance level or p-values of the three variables is less than 0.05 or below 5%, so that it has met the applicable rule of thumb (Sarstedt et al., 2022). In contrast to H4 which states that Herding Bias has a positive and significant effect on Investment Decisions in the Sharia Capital Market, this hypothesis is rejected because the p-values in the Table above are greater than 0.05 or above 5%.

#### 4.2 Discussion

The results of hypothesis testing explain that the variables of Financial Technology (FT), Islamic Financial Literacy (IFL), and one type of Behavioral Bias, namely Overconfidence Bias (OB), are positively and significantly correlated with Investment Decisions in the Sharia Capital Market (KIS). Further explanation; First, the results of testing the Financial Technology (FT) variable can justify the hypothesis accepted and proves that there is conformity with the Theory of Acceptance Model (TAM) initiated by Davis (1989). These findings show that the more Muslim investors feel the usefulness and convenience of Fintech, the more they will make Investment Decisions in the Sharia Capital Market (KIS) (A. M. Yusuf, 2017), (Aisa, 2021). Second, the hypothesis discusses how Islamic Financial Literacy (IFL) also has a positive and significant relationship with Investment Decisions in the Islamic Capital Market (KIS), that the more Muslim Investors have Islamic Financial Literacy, the Investment Decision in the Sharia Capital Market will increase. This is because Sharia Financial Literacy means that someone understands sharia finance and its differences with non-sharia finance. The Investors will be able to organize, analyze, and manage their assets into financial products that follow Sharia principles. Sufficient preferences about principles, values, and an Islamic solid financial system have been proven to intervene in a person, especially Muslim investors, to make investment decisions in the Sharia Capital Market (KIS) (Hudha, 2021); Yusfiarto et al., (2023).

Furthermore, the results of data processing also discuss the third hypothesis accepted, namely Overconfidence Bias (OB) has a positive and significant effect on Investment Decisions in the Sharia Capital Market (KIS). As one type of Behavioral Bias

that is widely discussed, this study found that there is Overconfidence Bias (OB) behavior in Muslim Investors when making Investment Decisions in the Sharia Capital Market (KIS). The results of this study can prove that the Theory of Behavioural Finance applies to Muslim Investors where emotions and cognitive errors correlate with Investment Decisions in the Islamic Capital Market (KIS). Overconfidence Bias (OB) is an irrational behavior formed from these emotions and errors. This research is reinforced by previous research by Sari et al., (2021); Rona et al., (2021); and Khairunizam & Isbanah, (2019) that Overconfidence Bias (OB) has a positive and significant effect on Investment Decisions. So, in this case, if Muslim Investors who behave Overconfidence Bias increase, the Investment Decision in the Islamic Capital Market (KIS) will also increase. Being confident is something that is viewed favorably in Islam. However, Islam also prohibits everything that is done in overmuch. In making Investment Decisions in the Sharia Capital Market, Muslim Investors must think carefully and be tawadu' or humble to avoid negative impacts on themselves. So investors must behave appropriately.

Unlike the types of Behavioral Bias above, researchers test another Behavioral Bias, namely Herding Bias (HB). In this study, Herding Bias (HB) is known not to be positively correlated with Investment Decisions in the Sharia Capital Market (KIS) or in other words, the fourth hypothesis is rejected. This means that Muslim investors avoid following behavior when making investment decisions, the fewer who behave Herding Bias (HB), the fewer also make Investment Decisions in the Sharia Capital Market (KIS). Muslim investors prefer to do the analysis first because knowledge and all information related to Islamic Investment instruments can be learned easily via the internet. These findings align with the results of research conducted by Sari et al., (2021) that Herding bias has no effect on investment decisions in Islamic stocks. This study has also filled the empirical gap from previous research by Fitriyani & Anwar, (2022) and Puspawati & Yohanda, (2022) where Herding Bias has no positive and significant effect on Investment Decisions.

## **E. Conclusions & Policy Recommendation**

Perceptions of the ease and usefulness of Financial Technology services can significantly encourage Muslim investors to make Investment Decisions in the Sharia Capital Market, thus supporting the Theory Acceptance Model. This encouragement cannot be separated from the understanding of Islamic Financial Literacy owned by Muslim Investors. It is because a Muslim who has adequate Islamic Financial Literacy will place their assets in Sharia Investment. However, Muslim Investors in making Sharia Investment Decisions are also influenced by behavior beyond rationality.

In this study, Overconfidence Bias, namely excessive confidence in personal abilities and knowledge, is proven to have a significant impact on Investment Decisions in the Islamic Capital Market, thus supporting the Theory of Behavioral Finance which explains the existence of emotional factors and cognitive errors in Investment Decisions in the Sharia Capital Market that have been made. On the other hand, Herding Bias as irrational behavior from social interaction does not have any impact on Investment Decisions in the Sharia Capital Market, so it can be understood that Muslim Investors in this study keep a distance from Herding Bias when making Investment Decisions in the Sharia Capital Market. Because this research is limited to testing four exogenous variables, namely Financial Technology, Islamic Financial Literacy, and two Behavioral Bias namely Overconfidence Bias and Herding Bias. Therefore, the future research must explore more about the scope of Islamic Financial

Behavior by testing further Behavioral Bias such as Anchoring Bias, Representativeness Bias, Loss Aversion Bias and etc. Future research is also expected to use an organization as a research subject or a certain area with more samples or respondents to get more rigid and representative data.

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