



OPERATIONAL EFFICIENCY OR NON-PERFORMING LOANS? ANALYSIS OF SHARIA BANK PERFORMANCE 2015–2022

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ABSTRACT

This study aims to analyse the influence of credit and operational risks on banking performance in Islamic commercial banks registered with the Financial Services Authority (OJK) from 2015–2022. Credit risk is measured by the Non-Performing Financing (NPF) ratio. In contrast, operational risk is measured by the Operating Expenses to Operating Income (BOPO) ratio, and banking performance is measured by Return on Assets (ROA). Using the multiple linear regression analysis method, this study found that credit risk (NPF) did not significantly affect ROA. In contrast, operational risk (BOPO) significantly affected ROA—the results of the simultaneous test show that the two independent variables together jeopardise the bank's performance. The coefficient of determination (R^2) showed that credit and operational risk could explain 12.2% of the variation in ROA. At the same time, the rest was influenced by other factors not examined in this study. These findings indicate that Islamic bank management needs to focus on managing operational risks to improve efficiency and profitability, although credit risk management is also essential. This study contributes to developing the risk management literature of Islamic banking and suggests further research by considering additional variables.

Keywords: Credit Risk, Operational Risk, Banking Performance, Non-Performing Financing.

INTRODUCTION

Islamic banking in Indonesia has developed into one of the essential pillars in supporting national economic growth (Ernawati, 2019), in line with the increasing demand for financial services based on Islamic values. Islamic banks aim to achieve profitability and emphasise justice, benefit, and economic sustainability as part of a monetary system based on Sharia principles. Islamic banks manage funds with a profit-sharing mechanism, which distinguishes them from conventional banks. However, as the business environment becomes more dynamic, the sector faces complex challenges, including risk management that affects its financial performance.

One of the significant challenges Islamic banks face is credit risk (Husain & Asmawati, 2017), which is often a key indicator of operational stability and success. Credit risk occurs when a customer fails to meet its obligations, either partially or in full, resulting in non-performing financing, reflected in the Non-Performing Financing (NPF) ratio. The high NPF ratio impacts the bank's profitability and reflects the low effectiveness in credit risk management (Syaputra & Rialdy, 2023). This risk has double consequences, considering that customers not only bear financial losses but can also affect the reputation of Islamic banks in maintaining Sharia principles, such as justice and social responsibility.

In addition to credit risk, operational risk is also a significant concern in maintaining the efficiency and sustainability of Islamic bank operations (Claudia & Yusbardini, 2022). Operational risks include a variety of factors, ranging from internal system failures and incorrect procedures to the influence of unexpected external events. In its management, the Operating Expenses to Operating Income (BOPO) ratio is used to measure operational

efficiency. A high BOPO ratio indicates inefficiency in resource management (Yunitasari & Setiawan, 2023), which can ultimately reduce the bank's profitability and competitiveness. This phenomenon has become increasingly crucial given the fierce competition from fintech and big tech companies that offer technology-based financial services, putting additional pressure on Islamic banks to adapt and remain relevant in the digital era.

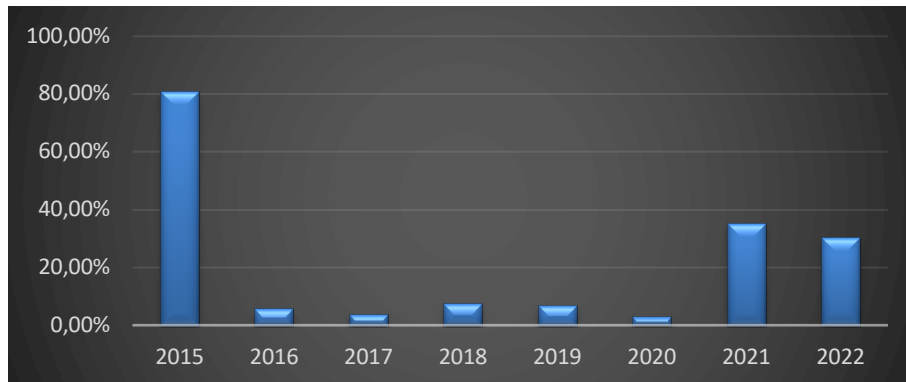


Figure 1. NPF in Islamic Banking

Source: Processed Data, 2024

Data released by the Financial Services Authority (OJK) during 2015-2022 shows fluctuations in Islamic commercial banks' NPF and BOPO ratios. This trend reflects the significant challenges Islamic banks face in maintaining the stability of their performance, especially in the Return on Assets (ROA) indicator, which is a benchmark for bank profitability and efficiency. The data analysis reveals that Islamic banks must adopt more effective risk management strategies to ensure operational efficiency while maintaining profitability.

Studying the influence of credit and operational risks on banking performance is essential, especially to understand how these factors affect ROA as a critical indicator of bank performance. This research is relevant considering the fundamental differences between Islamic banks and conventional banks. Risk management in Islamic banks must be based on sharia principles such as fairness, transparency, and the prohibition of usury. This approach requires solid technical management and deep ethical considerations in every aspect of operations.

This study aims to empirically analyse the influence of credit risk and operational risk on the performance of Islamic banks as measured through ROA. Using data on the financial statements of Islamic commercial banks registered with the OJK from 2015–2022, this study applies a quantitative approach to identify the relationship between these variables. Theoretically, this research is expected to contribute to developing Islamic banking risk management literature. From a practical standpoint, the findings of this study can be a strategic reference for Islamic bank management in designing more efficient risk management policies to increase competitiveness amid the challenges of economic globalisation and technological advancements.

Thus, this research not only enriches the understanding of risk management in Islamic banks but also provides practical recommendations for the banking industry to continue to innovate in answering challenges and maintaining operational sustainability.

LITERATURE REVIEW

Much research has been conducted on banking performance, especially in the context of how the risks faced by banks can affect profitability and operational efficiency. Banking performance is generally measured through financial indicators such as Return on Assets (ROA), which reflects the bank's ability to manage assets to generate profits. ROA is one of the leading indicators to assess the success of bank operations because it measures the effectiveness of overall asset management (Syafina, 2019).

Credit risk is one of the main risks that affect financial performance. Credit risk is potential losses due to the customer's inability to meet their obligations on time (Dewantara & Nufitasari, 2021). In Islamic banks, credit risk is measured using the Non-Performing Financing (NPF) ratio, which refers to non-performing financing. The higher the NPF ratio, the more likely the bank will experience a decline in financial performance. An increase in NPF can indicate poor credit risk management, ultimately negatively impacting ROA (Irawan et al., 2019).

In addition to credit risk, operational risk is essential in determining the bank's financial efficiency and stability. Based on Bank Indonesia Circular Letter No. 13/24/DPNP of 2011, operational risk is defined as risk that arises due to inadequate internal processes, human error, system failures, or adverse external events (Bank Indonesia, 2011). A bank's operational efficiency is measured through the Operating Expenses to Operating Income (BOPO) ratio, which reflects how well it utilises its resources to generate revenue. A high BOPO ratio indicates inefficiency, which can reduce the bank's profitability. The increase in BOPO significantly affected ROA as it showed an uncontrolled operational expense (Irawan et al., 2019).

Previous studies have provided mixed views on the relationship between credit risk, operational risk, and banking performance. Credit risk has a significant effect on ROA, while operational risk has a more complex impact depending on the efficiency of the bank's internal management (Maulidya & Manda, 2021). In contrast, credit risk does not always significantly impact ROA, but operational risk is a crucial determinant of profitability (Serly & Kurniawan, 2020). This difference suggests that the influence of both risks on bank performance may vary depending on the management context and the bank's structure.

From a Sharia perspective, risk management has a unique dimension because it is based on financial efficiency and the principles of fairness and transparency. Credit risk in Islam is considered a test of the parties' responsibility in the financing agreement (Djawas & Hani, 2020). Bad loans due to unstable market conditions can undermine the principle of fairness if not appropriately managed (Tirana et al., 2019). Similarly, operational risk in Islam includes technical efficiency and morality in resource management. Therefore, the risk management approach in Islamic banks requires a strategy that considers sharia principles to maintain financial stability and public trust.

This study's conceptual framework is based on the relationship between credit risk (NPF), operational risk (BOPO), and banking performance (ROA). It seeks to enrich the existing literature by empirically examining the influence of these two risks on Islamic banks registered with the Financial Services Authority (OJK) during the 2015–2022 period. Thus, this research is expected to make a theoretical and practical contribution to developing risk management strategies in Islamic banking.

RESEARCH METHODS

This study uses a quantitative approach to analyse the influence of credit and operational risks on banking performance in Islamic commercial banks registered with the

Financial Services Authority (OJK) from 2015 to 2022. In analysing the data, this study adopts a multiple linear regression model to test the relationship between independent variables (credit risk and operational risk) and dependent variables (banking performance measured by Return on Assets / ROA) (Sugiyono, 2022).

The population in this study is Islamic commercial banks registered with the Financial Services Authority (OJK) from 2015–2022. This study examines secondary data from the annual financial statements of Islamic commercial banks that are available in the official publication of the OJK. The sample used in this study is Islamic commercial banks that meet the following criteria:

1. Registered with OJK during the research period (2015-2022).
2. Publish publicly accessible annual financial statements during the period under study.
3. Providing the financial ratios needed in this study, namely the NPF and BOPO ratios.

Based on these criteria, the selected sample consisted of six Islamic commercial banks that met the requirements. The list of banks that are the sample of this study is:

1. PT. Bank Panin Dubai Syariah
2. PT. Bank Victoria Syariah
3. PT. Bank Mega Syariah
4. PT. Bank BCA Syariah
5. PT. Bank Muamalat Indonesia
6. PT. Bank Syariah Bukopin

The collected data was then analysed using multiple linear regression analysis to test the influence of independent variables (credit risk and operational risk) on dependent variables (banking performance). The multiple linear regression model is used because it can simultaneously measure the relationship between more than one independent variable and the dependent variable. The regression equations used are as follows:

$$ROA = \alpha + \beta_1 NPF + \beta_2 BOPO + \varepsilon$$

Where:

α = Constant

β_1, β_2 = Regression coefficient of each independent variable

ε = Error term

RESULT AND DISCUSSION

Research Results

Based on multiple linear regression analysis, results were obtained that describe the relationship between Non-Performing Financing (NPF) and Operating Expenses to Operating Income (BOPO) with Return on Assets (ROA) as an indicator of banking performance.

The following table shows the results of descriptive statistical tests for NPF, BOPO, and ROA variables in Islamic commercial banks registered with the OJK:

Table 1. Islamic bank financial ratios

Variable	N	Minimum	Maximum	Mean	Std. Deviation
NPF	48	0.09	23.76	3.35	4.01
BOPO	48	0.13	7084.00	517.61	1013.42

ROA	48	-11.23	5.87	0.65	2.25
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Based on the results of the descriptive analysis above, the NPF value shows a considerable fluctuation between 0.09% and 23.76%, with an average of 3.35%. This indicates that while there are some banks with very low NPFs, there are also those that face high levels of non-performing financing. BOPO has an extensive range, from the lowest 0.13% to 7084%, with an average of 517.61%, indicating instability in the operational efficiency of interbanks. ROA also showed significant variation, with a negative minimum value (-11.23%) indicating that there were banks experiencing losses, while the maximum value reached 5.87%, which shows excellent performance in some banks.

The multiple linear regression test results revealed that the NPF (credit risk) variable did not significantly affect ROA. These results are supported by the t-test, which shows that the t-count value for NPF is 0.616, smaller than the t-table (1.679), with a significance value (sig) of 0.542, more significant than 0.05. Therefore, the hypothesis that credit risk affects banking performance (ROA) is not accepted.

In contrast, BOPO (operational risk) significantly influences ROA. The t-test results show that the t-count value for BOPO is 2.618, more significant than the t-table (1.679), with a significance value (sig) of 0.013, which is smaller than 0.05. Thus, the hypothesis that operational risks affect banking performance is accepted.

The results of the simultaneous F test showed that the two independent variables, NPF and BOPO, affected the ROA. The F-count value is 3.428, more significant than the F-table (3.20), with a significance value of 0.044, more diminutive than 0.05. This indicates that credit risk and operational risk simultaneously significantly influence Islamic banks' performance.

The coefficient of determination (R^2) obtained in this study is 0.122, which means that the NPF and BOPO variables can explain 12.2% of the variation in banking performance (ROA). The rest, 87.8%, was influenced by other factors not studied in this study.

Discussion

The results of this study reveal exciting and relevant findings related to the influence of credit risk and operational risk on Islamic banking performance as measured through Return on Assets (ROA). Multiple linear regression analysis found that credit risk, represented by the Non-Performing Financing (NPF) ratio, had no significant influence on ROA. In contrast, operational risk, as measured through the ratio of Operating Expenses to Operating Income (BOPO), significantly influences ROA. These results are consistent with previous findings that show that credit risk and operational risk, despite having different levels of contribution, affect Islamic banks' performance (Amijaya & Alaika, 2023).

Credit risk does not significantly affect ROA, providing essential insights into Islamic banks' maturity level of credit risk management. The NPF ratio, which fluctuated between 0.09% and 23.76% in this study, indicated significant variability among the Islamic banks in the research sample. However, the average NPF of 3.35% shows that most Islamic banks can maintain a controlled level of non-performing financing.

Several factors can explain the insignificance of the effect of NPF on ROA. First, Islamic banks have effective credit risk mitigation mechanisms, such as establishing adequate financing loss reserves, portfolio diversification, and a sharia value-based approach in assessing financing feasibility. Sharia principles prioritising justice and shared responsibility in financing contracts also contribute to better risk management (Setiawati, 2020). Thus, even if customers fail to meet their obligations, the impact on the bank's profitability can be minimised through a planned approach.

High NPF fluctuations indicate that certain banks face significant challenges in managing non-performing financing. In the long term, credit risk can still impact banks' financial stability (Chai et al., 2022). Therefore, credit risk management must continue to be a priority, especially considering the potential impact of uncertain macroeconomic conditions.

Operational risk, as measured through the BOPO ratio, significantly influences ROA. The average BOPO ratio is 517.61%, with an extensive range from 0.13% to 7084%, reflecting a significant inequality in operational efficiency between Islamic banks. A high BOPO indicates a high operating expense compared to the revenue generated (Pohan et al., 2021), ultimately reducing profitability.

This result aligns with previous research, which shows that operational efficiency is one of the main determinants of banking performance (Mogilnikov, 2021). The high BOPO can be caused by several factors, including using less than optimal technology, the complexity of internal processes, and the lack of innovation in the business model. Banks that are inefficient in managing operational costs face the risk of declining competitiveness (Ntarindwa, 2022), especially in the era of digitalisation, which encourages the presence of new competitors from the fintech and biotech sectors.

BOPO's significant impact on ROA emphasises investing in digital technology and operational process automation to improve efficiency. Technology will not only help reduce operational costs but also improve service quality, which can ultimately increase customer trust and loyalty.

The results of the simultaneous test show that credit risk and operational risk together affect ROA. The F-count value 3.428, more significant than the F-table, confirms that the two independent variables collectively contribute to banking performance. However, the coefficient of determination (R^2) of 12.2% indicates that the contribution of NPF and BOPO to ROA variability is relatively small, with most (87.8%) of banking performance being influenced by other factors not covered in this study.

Other factors can include the quality of management, monetary policy, market conditions, and social and cultural aspects that affect the operational dynamics of Islamic banks. For example, fiscal and monetary policies implemented by governments can affect liquidity and financial market stability, ultimately impacting bank performance. In addition, the bank's reputation in maintaining sharia principles is also an essential factor that affects public perception and trust in Islamic banks.

From a Sharia perspective, risk management is oriented towards technical efficiency and the principles of fairness, transparency, and responsibility (Rosli et al., 2023). Credit risk, for example, must be seen as a moral challenge where banks and customers have a shared responsibility in maintaining the continuity of financing contracts. In this case, a Sharia-based approach can be a solution to minimise the risk of non-performing financing through education, monitoring, and the formation of closer relationships with customers.

Similarly, operational risks must be managed by considering Sharia values. Operational efficiency is not only about reducing costs but also ensuring that business processes are carried out with transparency and accountability. Therefore, a holistic approach that integrates technical efficiency with Sharia values is the key to improving banking performance in a sustainable manner.

CONCLUSIONS

Credit Risk (NPF) does not significantly influence banking performance as measured by Return on Assets (ROA). The analysis results show that despite fluctuations in the Non-Performing Financing (NPF) ratio between banks, there is not enough evidence to support that the increase in NPF directly affects the decrease in ROA. This shows that the Islamic banks in this study sample can manage credit risk well so that it does not affect their performance in the short term.

Operational Risk (BOPO) has a significant influence on ROA. Banks with a high BOPO ratio tend to show operational inefficiencies that can reduce their profitability. In contrast, banks with low BOPO show more efficient cost management, positively impacting ROA. This emphasises the importance of operational efficiency in improving the performance of Islamic banks, considering that BOPO reflects how effectively banks manage their operational expenses.

The simultaneous influence of credit risk (NPF) and operational risk (BOPO) on banking performance (ROA) is also significant. Although individual credit risk does not affect ROA, when the two are analyzed together, they affect the bank's performance. Therefore, bank management needs to pay attention to these two risks simultaneously to maintain the bank's overall performance.

The coefficient of determination (R^2) shows that credit and operational risk variables can explain about 12.2% of the variation in banking performance. This shows that other factors, such as internal bank policies, market conditions, and macroeconomic factors, affect the performance of Islamic banks that are not covered in this study.

Based on these findings, it is recommended that Islamic banks focus on managing operational risks to improve efficiency and profitability. Although credit risk management remains essential, the results of this study show that Islamic banks already have adequate mechanisms to handle credit risk. Further research can expand the variables analysed to provide a more comprehensive picture of the factors that affect the performance of Islamic banking.

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