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# Sharia stock investment decisions: Sharia stock literacy and risk factors and their relations with behavioral bias

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## Abstract

**Research aims:** This study aims to analyze the influence of Sharia stock literacy and risk factors on Sharia stock investment decisions with behavioral bias as an intervening variable.

**Design/Methodology/Approach:** The population was investors in East Java Province who invested in Sharia stock. The sample for this research was 500 respondents. The analysis employed was the Structural Equation Model.

**Research findings:** The impact of Sharia stock literacy on both Sharia stock literacy and investor behavioral bias was positive. Sharia stock investment decisions were adversely impacted by risk factors. Additionally, risk factors had a detrimental impact on investor behavioral bias. Behavioral bias yielded a favorable impact on the decision-making process for investing in Sharia-compliant stocks. Through behavioral bias, Sharia stock literacy positively affected Sharia stock investment decisions. Meanwhile, risk factors obtained a negative effect on Sharia stock investment decisions through behavioral bias.

**Theoretical contribution/Originality:** This research contributes to Sharia stock investment decisions and provides empirical evidence of Sharia stock investment decisions concerning Sharia stock literacy, risk factors, and behavioral biases.

**Practitioner/Policy implication:** This research contributes to investors' ability to determine investment decisions in Sharia stock.

**Research limitation/Implication:** The limitation of this research is that independent variables only used two components of Sharia stock investment decision, i.e., Sharia stock literacy and risk factors. Hence, the level of influence of the independent variables on the dependent was small.

**Keywords:** Sharia Stock Literacy; Risk Factors; Behavioral Biases; Sharia Stock Investment Decision



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## Introduction

Indonesia is a country with the largest Muslim population in the world, giving rise to Sharia-based investment products, including Sharia stock, Sharia bonds, and Sharia mutual funds. Sharia-based instruments were formed to provide Sharia-based investment and financing facilities and alternatives. The Sharia capital market in Indonesia has 30 companies listed as Sharia stock, which are members of the Jakarta Islamic Index (JII) or the Sharia index, which is the benchmark for Sharia stock in Indonesia on the Indonesia Stock Exchange (BEI) (Fitriyani & Anwar, 2022).

In this case, Sharia stock literacy refers to having comprehensive knowledge and understanding of the fundamentals of Sharia stocks, including their associated risks. It also encompasses the ability, drive, and confidence to utilize this knowledge when making financial decisions across different financial scenarios, with the ultimate goal of enhancing the financial well-being of individuals and society at large. Investors must also have Sharia stock literacy to help households manage daily finances, handle emergencies, and pull them out of poverty. In addition, investors with financial knowledge and skills will make individuals capable of managing and allocating finances appropriately (Abdullah, Hoque, Rahman, & Said, 2022; Albaity & Rahman, 2019; Alsayigh & Al-Hayali, 2022; Gunawan, Asmuni, & Siregar, 2021; Hariawan & Canggi, 2022; Roemanasari & Sabela, 2022).

In theory, it is stated that return is directly proportional to risk. Risk is the possibility that an outcome will deviate from what was expected. As explained, the higher the security risk, the higher the profit must be offered to investors. Therefore, when an investor decides to invest in the capital market, they will not be surprised by the risks they face and the returns they will receive (Agha & Sabirzyanov, 2015; Hudha, 2021; Mardhiyaturositaningsih, 2022; Rahman, Tafri, & AlJanad, 2010).

In financial decision-making, psychological factors contribute to behavioral bias, making it difficult to predict investors' choices. Investors tend to lose control and exhibit either a surfeit of confidence or even a sense of pessimism due to an overwhelming emotional excessive. Investor behavioral biases are divided into two categories: cognitive bias, which is wrong reasoning, and emotional bias, which is investors' impulses or intuition. In order to reduce the impact of behavioral bias, investors must possess a strong understanding of financial matters (Din et al., 2021; Humaira, 2021; Koesoemasari, Haryono, Trinugroho, & Setiawan, 2022; Lobão, 2023; Roemanasari & Sabela, 2022).

Additionally, the ability to manage finances is something that every individual, especially investors, must have. Financial management aims to obtain benefits and profits in the future. In reality, many investors are still trapped in their investments due to limited financial literacy and knowledge about risk factors. This influences investor behavior in making investment decisions. Biases in investor behavior due to limited financial literacy and risk factors can result in losses in behaviors committed. Therefore, this research provides an overview of how investment decisions should be made with financial information literacy and risk factors mediated by behavioral bias. In order to have a clear direction for investment decisions, individuals require financial knowledge and skills (referred to as financial literacy) when planning to make investments (Uthman, 2021).

As a phenomenon in this research, the 2022 National Survey of Financial Literacy and Inclusion results uncovered that the financial literacy index of the Indonesian population has gone up to 49.68%, indicating a significant improvement from the previous year's 38.03% (Financial Services Authority, 2022). Meanwhile, East Java Province was ranked 6th in financial literacy with an index of 35.6%, above the national average (Rumain, Mardani, & Wahono, 2021). This figure is still relatively low; many people only know about the financial services industry, such as banks and Sharia insurance. Specifically, investors' low financial literacy in Jember Regency results in two things: conservative investors do

not dare to make investment decisions, and aggressive investors experience losses due to wrong decision-making.

## Literature Review and Hypotheses Development

### Prospect theory

Daniel Kahneman and Amos Tversky developed a psychological theory called prospect theory in 1979. Prospect theory explains how individuals make decisions, even though the results are unpredictable. This theory explicates that people often act irrationally when they are uncertain. This theoretical view relates to investors' purchases of investment products, which are also influenced by various psychological factors, one of which is risk perception.

Kahneman and Tversky further found that people search for information and create a “decision frame” or concept. After a decision concept is made, a person will decide by choosing one of the concepts that produces the highest expected utility.

### Research Hypotheses

#### The Influence of Sharia Stock Literacy on Sharia Stock Investment Decisions

Increasing consumers' or society's knowledge, abilities, and self-assurance in their capacity to handle personal finances more effectively is known as financial literacy. According to Budiarto and Susanti (2017), by having adequate financial knowledge, investors can make the right investment decisions in accordance with expectations. Pradikasari and Isbanah (2018) also stated that individuals with high financial literacy can invest their money in various assets because they know the dangers involved. The wiser individuals make decisions, the more financially literate they are (Pradhana, 2018). Studies (Fitriyani & Anwar, 2022; Hariawan & Canggih, 2022; M. K. Hassan, Aliyu, Saiti, & Halim, 2021; N. C. Hassan, Abdul-Rahman, Amin, & Hamid, 2023; Hudha, 2021; Humaira, 2021; Utsman, 2021) have demonstrated that Sharia stock literacy influences Sharia stock investment decisions. Based on the description and results of previous research, the hypothesis in this research is as follows:

*H<sub>1</sub>: Sharia stock literacy is positively related to Sharia stock investment decisions.*

#### The Influence of Sharia Stock Literacy on Behavioral Bias

Behavioral bias in finance refers to using human emotion and cognitive errors in financial decision-making and behavior (Pompian, 2006). There are two broad forms of behavioral bias: emotional and cognitive. One example of cognitive bias is overconfidence and representativeness. Overconfidence is the behavior of being too confident in oneself, resulting in investors being blind to existing negative information, while

representativeness is the behavior of an investor who tends to rely on their life experience. To avoid behavioral bias, investors must be well-literate and have not only financial knowledge but also good financial behavior and attitudes. Based on research conducted by Koichi et al. (2013), the higher an investor's financial literacy, the lower their overconfidence behavior will be. Likewise, with representativeness behavior, it was found that financial literacy influenced this behavior (Ateş et al., 2016). Sharia stock literacy influences behavioral bias, according to studies (Budiman, 2021; Din et al., 2021; Fatihudin, 2017; Humaira, 2021; Koesoemasari et al., 2022; Lobão, 2023; Roemanasari & Sabela, 2022) show that Sharia stock literacy influences behavioral bias. Drawing from the preexisting literature and its findings, the present study aims to test the following hypothesis:

*H<sub>2</sub>: Sharia stock literacy is positively related to behavioral bias.*

### **The Influence of Risk Factors on Sharia Stock Investment Decisions**

Perceived risk is an event related to uncertainty that gives rise to negative thoughts in the minds of consumers that are detrimental (Muhammad, Rikumahu, & Iradianty, 2016). Aren and Zengin (2016) contend that a person's perception of risk affects their choice of investments. Those who are risk averse typically opt to invest in deposits, while those who are risk takers typically favor foreign currency, capital, and portfolios. Research by Budiman (2021), Din et al. (2021), Fatihudin (2017), Humaira (2021), Koesoemasari et al. (2022), Lobão (2023), and Roemanasari and Sabela (2022) indicate that risk factors have a significant role in shaping decisions related to Sharia stock investments. The following hypothesis in this research is derived from the description and outcomes of earlier studies:

*H<sub>3</sub>: Risk factors are negatively related to Sharia stock investment decisions.*

### **The Influence of Risk Factors on Behavioral Bias**

Two elements are always inherent in investment, namely return and risk. These two elements have a unidirectional relationship, so the higher the investment risk, the greater the chance of return, and vice versa. The emergence of risk is one of the benchmarks for how investors act on their investment plans. According to Aren and Zengin (2016), investor behavior is influenced by the emergence of risk. Risk-averse individuals usually invest in deposits, whereas risk-takers prefer foreign currency, capital, and portfolios. There is evidence that risk factors have an impact on behavioral bias, according to several studies (Agha & Sabirzyanov, 2015; Hudha, 2021; Indrarini, 2019; Mardhiyaturrositaningsih, 2022; Maria, 2017; Rahman et al., 2010). From prior investigations' descriptions and findings, the present study posits the following hypothesis:

*H<sub>4</sub>: Risk factors are negatively related to behavioral bias.*

### **The Influence of Behavioral Bias on Sharia Stock Investment Decisions**

The influence of behavioral biases on the decision-making process is substantial. Investors may exhibit irrational behavior, which may lead to the commission of errors. Overconfidence motivates investors to pursue investments with greater ambition (Novianggie & Asandimitra, 2019). An investor's inclination toward risk-taking positively correlates with their degree of overconfidence (Budiarto & Susanti, 2017; Pradhana, 2018). Similarly, investors make larger decisions about their investments the more representativeness they exhibit (Novianggie & Asandimitra, 2019). Investors consistently believe that past performance in the stock market will translate into future success. According to studies (Budiman, 2021; Din et al., 2021; Fatihudin, 2017; Humaira, 2021; Koesoemasari et al., 2022; Lobão, 2023; Roemanasari & Sabela, 2022), behavioral bias influences Sharia stock investment decisions. From the description and results of previous research, this research's hypothesis is proposed as follows:

*H<sub>5</sub>: Behavioral bias is positively related to Sharia stock investment decisions.*

### **The Influence of Sharia Stock Literacy on Sharia Stock Investment Decisions through Behavioral Bias**

Having high financial literacy will minimize investors' irrational behavior in making investment decisions. The higher an investor's financial literacy, the more rational they will make investment decisions (Khairiyati & Krisnawati, 2019; Novianggie & Asandimitra, 2019; Putri & Rahyuda, 2017). Besides financial literacy, behavioral biases also play an important role in decision-making. Investors are prone to illogical behavior, which can lead to costly blunders. While financial literacy helps people make better financial decisions, behavioral biases cause people to behave unreasonably regarding money (Ateş et al., 2016). In addition, investors will be more courageous in taking chances and making judgments if they exhibit higher overconfidence (Budiarto & Susanti, 2017; Novianggie & Asandimitra, 2019; Pradhana, 2018). Similarly, stronger representativeness behavior correlates with larger investment decisions investors make (Novianggie & Asandimitra, 2019). Research indicates that Sharia stock literacy affects Sharia stock investing decisions through behavioral bias (Abdullah et al. 2022; Albaity and Rahman 2019; Alsayigh and Al-Hayali 2022; Gunawan et al. 2021; Hariawan and Canggih 2022; Humaira 2021; Roemanasari and Sabela 2022) show that Sharia stock literacy influences Sharia stock investment decisions through behavioral bias. Thus, the following is the research's hypothesis, which is based on the description and findings of prior studies:

*H<sub>6</sub>: Sharia stock literacy is positively related to Sharia stock investment decisions through behavioral bias.*

## **The Influence of Risk Factors on Sharia Stock Investment Decisions through Behavioral Bias**

Perceived risk is an uncertainty regarding achieving an expected profit in the future (Brigham & Houston, 2014). In their research, Cho and Lee (2006) revealed that if the portion invested is low, the number of searches for information and the frequency of transactions will increase due to risk perception. Information about investment risks obtained by investors influences behavioral biases. The more risk information obtained, the lower the investor's behavioral bias, and investors can determine their investment decisions. On the other hand, if little risk information is obtained, behavioral bias will increase, and investors will tend to follow the decisions of other investors so that investment profits or losses will become increasingly unclear. Research (Agha & Sabirzyanov, 2015; Hudha, 2021; Indrarini, 2019; Mardhiyaturrositaningsih, 2022; Maria, 2017; Rahman et al., 2010) demonstrates how behavioral bias causes risk factors to affect Sharia stock investment decisions. In this study, the following hypothesis is tested in light of the description and findings of earlier research:

*H<sub>1</sub>: Risk factors are negatively related to Sharia stock investment decisions through behavioral bias.*

## **Research Method**

The research design used in this research was descriptive research with a quantitative approach, namely a method for examining the status of a group of people, an object, a condition, a situation, or a system of thought. This research employed a descriptive approach using survey methods. The survey method generally obtains facts about existing phenomena and seeks actual information. In a survey, this information is collected from respondents' answers using a questionnaire as a research object (Sugiyono, 2016).

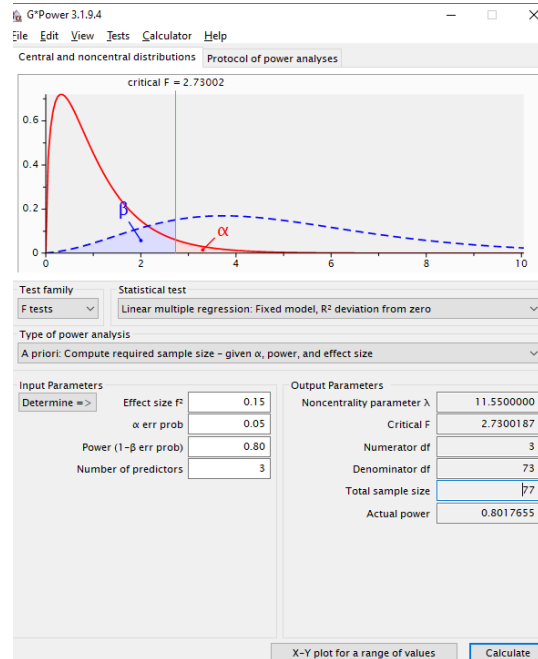
The population used was all investors in East Java Province who invested in Sharia stock. The criteria for this study included investors from East Java who invested in Sharia stock listed on the Jakarta Islamic Index (JII) starting in 2019.

Financial literacy consists of financial knowledge, attitude, and behavior indicators. Furthermore, risk factors comprise indicators of performance risk, financial risk, and physical/security risk. Behavioral bias is made of overconfidence, representativeness, and capability indicators. Lastly, stock investment decisions entail return, risk, and the relationship between return and risk indicators.

All investors in Sharia stock in the Province of East Java were the population used. Investors from East Java Province who purchased Sharia stocks listed on the Jakarta Islamic Index (JII) beginning in 2019 comprised the sample criteria. Since this study employed non-probability sampling, power analysis is recommended to determine sample size (Memon et al., 2020; Sofyani, 2023). Based on G\*power analysis, the minimum sample in this study was 77 respondents (Figure 1). Meanwhile, in this study,

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the sample used was 500 respondents, with the questionnaire distribution presented in Table 1. In addition, the measurement scale utilized was the Likert scale.



**Figure 1** Minimum Sample Size Using G\*Power

**Table 1** Questionnaire Distribution Results

Information	Response	
	Frequency	%
Sent	1073	100
Received	684	63.74
Un-appropriate respondent	178	16.59
Extreme answer	6	0.56
Usable questionnaire	500	46.6

The Partial Least Square-Structural Equation Modeling (PLS-SEM) method was employed to test the hypothesis. Structural Equation Modeling (SEM) is one technique for addressing the shortcomings in the regression approach (Ghozali, 2014). Effective and low-assumption analysis can be done with partial least squares. The distribution-free PLS method accepts various data types, including nominal, category, ordinal, interval, and ratio. PLS uses a random doubling or bootstrapping technique; hence, PLS does not require the premise of normalcy. In addition, no minimum quantity of samples is needed to employ PLS in research; small sample sizes can still be used with this methodology. Since partial least squares are considered non-parametric types, normal distribution data are unnecessary for PLS modeling (Ghozali, 2014).

Following that, the results of the probability and t-statistic tests demonstrated the need for hypothesis testing. The t-statistic value for alpha 5% was 1.64, the statistical value

used to test the hypothesis. Thus, when the t-statistic is greater than 1.64,  $H_a$  is accepted, and  $H_0$  is rejected, according to the criteria for accepting or rejecting the hypothesis. For probability-based hypothesis rejection/acceptance,  $H_a$  is accepted if the p-value is less than 0.05 (Ghozali, 2014).

## Result and Discussion

Based on G\*power analysis, even though the minimum sample in this study was 77 respondents, this study's sample was 500. According to the characteristics of respondents, the number of respondents aged 21–30 years was 264 people (52.8%), aged 31–40 years old was 167 people (33.3%), and aged 41–50 years old was 69 people (13.9%). Concerning the gender number of respondents, there are as many men as 275 people (55.1%) and women as many as 225 people (44.9%). In addition, the number of respondents with education in elementary school was nine people (10.3%), junior high school was as many as 21 people (24.2%), senior high school was 28 people (56.3%), and bachelor's degrees was 42 people (9.2%). Further, investors with 0-1 year of investment experience, mostly with elementary and junior high school education, accounted for 37.2%. Those with 1-3 years of experience, mainly with senior high school education, made up 42.6% of the total. Investors with bachelor's degrees had a smaller representation in the 3-5 years and over five years experience categories.

**Table 2** Characteristics of Respondents

Category	Indicator	Percentage (%)
Age	21 – 30 years	52.8
	31 – 40 years	33.3
	41 – 50 years	13.9
Gender	Man	55.1
	Woman	44.9
Last education	Elementary School	10.3
	Junior High School	24.2
	Senior High School	56.3
	Bachelor	9.2
Length of investment experience	0 – 1 Year	37.2
	1 - 3 Years	42.6
	3 – 5 Years	11.4
	> 5 Years	8.8
Total		100%

In survey studies, there is a potential normative bias called Common Method Bias (CMB). Common Method Bias (CMB) issues can pose a risk to the consistency of the study. In this research, the researchers used Hermann's one-factor test to determine the threat of CMB. The test indicated that all elements could be characterized into five factors, and the first factor only explained 39.78% of the inconsistencies, which was much less than 50%. From these results, CMB was not a threatening problem in this study.



In this study, the Sharia stock literacy variable showed a mean of 12.67. The Sharia stock literacy variable had the lowest value of 8 and the greatest value of 15. A value of 1.55 was the standard deviation. For the risk factor variable, the mean was 12.35. The risk factor variable had a minimum value of 6 and a maximum value of 15. Its standard deviation was 1.54. In addition, 12.52 was the mean value of the behavioral bias variable. While the behavioral bias yielded a lowest value of 7, its highest value was 15. Then, 1.51 was the standard deviation. Lastly, the mean value for the Sharia stock investment decision variable was 13.22, with the lowest value of 7, the highest value of 15, and the standard deviation of 1.58.

**Table 3** Descriptive Statistics

Information	Sharia Stock Literacy	Risk Factor	Behavioral Biases	Sharia Stock Investment Decisions
MIN	8	6	7	7
MAX	15	15	15	15
MEAN	12.67	12.35	12.52	13.22
STD.DEV	1.55	1.54	1.51	1.58

Before evaluating the structural model to test the hypothesis, the validity and reliability were assessed by testing the outer model (Sarstedt, Ringle, Henseler, & Hair, 2014). According to Hair et al. (2019), indicators that do not meet the requirements of less than 0.7 should be eliminated.

**Table 4** Outer Loading and AVE

Latent Variables	Code	Indicators	Outer loading	AVE
Sharia Stock Literacy	X1.1	Financial knowledge	0.867	0.688
	X1.2	Financial attitude	0.784	
	X1.3	Financial behavior	0.835	
Risk Factors	X2.1	Performance risk	0.833	0.723
	X2.2	Financial risk	0.849	
	X2.3	Physical/security risks	0.868	
Behavioral Bias	Z.1	Overconfidence	0.874	0.750
	Z.2	Representativeness	0.876	
	Z.3	Capability	0.848	
Sharia Stock Investment Decision	Y.1	Return	0.844	0.738
	Y.2	Risk	0.883	
	Y.3	The relationship between return and risk levels	0.848	

Moreover, the Fornell-Lacker criterion is commonly employed in PLS to evaluate discriminant validity (Table 5). According to statistics, a construct is considered discriminately valid if its square root of AVE is more than the correlations with all other constructs in the model (Fornell & Larcker, 1981).

**Table 5** Fornell-Lacker Criterion

Variable	X1	X2	Y	Z	CA	CR
Sharia Stock Literacy	0.829				0.773	0.868
Risk Factors	0.763	0.850			0.808	0.887
Behavioral Bias	0.760	0.757	0.866		0.833	0.900
Sharia Stock Investment Decision	0.749	0.752	0.819	0.859	0.822	0.894

Table 5 indicates that both discriminant and convergent validity were met. Furthermore, every construct had a Cronbach's Alpha (CA) value greater than 0.6, and every construct's Composite Reliability (CR) value demonstrated outcomes consistent with the rule of thumb (Fornell & Larcker, 1981). Every construct, thus, satisfied the validity and reliability requirements. As a result, testing for theories might be done.

Based on Table 6, all hypotheses in this research were supported. Thus, Sharia stock literacy had a positive direct effect on Sharia stock investment decisions and behavioral bias. Then, risk factors had a negative direct effect on Sharia stock investment decisions, whereas risk factors had a negative direct effect on behavioral bias. In addition, through behavioral bias, Sharia stock literacy positively and directly affected Sharia stock investment decisions. Lastly, this result disclosed that behavioral bias was pure mediation in the relationship between Sharia stock literacy and risk factors on Sharia stock investment decisions.

**Table 6** Summary of Hypothesis Testing Results

	Hypothesis	Original Sample	P-value	Conclusion
<b>Direct Effect</b>				
H <sub>1</sub>	Sharia Stock Literacy - Sharia Stock Investment Decisions	0.236	0.000	Supported
H <sub>2</sub>	Sharia Stock Literacy - Behavioral Bias	0.420	0.000	Supported
H <sub>3</sub>	Risk Factors - Sharia Stock Investment Decisions	-0.216	0.000	Supported
H <sub>4</sub>	Risk Factors - Behavioral Biases	-0.431	0.000	Supported
H <sub>5</sub>	Behavioral Bias - Sharia Stock Investment Decisions	0.479	0.000	Supported
<b>Indirect Effect</b>				
H <sub>6</sub>	Sharia Stock Literacy - Sharia Stock Investment Decisions through Behavioral Bias	0.201	0.000	Supported
H <sub>7</sub>	Risk Factors - Sharia Stock Investment Decisions through Behavioral Bias	-0.207	0.000	Supported

## Discussion

### The Influence of Sharia Stock Literacy on Sharia Stock Investment Decisions

The research revealed that Sharia stock literacy positively affected Sharia stock investment decisions. Financial literacy increases the knowledge, skills, and confidence of consumers or the public in their ability to manage personal finances better. This process aims to make the general public, who are consumers, knowledgeable about the benefits

and risks of financial products and services and their rights and obligations as consumers so they can make better financial decisions that suit their needs. Apart from that, consumers can also use financial services with their expertise and trust in financial institutions so that these institutions can manage financial activities well (Rahayu, Widyastuti, & Purwantini, 2021).

The findings of this research are consistent with previous research (Fitriyani & Anwar, 2022; Hariawan & Canggih, 2022; Hudha, 2021; Humaira, 2021; Utsman, 2021), showing that Sharia stock literacy influences Sharia stock investment decisions.

### **The Influence of Sharia Stock Literacy on Behavioral Bias**

The study's findings indicated that Sharia stock literacy had a notable and positive impact on behavioral bias. Financial literacy refers to the comprehension, abilities, and convictions that shape an individual's mindset and actions to enhance decision-making and efficiently handle finances, ultimately leading to prosperity. Attitudes and behavior are important in developing financial literacy programs by the Financial Services Authority. Relying on knowledge alone, without being followed by action, will not change individual behavior in making wise decisions (Zulfikar, 2016).

This research aligns with other studies (Budiman, 2021; Din et al., 2021; Fatihudin, 2017; Humaira, 2021; Koesoemasari et al., 2022; Lobão, 2023; Roemanasari & Sabela, 2022), which indicate that Sharia stock literacy influences behavioral bias.

### **The Influence of Risk Factors on Sharia Stock Investment Decisions**

Based on the research results, risk factors yielded a negative effect on Sharia stock investment decisions. Risk is a result that deviates from expectations. Because the profits obtained from each security are different, depending on the amount of risk borne by the investor, investors can minimize the risk by paying attention to the magnitude of the influence of each factor. Perceived risk is an occurrence associated with unpredictability that induces detrimental negative thoughts in the minds of consumers (Muhammad et al., 2016).

As with other studies (Budiman, 2021; Din et al., 2021; Fatihudin, 2017; Humaira, 2021; Koesoemasari et al., 2022; Lobão, 2023; Roemanasari & Sabela, 2022), this study's results demonstrated that risk factors influence Sharia stock investment decisions.

### **The Influence of Risk Factors on Behavioral Bias**

The findings of the study uncovered that risk factors exerted an adverse influence on behavioral bias. Investment inherently consists of two components: return and risk. A one-way relationship exists between these two factors: an increase in investment risk corresponds to a larger probability of return, while the inverse holds true. Consumers perceive risk as an undesirable consequence and want to avoid the risks of purchasing a product. In risk perception, there is uncertainty and consequences. Perceptions of risk will

arise in consumers' minds if the purchasing decision involves extensive information search. This risk perception will influence the amount of information consumers seek. The greater the perceived risk, the more information consumers seek before purchasing a product (Wira, 2016).

Consistent with prior investigations (Agha & Sabirzyanov, 2015; Hudha, 2021; Indrarini, 2019; Mardhiyaturositaningsih, 2022; Maria, 2017; Rahman et al., 2010), the findings of this study exhibited that behavioral bias is influenced by risk factors.

### **The Influence of Behavioral Bias on Sharia Stock Investment Decisions**

Behavioral bias positively influenced Sharia stock investment decisions, according to the study's findings. Abstractly speaking, behavioral bias is comparable to systematic error in judgment. Moreover, it may be construed as a form of financial behavior in which human emotions and cognitive errors are taken into account during the decision-making process. Behavioral biases are mostly of two types: cognitive and emotional. Both cause people to make illogical decisions. Since cognitive biases are the result of flawed reasoning, they can be overcome with greater knowledge and guidance. However, emotional biases are difficult to overcome since they are rooted in instinct or intuition rather than conscious thought.

This study supports prior research (Budiman, 2021; Din et al., 2021; Fatihudin, 2017; Humaira, 2021; Koesoemasari et al., 2022; Lobão, 2023; Roemanasari & Sabela, 2022), denoting that behavioral bias influences Sharia stock investment decisions.

### **The Influence of Sharia Stock Literacy on Sharia Stock Investment Decisions through Behavioral Bias**

According to the study findings, Sharia stock literacy positively impacted Sharia stock investment decisions by influencing behavioral bias. One can infer that financial literacy indirectly affects stock investment decisions utilizing behavioral bias. Having a strong understanding of personal finance can help reduce the influence of behavioral biases. An investor with a strong bias tendency is likely to be more inclined to take risks when making investment choices. Investors' ambitious nature can often lead them to make errors in decision-making. On the one hand, acquiring knowledge in managing finances will result in improved choices for investing; conversely, personal inclinations may hinder investors' judgment.

The results of this research corroborate with previous research conducted (Abdullah et al. 2022; Albaity and Rahman 2019; Alsayigh and Al-Hayali 2022; Gunawan et al. 2021; Hariawan and Canggih 2022; Humaira 2021; Roemanasari and Sabela 2022), which revealed that Sharia stock literacy influences Sharia stock investment decisions through behavioral bias.

## **The Influence of Risk Factors on Sharia Stock Investment Decisions through Behavioral Bias**

Risk is one of the worries for investors when starting their investment activities. This creates conditions of uncertainty that overshadow investors' investment decisions. According to Schiffman and Wisenblit (2015), risk perception gives rise to consequences due to the emergence of uncertainty when making a decision. This uncertainty can contribute to an investor's investment decision-making preference to be cautious. Risk perception also causes investor behavioral bias to increase, resulting in investment decision-making. Thus, if individuals have a high level of risk perception, they usually tend to have an attitude that is not hasty and fully considers the information they have in making investment decisions.

Meanwhile, according to prospect theory, the risk perception variable is biased in determining investment decisions (Salerindra, 2020). In this case, bias is a prejudice against or favoring something. Investment decisions are based not only on financial conditions but also on risk factors and investor behavior.

This study's findings confirm those of other studies displaying that risk factors impact Sharia stock investment decisions through behavioral bias (Agha & Sabirzyanov, 2015; Hudha, 2021; Indrarini, 2019; Mardhiyaturositaningsih, 2022; Maria, 2017; Rahman et al., 2010).

## **Conclusion**

Sharia stock literacy was found to have a positive influence on Sharia stock investment decisions, according to the research findings. A favorable influence on investor behavioral bias was shown to be associated with Sharia stock literacy. Based on the study results, risk factors had a detrimental impact on Sharia stock investment decisions. Risk factors were also reported to have a negative impact on investor behavioral bias. As demonstrated by study findings, behavioral bias produced a beneficial impact on Sharia stock investment decisions. Through behavioral bias, the research results demonstrated that Sharia stock literacy had a positive impact on Sharia stock investment decisions. Also, behavioral bias was responsible for the unfavorable impact of risk factors on Sharia stock investment decisions.

The novelty of this research is that it provides a different picture of investment decision-making factors by referring to financial literacy, risk factors, and behavioral biases. In other research, investment decisions are fundamentally and technically based on the company's financial condition. Meanwhile, this research implies that financial literacy and risk factors are vital in determining investment decisions. Understanding financial literacy and risk factors, thus, helps investors assess investments more objectively and avoid biased investment behavior. The limitation of this research is that independent variables only used two components of Sharia stock investment decision, i.e., Sharia stock literacy

and risk factors, so the level of influence of the independent variables on the dependent was small.

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### Conflicts of Interest

The authors declare no conflict of interest. The funders had no role in the design of the study; in the collection, analyses, or interpretation of data; in the writing of the manuscript, or in the decision to publish the results.



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