

Determinant on Investment Decision Making in the Sharia Capital Market with Sharia Financial Literacy as a Moderating Variable

Falah Sadjida¹; Muhfiatun²

¹Faculty of Islamic Economics and Business, Sunan Kalijaga State Islamic University Yogyakarta, Indonesia, email: falahsadjida82@gmail.com (Corresponding)

¹Faculty of Islamic Economics and Business, Sunan Kalijaga State Islamic University Yogyakarta, Indonesia, email: 198909192015032009@uin-suka.ac.id

Abstract

Background: Driven by the rapid development of the Islamic capital market and the significant role of psychological factors in shaping investor decision-making, this study explores the behavioral dynamics influencing investment strategies.

Objectives: This study aims to determine the effect of cognitive dissonance bias, regret aversion, and framing effect on investment decisions in the sharia capital market with sharia financial literacy as a moderating variable (case study: in the Special Region of Yogyakarta Province).

Novelty: Departing from conventional investment studies, this framework specifically examines the moderating role of sharia-compliant financial knowledge in navigating psychological biases during decision-making.

Research Methodology / Design: The sampling technique used is purposive sampling with predetermined criteria, which was carried out on 200 respondents of sharia capital market investors in the Special Region of Yogyakarta Province. This study uses a quantitative method with PLS-SEM analysis with SmartPLS.

Findings: The results of this study indicate that cognitive dissonance bias and regret aversion have a positive and significant effect on investment decisions in the sharia capital market, while the framing effect does not have a significant effect on investment decisions in the sharia capital market. Sharia financial literacy as a moderating variable successfully weakens the effect of cognitive dissonance bias on investment decisions in the sharia capital market but fails to weaken the effect of regret aversion bias and framing effect on investment decisions in the sharia capital market on investors domiciled in the Special Region of Yogyakarta Province.

Implication: This study implies that improving investment decision-making in the Sharia capital market requires not only enhancing Sharia financial literacy but also addressing behavioral factors. The findings offer guidance for developing more comprehensive investor education programs to promote more rational and sustainable investment decisions.

Keywords:

Cognitive Dissonance Bias, Regret Aversion Bias, Framing Effect, Sharia Financial Literacy, Investment Decisions

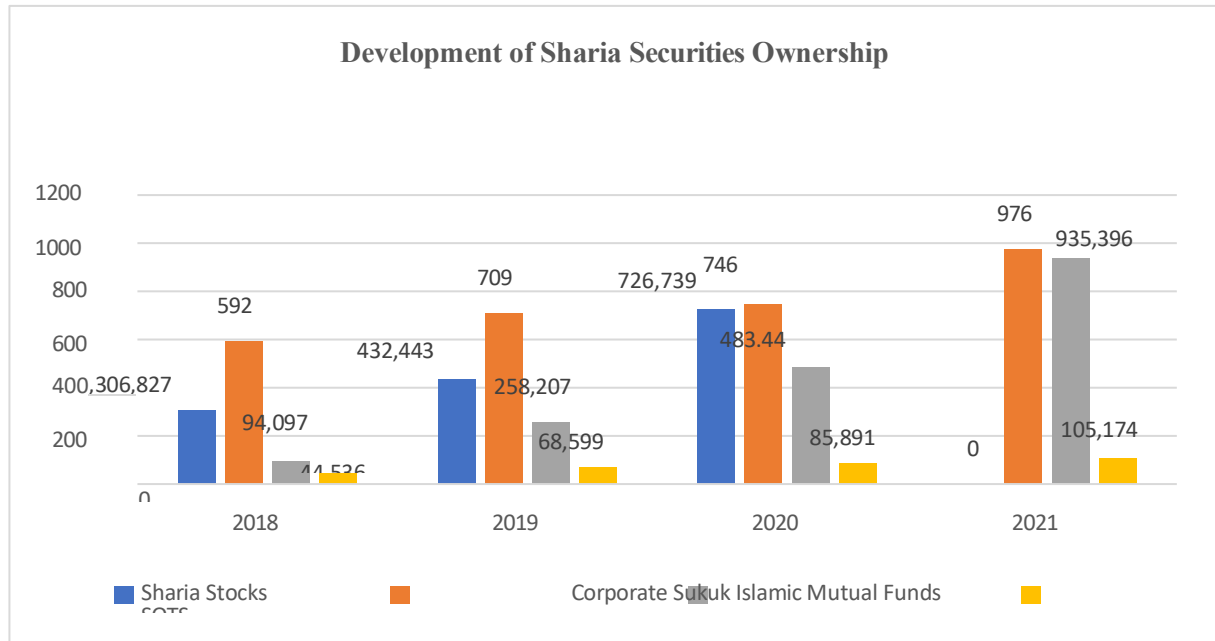
JEL Classifications:

G41, G53, Z12

Received: April 22, 2026; Revised: May 26, 2026; Accepted: June 3, 2026; Available online: June 30, 2026

A. Introduction

Indonesia's development and economic growth are closely related (Puspita et al., 2021). According to Fauzan & Suhendro (2018), one of the keys to driving Indonesia's economic growth is to increase investment in the capital market. Investment itself is defined as the placement of productive assets that are expected to become a source of income in the future (Afrida & Sari, 2021). The development of the Islamic capital market in Indonesia has shown a positive and significant trend in recent years (KSEI, 2022). As shown in Figure 1 regarding Statistics on Islamic Securities Ownership, the number of investors has continued to increase impressively (KSEI, 2022).



Source: IDX, processed by authors (2026)

Figure 1 . Statistics on Sharia Securities Ownership

The main obstacle in the current sharia capital market is the lack of clarity in regulations in various countries (Atikah & Sayudin, 2024), thus requiring transparent policies to provide appropriate guidance for stakeholders (Effendi et al., 2023). In addition to regulatory issues, the limited variety of products compared to conventional markets is a major challenge, even though Sharia instruments continue to show a positive growth trend (Atikah & Sayudin, 2024). However, sharia investment is still seen as a major catalyst for the expansion of the Islamic economy, capable of attracting global investors with a focus on ethics and sustainable finance (Atikah & Sayudin, 2024; Susanto et al., 2023).

In determining their investment steps, investors consider various crucial factors, such as commercial prospects and the legitimacy of a company (Pradhana, 2018). The decisions made can be rational or irrational, where this irrationality often triggers market anomalies caused by cognitive and emotional disturbances (Fitra, 2023). This occurs because these psychological barriers make it difficult for investors to interpret information accurately (Fitra, 2023). Emotional involvement, preferences, and innate characteristics ultimately become the main causes of irrational behavior in the decision-making process (Budiarto and Susanti, 2017).

Cognitive dissonance bias occurs when an investor obtains new information that differs from previous information, causing the investor's decision to be inconsistent with what has been determined (Fatkhurrozi et al., 2024). According to Gunawati (2024), *cognitive dissonance* arises when an investor feels uneasy because their actions contradict their beliefs or personal values. This will have a significant impact on their behavior, which will ultimately encourage them to change their actions to be in line with what they believe. According to Gupta & Ahmed (2017), someone who lacks emotional intelligence will find it difficult to understand and adapt to the emotional needs of others, which causes problems and misinterpretations.

In addition, there is another factor, namely *regret aversion*. *Regret aversion bias* is a tendency for individuals to avoid making decisions because they fear regret (Singh & Sikawar, 2015). Simply put, *regret aversion bias* is the tendency to delay making choices because of concerns about the possibility of regret (Singh & Sikawar, 2015). According to Budiarto (2017), *regret aversion bias* can cause investors to be reluctant to let go of instruments they already own that should have been sold long ago to make a profit. The choice of *regret aversion bias* in this study is because the spiritual values and limited choices of Islamic investment may cause investors to have a greater fear of regret, even if the decision is more rational.

The next psychological factor is *the framing effect*. The phenomenon known as *the framing effect* shows how different people may respond to the same issue when making investment decisions if the issue is presented in different ways (Wulandari & Iramani, 2014). According to Cahyanti et al. (2021), *the positive framing effect* is conveyed through information that offers the possibility of profit or savings. Sari & Dwita (2024) define negative *framing* as focusing on circumstances that will result in losses. *Framing* itself is a form or method of presenting data with the aim of influencing someone to make a decision, according to Feriyana et al. (2020). According to Sari et al. (2024), investors' decisions will be influenced by the *framing* they receive. Based on the *framing* obtained, investors will interpret facts as a decision. *The framing effect* was chosen as a research variable because Islamic investors are greatly influenced by the way information is conveyed in accordance with Islamic law, not just numbers or investment returns.

Along with these various behavioral biases, the level of Islamic financial literacy was chosen as a moderating variable. Islamic financial literacy is defined as the level at which people have an understanding of Islamic finance and the skills that will later influence their financial decisions (Adiba, 2021). Sharia finance requires a different level of literacy measurement than conventional finance. For example, there is a general financial literacy measurement regarding interest rates, the effects of inflation, and risk diversification (Hidajat & Hamdani, 2017). Meanwhile, sharia financial literacy measures *riba*, *gharar*, and *halal* and *haram* aspects (Adiba, 2021). Based on the results of a national survey conducted by the OJK and BPS in 2024, the conventional financial literacy index of the Indonesian population was 65.08%. Meanwhile, the Islamic financial literacy index was 39.11%. Conventional financial inclusion showed a figure of 73.55%, while Islamic financial inclusion was 12.88%.

The gap between investor growth and understanding of investment behavior creates an urgency for this research to be conducted. Although there have been many studies on investment decisions, the integration of cognitive bias and Islamic financial literacy as a moderator is still rarely done. This study attempts to fill this gap by examining the extent to which emotional and cognitive factors influence investment decisions. It is hoped that the results of this study will provide guidance for investors to become more aware of their biases. In addition, the results of this study are also expected to be useful for regulators in developing more effective financial education programs.

Based on this background, this study aims to analyze the influence of Cognitive Dissonance Bias, Regret Aversion, and Framing Effect on investment decision-making. Sharia Financial Literacy is placed as a moderating variable to see its role in mitigating the impact of these biases. Through this approach, it is hoped that a comprehensive picture of the behavior of sharia investors in the Special Region of Yogyakarta will be obtained.

B. Literature Review

B.1. Theoretical Framework

This study is based on two theories, namely *Prospect Theory* and *Behavioral Finance Theory*.

Prospect Theory

Prospect Theory was introduced by Kahneman and Tversky (1979) and developed in 1992. This theory explains that individual emotions and biases greatly influence the decision-making process (Kahneman & Tversky, 2013). The core of this theory is the human tendency to be more sensitive to losses than gains, where losses have a greater psychological impact on individual well-being (Khairunnisa & Mubaraq, 2024). Although often considered contradictory and irrational (Pradhana, 2018), this theory effectively highlights how decisions are often based on investor sentiment (Holly et al., 2022). Furthermore, prospect theory emphasizes that investors tend to place a higher value on certain outcomes than on uncertain outcomes (Ayudiasuti, 2021).

Behavioral Finance Theory

Behavioral finance is a concept that explains how individuals make investment decisions, especially in conditions of market uncertainty (Muhammad, 2022). This theory emphasizes that financial decisions are not always based on rational attitudes, but are also influenced by psychological factors and irrational behavior (Fridana & Asandimitra, 2020). As an approach that links the psychological state of investors with finance (Sumtoto & Anastasia, 2015), this concept indicates that investors can still behave irrationally even though they have adequate understanding and knowledge (Addinpujoartanto & Darmawan, 2020). Thus, *behavioral finance* is able to map investors' thought patterns, including how emotional aspects dominate and influence the investment decision-making process (Hayati et al., 2022).

B.2. Hypothesis Development

Cognitive dissonance bias is a state of mental imbalance that arises when individuals attempt to overcome discomfort by convincing themselves (Zahro & Singgih, 2024). This bias occurs when a person is gathering, processing, and interpreting information, which ultimately affects their thinking ability due to limitations in processing that information (Baker & Puttonen, 2019; Alifya et al., 2024). In the context of investment, investors who experience this bias tend to convince themselves that their personal principles are better than the new information received, thus significantly impacting the decisions made (Komara et al., 2023; Manuel & Mathew, 2017). In fact, cognitive dissonance bias has a positive effect on investment decisions because it can encourage investors to make quick decisions even if they are based on subjective beliefs (Gupta & Ahmed, 2017). Based on previous research, the following hypothesis was formulated:

H₁: Cognitive dissonance bias has a significant positive effect on sharia capital market investment decision-making among investors residing in the Special Region of Yogyakarta.

Regret aversion bias is an individual's tendency to avoid regret due to bad decisions or unsatisfactory investment results (Pompian, 2006). The effects of this bias include postponing investment decisions, a tendency to maintain losing positions, and a lack of portfolio diversification (Komara et al., 2023). Research shows that past failures or losses greatly influence how investors make decisions in the future (Nurdinda, 2020). However, there are findings that investors who are able to manage regret over bad experiences tend to remain consistent in investing in the capital market (Hidayah & Irowati, 2021). In general, regret aversion bias has been proven to have a positive and significant influence on the investment decision-making process for investors (Budiartha & Susanti, 2017). Based on previous research, the following hypothesis was formulated:

H₂: Regret aversion bias has a significant positive effect on sharia capital market investment decision-making among investors residing in the Special Region of Yogyakarta.

The framing effect is a phenomenon in which presenting information in different ways can trigger bias in investment decision-making (Elfahmi et al., 2022). Differences in how problems are framed cause real changes in investor behavior, especially in assessing the risks of the decisions to be made (Cahyanti et al., 2021; Baker, 2014). Experimental research shows that investment decisions are highly dependent on how a problem is presented, even though the problem is essentially the same (Pasek et al., 2019). In addition, there are differences in responses between individuals with high and low numerical abilities in dealing with this framing (Pasek et al., 2019). Overall, the framing effect has been proven to have a significant positive effect on investment decisions because the presentation of information directly affects the level of investor courage in taking risks (Dewi et al., 2021). Based on previous research, the following hypothesis was formulated:

H₃: The framing effect has a significant positive effect on investment decision-making in the Islamic capital market based in the Special Region of Yogyakarta.

Psychological and social factors have been proven to influence investor behavior in the investment decision-making process, where humans tend to be susceptible to various biases and certain strategies (Moueed et al., 2020; Rahmawati & Santi, 2023). One such bias is cognitive dissonance, which arises from an imbalance between cognitive factors and existing conditions (Jannah & Ady, 2017). On the other hand, a good understanding of religion encourages individuals to study Islamic finance thoroughly, even though decision-making remains influenced by psychological factors (Ilfiti & Canggi, 2021; Wahyuni & Pramono, 2021). However, financial literacy has been proven to be effective in weakening the influence of these psychological biases, so that individuals with a high level of literacy will be able to make more rational investment decisions (Wendy, 2021; Hariyono et al., 2023). Based on previous research, the following hypothesis was formulated:

H₄: Sharia financial literacy significantly weakens the influence of cognitive dissonance bias on sharia capital market investment decisions in the Special Region of Yogyakarta Province.

Regret over an investment decision has a significant psychological impact, where individuals tend to take extreme risks or avoid them altogether to prevent future pain (Zahera & Bansal, 2018). Regret aversion causes rational decision makers to ignore personal information in order to follow the crowd to avoid inefficient situations (Sattar et al., 2020), or to delay decisions, which in turn triggers new regrets (Sidore & Christie, 2019). This is in line with prospect theory, which explains that psychological factors prevent individuals from always using theoretical understanding when facing risks (Pradikasari & Isbanah, 2018). However, financial literacy has been proven to weaken the negative impact of *regret aversion bias* on investment decisions (Wangzhou et al., 2021). With a higher level of financial literacy, individuals can make much better and more measured investment decisions (Updana & Herawati, 2020). Based on previous research, the following hypothesis was formulated:

H₅: Sharia financial literacy significantly weakens the influence of regret aversion bias on sharia capital market investment decisions in the Special Region of Yogyakarta Province.

The framing effect is divided into positive framing, which prioritizes profit and risk minimization, and negative framing, which tends to choose risky investments based on numerical probabilities (Dewi et al., 2021). This behavioral bias psychologically affects investment interest and risk tolerance, which often results in investors becoming careless and unable to act rationally (Roemanasari et al., 2022). To mitigate this, Islamic financial literacy is present as an awareness of knowledge and behavior in making investment decisions based on Islamic principles (Khasanah, 2019). A high level of Islamic financial literacy has been proven to encourage investors to be more consistent in placing their assets in Islamic instruments (Din et al., 2021). Ultimately, adequate financial literacy greatly influences the way a person invests and can improve the quality of decision-making to be more prudent (Aren & Zengin, 2016; Syarkani & Tristanto, 2022). Based on previous research, the following hypothesis is formulated:

H₆: Sharia financial literacy significantly weakens the influence of the framing effect on sharia capital market investment decisions in the Special Region of Yogyakarta Province.

C. Research Methodology

This study uses a quantitative approach located in the Special Region of Yogyakarta Province. The population in this study consists of investors who have invested or have the potential to invest in the Islamic capital market in the region. Sampling was conducted using specific criteria, namely Islamic capital market investors who are Muslim, reside in the Special Region of Yogyakarta Province, and are between the ages of 18 and 60. To determine a representative sample size, this study refers to the formula by Hair et al. (2010), which states that the sample size is determined by multiplying the number of indicators in the study by a constant of 10. Considering that there are 20 indicators in this study, the required sample size is 200 respondents (20 x 10). The data used is primary data collected directly from respondents, where each question instrument is measured using a Likert scale to obtain continuous and measurable data. The operational definitions of the variables used in this study are listed in the following table:

Table 1 . Operational Definitions of Variables

Variables	Definition	Indicators	References
Investment Decision	An investment decision is a commitment made by a fund to one or more assets with a long-term horizon with the aim of generating future profits.	1. Searching for information 2. Calculating quickly and carefully 3. Evaluating the portfolio 4. Placing or placing reinvest capital	Ariska & Sugiyanto 2023
Cognitive dissonance bias	Is an imbalance that occurs between beliefs and newly acquired information	1. Having a belief in the truth of initial information obtained 2. Having doubts when new information arises 3. Ignoring information that does not align with one's beliefs	Ariska & Sugiyanto 2023
Regret Aversion bias	A condition where an investor has a tendency to avoid repeating the same mistakes caused by wrong investment decisions	1. Fear of the potential risks faced when making a new investment 2. Having doubts about making investment decisions 3. A bad experience when investing causes regret after making an investment decision 4. Being cautious when making investment decisions due to bad experiences	Mayora & Lestari, 2024
Framing Effect	This is an effect on an assessment made by investors due to differences in the presentation of the method, format, or emphasis of a piece of information.	1. Positive <i>framing effect</i> (contains information that contains benefits. 2. Negative framing effect (presented in the form of information containing disadvantages)	Cahyanti et al., 2021
Sharia Financial Literacy	It is the insight that a person has about a product or service based on Islamic financial services and is able to distinguish between conventional and Islamic systems, which has an impact on economic decisions economic decisions made	1. Risk 2. Return on investment 3. Time factor	Putri & Hamidi, 2019

Source: Authors (2026)

The data analysis method used in this study is *Structural Equation Modeling* (SEM), a multivariate analysis tool that allows for the simultaneous analysis of several research variables, including variables that cannot be measured directly or unobserved variables (Solihin & Ratmono, 2020; Qoyum et al., 2021). There are two main approaches in SEM, namely *Covariance-Based SEM* (CB-SEM) and *Variance-Based SEM* (VB-SEM), better known as Partial Least Square (PLS) (Pering, 2021). The PLS-SEM method has become a popular choice in the social and management fields due to its advantages in handling non-normally distributed data, small samples, and complex models with many indicators (Sahban et al., 2024; Budiarsi, 2020). Operationally, SEM involves two crucial testing stages, namely the evaluation of the Measurement Model (Outer Model) to test the validity and reliability of the instruments, and the evaluation of the Structural Model (Inner Model) to test the relationships between constructs in the study (Qoyum et al., 2021).

D. Result & Discussion

Data collection in this study was conducted by distributing questionnaires via *Google Forms* on social media (*Instagram*, *WhatsApp*, and *Twitter*) and broadcast messages from February 14 to March 26, 2025. Of the total 240 respondents collected, 200 respondents met the criteria for analysis to provide a comprehensive demographic background. The results showed that the majority of respondents were Muslim (99.2%), female (60%), aged 18-28 years (52.9%), and resided in Sleman Regency (31.7%). In addition, the dominant characteristics of respondents included student status (32.5%), bachelor's degree educational background (47.1%), monthly income between IDR 1,000,000 and IDR 3,000,000, and 64.2% had experience investing in the Islamic capital market.

Table 2 . Path Coefficient Test

Path	Original Sample	t-statistic	p-value	Hypothesis
CDB → CI	0.149	2.043	0.041	Accepted
RAB → CI	0.167	2.882	0.004	Accepted
FE → CI	0.056	0.615	0.538	Rejected
LKS × CDB → CI	-0.156	1.970	0.049	Accepted
LKS × RAB → CI	0.067	0.894	0.371	Rejected
LKS × FE → CI	0.051	0.887	0.375	Rejected

Source: Authors (2026)

The Effect of Cognitive Dissonance Bias on Investment Decision Making in the Sharia Capital Market

The results of the first hypothesis test (H1) prove that *cognitive dissonance bias* has a positive and significant effect on investment decisions in the Islamic capital market in DIY. This is indicated by the *original sample* value of 0.149, *t-statistic* 2.043 (>1.96), and *p-value* 0.041 (<0.05). Theoretically, this finding confirms that investors tend to be irrational due to imperfect information processing, which is in line with prospect theory, where individuals often stick to old beliefs even when there is new conflicting evidence (Claudia, 2020; Purwanto, 2020). These statistical findings are reinforced by questionnaire data showing the actual behavior of respondents in the field. The majority of investors (44.2% agree and 38.8% strongly agree) acknowledge their tendency to maintain their initial beliefs even when faced with contradictory information. In addition, 48.3% of respondents stated that they were more focused on finding information that only supported their personal beliefs rather than considering different objective data (Budiarto & Susanti, 2017). In the context of the Islamic capital market in DIY, this behavior pattern is also closely related to religious values, where investors often maintain their decisions because they are considered to be in accordance with Islamic principles even though they are financially sub-. As a result, investors become less critical and tend to ignore rational analysis in order to maintain mental comfort regarding their beliefs. Therefore, there is a need to improve Islamic financial literacy, which should not only cover legal aspects but also the ability to manage cognitive biases so that investment decisions become more objective.

The Influence of Regret Aversion Bias on Investment Decision Making in the Sharia Capital Market

The results of the second hypothesis test (H2) show that *regret aversion bias* has a positive and significant effect on Islamic capital market investment decisions among investors in DIY. This is evidenced by an *original sample* value of 0.167, a *t-statistic* of 2.882 (above 1.96), and a *p-value* of 0.004 (below 0.05). This finding supports previous studies that state that the tendency to avoid regret is closely related to and significantly influences the investment decision-making process (Akinkoye & Bankole, 2020; Mahadevi & Asandimitra, 2021; Sinaga & Silalahi, 2022). Based on questionnaire data, this bias is reflected in the high level of investor uncertainty when making decisions due to concerns about losses or uncertain outcomes (36.7% agree; 25.8% strongly agree). In addition, bad investment experiences in the past left respondents with deep regret (34.6% agree; 34.2% strongly agree). This condition is exacerbated by investors' low confidence in understanding or managing investment risks, with the majority of respondents agreeing (37.1%) to strongly agreeing (35%) that they feel inadequate in this aspect. Overall, these findings indicate that emotional factors are more dominant than rational analysis in the investment process in the Islamic capital market. Investors tend to delay or avoid decisions that could potentially cause regret, so they rely more on a sense of security than pursuing greater potential profits. Therefore, the future approach to Islamic investment needs to pay more attention to the psychological aspects of investors so that the decisions made can be more balanced between religious values, risk management, and potential returns.

The Influence of the Framing Effect on Investment Decision-Making in the Islamic Capital Market

The results of the third hypothesis test (H3) show that *the framing effect* has a positive but insignificant effect on investment decisions in the Islamic capital market in DIY, so this hypothesis is rejected. This is based on the *original sample* value of 0.056, *t-statistic* of 0.615 (< 1.96), and *p-value* of 0.538 (> 0.05). This finding is in line with the research by Djaini et al. (2025), which states that the presentation of information as a basis for the formation of perceptions () is not strong enough to significantly influence investment decisions. As explained by experts, investor behavior is a complex process involving analysis, prediction, and in-depth interpretation of information, so that the way information is presented alone is not the sole determining factor (Slovic, 1972; Alfredo & Vicente, 2010 in Aziz, 2015). The questionnaire data shows the psychological dynamics of respondents who initially focused more on potential profits (49.2% agreed; 34.6% strongly agreed) and felt more confident with positive information (48.8% agreed; 43.3% strongly agreed). However, when reevaluating their decisions, respondents shifted their focus to potential losses (40.4% agreed; 39.6% strongly agreed). This inconsistency shows that although *framing* influences initial perceptions, its effect is not consistent enough to strongly influence the final decision. Therefore, it is important for investors to have good literacy skills in order to evaluate information objectively and comprehensively so as not to be trapped by the way the information is presented.

Sharia Financial Literacy Moderates the Influence of Cognitive Dissonance Bias on Investment Decisions

The results of the fourth hypothesis test (H4) show that Islamic financial literacy significantly weakens the influence of *cognitive dissonance bias* on investment decisions. This is evidenced by a *p-value* of 0.049 (< 0.05), a *t-statistic* of 1.970 (> 1.96), and a negative *original sample* value of -0.156. This finding confirms that the higher the level of Islamic financial literacy investors have, the more rational they are in making decisions, because good knowledge encourages the use of objective facts and information to suppress bias tendencies (Stefani & Rahman, 2023; Humairo, 2020). Additionally, strong literacy has been proven to improve decision quality through greater diversification and rationality (Wendy, 2024). Field data reinforces this finding, with the majority of respondents in DIY feeling they have adequate skills in managing personal finances according to Islamic principles (47.5% agree; 40.8% strongly agree). Respondents also showed high confidence in making investment, consumption, and future planning decisions that are in line with Islamic values (46.7% agree; 42.5% strongly agree). Thus, Islamic financial literacy acts as an effective buffer in reducing the negative influence of cognitive dissonance bias, enabling investors in DIY to make more objective and optimal investment decisions while remaining within the corridor of Islamic principles.

Sharia Financial Literacy Moderates the Influence of Regret Aversion Bias on Investment Decisions

The test results show that Islamic financial literacy is not able to significantly weaken the influence of *regret aversion bias* on investment decisions. This is evidenced by a *p-value* of 0.371 (> 0.05), a *t-statistic* of 0.894 (< 1.96), and an *original sample* of 0.067, thus rejecting the hypothesis. This finding indicates that even though investors have a good understanding of Islamic finance principles, this knowledge is not strong enough to mitigate the emotional aspects that arise from trauma or fear of regret in the past (Budiarto & Susanti, 2017). This is in line with Wendy's (2021) research, which concluded that financial literacy is often unable to moderate the relationship between emotional biases such as regret aversion and investment decisions. More deeply, past loss experiences have been proven to have a very strong psychological impact that is difficult to eliminate with only cognitive-normative understanding (Handayani & Mutohar, 2024). In addition to personal trauma factors, questionnaire data shows that social pressure or the opinions of others also reinforce investors' doubts in making decisions (36.7% agree; 35.4% strongly agree). This condition confirms that Islamic financial literacy alone is not enough to create perfectly rational investors. Therefore, an additional educational approach is needed that touches on aspects of psychological management and experience-based education to help investors manage regret and social pressure in order to achieve more objective investment decisions.

Sharia Financial Literacy Moderates the Influence of the Framing Effect on Investment Decisions

The results of testing the sixth hypothesis (H6) show that Islamic financial literacy is unable to significantly moderate the influence of *the framing effect* on investment decisions. This is evidenced by a *p-value* of 0.375 (> 0.05), a *t-statistic* of 0.887 (< 1.96), and an *original sample* of 0.051. These findings indicate that the way information is presented (*framing*) is not a major factor for Islamic investors in DIY, even for those with high literacy. This may occur because investors tend to rely more on intuition (Novianguie, 2019) or prefer technical and fundamental analysis rather than being influenced by the pattern of information presentation. In line with Djaini et al. (2025), because the framing effect itself has a weak influence, financial literacy does not have a strong enough basis to strengthen or weaken this relationship. This condition is also influenced by the profile of the respondents, 64.2% of whom are individuals who have only invested and are not active investors. Their status as inactive investors indicates that the majority of respondents are not consistently involved in decision-making activities in the capital market. As a result, their understanding of Islamic financial literacy is likely only theoretical and not actually applied in a real context. Therefore, even a good level of literacy cannot have a significant impact in moderating the influence of the framing effect on their investment decisions.

E. Conclusions & Policy Recommendations

Based on the analysis and discussion conducted, the following conclusions can be drawn: *Cognitive dissonance bias* has a positive and significant effect on investment decisions. Investors tend to ignore new information and maintain old beliefs in order to avoid mental discomfort, resulting in irrational decisions. *Regret aversion bias* has a positive and significant effect on investment decisions. Fear of regret and trauma from past losses makes investors very cautious or prone to delaying decisions. *The framing effect* has a positive but insignificant effect. The way information is presented (positive/negative) does influence perception, but it is not strong enough to consistently change investors' final decisions.

Sharia financial literacy successfully weakens the influence of *cognitive dissonance bias*. Good knowledge encourages investors to act more rationally and based on data rather than simply following personal beliefs. Sharia financial literacy is unable to moderate *regret aversion bias*. Understanding of sharia theory has proven to be insufficient to dampen the traumatic emotions or social pressures felt by investors. Sharia financial literacy does not moderate *the framing effect*. This is because framing is not a dominant factor, and there is also the influence of low active involvement of respondents in actual capital market activities. Based on these conclusions, the author recommends that financial institutions, capital market authorities, and educational institutions use the results of this study as a basis for designing educational programs that not only improve Islamic financial literacy but also equip investors with emotional management skills and more objective decision-making. In addition, there is a need to develop digital platforms or features that help investors evaluate decisions more rationally and avoid the influence of bias, in order to create a healthy and sustainable Islamic investment ecosystem.

REFERENCES

- Adiba, E. M. (2021). Islamic Financial Literacy and Investment Decisions: A Social Analysis Demography. *Iqtishaduna*, 12(2), 224–233.
<https://doi.org/10.20414/iqtishaduna.v12i2.4224>
- Afrida, N. P., & Sari, D. A. (2021). The Influence of Financial Literacy and Risk Perception on the Investment Interest of STIE YPPI Rembang Students. 977–987.
- Ahmed, Z., Rasool, S., Saleem, Q., Khan, M. A., & Kanwal, S. (2022). The Mediating Role of Risk Perception Between Behavioral Biases and Investors' Investment Decisions. *SAGE Open*, 12(2). <https://doi.org/10.1177/21582440221097394>
- Akinkoye Professor, E. Y., & Bankole Post-Graduate Student, O. E. (2020). Effect of Emotional Biases on Investor's Decision Making in Nigeria. *International Journal of Business and Management Future*, 4(1). www.cribfb.com/journal/index.php/ijbmf
- Alifya, A. R., Yulion, D. A. P., Hidayat, R., & Kusumasari, I. R. (2024). The influence of cognitive bias in decision making on the business world. 1(3).
- Aren, S., & Zengin, A. N. (2016). Influence of Financial Literacy and Risk Perception on Choice of Investment. *Procedia - Social and Behavioral Sciences*, 235(October), 656–663.
<https://doi.org/10.1016/j.sbspro.2016.11.047>
- Ariska, N., & Sugiyanto. (2023). The Influence of Financial Literacy, Financial Efficacy, Overconfidence, Cognitive Dissonance, and Illusion of Control on Investment Decisions Among Investors in Surabaya. 1(6), 6.
- Atikah, N., & Sayudin, S. (2024). Analysis of Sharia Capital Market Development: Challenges and Opportunities in Sharia-Based Investment. *Jurnal Inovasi Global*, 2(1), 204–213.
<https://doi.org/10.58344/jig.v2i1.54>
- Ayudiastuti, L. (2021). Analysis of the Influence of Student Investment Decisions. *Journal of Management Science*, 9(3), 1138–1149. <https://doi.org/10.26740/jim.v9n3.p1138->
- Batubara, Y. (n.d.). Masalah Analysis: Sharia Capital Market as an Investment Instrument in Indonesia.
- Budiarsi, S. Y. (2020). Pendampingan pengenalan program SEM-PLS pada Fakultas Ekonomi Universitas Merdeka Surabaya. *PeKA: Jurnal Pengabdian Kepada Masyarakat*, 3(2), 126–134.
<https://doi.org/10.33508/peka.v3i2.3001>

- Budiarto & Susanti. (2017). The Influence of Financial Literacy, Overconfidence, Regret Aversion Bias, and Risk Tolerance on Investment Decisions (A Study of Investors at PT. Sucorinvest Central Gani Investment Gallery, Surabaya State University). *Angga Budiarto*. 05, 1–9.
- Cahyanti et al. (2021). The Impact of Framing Effect and Self-Efficacy in Investment Decision Making (Analysis of the "Mini Gold: Everyone Can Own Gold" Program). *Journal of Management Science*, 10, 157–168.
- Candra Susanto, P., Ulfah Arini, D., Yuntina, L., Panatap Soehaditama, J., & Nuraeni, N. (2024). Quantitative Research Concepts: Population, Sample, and Data Analysis (A Literature Review). *Journal of Multidisciplinary Science*, 3(1), 1–12. <https://doi.org/10.38035/jim.v3i1.504>
- Claudia, N. (2020). The Influence of Cognitive Bias on Stock Investment Decision Making Among Generation Z in Surabaya with Financial Literacy as a Moderating Variable.
- Darmawan, A. &. (2020). The Influence of Overconfidence, Regret Aversion, Loss Aversion, and Herding Bias on Investment Decisions in Indonesia. 13(3), 175–187.
- Dewi, M., Hamidah, H., & Buchdadi, A. D. (2021). The Influence of Financial Literacy, Experienced Regret, Framing Effect, and Mental Accounting on Millennial Generation Investment Decisions in DKI Jakarta with Risk Tolerance as Intervening Variables. *International Journal on Advanced Science, Education, and Religion*, 4(3), 147–163. <https://doi.org/10.33648/ijoaser.v4i3.155>
- Djaini, L., Syaifuddin, D. T., Saleh, S., Armstrong, V., Manajemen, J., & Oleo, U.H. (2025). <http://jmk.uho.ac.id/index.php/journal/index> ISSN 2685-5151.17(1).
- Elfahmi, R., Astutik, E. P., & Andayani, K. V. (2022). The Influence of Confirmation Bias and Risky Choice Framing on Farmers' Investment Decisions. *Scientific Journal of Reflection: Economic, Accounting, Management and Business*, 5(4), 1234–1246. <https://doi.org/10.37481/sjr.v5i4.602>
- Elisa Daniati Edison, & Hesty Aisyah. (2023). The Effect of Regret Experienced in Investment Decision: an Experimental Study. *International Journal of Asian Business and Management*, 2(1), 85–98. <https://doi.org/10.55927/ijabm.v2i1.3203>
- Fatkhurrozi, M., Innayah, M. N., Tubastuvi, N., & Ikhsani, M. M. (2024). Challenges in Millennials Investment Decision: A Study of Behavioural Biases. *Asian Journal of Economics, Business and Accounting*, 24(5), 60–72. <https://doi.org/10.9734/ajeba/2024/v24i51293>
- Fauzan, M. (n.d.). The Role of the Sharia Capital Market in Driving Economic Growth in Indonesia.
- Feriyana, I., Widiastara, A., & Novitasari, M. (2020). The Influence of Mental Accounting and Framing Effect on Investment Decision Making. *SIMBA: Seminar on Business Management and Accounting Innovation*, II.
- Fitra, Y. A. (2023). The Influence of Investor Behavioral Bias on Investment Decisions in the Stock Market. *JURNAL CAPITAL: Economic Policy, Management and Accounting*, 5(1), 88–98. <https://doi.org/10.33747/capital.v5i1.185>
- Fridana, I. O., & Asandimitra, N. (2020). Analysis of Factors Affecting Investment Decisions (A Study of Female Students in Surabaya). *Jurnal Muara Ilmu Ekonomi Dan Bisnis*, 4(2), 396. <https://doi.org/10.24912/jmieb.v4i2.8729>
- Gradinda Maryama Mayora, & Wiwik Lestari. (2024). The Effect of Risk Perception, Recency Bias, Herding Behavior and Regret Aversion Bias on Investment Decision Making Among The Younger Generation in Surabaya. *Ekspektra: Journal of Business and Management*, 8(1), 80–94. <https://doi.org/10.25139/ekt.v8i1.7482>

- Gunawati, I. S. (2024). Semarang State University. Semarang State University 2005. 4(024), 208–216.
- Gupta & Ahmed. (2017). E-ISSN - 2349-6746 International Journal of Management and Social Science Research Review, Vol-1, Issue-38, August-2017 Page 37 Research Paper E-ISSN - 2349-6746 ISSN - 2349-6738 International Journal of Management and Social Science Research Review. 1(38), 37–40.
- Hayati, R., Azmansyah, Suriyanti, L. H., & Irman, M. (2022). Cognitive Bias in Investment Decisions in Pekanbaru. Journal of Accounting and Economics, 12(1), 64–73. <https://doi.org/10.37859/jae.v12i1.3164>
- Hidajat, T., & Hamdani, M. (2017). Measuring Islamic financial literacy. Advanced Science Letters, 23(8), 7173–7176. <https://doi.org/10.1166/asl.2017.9321>
- Hidayah, E. (2021). Investment Decision: The Analysis of Risk Perception, Regret Aversion Bias Perception, and Overconfidence. Review of Integrative Business and Economics Research, 10(3), 395.
- Holly, A., Jao, R., & Limang, A. (2022). Emotional Bias Behavior and Risk Tolerance in Investment Decision Making. Muhammadiyah Riau Accounting and Business Journal, 4(1), Press. <https://doi.org/10.37859/mrabj.v4i1.4036>
- Humairo, N. (2020). The Influence of Financial Literacy and Sociodemographic Factors on Stock Investment Decisions with Behavioral Bias as an Intervening Variable (A Study of BEI Investment Gallery Members in Malang City).
- Ilfita, K., & Canggi, C. (2021). The influence of Sharia financial literacy, religiosity, and perception of saving on students' interest in Sharia banks. Indonesian Interdisciplinary Journal of Sharia Economics (IIJSE), 3(2), 113–134.
- Jannah, W., & Sri Utami Ady. (2017). Fundamental Analysis, Interest Rates, and Overconfidence Against Investment Decision Making for Investors in Surabaya. Ekspektra: Journal of Business and Management, 1(2), 138.
- Kahneman, D., & Tversky, A. (2021). Prospect Theory: An Analysis of Decision under Risk. The Passion of Perpetua and Felicitas in Late Antiquity, 47(2), 293–298. <https://doi.org/10.2307/j.ctv1kr4n03.21>
- Khairunnisa, & Muhammad Satrio Mubaraq. (2024). Investment Decision-Making Among Students Using Prospect Theory in Behavioral Economics. Fundamental and Applied Management Journal, 2(2), 40–46. <https://doi.org/10.61220/famj.v2i2.2246>
- Khasanah, M. (2019). Equivalence of Islamic Financial Literacy Index with Islamic Financial Inclusion Index in the Islamic Banking Sector: A Case Study of DIY Society. Economica: Journal of Islamic Economics, 10(2), 255–282. <https://doi.org/10.21580/economica.2019.10.2.3241>
- Manuel J&Mathew G . (2017). Impact of Cognitive Biases in Investment Decision of Individual Investors in Stock Market . International Journal of Engineering Technology Management and Applied Sciences , 74-77.
- Mayora, G. M., & Lestari, W. (2024). The Effect of Risk Perception, Recency Bias, Herding Behavior, and Regret Aversion Bias on Investment Decision Making Among the Younger Generation in Surabaya. Ekspektra: Journal of Business and Management, 8(1), 80–94. <https://doi.org/10.25139/ekt.v8i1.7482>
- Moueed, A., & Hunjra, A. I. (2020). Use anger to guide your stock market decision-making: results from Pakistan. Cogent Economics and Finance, 8(1). <https://doi.org/10.1080/23322039.2020.1733279>

- Naharyanto, P. &. (2014). Does the Framing Effect Occur in Investment Decisions Based on Tabular Format Information Risk: The Fuzzy-Trace Theory Framework? *Negina Kencono Putri * Zaki Baridwan Supriyadi Ertambang Nahartyo*. 17(1), 1–18.
- Novianggie, V., & Asandimitra, N. (2019). The Influence of Behavioral Bias, Cognitive Bias Nunnally, J. C. (1978). *Psychometric Theory*, 2nd ed. McGraw-Hill.
- Pasek, G. W., Agus, I. P., & Agung, G. (2019). Effect Framing in Investment Decision Making: A Review of Numerical Ability. 10(2), 125–130.
- Pering, I. M. A. A. (2021). *Journal Satyagraha Abstract*. *Journal Satyagraha*, 03(02), 28–48.
- Pompian. (2006). *Behavioral Finance and Wealth Management: How to Build an Optimal Portfolio for Private Clients*.
- Pradhana, R. W. (2018). The Influence of Financial Literacy, Cognitive Bias, and Emotional Bias on Investment Decisions (A Study of Investors at the Surabaya State University Investment Gallery). 6, 108–117.
- Purwanto, E. (2020). *Fundamental Analysis and Cognitive Dissonance in Making Stock Investment Decisions*
- Puspita, A. T., Lubis, D., & Muthohharoh, M. (2021). Factors Affecting the Level of Islamic Financial Literacy among Muslim Students in Bogor. 9(1), 1–20. <https://doi.org/10.29244/jam.9.1.1-20>
- Putri&Naharyanto. (2014). Do the Framing Effect Occur in the Investment Decision Based on Tabular Format Information Risk: A Fuzzy-Trace Theory Framework? *Negina Kencono Putri * Zaki Baridwan Supriyadi*. 17(1), 1–18.
- Putri, W. W., & Hamidi, M. (2019). The Influence of Financial Literacy, Financial Efficacy, and Demographic Factors on Investment Decision Making (Case Study of Master of Management Students at the Faculty of Economics, Andalas University, Padang). *Scientific Journal of Economics and Management Students*, 4(1), 398–412.
- Qoyum Abdul, Berakon Izra & Umar Rizki Al-Hashfi. (2021). *Research Methodology in Islamic Economics and Business: Theory and Application*. Depok: PT RajaGrafindo Persada.
- Rahmawati, F., & Santi, F. (2023). A Literature Review on the Influence of Availability Bias and Overconfidence Bias on Investor Decisions. *East Asian Journal of Multidisciplinary Research*, 2(12), 4961–4976. <https://doi.org/10.55927/eajmr.v2i12.6896>
- Roemanasari, F., Sabela, J., & Rusgianto, S. (2022). Islamic Financial Literacy and Financial Behavior on Investment Intention. *Journal of Applied Economics*, 7(2), 239–250. <https://doi.org/10.20473/jiet.v7i2.40679>
- Sahban, M., Adinugroho, I., & Brehnaputrifajar Khaerudin, R. (2024). Training in Research Data Processing Using the Smart PLS (Partial Least Square) Application. *Community Development Journal*, 5(4), 7379–7383.
- Sari & Dwita. (2024). The Influence of Negative Framing and Monitoring Control on Commitment Escalation in Investment Decision Making. 6(2), 801–816.
- Sari et al. (2024). The Influence of Anchoring, Effect Framing and Overconfidence of Investment Decision Making For The Millennial Generation. *Journal of Accounting, Finance, Taxation and Corporate Governance*, 2(1), 210–226.
- Sattar, M. A., Toseef, M., & Sattar, M. F. (2020). Behavioral finance biases in investment decision making. *Journal of Accounting, Finance and Risk Management*.

- Sinaga, A. N. A., & Silalahi, P. R. (2022). The Influence of Regret Aversion Bias and Overconfidence on Cryptocurrency Investment Decision Making Among Generation Z Investors. PESHUM: Journal of Education, Social Sciences and Humanities, 1(2), 105-112.
- Singh, T., & Sikarwar, G. S. (2015). "The Influence of Investor Psychology on Regret Aversion." 15(2).
- Stefani, A. N., & Rahman, T. (2023). The role of behavioral bias in the relationship between financial literacy, sociodemographic characteristics, and locus of control with sharia stock investment decisions. Journal of Management and Digital Business, 3(2), 57–72. <https://doi.org/10.53088/jmdb.v3i2.597>
- Sugiyanto, A. &. (2023). The Influence of Financial Literacy, Financial Efficacy, Overconfidence, Cognitive Dissonance, and Illusion of Control on Investment Decisions Among Investors in Surabaya. 1(6), 6.
- Sumtoto, A., & Anastasia, N. (2015). Financial Behavior in Investment Decision-Making for Residential Property in Surabaya. Finesta, 3(1), 41–45.
- Rofika, H., Budianto, E. W. H., & Dewi, N. D. T. (2023). *Pemetaan penelitian seputar Maybank Syariah dan konvensional: Studi bibliometrik VOSviewer dan literature review*. Jurnal Ekonomi: Journal of Economic, 14(1), 28–39. <https://ejurnal.esaunggul.ac.id/index.php/Eko/article/view/6463>
- Syarkani, Y., & Tristanto, T. A. (2022). Examining the predictors of crypto investor decision: The relationship between overconfidence, financial literacy, and attitude. International Journal of Research in Business & Social Science, 11(6).
- Tversky, A., & Kahneman D. (1974). Judgment under Uncertainty: Heuristics and Biases: Biases in judgments reveal some heuristics of thinking under uncertainty. Science.
- Updana, I. W. Y., & Herawati, N. T. (2020). The influence of financial literacy and financial behavior on student investment decisions. Scientific Journal of Accounting and Humanika.
- Wahyuni, A. N., & Pramono, N. H. (2021). The Influence of Demographic and Psychological Factors on Investor Investment Decisions in the Digital Economy Era. JABI (Indonesian Journal of Sustainable Accounting), 4(1), 73–91. <https://doi.org/10.32493/jabi.v4i1.y2021.p73-91>
- Wangzhou, K., Khan, M., Hussain, S., Ishfaq, M., & Farooqi, R. (2021). Effect of Regret Aversion and Information Cascade on Investment Decisions in the Real Estate Sector: The Mediating Role of Risk Perception and the Moderating Effect of Financial Literacy. Frontiers in Psychology, 12(October), 1–15. <https://doi.org/10.3389/fpsyg.2021.736753>
- Wilson, J., Hair, C., Knight, R., Catto-Smith, A., Bell, S., Kamm, M., Desmond, P., McNeil, J., & Connell, W. (2010). High incidence of inflammatory bowel disease in Australia: A prospective population-based Australian incidence study. Inflammatory Bowel Diseases, 16(9), 1550–1556. <https://doi.org/10.1002/ibd.21209>
- Wulandari, D. A. (2014). Study of Experienced Regret, Risk Tolerance, Overconfidence. 4(1), 55–66.
- Zahera, S. A., & Bansal, R. (2018). Do investors exhibit behavioral biases in investment decision making? A systematic review. Qualitative Research in Financial Markets, 10(2), 210–251. <https://doi.org/10.1108/QRFM-04-2017-0028>
- Zahro & Singgih. (2016). The Influence of Herding Bias, Overconfidence Bias, and Cognitive Dissonance Bias on Investment Decisions. Journal GEEJ, 4(1), 1–23. http://www.joi.isoss.net/PDFs/Vol-7-no-2-2021/03_J_ISOSS_7_2.pdf