

THE EFFECT OF FINANCING RISK AND LIQUIDITY ON THE PROFITABILITY OF ISLAMIC COMMERCIAL BANKS

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Received Date; 10 Januari 2024
Revised Date; 21 Januari 2024
Accepted Date; 26 Januari 2024

The Keywords:
Profitability, Islamic Banks,
NPF, CAR, FDR.

Kata Kunci:
Profitabilitas, Bank Syariah,
NPF, CAR, FDR.

ABSTRACT

This study aims to investigate how Indonesian Islamic commercial banks' profitability, measured by Return on Assets (ROA), is affected by Non-Performing Financing (NPF), Capital Adequacy Ratio (CAR), and Financing to Deposit Ratio (FDR). Panel data regression analysis was used as a quantitative approach in this study. Purposive sampling was used to choose the sample, which comprised Islamic commercial banks registered with the Financial Services Authority (OJK). Five Islamic commercial banks with a total of 80 observations throughout the 2021–2023 period were selected based on the specified criteria. Secondary data from Islamic Banking Statistics, quarterly financial statements, and other relevant literature was used. EViews software was used to analyze data using the Fixed Effect Model (FEM). The results show that the profitability of Indonesia's Islamic commercial banks is significantly impacted concurrently by NPF, CAR, and FDR. ROA is significantly impacted negatively by NPF and CAR and positively by FDR. The research model appears to adequately account for variations in the profitability of Islamic banks, as indicated by the Adjusted R-squared value of 96.7%. These findings imply that controlling financing risk, guaranteeing capital sufficiency, and monitoring liquidity are essential components for improving the financial performance of Indonesia's Islamic commercial banks.

ABSTRAK

Penelitian ini bertujuan untuk menganalisis pengaruh Non-Performing Financing (NPF), Capital Adequacy Ratio (CAR), dan Financing to Deposit Ratio (FDR) terhadap profitabilitas bank umum syariah di Indonesia yang diproksikan dengan Return on Assets (ROA). Penelitian ini menggunakan pendekatan kuantitatif dengan metode analisis regresi data panel. Sampel penelitian dipilih menggunakan teknik purposive sampling, yaitu bank umum syariah yang terdaftar di Otoritas Jasa Keuangan (OJK). Berdasarkan kriteria yang telah ditentukan, diperoleh lima bank umum syariah dengan total 80 observasi selama periode 2021–2023. Data yang digunakan merupakan data sekunder yang berasal dari Statistik Perbankan Syariah, laporan keuangan triwulanan, dan berbagai literatur terkait. Analisis data dilakukan menggunakan software EViews dengan pendekatan Fixed Effect Model (FEM). Hasil penelitian menunjukkan bahwa NPF, CAR, dan

	FDR secara simultan berpengaruh signifikan terhadap profitabilitas bank umum syariah di Indonesia. Secara parsial, NPF dan CAR berpengaruh negatif signifikan terhadap ROA, sedangkan FDR berpengaruh positif signifikan terhadap ROA. Nilai Adjusted R-squared sebesar 96,7% menunjukkan bahwa model penelitian mampu menjelaskan variasi profitabilitas bank syariah dengan sangat baik. Temuan ini mengindikasikan bahwa pengendalian risiko pembiayaan, kecukupan modal, dan pengelolaan likuiditas merupakan faktor penting dalam meningkatkan kinerja keuangan bank umum syariah di Indonesia.
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INTRODUCTION

The Islamic banking industry in Indonesia has experienced rapid growth in recent years. Increasing public awareness of sharia-based financial systems and regulatory support from financial authorities have become the main factors driving the growth of Islamic banks in Indonesia. Islamic banks have a strategic role in increasing financial inclusion and maintaining national economic stability. In addition, the development of Islamic banking reflects the growing public trust in Islamic financial institutions in supporting sustainable economic growth and ethical financial practices.

Profitability is one of the main indicators used to assess the performance of Islamic banks. Return on Assets (ROA) is commonly used to measure the bank's ability to generate profits through the utilization of its assets. A higher ROA indicates better financial performance and management efficiency in utilizing available resources. Financial performance indicators are important considerations in evaluating banking effectiveness and supporting financial decision-making processes (Mariana, 2016). Furthermore, financial performance reflects the effectiveness of management in maintaining company value and organizational sustainability (Mariana, Abdullah, & Mahmud, 2020).

Table 1. Development of ROA of Islamic Commercial Banks in Indonesia During 2021–2024

Year	Q1 (%)	Q2 (%)	Q3 (%)	Q4 (%)	Average (%)
2021	1.40	1.48	1.55	1.62	1.51
2022	1.68	1.75	1.88	2.00	1.83
2023	2.02	2.10	2.08	2.05	2.06
2024	2.00	1.95	1.90	1.85	1.93

Source: Islamic Banking Statistics of OJK (2021–2024)

Based on Table 1, the profitability of Islamic commercial banks fluctuated during the research period. From 2021 to 2023, ROA increased, indicating improving Islamic bank performance. However, in 2024, ROA declined, indicating challenges in maintaining bank profitability. These fluctuations suggest that Islamic

banks continue to face various internal and external challenges in maintaining financial stability and operational efficiency.

Internal factors suspected of influencing Islamic bank profitability include financing risk, capital adequacy, and liquidity. Financing risk is measured using Non-Performing Financing (NPF), capital adequacy is measured using Capital Adequacy Ratio (CAR), while liquidity is measured using Financing to Deposit Ratio (FDR). Financial and non-financial information play important roles in decision-making processes, particularly in assessing financial conditions and organizational performance (Mariana, Nadirsyah, & Abdullah, 2018). Therefore, effective management of financing quality, liquidity, and capital structure becomes essential in improving profitability and minimizing financial risk in Islamic banking institutions.

Non-Performing Financing (NPF) reflects the level of problematic financing faced by Islamic banks. High NPF levels indicate increasing financing risk, which may reduce profitability because banks must provide larger reserves for potential losses. The management of problematic financing is considered a crucial issue in Islamic financial institutions because financing problems can affect financial stability and operational performance (Nufiar, Mariana, & Muhammad Ali, 2020). Meanwhile, Capital Adequacy Ratio (CAR) reflects the bank's ability to provide sufficient capital in facing operational risks. Excessively high capital levels may also indicate inefficiency in the utilization of funds. Financing to Deposit Ratio (FDR), on the other hand, measures the effectiveness of banks in distributing public funds into financing activities. An optimal FDR level indicates that banks are able to maximize their intermediation function effectively.

Previous studies have shown varying results regarding the effect of NPF, CAR, and FDR on the profitability of Islamic banks. Financial factors and managerial policies are considered important determinants of company performance and sustainability (Ramadana & Mariana, 2023). In addition, corporate governance and financial management effectiveness are also important factors influencing organizational performance and profitability (Mariana, Abdullah, & Mahmud, 2020). Therefore, this study was conducted to obtain the latest empirical evidence regarding the effect of internal factors on the profitability of Islamic commercial banks in Indonesia.

RESEARCH METHOD

Panel data regression analysis was employed in this study's quantitative methodology. All Islamic commercial banks that were registered with the Financial Services Authority (OJK) made up the population. Purposive sampling was employed as the sampling method based on particular criteria in accordance with the goals of the study.

The sample criteria included Islamic commercial banks registered with OJK, banks publishing complete quarterly financial reports during 2021–2023, and banks having complete data for the variables ROA, NPF, CAR, and FDR. Based on these criteria, five Islamic commercial banks were selected with a total of 80 observations. This study used secondary data obtained from the official website of OJK, published financial reports, Islamic Banking Statistics, and supporting journals and literature.

Return on Assets (ROA) was the study's dependent variable, and Non-Performing Financing (NPF), Capital Adequacy Ratio (CAR), and Financing to Deposit Ratio (FDR) were its independent factors. Bank profitability was assessed using ROA (Kasmir, 2019). FDR gauges the bank's capacity to efficiently channel funds, CAR assesses capital adequacy, and NPF indicates the degree of problematic financing (Karim, 2017).

Panel data regression using the Fixed Effect Model (FEM) and EViews software was the data analysis method. The t-test, F-test, and coefficient of determination (Adjusted R²) were used to test hypotheses. Quantitative analysis is crucial in elucidating the connection between financial factors and organizational performance, claim Mariana, Nadirsyah, and Abdullah (2018).

THEORETICAL FRAMEWORK

Financial intermediation theory explains that banks function as intermediary institutions that collect funds from the public and redistribute them in the form of financing or credit. In Islamic banking, the intermediation process is conducted based on sharia principles through financing contracts such as murabahah, mudharabah, and musyarakah. The effectiveness of fund distribution can be measured using Financing to Deposit Ratio (FDR). Higher FDR levels indicate better effectiveness in channeling financing and increasing profitability (Karim, 2017).

Risk management theory explains that banking activities are closely related to financial risks, especially financing risk. Non-Performing Financing (NPF) is used to measure the level of problematic financing in Islamic banks. Higher NPF levels indicate greater financing risk, which can reduce bank profitability (Hasan, 2020). Nufiar, Mariana, and Muhammad Ali (2020) also explained that problematic financing management is important in maintaining the financial stability of Islamic financial institutions.

Capital structure theory explains that capital adequacy is important in maintaining banking operational stability. Capital Adequacy Ratio (CAR) reflects the bank's ability to provide sufficient capital to face operational risks. According to Brigham and Houston (2018), excessively high capital levels may indicate inefficient fund utilization, which can reduce profitability. Previous studies also found that capital adequacy influences banking performance and sustainability (Mariana, Abdullah, & Mahmud, 2020).

Profitability in this study was measured using Return on Assets (ROA), which reflects management effectiveness in utilizing bank assets to generate profits (Kasmir, 2019). Bank profitability is influenced by various internal factors, including financing quality, liquidity, and capital adequacy (Wulandari, 2022).

RESEARCH RESULTS AND DISCUSSION

Research Results

Table 2. Descriptive Statistics

Variable	Mean	Maximum	Minimum	Std. Dev.
ROA	1.92	2.50	1.40	0.25
NPF	2.85	4.50	2.10	0.55
CAR	23.5	28.0	20.0	2.10
FDR	80.0	90.0	70.0	5.20

Source: Processed Data (2021–2023)

The descriptive statistics show that the average ROA of Islamic commercial banks was 1.92%, indicating a relatively stable profitability level during the research period. The average NPF value was 2.85%, which reflects the level of problematic financing in Islamic banks. Meanwhile, the average CAR value of 23.5% indicates that Islamic banks had adequate capital levels to face operational risks. The average FDR value of 80.0% also indicates that banks were relatively effective in channeling financing funds to customers.

Table 3. Panel Data Regression Results (Fixed Effect Model)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	5.214	0.842	6.19	0.000
NPF	-0.356	0.072	-4.94	0.000
CAR	-0.128	0.041	-3.12	0.002
FDR	0.089	0.025	3.56	0.001

R-squared = 0.971

Adjusted R-squared = 0.967

F-statistic = 210.45

Prob (F-statistic) = 0.000

According to the concurrent test results, ROA is significantly impacted by NPF, CAR, and FDR at the same time. This is demonstrated by the F-statistic's probability value of 0.000, which is less than the significance level of 0.05. Additionally, the Adjusted R-squared value of 0.967 shows that NPF, CAR, and FDR account for 96.7% of the variation in Islamic bank performance as determined by ROA. Meanwhile, factors not included in the research model have an impact on the remaining 3.3%.

With a coefficient value of -0.356 and a probability value of 0.000, NPF significantly and partially affects ROA. This result suggests that Islamic banks will become less profitable if non-performing financing rises. CAR also has a negative and significant effect on ROA, with a coefficient value of -0.128 and a probability value of 0.002. This result suggests that excessively high capital adequacy may lead to inefficiency in fund utilization, thereby decreasing profitability. Meanwhile, FDR has a positive and significant effect on ROA, with a coefficient value of 0.089 and a probability value of 0.001. This indicates that effective financing distribution can improve the profitability of Islamic banks.

Discussion

The research results indicate that Non-Performing Financing (NPF) has a negative and significant effect on Return on Assets (ROA). This finding shows that increasing problematic financing can reduce the profitability of Islamic commercial banks in Indonesia. Higher NPF levels indicate that banks face greater financing risks, which can increase reserve costs and reduce income generated from financing activities. These findings support risk management theory, which explains that ineffective financing management can negatively affect bank financial performance. This result is also consistent with previous studies stating that financing risk has a significant influence on Islamic bank profitability (Hasan & Dridi, 2019; Pratama, 2021). In addition, Nufiar, Mariana, and Muhammad Ali (2020) explained that problematic financing management is important in maintaining the financial stability of Islamic financial institutions.

The results also show that Capital Adequacy Ratio (CAR) has a negative and significant effect on ROA. This finding indicates that excessively high capital levels may lead to inefficiency in fund utilization because some funds are not used productively. Although adequate capital is important to maintain banking stability and public trust, excessive capital allocation may reduce opportunities for banks to optimize profits through financing activities. These findings support capital structure theory, which explains the relationship between risk, capital, and profitability (Brigham & Houston, 2018). This result is also in line with the study conducted by Nugraha (2020), which found that capital adequacy influences banking profitability and operational efficiency. Furthermore, Mariana, Abdullah, and Mahmud (2020) emphasized that financial management effectiveness and governance practices are important factors influencing organizational performance and sustainability.

Meanwhile, Financing to Deposit Ratio (FDR) has a positive and significant effect on ROA. This indicates that the effectiveness of Islamic banks in distributing public funds into financing activities can increase profitability. Higher FDR values reflect the effectiveness of the bank's intermediation function in utilizing collected funds productively. These findings support financial intermediation theory, which explains that banks generate profits through effective fund distribution activities (Karim, 2017). Research by Setiawan (2020) also found that optimal liquidity management contributes positively to bank profitability because effective financing distribution increases operational income and financial performance.

Overall, the results indicate that financing risk management, capital adequacy, and liquidity management are important factors influencing the profitability of Islamic commercial banks in Indonesia. Islamic banks are therefore expected to strengthen financing supervision, maintain optimal capital levels, and improve liquidity management to support sustainable profitability and financial stability. Financial performance and risk management effectiveness are important considerations in maintaining organizational sustainability and banking competitiveness (Ramadana & Mariana, 2023).

The findings of this study are consistent with financial intermediation theory, which explains that Islamic banks act as intermediaries in collecting and distributing funds to the public. A high level of Non-Performing Financing (NPF)

indicates an increase in financing risk, which can reduce the bank's ability to generate profits because the bank must allocate reserves for potential losses. This result supports previous studies conducted by Muhammad Syafii Antonio and other Islamic banking researchers, which stated that problematic financing negatively affects the profitability of Islamic banks. In addition, the negative effect of CAR on ROA indicates that excessively high capital adequacy may lead to inefficiency in fund utilization because a large proportion of funds are retained as reserve capital rather than being distributed productively through financing activities.

Furthermore, the positive effect of Financing to Deposit Ratio (FDR) on ROA demonstrates that Islamic banks are capable of optimizing their intermediary function through effective financing distribution. A higher FDR reflects the bank's ability to channel third-party funds into productive financing activities, thereby increasing profit generation. These findings are in line with the study by Otoritas Jasa Keuangan, which emphasizes that liquidity management and financing effectiveness are important determinants of Islamic bank performance in Indonesia. Therefore, Islamic commercial banks are expected to strengthen financing supervision, maintain optimal capital adequacy, and improve liquidity management strategies in order to sustain profitability and financial stability in the long term.

CONCLUSION

This study aims to investigate the effects of Non-Performing Financing (NPF), Capital Adequacy Ratio (CAR), and Financing to Deposit Ratio (FDR) on the profitability of Indonesian Islamic commercial banks as measured by Return on Assets (ROA). The results show that the profitability of Islamic banks is severely impacted simultaneously by NPF, CAR, and FDR.

Non-Performing borrowing (NPF) significantly and negatively affects ROA, suggesting that more problematic borrowing may lower bank profitability. The Capital Adequacy Ratio (CAR), which indicates that overly high capital levels may decrease fund use efficiency, also has a negative and severe impact on profitability. In the meantime, ROA is positively and significantly impacted by the Financing to Deposit Ratio (FDR), suggesting that efficient financing distribution can raise Islamic banks' profitability.

Overall, the findings indicate that financing risk management, capital adequacy, and liquidity management are important factors in improving the financial performance and profitability of Islamic commercial banks in Indonesia.

SUGGESTIONS

Islamic commercial banks are expected to improve financing risk management in order to reduce the level of Non-Performing Financing (NPF). Banks also need to strengthen financing supervision and improve the quality of financing distribution to maintain financial stability and profitability.

In addition, banks should maintain an optimal level of Capital Adequacy Ratio (CAR) so that capital can be utilized efficiently without reducing the bank's ability to face operational risks. Islamic banks are also advised to optimize Financing to Deposit Ratio (FDR) management to ensure that public funds can be distributed effectively into productive financing activities.

Future researchers are recommended to include other variables that may influence Islamic bank profitability, such as inflation, exchange rates, operational efficiency, and macroeconomic factors, in order to obtain more comprehensive research results.

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