



## Analysis of the Development of an Investment Risk Assessment Model at Bank Syariah Indonesia, Tamalanrea Branch, Makassar City

Syarifuddin\*<sup>1</sup>,

Institut Agama Islam Negeri Manado, Indonesia<sup>1</sup>

[syarifuddin.syarif@iain-manado.ac.id](mailto:syarifuddin.syarif@iain-manado.ac.id),

\*Corresponding Author

Received: November 28, 2025; Revised: December 30, 2025; Published: December 31, 2025

### Abstract

*Sharia financial institutions play an important role in identifying, measuring, and managing risks related to operations and financial products to ensure compliance with sharia principles. This study aims to determine how customer investment risk is developed at Bank Syariah Indonesia (BSI) and what is the appropriate evaluation model to address the risks that occur when investing in Bank Syariah Indonesia (BSI) Tamalanrea Branch, Makassar City. This study uses qualitative research with a descriptive approach and data collection methods through observation and interviews, as well as analysis tools that utilise data reduction. The results of the study show that, first, the development of investment risk in Islamic banks includes financing, market, and reputation risks, which must be managed effectively through comprehensive risk management. Second, the appropriate evaluation models to address the risks that occur when investing in the Indonesian Islamic Bank (BSI) Tamalanrea Branch in Makassar are Risk-Adjusted Return on Capital (RAROC) and Value at Risk (VaR), which are proposed to improve the bank's performance and transparency. This study provides insight into the importance of risk management techniques in supporting the growth and sustainability of Islamic banking in Indonesia.*

**Keywords:** *Islamic Banking; Sharia Risk Management; Investment Risk; Risk-Adjusted Return on Capital (RAROC); Value at Risk (VaR); Bank Syariah Indonesia*

### INTRODUCTION

A report provided by Islamic banks and the Global Stability Report (2010) shows that during the crisis, Islamic banks experienced 38.2% growth in assets and 20% growth in profits. In contrast, conventional banks experienced only 16.3% asset growth and -6.1% profit growth between 2007 and 2008. These findings clearly show that Islamic banks are apparently safer and better at mitigating risk than conventional banks. Most studies evaluating bank performance during the financial crisis show that Islamic banks performed well compared to conventional banks.

Financial institutions have developed various methods to reduce risk and improve their overall performance (Alhammedi, 2020). Risk assessment in Islamic banking is a systematic process to identify, measure, and manage risks associated with Islamic financial operations and products. This process is important to ensure that banks can operate efficiently and in



accordance with Islamic principles. Risk management is one of the practices used by financial institutions to reduce various types of risks (Nelly, Siregar, and Sugianto, 2022).

The presence of Islamic banking in Indonesia began with the establishment of Bank Muamalat Indonesia, which became an important milestone in the life of Islamic banking in Indonesia. The company was founded based on Deed of Establishment No. 1 dated 1 November 1991. Bank Muamalat Indonesia proved its ability to survive in extremely difficult economic conditions, when conventional banks were hit by the economic crisis and had to enter into the government's recapitalisation programme and even be liquidated. This incident raised awareness that the concept of Islamic banking was not just a concept but could also be proven in practice (Farid, 2021).

Sharia banks, upon closer inspection, are one of the most risk-prone businesses. This is because, in carrying out their activities, banks deal extensively with products that carry risk, such as *mudharabah*. Sharia banks are not only faced with traditional risks, such as credit risk, but also risks that arise due to the unique characteristics of their business and contracts. Unique and distinctive risks in Islamic banking include Sharia compliance risk, financing risk, return risk, investment risk, and so on. For this reason, it is crucial for Islamic banks to employ risk management techniques to mitigate potential risks at all times. The evaluation and management of risks for Islamic banking products and services is one of the biggest challenges faced by many Islamic banks today (Novianti, 2019).

The approach used in Islamic banking is very different due to its unique nature, particularly in terms of profit sharing and risk sharing. Compared to conventional banks, Islamic banks deal with many products that are not found in conventional banking, with unique and sometimes significant risks. The central issue is the implications of Sharia compliance for risk management systems. The benefits provided to product users, as well as the high level of innovation in the products, have presented themselves as a practical alternative to conventional finance. Today, Islamic banking deserves recognition as a valuable constituent of the global financial system (Labidi, 2020).

The principles applied in Islamic banking are part of Islamic teachings, especially in the field of economics. Islamic banking functions in the same way as conventional banking, namely as an intermediary between parties with excess funds and parties with insufficient funds (Fasa, 2016). In Indonesia, Islamic banking has grown by more than 30% over the past five years. In 2022, Islamic banking proved its resilience and was able to grow positively, as reflected in the total asset growth of Rp 802.26 trillion or 15.63% (yoy) (Financial Services Authority Report). Currently, it offers a variety of financial products and services. However, Islamic banks currently represent less than 10% of banking assets and deposits in Indonesia (Harahap, M. A., Hafizh, M., & Alam, 2021).

Several problems also occurred at Bank Syariah Indonesia (BSI) in investments, including financing risks, sharia compliance risks, market volatility, lack of diversification, product innovation, etc. Then there is the risk that projects will not generate the estimated profit sharing, which is smaller than expected, and the bank and customers will bear the risk



of loss together. Therefore, as several problems have occurred, research is needed on how to reduce risk, and it is necessary to identify the issues that must be resolved

In identifying and managing these issues, Islamic banks must implement comprehensive risk management from risk recognition to mitigation. This process involves risk identification techniques by tracing risks from their source to their detrimental impact. Risk identification is important to anticipate common risks such as credit risk in Islamic banks, where debtors may default on their debts (Pratama, 2018).

The main objective of implementing risk management in financing is to ensure the continuity of the company's operations in facing various challenges that may arise in Islamic banks. This requires risk managers to devise strategies that can guarantee the smooth operation of the company even after facing serious problems in Islamic banks (Fachryana, 2020).

A systematic process carried out by Bank Syariah Indonesia (BSI) to identify, measure, monitor, and control risks arising from all of the bank's business activities. The implementation of comprehensive risk management aims to protect customer interests, maintain the bank's financial stability, and ensure compliance with sharia principles and applicable regulations. This addresses the issues of how to develop customer investment risk at Bank Syariah Indonesia (BSI) and what is the appropriate method to overcome the risks that arise when investing in Bank Syariah Indonesia (BSI) Tamalanrea Branch, Makassar City.

This research contributes strategically to improving the quality of risk management, customer protection, and the sustainability of Islamic banking performance. A comprehensive, Shariah-based risk assessment model serves not only as an internal control tool but also as a means of increasing public confidence in the Islamic financial system.

## LITERATURE REVIEW

### Investment Risks in Islamic Banks

The term investment comes from the Latin word *investire* (to use), while in English it is called *investment*. The legal term *investment* comes from the English translation, namely *investment of law*. As there is no mention of *investment law* in legislation, it must be sought from various expert opinions and legal dictionaries (Fadilah and Jalaludin, 2019). In the Qur'an, Surah At-Taubah verse 34 explains the prohibition for Muslims against hoarding wealth or idle funds, which reads as follows:

﴿ يَا أَيُّهَا الَّذِينَ آمَنُوا إِنَّ كَثِيرًا مِّنَ الْأَحْبَارِ وَالرُّهْبَانِ لَيَأْكُلُونَ أَمْوَالَ النَّاسِ بِالْبَاطِلِ وَيَصُدُّونَ عَن سَبِيلِ اللَّهِ وَالَّذِينَ يَكْنِزُونَ الذَّهَبَ وَالْفِضَّةَ وَلَا يُنْفِقُوهَا فِي سَبِيلِ اللَّهِ فَبَشِّرْهُمْ بِعَذَابٍ أَلِيمٍ

*O believers! Indeed, many rabbis and monks consume people's wealth wrongfully and hinder 'others' from the Way of Allah. Give good news of a painful torment to those who hoard gold and silver and do not spend it in Allah's cause. (Q.S At-Taubah (9):34)*

Investment risk is the possibility of loss or uncertainty in the results of investment

activities. In other words, this risk reflects the potential that the returns obtained will not meet the investor's initial expectations (Bizhare.id, 2024). In Islamic banking, investment risk is the risk arising from the bank sharing in the losses of the business of customers financed through profit-sharing financing, whether using the next revenue sharing method or the profit and loss sharing method. Investment risk arises when the bank provides profit-sharing financing to customers where the bank shares the risk of losses incurred by the financed customer's business (profit and loss sharing). In this case, the profit-sharing calculation is not only based on the amount of income or sales earned by the customer but is calculated from the profits generated by the customer's business (M. Doni, Bella Juliansia, Putri. T, Sari W.P, 2022).

One of the main risks for Islamic banks is financing risk, whereby Islamic banks must ensure that all products and services offered comply with Sharia law. In addition, market risk is also an important consideration. Economic fluctuations and changes in market conditions can affect the value of investments made by Islamic banks. Reputational risk is also a factor that should not be overlooked. Islamic banks must maintain their image and customer trust by ensuring that all transactions and investments are conducted transparently and in accordance with Sharia principles. One way to minimise these risks is for Islamic banks to implement effective risk management to reduce these risks (M. Sugianto and Azzahra, 2023).

### **Risk Assessment Model**

A risk assessment model is a framework used to identify, analyse and evaluate risks that may affect the achievement of organisational objectives. In the context of Islamic banking, this model must take into account the Sharia principles that govern every transaction. By integrating elements such as financing risk, market risk, and reputational risk, a risk assessment model can provide a comprehensive overview of potential threats and opportunities. In Islamic banking, it is important to adapt this model to suit the unique characteristics of Islamic investment, such as compliance with Sharia law and the principle of profit sharing (Rustam, 2024).

For example, one widely used model is Risk-Adjusted Return on Capital (RAROC), which measures the relative profitability of investments by taking into account the risks taken. This model can be adapted to include Shariah elements, such as profit-sharing financing and liquidity risk. By using this model, Islamic banks can determine whether a particular investment is in line with their long-term objectives, while ensuring that all transactions meet Shariah standards (A. Saha, Ahmad N.H, 2016).

The implementation of a comprehensive risk assessment model enables Islamic banks to be more proactive in managing risk. By utilising technology and data analysis, banks can monitor risk in real time, identify potential problems before they become crises, and adjust their investment strategies. This not only improves financial performance, but also strengthens the bank's reputation in the eyes of its customers (Muffrikha, S & Latifa, 2021). In Sharia banking, the implementation of a risk assessment model involves several elements, such as: (a) risk identification, (b) risk measurement, (c) monitoring, and (d) risk control (Universitas & Leuser, 2024).



## **RESEARCH METHODOLOGY**

This type of research uses qualitative research with a descriptive approach. Data collection methods included observation and interviews conducted with several informants who were employees of the Tamalanrea branch of Bank Syariah Indonesia in Makassar. This was based on the objective of the study, which was to analyse the development of an investment risk evaluation model at the Tamalanrea branch of Bank Syariah Indonesia in Makassar. The researcher used data reduction analysis tools to produce comprehensive data.

## **RESULTS AND DISCUSSION**

### **Customer Investment Risk Development at Bank Syariah Indonesia (BSI)**

In managing investment risks in Islamic banks, banks must implement risk management. Risk management is a core activity of every financial institution, involving the identification, measurement, monitoring and control of risks. Therefore, it is very important for risk managers to have a comprehensive understanding of risks and risk exposure measurement in order to carry out their assigned tasks effectively. In addition, risk management serves as a means of checking whether decisions made regarding risk are in line with business strategies and objectives (Ben Selma Mokni, Echchabi, Azouzu D, 2016).

The concept of risk management encompasses a series of structured and organised steps, including identification, assessment, mapping, development of risk management alternatives, as well as monitoring and control of risk solution implementation (Wirman, 2023). The objective of an effective risk management system is not only to avoid financial losses, but also to ensure that the bank achieves its financial results with a high degree of reliability and consistency (Abdullah, 2019).

There are two elements that are always inherent in every investment, namely return and risk. According to Panji Anoraga and Piji Pakarti, when making an investment, an investor is expected to understand the existence of several risks, as follows:

1. Financial risk, which is the risk borne by investors as a result of the issuer's (shares/bonds) inability to fulfil its obligations to pay dividends (interest) and the principal investment.
2. Market risk, which is the result of a substantial decline in market prices for both stocks in general and specific stocks due to economic inflation, state finances, changes in company management, or government policy in the economic field.
3. Psychological risk, which is the risk for investors who act emotionally in response to changes in share prices based on optimism and pessimism, which can lead to increases and decreases in share prices.

There are more than 400 financial institutions worldwide that operate based on Islamic sharia principles. These institutions provide a variety of services and products. In addition,

the increasing popularity of Islamic banks has led to many risks associated with the unique products they offer. Unlike conventional banks, Islamic banks, with their main characteristics of profit sharing and risk sharing, create their own risks.

There are substantial differences in the concepts and practices used in Islamic and conventional banking systems. As a result, the two types of banks have different styles in recognising and managing different risk exposures related to these differences. Moreover, Islamic banks, with their different characteristics of assets and liabilities, face very different types of risks that are not experienced by most conventional banks, particularly risk sharing and Shariah compliance risks. In addition, Islamic banks are also exposed to risks commonly faced by conventional commercial banks, such as credit, liquidity, and interest rate risks. However, these risks usually take different forms based on the differences in the products and services offered by the two types of banks, which in turn affect the characteristics of the assets and liabilities held by the banks.

Risk management is supported by affirmative verses from the Qur'an and Hadith, thus establishing a tradition that aims to effectively manage the risks arising from the worldly activities of Muslims. Risk management takes preventive measures aimed at blocking sources of risk that could endanger human welfare. As mentioned, profits are certainly linked to risk exposure in Islamic finance. Therefore, efforts are needed to manage various types of risk in accordance with Sharia principles. The spectrum of models and processes covers all risks: credit risk, market risk, interest rate risk, liquidity risk and operational risk.

### **Risks of Sharia Deposit Investments**

Sharia deposits are investments made in sharia banks by adding cash funds for a period of 1 month, 3 months, or 12 months with a certain ratio. The contract used in these deposits is a mudharabah contract. The customer (depositor) in this case is an insurance company acting as shahibul maal and the bank acting as mudharib. The mudharabah contract requires a grace period between deposit and withdrawal so that the funds can be put to work. For placing these funds, the company is entitled to a profit share, which is a certain percentage of the bank's total profits or income during a certain period. There are two types of deposit investments, namely foreign currency deposits (using foreign currencies) and rupiah deposits (Mustofa, 2016).

This percentage is known as the profit sharing ratio, which will be paid at the end of the month or at maturity. The ratio varies between banks. This was confirmed in an interview with Mr Hasrani Said (50), head of the BSI KCP Makassar Tamalanrea 1 branch, who said: 'A deposit is an investment made by depositing funds, which are then managed by the bank, and the profits are divided in half according to an agreement on the percentage ratio for the bank and the customer.'

The return on mudharabah deposits fluctuates in line with the operational performance of the bank concerned. The amount of return earned by depositors depends on the bank's income, the profit-sharing ratio between customers and the bank, the nominal value of customer deposits, the average deposit balance for the period at the bank, and the



deposit term, as this affects the length of the investment. This differs from deposits in conventional banking, which provide a fixed rate of return in the form of an agreed interest rate. In other words, the return depends on: the applicable interest rate, the nominal deposit amount, and the deposit term (Mujibur Rohman, 2018).

In Sharia deposit investment risk management, the Value at Risk (VaR) and Risk Adjusted Return on Capital (RAROC) methods are used, with the VaR method being used to assess the potential losses of mudharabah deposits. VaR is also commonly used as a tool to measure and control market risk. VaR measures the potential losses over a given period of time with several levels of statistical confidence. By looking at the VaR value, banks can assess the risk of returns.

The higher the VaR value, the higher the risk that bank customers will switch to other, more profitable investment products. The RAROC method aims to determine the potential return adjusted for risk. Banks can see whether the returns given to customers are risk-free or not. The higher the RAROC value, the less likely customers will be to switch to other investment products and the more confident they will be in investing with that bank (Kumaidi, 2020).

### **Risks of Sharia Mutual Fund Investment**

According to fatwa No. 20/DSN-MUI/VI/2001, a Sharia mutual fund is a mutual fund that operates according to the provisions and principles of Islamic law, both in the form of an agreement between the investor as the owner of the assets (shahib al-mal/rabb al-mal) with the investment manager as the representative of shahib al-mal, or between the investment manager as shahib al-mal and the investment user. Sharia mutual funds are financial products that refer to the Sharia financial system and are based on Islamic principles. In practice, Sharia mutual funds must obtain permission and a fatwa from the National Sharia Council under the Indonesian Ulema Council (MUI). Basically, Sharia mutual funds and conventional mutual funds are similar in terms of their nature and characteristics. The only difference is in their operational principles and investment portfolio management, which apply Islamic Sharia principles (Masrurroh, 2015).

To invest in mutual funds, investors must understand the types of risks that may arise when purchasing mutual funds. These risks include: the risk of a decline in the net asset value (NAV) of participation units, liquidity risk, market risk, and default risk.

To address these risks, Islamic banks and customers employ several methods, namely:

#### **1. Portfolio Diversification**

For banks, this is done by spreading investments across various types of assets and sectors to reduce risk. As for customers, they must carefully select mutual funds that have diversified portfolios, including stocks, bonds, and money market instruments.

#### **2. Performance Analysis and Investment Manager Selection**

For banks, due diligence is carried out to select investment managers who have a good track record and strategies that are in line with sharia principles. Meanwhile, customers

must carefully select mutual funds that are managed by experienced investment managers who have a good reputation in managing sharia mutual funds.

### 3. Routine Monitoring and Evaluation

For banks, this is done by regularly monitoring mutual fund performance and market conditions in order to take appropriate action. As for customers, they need to evaluate their investment performance and make adjustments if necessary.

### 4. Sharia Compliance Risk Management

For banks, this is done by establishing policies and procedures to ensure that all investments comply with sharia principles. As for customers, they need to ensure that the mutual funds they choose have obtained a fatwa from the sharia authority regarding investment compliance.

### 5. Portfolio Rebalancing

For banks, this is done by regularly checking and adjusting investment portfolios to maintain a balance between risk and return. As for customers, rebalancing investment portfolios ensures that allocations remain in line with investment objectives.

By applying these methods, both banks and customers can manage investment risks in sharia mutual funds more effectively, thereby achieving their desired financial goals. (Sepdiana, 2019).

## **Risks of Investing in Sukuk and Waqf**

Based on DSN-MUI fatwa No. 32/DSN-MUI/IX/2002, sharia securities are long-term securities based on sharia principles issued by issuers to sukuk holders in the form of profit sharing/fees/margins and repaying bond funds at maturity. Sukuk has considerable potential as an instrument for mobilising Islamic financial funds, as it is a long-term financing instrument and an alternative for obtaining project investment funds. Meanwhile, waqf funds have the capacity to generate income as an Islamic social financial activity in the form of sukuk products. Islamic financial instruments are an important part of national development. These instruments are quite effective in reducing poverty and addressing income inequality in order to improve economic welfare and meet the needs of the community (Syairozi and Cahya, 2016).

Waqf-based sukuk is an innovation in empowering the many unproductive waqf assets in Indonesia. This is because, in essence, waqf should continue to grow and generate benefits without reducing the core value of the original waqf assets. Sukuk-based waqf is based on two different contracts, namely: first, waqf. Waqf is built on a social contract, where the waqif does not expect any material returns, but rather seeks the pleasure of Allah SWT and the benefits of waqf for the people, which are managed through a nadzir. Second, sukuk. Sukuk is built on an ijaroh contract, which has a business nature. The two different objectives of the sukuk-based waqf contracts are combined for the sake of greater benefit (Sulistiani, 2015).

Sukuk and waqf are two different instruments, but they are combined into one through



waqf sukuk with the aim of obtaining greater benefits. Sukuk is based on an ijarah contract, which has a business nature, while waqf is based on a contract that is social in nature, with no returns. Waqf sukuk is sukuk based on an ijarah contract, because ijarah has flexibility and good potential. The characteristics of ijarah are that sukuk holders jointly bear the risk of the asset, the costs associated with ownership, and the rental income is distributed to sukuk holders. The emergence of additional or unexpected costs for leased assets, as well as the possibility of failure and absolute fixed returns, even though many investors respond that absolute fixed returns are contrary to the Islamic financial system (Prastiwi, 2017). Sukuk and the Sharia financial industry in general face several unique risks. Some of these are:

1. Liquidity risk

Islamic financial institutions do not provide guarantees of return on deposits or investments made by investors. Therefore, investors can transfer their money to other financial institutions if the returns do not meet their expectations (Oktayani, 2017). Customers or investors can quickly withdraw their funds. An effort to minimise this risk is to implement a partnership method whereby investors provide equity capital and shares in exchange for business rewards. In other cases, the capital structure of Islamic companies can serve as its own risk management, as the partnership structure in Islamic companies encourages the partners themselves to make the necessary efforts to identify, measure and manage risks (Harahap, R.A & Siregar, 2022).

2. Risk of default (sukuk default)

The risk of default is associated with the possibility that the borrower will fail to make repayments on the due date. Sukuk default also occurs when the borrower is unable to pay interest. This will affect the interest rate charged on a debt instrument. The greater the risk of default, the higher the interest rate charged by the lender. (Wulandari & Sipahutar, 2021). An increase in the borrower's operating cash flow risk will also increase the likelihood of default.

Default on sukuk occurs due to a breach of binding obligations under the initial agreement between the contracting parties, namely the sukuk issuer and the holder. However, sukuk are considered safer than conventional bonds, which are based on interest and are not backed by assets, whereas sukuk offer guaranteed returns because they are backed by assets (Utami & Silaen, 2018).

3. Risk of Sharia non-compliance

Sharia non-compliance risk is a risk that arises due to the failure of sharia financial instruments or contracts to comply with the sharia rules and principles determined by the sharia supervisory board. Sharia compliance risk in sukuk is described as the risk of asset value loss because the issuance of sharia-compliant or non-sharia-compliant sukuk can affect the reputation of the sukuk itself and can affect investor confidence in sukuk (Komariyah & Triyuwono, 2016).

The preparation of sukuk needs to be carried out not only by the sukuk issuer but also by the Sharia Supervisory Board to assess the compliance risks involved. It also

needs to be reviewed by internal and external advisors during the sukuk product development process, because even if there is a fatwa stating that the sukuk is halal or not, not everyone will agree, and there will be parties who oppose it and provide their understanding, which will be taken into consideration by all parties. (Dede, 2019).

The implementation of Good Corporate Governance (GCG) in productive waqf investments is very important to improve accountability and transparency in waqf fund management. Good Corporate Governance is a set of principles and practices that aim to regulate the relationship between management, shareholders, and other stakeholders. GCG focuses on transparency, accountability, responsibility, and fairness in organisational management, including in waqf management. The implementation of good GCG can increase public trust in waqf management institutions. This trust is important to attract more donors and waqif, which in turn will increase the potential of funds managed. GCG encourages waqf institutions to report the use of funds openly and accountably (Triwibowo, 2020).

This includes the submission of clear and accountable financial reports, so that waqf donors can see the impact of their waqf investments. By applying GCG principles, waqf funds can be managed more efficiently. This includes better decision-making in investments, so that waqf funds can be used for productive projects that provide long-term benefits to the community. In the context of waqf, the application of GCG must also take into account sharia principles. This includes compliance with Islamic law in the management of waqf assets, which can increase the legitimacy and acceptance of the institution by the community. The application of Good Corporate Governance in productive waqf investments not only increases efficiency and accountability, but also strengthens public trust in waqf management. By applying GCG principles, waqf institutions can better manage funds and provide greater benefits to the community. (Syahrullah, 2024).

### Risks of Investing in Gold

BSI has two gold products, namely gold pawn and gold instalment. The differences between gold pawn and gold instalment (gold instalment financing product) are shown in the table below.

No	Product Name	
	Gold Pawn	Gold instalments
1	The customer already has gold.	The customer does not yet own any gold.
2	Deposited in a bank as collateral for debt	Deposited in a bank as collateral for financing instalments
3	Using Qard	Using Murabahah contracts
4	There are maintenance costs	There are no maintenance fees, only administrative fees and insurance at the beginning of the contract.
5	Taken when the customer has repaid the debt according to the agreed	The gold can be collected once the instalments have been paid in full.



	period	
6	There is no limit to the weight of gold that can be pawned.	There is a limit on the weight of gold that will be purchased.

From several differences that researchers have outlined, it is known that gold pawn and gold instalments are two different gold products. The gold instalment product provides an opportunity for the public to own gold bars by paying in instalments. The contract used in financing gold ownership is murabahah. BSI utilises this to meet the public's need for investment products. Gold is a commodity with high demand, whether for asset protection, security purposes, hajj savings, or investment. The price of gold in the world tends to rise in the long term. (Fauziyah and Surya, 2016).

Gold pawn products have minimal risk. This is because gold is a highly liquid commodity that can be easily traded, but this does not rule out the possibility of risk, especially since the COVID-19 pandemic, when gold pawn financing has increased. Given the possibility of risk in gold pawn financing, banks need to manage risk. Optimal risk control requires risk management (Sudarmanto, 2021). Gold pawn risk management is the process of identifying, measuring, monitoring and managing risks arising from gold pawn financial products. Risks may arise due to several factors, both internal (the bank) as the manager and external (customers or other related parties). (Rahmany, 2017).

### **Customer Investment Risk at Bank Syariah Indonesia (BSI) KCP Makassar**

Some of the risks that may arise from gold pawn products include the following: high gold pawn estimates, theft of collateral, fictitious pawn, piggyback pawn, and withholding of redemption. Based on the results of research and interviews at BSI KCP Makassar Tamalanrea 1, there are four risks in gold investment, which include:

#### 1. Market Risk

Based on the survey results, investing in gold does not carry a high market risk because BSI KCP Makassar Tamalanrea 1 has strict regulations, such as in the event of default or non-payment, there are no penalties but quick auction execution. So, if a customer is late in making a payment, they will not be charged a penalty, but if they continue to default on their instalments, their property will be auctioned off immediately. This statement was also conveyed directly by Hasrani Said, the branch manager (interview on 10 December 2024).

According to (Mushawir Rosyidi, 2022), In his journal findings, he emphasises that although gold financing products are often considered more stable than other instruments, market risk still exists due to fluctuations in gold prices, and banks/institutions need to implement structured risk management to minimise losses.

#### 2. Credit Risk

According to interviews with BSI KCP Makassar Tamalanrea 1, market risks often result in fluctuations in the price of gold. The risk of a decline in the price of gold has a significant impact on collateral value. In the case of BSI KCP Makassar Tamalanrea 1,

the decline in gold prices can still be controlled. This is because BSI uses the HTBI (Bank Indonesia Middle Rate), which is not quite 100% of the market price. However, if the price of gold falls and cannot be covered, an adjustment request will be submitted to the centre to request relief, at least in the form of a reduction in costs, which is the most important thing.

The decline in gold prices is also influenced by foreign policy factors. This is confirmed by Hasrani Said (50), who said: 'If there are macroeconomic conditions occurring abroad, this will affect the dollar exchange rate, which will cause gold prices to decline steadily from year to year.

According to (Sapitri, 2024) In his journal findings, he emphasises the importance of considering the factor of gold price fluctuations in the strategy of distributing rahn pawn financing at Pegadaian Syariah Indonesia. Although income levels do not have a significant impact, the increase in profitability resulting from gold price fluctuations can be an opportunity for financial institutions such as Pegadaian Syariah to improve their services and expand their financing reach.

### 3. Operational Risk

Based on data from interviews with BSI KCP Makassar Tamalanrea 1, it was found that the appraisal of collateral must be accurate because it can affect the value of the collateral and can harm the bank itself. Several methods used in testing gold are the friction method, calculating specific gravity, and using the scan method (applications such as Certieye or barcode scanners). This was conveyed directly by Hasrani Said (50 years old), who explained that in addition to errors in appraisal by employees, human error can also occur in the form of negligence in data input. Input errors are a very high risk, because if data is entered incorrectly, it will harm the bank.

According to (Rivayanty et al., 2025), In a study on the implementation of operational risk management at a regional bank, it was found that human error remains a major obstacle despite the bank having strict procedures and controls in place. Data entry errors are a significant challenge that is difficult to eliminate completely. This is in line with findings at BSI KCP Makassar Tamalanrea 1, which identified human error as a significant risk.

### 4. Marketing Risk

Based on an interview with Anggun Afdillah (21 years old), an internship student, one of the risks faced by BSI KCP Makassar Tamalanrea 1 in gold investment financing is marketing risk. Marketing risks occur, such as the process of introducing gold pawn products to customers, which can only be focused on social media.

According to (Resta Nur Handayani, Muhammad Iqbal Fasa, 2023) The main focus is on Islamic banking marketing strategies in general, based on a review of relevant literature in Indonesia. It does not directly discuss marketing risks, but it is highly relevant to compare general marketing strategies with the risks faced by BSI.



## **An evaluation model to address the risks involved in investing in the Tamalanrea Branch of Bank Syariah Indonesia (BSI) in Makassar City**

The appropriate evaluation models for addressing the risks involved in investing in the Tamalanrea Branch of Bank Syariah Indonesia (BSI) in Makassar are Risk-Adjusted Return on Capital (RAROC) and Value at Risk (VaR).

### **1. Risk-Adjusted Return on Capital (RAROC)**

RAROC is an evaluation model used to measure the level of investment returns by considering the risks inherent in the investment. This model is highly relevant to Islamic banking because it emphasises the prudential principle.

*RAROC formula:*

$$\text{RAROC} = \frac{\text{Expected Return} - \text{Expected Loss}}{\text{Economic Capital}}$$

Implementation at BSI Tamalanrea Branch:

- a. Used to evaluate the feasibility of sharia-based financing such as murabahah, mudharabah, and musyarakah.
- b. Assists management in determining whether an investment or financing provides a return commensurate with the risks incurred.
- c. Supports investment decisions that are in line with the principles of fairness and profit sharing in Islamic banking.

Benefits of RAROC: Optimises bank capital allocation, reduces potential for non-performing financing, and improves the stability and profitability of Islamic banks.

From other research according to (Abrar Amri, 2020) shows that risk affects mudarabah financing, while returns do not affect mudarabah financing. Meanwhile, it simultaneously shows that risk and returns affect mudarabah financing at the Sharia People's Financing Bank.

### **2. Value at Risk (VaR)**

Value at Risk (VaR) is a risk measurement method used to estimate the maximum loss that may occur in an investment portfolio within a certain period of time with a certain level of confidence.

Implementation at BSI Tamalanrea Branch:

- a. Measuring market risk to sharia investment portfolios.
- b. Assisting banks in anticipating fluctuations in asset values due to changes in economic conditions.
- c. Used as a risk control tool and for setting risk tolerance limits (risk appetite).

Benefits of VaR: Provides a quantitative overview of potential losses. Assists in preventive risk management planning. Supports compliance with banking regulations and prudential principles.

According to (Sari, 2024) in his findings that all equity-based and debt-based financing produces stable risks and returns. However, equity-based financing produces higher returns, but at the same time creates higher risks due to its uncertain nature. The results of the study also show that risk management in Islamic banks has gradually improved during the observation period, as indicated by the average portfolio combination score. This finding has implications for Islamic banks, which are advised to strike a balance between equity-based financing products and debt-based financing. At the same time, Islamic banks are also advised to strengthen risk management, particularly for murabahah products in equity-based financing.

This study offers in-depth insights into the development of an investment risk evaluation model in Islamic banking, with a focus on Bank Syariah Indonesia (BSI) KCP Makassar Tamalanrea. In the context of Islamic banking, risk management is a crucial aspect given the uniqueness of Sharia-based products, such as profit sharing and mudharabah-based financing. This study explores various types of risks faced by Islamic banks, such as financing, market, reputation, and compliance with sharia principles, and proposes the use of more integrated risk assessment models such as Value at Risk (VaR) and Risk-Adjusted Return on Capital (RAROC).

This is expected to increase transparency and effectiveness in risk management, as well as strengthen the position of Islamic banking as a more stable and sustainable option compared to the conventional banking system. This research is important because it provides insight into how Sharia-based risk management can support the stability and sustainability of Islamic banking as an alternative to the conventional banking system.

This study presents accurate information about the development of investment risk assessment in Islamic banking, which will certainly provide information and make it easier for the public to sort through the investments available at Indonesian Islamic banks. The public will certainly understand the differences between investment products in conventional banking and Islamic banking, as well as the benefits and risks of investing in Indonesian Islamic banks. Therefore, this research is expected to attract public interest in learning about products offered by Indonesian Islamic banks and even provide accurate information about investment procedures in accordance with sharia principles.

Regarding the investment risks associated with Islamic banking, Hasrani, head of the Tamalanrea branch of BSI, stated that one type of investment with very low risk is gold instalment investment, because the price of gold has never declined year on year, meaning that the risk of loss on gold instalment investments is very small. This certainly has a positive impact on people who are investing in gold instalments at Bank Syariah Indonesia (BSI).

## CONCLUSION AND RECOMMENDATIONS

Research findings indicate that investment risks in Islamic banking include financing risks, market risks, reputational risks, and risks of non-compliance with Sharia principles.



<https://doi.org/10.53491/oikonomika.v6i2.1916>

[Creative Commons Attribution-ShareAlike 4.0 International License.](https://creativecommons.org/licenses/by-sa/4.0/)

Risk evaluation models such as Value at Risk (VaR) and Risk-Adjusted Return on Capital (RAROC) are important for assessing potential losses and risk-adjusted returns. In addition, portfolio diversification, performance analysis, routine monitoring, and the implementation of Good Corporate Governance (GCG) are highly recommended for managing risks in various types of investments, including mudharabah deposits, Islamic mutual funds, sukuk, waqf, and gold investments. The main conclusion is that the implementation of comprehensive risk management based on sharia principles, such as risk identification, measurement, monitoring, and control, can increase investor confidence and the performance of Islamic banking. This supports Islamic banking as a more stable and efficient alternative to conventional banking.

It is hoped that Islamic banks can improve their risk management policies by strengthening existing organisational structures and processes, and providing education and training on risk management to all employees, especially those involved in investment decision-making. Islamic banks can continue to innovate in the development of financial products that are in line with Sharia principles. This will not only attract more customers, but also help to diversify investment risks.

## REFERENCES

- A. Saha, Ahmad N.H, & Y. S. . (2016). Evaluation of Performance of Malaysian Banks in Risk Adjusted Return on Capital (RAROC) and Economics Value Added (EVA) Framework. *Asian Academy of Management Journal of Accounting & Finance*, 12(1).
- Abdullah, S. . (2019). Risk Management and Corporate Governance: An Islamic Perspective. *Research in Corporate and Shari'ah Governance in the Muslim World: Theory and Practice*, 1–17.
- Abrar Amri, Y. C. O. (2020). Analisis Risiko Dan Pengembalian Hasil Terhadap Pembiayaan Mudarabah Pada Bank Pembiayaan Rakyat Syariah (Bprs). *Akbis Media Riset Akuntansi Dan Bisnis*, 4(2), 141–150.
- Bambang Rianto Rustam. (2013). *Manajemen Risiko Perbankan Syariah di Indonesia*. Salemba Empat.
- Ben Selma Mokni, Echchabi, Azouzu D, & R. H. (2016). Risk management tools practiced in Islamic banks: evidence in MENA region. *Journal of Islamic Accounting and Business Research*, 5(1), 77–97.
- Bizhare.id. (2024). *Risiko Investasi: Pengertian dan Cara Meminimalisirnya*. PT Investasi Digital Nusantara.
- Dede, D. (2019). Konsep Hukum Sukuk Daerah Sebagai Alternatif Pembiayaan Daerah. *Jurnal Pemuliaan Hukum*, 2(2).
- Fachryana, F. A. . (2020). Manajemen Risiko Strategis Bank Syariah. *Jurnal Manajemen, Ekonomi, Keuangan Dan Akunatansi*, 1((2)), 067–080.
- Fadilah, A. N., & Jalaludin. (2019). Manajemen risiko investasi pada perbankan syariah. *Eksibank*, 3(1), 40–48.

- Farid, M. (2021). Manajemen Risiko dan Perbankan Syariah. *Jurnal Akuntansi Dan Keuangan Islam*, 3(2), 067–080.
- Fasa, M. I. (2016). Manajemen Risiko Perbankan Syariah di Indonesia. *Li Falah: Jurnal Studi Ekonomi Dan Bisnis Islam*, 1(2), 36–53.
- Fauziyah, A., & Surya, M. E. (2016). Peluang Investasi Emas (Anggriani Fauziyah, Mintaraga Eman Surya). *Islamadina : Jurnal Pemikiran Islam*, 16(1), 57–73.
- Harahap, M. A., Hafizh, M., & Alam, A. P. (2021). Analisis Data Panel Pengaruh PDRB, BI Rate dan IPM Terhadap Tabungan Bank. *Bank. Jurnal EMT KITA*, 5(2), 146–156.
- Harahap, R.A & Siregar, S. (2022). Investasi Bagi Hasil di Bank Syariah: Perspektif Akuntansi. *Jurnal Ilmiah Ekonomi Islam*, 8(1), 750–760.
- Komariyah, S. N & Triyuwono, I. (2016). Persepsi Akademisi Terhadap Risiko Kepatuhan Syariah Sukuk Di Indonesia. *Urnal Ilmiah Mahasiswa FEB*, 3(2).
- Kumaidi, H. E. P. (2020). *Pengelolaan Deposito Mudharabah Mutlaqah: Analisis Manajemen Risiko dan Strategis Bersaing*. 1–18.
- Labidi, C. & J. G. (2020). . Banks, Funds, and risks in islamic finance: Literature & future research avenues. *Finance Research Letters*, 41(101815).
- M. Doni, Bella Juliansia, Putri. T, Sari W.P, A. R. (2022). Manajemen Risiko Likuiditas pada Perbankan Syariah. *Jurnal Manajemen Bisnis Syariah*, 8(2), 750–760.
- M. Sugianto, Azzahra, M. F. . (2023). Implementasi Manajemen Risiko Bank Syariah Indonesia (BSI). *Innovative: Jjournal Of Social Science Research*, 3(6), 10778–10787.
- Masruroh, A. (2015). Konsep Dasar Investasi Reksa Dana. *Jurnal Filsafat Dan Budaya Hukum*, 84–96.
- Muffrikha, S & Latifa, F. . (2021). Implementasi Manajemen Risiko Pembiayaan pada BSI KCP Mojokerto Bangsal. *Jurnal Ilmiah Ekonomi Islam*, 7(3).
- Mujibur Rohman, M. (2018). Tinjauan Umum Tentang Investasi. *Journal of Applied Business Administration*, 4(1), 1–22.
- Mushawir Rosyidi, R. T. (2022). Analisis Manajemen Risiko Pembiayaan Gadai Emas (Studi Kasus Bank Mandiri Syariah Cabang Pancor). *Al Birru*, II(1), 1–11.
- Mustofa, P. (2016). Analisis Risiko Investasi Deposito Mudharabah (Studi pada Bank Syariah Mandiri Tahun 2013-2015). *Jurnal Ilmiah Ekonomi Islam*, 2(02).
- Nelly, R., Siregar, S., & Sugianto, S. (2022). Analisis Manajemen Risiko Pada Bank Syariah: Tinjauan Literatur . *Reslaj : Religion Education Social Laa Roiba Journal*, 4(4), 918–930. <https://doi.org/10.47467/reslaj.v4i4.1008>
- Novianti, D. (2019). Pengembangan Kerangka Manajemen Risiko Pada Perbankan Syariah. *Asy Syar'Iyyah: Jurnal Ilmu Syari'Ab Dan Perbankan Islam*, 4(1), 46–67. <https://doi.org/10.32923/asy.v4i1.996>



- Oktayani, D. (2017). Umat Islam Dan Lembaga Keuangan Berbasis Bunga. *IQTISHADUNA. Jurnal Ilmiah Ekonomi Kita*, 6(1), 50–65.
- Prastiwi, I. E. (2017). Perkembangan Instrumen Sukuk dalam Mendukung Pembangunan Infrastruktur. *Jurnal Ilmiah Ekonomi Islam Surakarta*, 3(3).
- Rahmany. (2017). Sistem Pengendalian Internal dan Sistem Manajemen Risiko Pembiayaan Pada Bank Syariah. *Iqtishaduna: Jurnal Ilmiah Ekonomi Kita*, 6(2), 193–222.
- Resta Nur Handayani, Muhammad Iqbal Fasa, S. (2023). Strategi pemasaran produk bank syariah di tengah pesatnya pertumbuhan industri perbankan syariah di indonesia. *Jurnal JUMANIS-BAJA*, 05(1), 1–10.
- Rivayanty, D. P., Fuadi, A., & Alam, A. P. (2025). Analisis Penerapan Manajemen Risiko Operasional Pada PT Bank Sumut KCP Pangkalan Susu. *Jeksyah*, 4(1), 106–122.
- S., Archer Alhammadi & Asutay, M. (2020). Risk Manajemen and Corporate Governance Failures in Islamic Banks: a case stufy. *Journal Islamic and Accounting and Business Research*, 11(9), 1921–1939.
- Sapitri, N. A. (2024). Penyaluran Pembiayaan Gadai Rahn Berdasarkan Tingkat Pendapatan Dan Fluktuasi Harga Emas. *Jurnal Akunsyah*, 4(2), 51–68.
- Sari, N. (2024). Managing Financing Risk Of Islamic Banking Products In Indonesia : A Value At Risk Approach. *Jurnal Ilmiah ISLAM FUTURA*, 24(1), 213–240.
- Sepdiana, N. (2019). Kinerja Reksa Dana di Pasar Modal Indonesia. *JAS (Journal Akuntansi Syariah)*, 3(1), 118–132.
- Sudarmanto. (2021). *Manajemen Risiko Perbankan. Yayasan Ki*.
- Sulistiani, S. dkk. (2015). Analisis hukum Islam terhadap pengembangan wakaf berbasis sukuk untuk pemberdayaan tanah yang tidak produktif di Indonesia. *Jurnal Wacana Hukum Islam Dan Kemanusiaan*.
- Syahrullah, M. (2024). Mitigasi Resiko Investasi Wakaf Produktif. *Qonun Iqtishad El Madani Journal*, 3(2), 111–121.
- Syairozi, M. I., & Cahya, S. B. (2016). *Sukuk Al Intifa'a: Integrasi Sukuk Dan Wakaf Dalam Meningkatkan Produktifitas Sektor Wakaf Pendorong Investasi Pada Pasar Modal Syariah*. II(2), 386–397.
- Triwibowo, A. (2020). PrinsipPrinsip Good Corporate Governance dalam Pengelolaan Wakaf Tunai pada Badan Wakaf Uang Tunai MUI Yogyakarta (Tapis). *Jurnal Penelitian Ilmiah*, 4(1), 123–146.
- Universitas, S., & Leuser, G. (2024). *Analisis Manajemen Risiko Pada Perusahaan Asuransi Syariah Indonesia*. 75–82.
- Utami, U & Silaen, U. (2018). Analisis Pengaruh Risiko Kredit dan Risiko Operasional Terhadap Profitabilitas Bank. *Jurnal Ilmiah Manajemen Kesatuan*, 6(3), 123–130.
- Wirman, S. H. &. (2023). Implementasi Manajemen Risiko Dalam Dunia Perbankan Syariah.

*Jurnal Ilmiah Wahana Pendidikan*, 9(5), 500–513.

Wulandari, Dini & Sipahutar, M. A. (2021). Pengaruh Loan To Deposit Ratio Dan Tingkat Suku Bunga Kredit Terhadap Return On Asset. *Jurnal Ilmiah Manajemen Kesatuan*, 9(1), 107–114.



<https://doi.org/10.53491/oikonomika.v6i2.1916>

[Creative Commons Attribution-ShareAlike 4.0 International License.](#)