

## Optimizing Risk Management of Sustainable Mortgage Financing at Islamic Bank in Indonesia

Fahmi Ilham Fadjar <sup>1\*</sup>

<sup>1\*</sup> State Islamic University of Maulana Malik Ibrahim Malang  
[fahmifadjar38@gmail.com](mailto:fahmifadjar38@gmail.com)

Accepted: 23-10-2025	Revised: 30-10-2025	Published: 20-12-2025
----------------------	---------------------	-----------------------

**Abstract:** The significant growth of sharia mortgage financing in Indonesia requires optimal risk management so that the sustainability and stability of sharia financial institutions can be maintained. This article examines risk management strategies in sustainable sharia mortgage financing by emphasizing the importance of systematic risk identification, measurement, monitoring, and control processes. The author identifies six main risk categories, namely financing risk, market risk, liquidity risk, operational risk, sharia compliance risk, and external risk. Through an analysis of the stages of risk management and additional strategies such as portfolio diversification, compliance with sharia principles, and the use of protection instruments, this article highlights the need for an integrated risk management approach that is in accordance with maqashid sharia. The results of this study are expected to provide theoretical and practical contributions in strengthening the sharia mortgage financing system that is adaptive, transparent, and long-term oriented.

**Keywords:** Risk Management, Home Ownership Credit Financing, Islamic Bank

### Citation:

Fadjar, F., I. (2025). Optimizing Risk Management of Sustainable Mortgage Financing at Islamic Bank in Indonesia. *JEBMAFA: Journal of Economics, Business, Management, Accounting, Finance, and Administration*, 1(1), 10-19.

---

## INTRODUCTION

Islamic banking in Indonesia has continued to experience significant growth in recent decades (OJK, 2025). The adoption of Law No. 21 of 2008 on Islamic Banking further strengthened its legal foundation and encouraged its accelerated growth in the early 1990s and has been running for more than thirty years (Tuzzuhro et al., 2023). The government merged three state-owned Islamic banks in 2021 and formed Bank Syariah Indonesia (BSI), which strengthened the position of Islamic banking in Indonesia. Since then, BSI has grown to become the largest Islamic bank in the country and continues to record impressive increases in assets and financing (Yusnita, 2024).

The Financial Services Authority (OJK) noted that in October 2023, the total assets of Islamic commercial banks (BUS) and Islamic business units (UUS) reached IDR 811.96 trillion, consisting of BUS assets of IDR 550.91 trillion and UUS of IDR 261.04 trillion. This data shows a slight increase compared to the previous month, but on an annual basis (year-on-year), the value jumped by around 11.97% compared to October 2022. In January 2024, OJK recorded an increase in BUS and UUS assets to IDR 845.61 trillion, or grew 10.48% on an annual basis. Towards the end of December 2024, OJK reported that Islamic banking assets reached IDR 980.29 trillion, growing 9.88% year-on-year, with a market share of 7.72% of total national banking.

As public awareness of sharia-compliant financial principles grows, Islamic banks have been actively introducing a variety of competitive products. One of the most in-demand products is sharia-based home ownership financing (KPR), offered through contracts such as murabahah, ijarah muntahiyah bittamlik, and musyarakah mutanaqisah (Permatasari & Gojali 2023). Through this product, Islamic banks not only help people have decent housing, but also encourage sustainable economic development (Apriantoro et al, 2024).

Several large Islamic banks, such as BCA Syariah, Bank Syariah Indonesia (BSI), and Bank bjb Syariah, continue to drive significant growth in the distribution of Islamic mortgages. In the first quarter of 2025, BCA Syariah disbursed KPR iB financing of Rp1.3 trillion, recording annual growth of 59.3%. In April 2025, Bank BJB Syariah increased the realization of sharia KPR financing by 13%, from Rp3.01 trillion to Rp3.39 trillion. Meanwhile, BSI posted growth in the griya business or housing sector financing of 8.63% on an annual basis, with total financing reaching Rp58.03 trillion in the first quarter of 2025 (OJK, 2025).

However, the rapid increase in Islamic mortgage financing has also intensified the complexity of risk exposure faced by banks. The main scientific problem lies in how Islamic banks can manage financing risks effectively without compromising sharia principles or long-term sustainability goals (Fitriyani & Giffara 2024). Various external factors such as fluctuations in property prices, instability of customer income, and macroeconomic policy changes can affect financing quality and potentially lead to an increase in non-performing financing (NPF) (Julistia & Hayati, 2022). Poorly managed risks could threaten operational resilience and the stability of the Islamic banking sector (Yulianti & Haribowo 2024).

According to classical risk management theory Damayanti (2023), risk management involves three fundamental stages: identifying, analyzing, and mitigating potential risks to reduce their probability and impact. This framework emphasizes systematic measurement and

---

control as the foundation of financial resilience. When applied to Islamic banking, these stages must be integrated with sharia principles, where risk mitigation not only focuses on financial protection but also aligns with ethical, social, and environmental objectives.

Furthermore, the challenge of managing Islamic mortgage risk extends beyond financial aspects. Banks are required to ensure compliance with sharia values and consider the broader social and environmental implications of their financing activities (Rasnawati et al 2024). Therefore, Islamic banks must shift their focus from short-term profit orientation toward long-term sustainable value creation that benefits society as a whole. Unfortunately, many Islamic financial institutions still face difficulties in implementing comprehensive and integrated risk management systems that balance profitability, sharia compliance, and sustainability (Sururi & Haryono, 2024).

Given these conditions, this article introduces a novelty in the form of an integrative conceptual framework for optimizing risk management in sustainable Islamic mortgage financing. The novelty lies in combining classical risk management theory with maqashid sharia principles to form a holistic approach that strengthens both financial resilience and ethical compliance. Through this framework, the author identifies key risk factors, evaluates current management practices, and proposes strategic improvements that align with long-term sustainability goals. This review is expected to provide meaningful theoretical and practical contributions in developing a resilient, ethically grounded, and sustainable Islamic banking system.

## RESEARCH METHOD

This research uses a qualitative approach with a library research method that focuses on conceptual and theoretical analysis related to optimizing risk management strategies for sustainable mortgage financing at Islamic banks in Indonesia. Research data were obtained from various relevant literature sources, such as scientific journals, books, official reports of the Financial Services Authority (OJK), and Islamic banking publications published in the latest period. The data collection process was carried out by selecting references that have a direct relationship with the topics of risk management, mortgage financing, sharia principles, and sustainability practices. The selection of sources also considers the credibility and currency of the information, so that the resulting analysis can reflect the current condition of the Islamic banking industry. However, this study is limited by its dependence on secondary data sources, which may not fully capture recent dynamic developments or unpublished internal practices of Islamic banks. Therefore, the findings are interpretative in nature and rely on the comprehensiveness and accuracy of the existing literature.

Data analysis was conducted through content analysis techniques with steps of identification, classification, and synthesis of information from various sources to find patterns, concepts, and strategies relevant to the management of Islamic mortgage financing risks. The information obtained is grouped into six main risk categories, namely financing risk, market risk, liquidity risk, operational risk, sharia compliance risk, and external risk. Furthermore, the analysis is directed at evaluating the stages of risk management from identification, measurement, monitoring, to control as well as supporting strategies such as portfolio diversification, sharia compliance, and the use of protection instruments. This

analysis process is carried out systematically to link the literature findings with the *maqashid sharia* principles, so that the research results can make theoretical and practical contributions to the strengthening of a sustainable Islamic mortgage financing system.

**Table 1. Stages of Content Analysis and Their Contribution to Research Findings**

Stage	Main Activities	Direct Contribution to Research Findings
<b>Identification</b>	Collecting and recognizing relevant information from academic and regulatory sources.	Discovery of six major risk categories in Islamic mortgage financing.
<b>Classification</b>	Grouping identified risks according to their characteristics and nature.	Structuring risks into six specific types (financing, market, liquidity, operational, sharia compliance, and external).
<b>Evaluation</b>	Assessing management stages (identification, measurement, monitoring, control) and supporting strategies.	Produces in-depth analysis of how Islamic banks manage and mitigate each risk type.
<b>Synthesis</b>	Integrating findings with <i>maqashid sharia</i> values for theoretical and practical implications.	Provides a conceptual framework for sustainable Islamic mortgage risk management.

Source: Processed by author (2025)

## RESULT AND DISCUSSION

### Result

Risk management is a logical and systematic method used to identify, measure, determine attitudes, determine solutions, and monitor and report risks that arise in any activity or process (Syahrir et al., 2023). The main objective of risk management is to recognize, analyze, and control risks that may occur (Fitriana & Yazid, 2023). Risks in mortgage financing at Islamic banks include several main types of risks that need to be managed effectively so that the financing process runs well and the bank's financial condition remains stable, including:

**Table 2. Six Risk Categories in Islamic Mortgage Financing**

No.	Risk Category	Description	Main Source
1	Credit Risk	Arises when the debtor fails to fulfill installment obligations according to the agreement (delay or default). Influenced by 5C aspects: character, capacity, capital, condition, and collateral.	(Julistia & Hayati, 2023)
2	Market Risk	Occurs due to changes in market conditions such as inflation, property price fluctuations, or interest rate movement that affect	(Fitriana & Yazid, 2023)

		financing returns.	
3	Liquidity Risk	Appears when the bank cannot meet short-term obligations due to lack of liquid assets.	(Syahrir, 2023)
4	Operational Risk	Related to system failure, human error, procedural weakness, or fraud that causes losses or reputational decline.	(Rahmawati, 2024)
5	Sharia Compliance Risk	Risk of violation against sharia principles such as riba, gharar, or forbidden practices, potentially reducing trust and sustainability.	(OJK, 2025)
6	External Risk	Stems from macroeconomic shifts, regulatory changes, or government policy affecting the Islamic mortgage market.	(OJK, 2025)

Source: Processed by the author (2025).

Risk management in sharia mortgage financing is implemented through a series of stages and strategies that are structured and systematic. The main objective is to minimize various types of risks, including financial, operational, and compliance with sharia principles. The following are the main stages in the risk management process of Islamic mortgage financing (Fatihin et., al 2024).

1. Risk Identification (Initial Selection Stage)

At the initial stage, the bank carries out a comprehensive identification and selection process of prospective customers to prevent adverse selection, which is the selection of customers with high risk potential. This process includes identity checks, field surveys, direct interviews, and evaluation of the business legality of prospective debtors. This step aims to ensure that prospective customers meet eligibility standards and have a level of credibility that can be accounted for before financing is approved.

2. Risk Measurement (5C Analysis)

In assessing the eligibility of prospective customers, banks apply the 5C analysis method which includes Character, Capacity, Capital, Collateral, and Condition. Character is used to evaluate the integrity and reputation of the debtor, Capacity to assess the debtor's ability to fulfill payment obligations, Capital to examine the strength of capital owned, Collateral to check the value and validity of collateral, and Condition to review the economic conditions and business environment of the debtor. This approach is very important in estimating the risk of default and determining the appropriate amount of financing (Sukmaningrum, 2023).

3. Risk Monitoring

After disbursing financing, the bank actively monitors customer installment payments

---

on a regular basis. In this process, the bank utilizes an information technology-based monitoring system, such as Sigma software, to support the effectiveness of monitoring. This step aims to enable the bank to immediately identify potential defaults and take mitigation actions quickly and appropriately (Baroroh & Faizin, 2023).

#### 4. Risk Control

Risk control is carried out by effectively managing various aspects, including systems, users, and time. The Bank enforces strict internal procedures and applies the principle of segregation of duties to minimize operational risks. In its implementation, the bank uses a number of risk control strategies, among others: risk avoidance by avoiding high-risk activities; risk reduction to reduce the likelihood of risk occurrence and its impact; risk transfer by transferring risks to third parties, such as through insurance; risk deferral by delaying the implementation of activities until risks can be reduced; and risk retention, which is accepting certain risks as part of an unavoidable business process (Haikal et., al 2024).

##### Additional Strategies in Risk Management

#### 1. Portfolio Diversification

Banks diversify in the type of financing and customer characteristics to reduce risk concentration. This strategy allows a more even spread of risk in the financing portfolio (Kholidah et al., 2024).

#### 2. Compliance with Sharia Principles

All financing activities must comply with sharia principles, which are supervised by the Sharia Supervisory Board (DPS). This compliance is important in maintaining integrity, reputation, and public trust in Islamic financial institutions (Adinugroho et., al 2023).

#### 2. Use of Risk Protection Instruments

The Bank also utilizes risk protection instruments, such as insurance on collateral objects and other risk protection, to reduce potential financial losses due to unexpected events (Adinugroho et., al 2023).

### Discussion

The implementation of risk management in Islamic mortgage financing has a very vital role considering that this sector is directly related to long-term financing involving large nominal values and continuous financial commitment of customers (Maruly, 2023). Financing risk is one of the main threats that can disrupt bank stability if not managed strictly, because the level of default or delay in payment can trigger an increase in the Non-Performing Financing (NPF) ratio. In this context, analyzing customer eligibility using the 5C method serves as a preventive instrument that can reduce the potential for default. This finding is consistent with Sururi & Haryono (2024) who found that a rigorous implementation of financing eligibility analysis significantly lowers NPF levels in Indonesian Islamic banks. However, the effectiveness of this method is highly influenced by the competence of credit analysts, the availability of accurate data, and the utilization of supporting technology such as credit scoring systems. Yusnita (2024) also emphasize that the use of digital-based risk assessment systems enhances accuracy and improves early detection of potential defaults.

Liquidity risk is another challenge that has the potential to pressure the bank's performance, especially when a large number of customers experience delays or defaults

---

simultaneously, thus disrupting cash flow to meet short-term obligations (Mikou et., al 2024). This risk is often closely related to macroeconomic conditions and the stability of people's income. On the other hand, operational risks that include procedural errors, employee negligence, fraud, and information technology system failures require a strong internal control system. Islamic banks in the digital era must ensure operational sustainability by implementing adequate segregation of duties, real-time monitoring, and incident response plans. These findings align with the results of Fitriana & Yazid (2023), who highlight that internal control quality and IT system reliability are key determinants of operational risk reduction in Islamic financial institutions.

Compliance with sharia principles is also a crucial factor, as violations can damage reputation and public trust. Therefore, supervision by the Sharia Supervisory Board (DPS) is not only a formality, but must be proactive in identifying potential deviations early on. (Rasnawati et al 2024) point out that consistent DPS supervision not only ensures sharia compliance but also contributes to the institution's ethical sustainability, aligning with maqashid sharia objectives.

From a sustainability perspective, risk management in Islamic mortgage financing is not merely about minimizing financial loss but also ensuring long-term socio-economic balance. Effective risk mitigation allows Islamic banks to maintain financial health while continuing to provide inclusive housing access and equitable economic participation. This sustainable orientation strengthens the bank's resilience and public trust, ensuring that financing activities contribute positively to social welfare and environmental responsibility (Hasbi & Widayanti 2023).

Additional strategies implemented such as portfolio diversification, Shariah compliance, and the use of risk protection instruments serve as layers of protection that reinforce primary risk management. Diversification helps reduce the concentration of risk in certain types of financing or customer segments, so that the risk of default is not concentrated in one sector alone. Compliance with sharia principles not only fulfills regulatory aspects and Islamic law, but also becomes a unique selling point that strengthens the positive image of Islamic banks in the eyes of the public. Meanwhile, protection instruments such as financing insurance or collateral asset protection can provide a financial buffer against unexpected losses. This is in line with findings by Yusnita (2024), who states that diversification and insurance-based protection mechanisms significantly strengthen the sustainability and stability of Islamic bank performance. The integration of these structured risk management stages and additional strategies, if implemented consistently and supported by technological innovation, will be able to produce an Islamic mortgage financing system that is sustainable, adaptive to market changes, and in line with maqashid sharia, namely creating benefits for the community while maintaining the sustainability of the bank's business.

## CONCLUSION

Risk management in Islamic mortgage financing plays an important role in maintaining the financial sustainability and stability of Islamic banks in Indonesia. The bank actively identifies risks from the outset, assesses customer eligibility through 5C analysis, monitors payments regularly, and controls risks based on sharia principles to prevent defaults and

---

maintain operational continuity. In addition, banks also implement portfolio diversification strategies, ensure compliance with sharia principles, and utilize risk protection instruments to strengthen their risk management systems. By carrying out all these stages and strategies in a comprehensive and integrated manner, Islamic banks can optimally manage risks and support the sustainable growth of mortgage financing.

Islamic banks need to continue to strengthen human resource capacity and optimize the use of information technology to support the process of identifying, monitoring and controlling risks more precisely and efficiently. They must also implement an integrated risk management system that is responsive to market dynamics and regulatory changes, so that risk mitigation strategies can run effectively across all financing lines.

The Sharia Supervisory Board (DPS) should take a more active role in overseeing compliance with sharia principles as well as providing strategic input on adaptive and relevant sharia risk policies. In addition, banks need to develop a variety of mortgage financing products and expand customer coverage to reduce risk concentration and maintain portfolio stability.

Banks should also increase collaboration with guarantee and insurance agencies as a tangible step to transfer risks and protect assets from potential financial losses. By implementing a holistic approach aligned with maqashid sharia, Islamic banks can strengthen the foundation of risk management and build public confidence in a sustainable Islamic financial system.

This study is limited by its qualitative library-based nature, which relies heavily on secondary data and conceptual synthesis from previous literature. As a result, the findings may not fully capture empirical variations across different Islamic banks or regional contexts. Future research is encouraged to conduct empirical investigations using quantitative or mixed-method approaches to test the effectiveness of risk management strategies in practice. Moreover, comparative studies between Islamic and conventional banks, or across different countries with similar sharia-based systems, could provide deeper insights into best practices and innovations that enhance the sustainability of Islamic mortgage financing.

## **ACKNOWLEDGMENTS**

The author gratefully acknowledges the guidance, encouragement, and constructive discussions from lecturers and colleagues at the Faculty of Economics, State Islamic University of Maulana Malik Ibrahim Malang. Appreciation is also extended to the reviewers and readers whose insights are expected to enrich the ongoing discourse on sharia financial risk management.

## **CONFLICTS OF INTEREST**

There are no financial, institutional, or personal relationships that could be perceived as influencing the research outcomes presented in this article.

## **ETHICS STATEMENT**

This article is based on conceptual and analytical research with references to secondary data and literature sources. Since no human or animal subjects were involved, ethical clearance

---

was not required.

## DECLARATION OF GENERATIVE AI

The manuscript was developed entirely by the author without relying on generative AI tools for its content or analysis.

## REFERENCES

- Adinugroho, M., Herlambang, T., Hakiki, M., & Yudianto, F. (2023). The Role of The Sharia Supervisory Board In Sharia Banking In Indonesia. *Islamic Banking: Journal of Islamic Banking Thought and Development*, 9(1), 51-64.
- Apriantoro, M. S., Puspa, E. R., Yafi, D. I., Putri, D. A., & Rosyadi, R. I. (2023). Beyond mortgages: Islamic law and the ethics of credit financing for public housing. *Profetika: Journal of Islamic Studies*, 24(02), 196-206.
- Sukmaningrum, D. A. S., (2023). Customer Feasibility Analysis Using the 5C Principle Method in Mortgage Financing. *Journal of Economics, Management, and Social Studies (JEMES)*, 6(2), 32–42.
- Baroroh, Z. R., & Faizin, M. (2023). Operational Risk Management of Mortgage Financing Products to Minimize Losses in Islamic Banks. *Falahiya: Research Journal of Islamic Banking and Finance*, 2(1), 14–25
- Damayanti, E. S. (2023). Risk Management: In an Overview of Literature Review. *Formosa Journal of Science and Technology*, 2(4), 1115-1122.  
<https://doi.org/10.55927/fjst.v2i4.3837>
- Hasbi, M., & Widayanti, S. (2023). *The Role of the Sharia Supervisory Council (DPS) of Sharia Financial Institutions and Its Supervision System in Compliance with Sharia Principles: Case Study in East Java*. Proceedings of AICIEB Conference, UIN Salatiga.
- Fatihin, M. K., Sapwan, M., & Hadi, N. H. (2024). The impact of risk management on Islamic bank performance in Indonesia. *Indonesian Journal of Islamic Economics and Business*, 9(1), 241–257. <https://doi.org/10.30631/ijoieb.v9i1.2599>
- Fitriana, A. N., & Yazid, M. (2023). Risk analysis and risk management process in Islamic banks. *BISNIS: Jurnal Bisnis dan Manajemen Islam*, 11(1), 12–27.  
<http://dx.doi.org/10.21043/bisnis.v11i1.20954>
- Fitriyani, F., & Giffara, M. (2024). Risk management in Islamic banking: Challenges and management strategies. *Journal of Islamic Banking Studies*, Universitas Muhammadiyah Yogyakarta.
- Haikal, M., Efendi, S., & Ramly, A. (2024). Sharia principles in risk management in Islamic banking: A literature review. *AT-TIJARAH: Journal of Islamic Finance and Banking Research*, 6(2), 44-63
- Julistia, C. E., & Hayati, I. (2022). Analysis of Mortgage Financing Risk Management Using a Murabahah Contract at Bank Syariah Indonesia, Medan Gajah Mada Branch. *Jurnal AKMAMI (Accounting, Management, Economics)*, 3(3), 515–526.
- Maruly, S. D. (2023). Risk management in Sharia financing: Credit risk analysis in Murabahah financing in Islamic banking in Surabaya. *Scientific Journal of Unified Management*. 11(3), 1161-1168.

- 
- Mikou, M., Lahrichi, N., & Achchab, S. (2024). Liquidity risk management in Islamic banks: Review of the literature and future research perspectives. *European Journal of Studies in Management and Business* 29(1), 56–73.
- Permatasari, A., & Gojali, D. (2023). Implementation of iB Hijrah Mortgage Financing Using Murabahah and Musyarakah Mutanaqishah Contracts in Islamic Banking: A Case Study at Bank Muamalat Rancaekek Branch. *Journal of Applied Economics and Accounting*, 2(3). <https://doi.org/10.61132/keat.v2i3.1563>
- Rahmawati, A. T. (2024). The Importance of Operational Risk Management in Islamic Banks to Enhance Stakeholder Confidence. *Maliki Interdisciplinary Journal*, 2(5), 60–64.
- Rasnawati, R., Abdullah, M., & Sumarlin, S. (2024). Ethical Financing and Sustainability Practices in Islamic Banking Institutions. *INVOICE: Journal of Islamic Economics and Finance*, 6(1), 72–85.
- Sururi, S., & Haryono, S. (2024). Does diversification affect financing risk in Indonesian Islamic banks? An ARDL approach. *Share: Journal of Islamic Economics and Finance*, 13(2), 880–905. <https://doi.org/10.22373/share.v13i2.24380>
- Syahrir, D. K., Wahyudi, I., Susanti, S., Darwant, D., & Qizam, I. (2023). Islamic Banking Risk Management. *AKUA: Journal of Accounting and Finance*, 2(1), 58–64. <https://doi.org/10.54259/akua.v2i1.1382>
- Tuzzuhro, F., Rozaini, N., & Yusuf, M. (2023). The Development of Islamic Banking in Indonesia. *PeKA: Journal of Economics and Accounting Education*, 11(2), 78–87.
- Yusnita, R. R. (2024). The Influence of Financing Diversification and Financial Performance on the Risk of Islamic Commercial Banks in Indonesia. *Quantitative Economics and Management Studies*, 5(3), 515-527.