

Influence of Third Party Fund, Financing, and CAR on Profitability with NPF mediation in Islamic Banks

Eka Dinda Agustin¹

¹*Universitas Negeri Surabaya*

Email: ekadinda.22005@mhs.unesa.ac.id

ABSTRACT

The merger of Bank Syariah Mandiri, BNI Syariah, and BRI Syariah into Bank Syariah Indonesia (BSI) IN 2021 marked a new phase in the development of Islamic banking in Indonesia. This consolidation successfully increased total assets, capital strength, and third-party funds (DPK). However, the rise in funding and capital has not consistently been followed by an increase in profitability (ROA), partly due to the increasing level of non-performing financing (NPF). This study aims to analyze the direct and indirect effects of Third Party Fund (DPK), Financing, and Capital Adequacy Ratio (CAR) on profitability (ROA), with Non- Performing Financing (NPF) as a mediating variable. This research uses a quantitative associative approach with secondary data from the financial reports of Islamic Commercial Bank in Indonesia for the period 2021 – 2024. The data will be analyzed using Structural Equation Modeling-Partial Least Squares (SEM-PLS) to examine direct effects and mediation relationships. The findings of this study are expected to provide empirical evidence regarding whether NPF mediates the relationship between funding, financing, capital, and profitability. The study is also expected to offer theoretical, practical, and policy implications for Islamic banking performance improvement in Indonesia.

Keywords: Third Party Fund, Financing, Capital Adequacy Ratio, Non-Performing Financing, Profitability

INTRODUCTION

The merger of Bank Syariah Mandiri, BNI Syariah, and BRI Syariah into Bank Syariah Indonesia (BSI) in 2021 marked a new era in the development of Islamic banking in Indonesia. This consolidation aimed to create a stronger, more efficient, and competitive Islamic bank capable of operating on both national and global scales. As a result, BSI recorded a significant increase in total assets, capital strength, and Third Party Funds (DPK), positioning itself as the largest Islamic bank in the country. The merger was expected to improve operational efficiency and profitability by integrating financial systems and reducing overlapping costs. However, despite these structural improvements, the increase in assets and funding has not always been accompanied by proportional growth in profitability, raising questions about the effectiveness of resource management and risk control in post-merger Islamic banking institutions (Mubarak, Wibowo, & Latif, 2024).

Profitability is one of the main indicators used to evaluate the financial performance and sustainability of banks. It reflects the institution's ability to generate earnings from its assets while maintaining stability and efficiency. In Islamic banking, profitability has a dual dimension: it measures both financial success and compliance with Sharia principles that emphasize fairness, transparency, and social benefit. The most commonly used indicators of profitability are Return on Assets (ROA) and Return on Equity (ROE). ROA measures the efficiency of asset utilization in generating net income, while ROE reflects the return to shareholders. Maintaining strong profitability is crucial for Islamic banks because it

determines their ability to sustain growth, absorb losses, and support social financing programs (Afkar, 2018).

One of the major sources influencing profitability in Islamic banks is Third Party Funds (DPK), which consist of deposits, savings, and current accounts collected from the public. DPK serves as the primary source of financing for Islamic banks, reflecting public trust and the bank's reputation in the market. An increase in DPK allows banks to expand financing to various economic sectors, particularly in small and medium enterprises (SMEs) that align with Islamic economic principles. However, high DPK growth must be accompanied by efficient fund allocation; otherwise, excessive idle funds can reduce profitability and create liquidity risks. Thus, proper management of DPK is critical in achieving an optimal balance between liquidity and return (Kasmir, 2014).

The financing component, which represents the distribution of funds through Sharia-compliant contracts such as murabahah, musyarakah, and mudharabah, is another key determinant of profitability. In Islamic banking, financing activities are not only intended to generate income but also to stimulate productive economic activities consistent with Islamic ethics. Well-managed financing enhances profitability through margin and profit-sharing revenues. However, poor financing management can lead to Non-Performing Financing (NPF), which reduces income and threatens financial stability. Therefore, the quality of financing reflected in how effectively banks evaluate and monitor borrowers plays a central role in determining overall profitability (Antonio, 2001).

The Capital Adequacy Ratio (CAR) measures the bank's ability to absorb potential losses and indicates its financial resilience. A higher CAR demonstrates that the bank has sufficient capital to manage unexpected risks, thereby maintaining stability and protecting depositors. However, holding excessive capital without effective utilization can lower profitability because unused capital fails to generate income. Hence, efficient capital allocation becomes essential to balancing financial security and profit optimization. This balance between capital adequacy and profitability highlights the importance of sound financial management in Islamic banks (Calem & Rob, 1999).

Meanwhile, Non-Performing Financing (NPF) serves as a critical indicator of asset quality and operational efficiency in Islamic banking. Rising NPF ratios indicate that a higher portion of financing is not performing as expected, leading to increased credit risk and lower profitability. High NPF levels force banks to allocate more resources for loss provisions, thereby reducing net income. The persistent rise in NPF in some Islamic banks has been one of the main obstacles preventing profitability from improving proportionally with the growth of funding and assets. Managing NPF effectively is therefore essential for sustaining profitability and maintaining investor and depositor confidence (Rahman & Hanif, 2021).

Several previous studies have examined the relationships among DPK, financing, CAR, and profitability in Islamic banks, but their findings have been inconsistent. Some studies have shown positive and significant effects, while others found weak or insignificant relationships. The discrepancies may stem from differences in economic conditions, time periods, and institutional characteristics. Additionally, empirical evidence suggests that NPF may act as a mediating variable linking internal financial factors with profitability, emphasizing the importance of credit risk management in explaining variations in performance (Jufrizen, Sari, & Rahma, 2018).

Considering these findings, this study aims to analyze the direct and indirect effects of Third Party Funds (DPK), Financing, and Capital Adequacy Ratio (CAR) on Profitability (ROA), with Non-Performing Financing (NPF) as a mediating variable, using data from Islamic commercial banks in Indonesia for the 2021–2024 period. The analysis will employ Structural Equation Modeling–Partial Least Squares (SEM-PLS) to test both direct and mediation effects. The results of this study are expected to provide empirical evidence on whether NPF mediates the relationship between funding, financing, capital, and profitability, while also offering theoretical, practical, and policy implications to enhance the performance and competitiveness of Islamic banking in Indonesia (Yusuf & Hassan, 2022).

LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

Previous Studies

Several scholars have explored the determinants of profitability in Islamic banking, focusing on internal and external factors that shape performance. Jufrizen, Sari, and Rahma (2018) investigated Islamic banks in Indonesia and found that Third Party Funds (DPK) and financing have significant positive effects on profitability measured by Return on Assets (ROA). Their findings indicated that efficient fund management and risk-based financing allocation are essential in ensuring sustainable profitability. However, the study also suggested that other financial ratios, such as the Capital Adequacy Ratio (CAR) and Non-Performing Financing (NPF), could play mediating roles, which warranted further investigation.

Rahman and Hanif (2021) conducted a cross-country analysis involving Islamic banks in Southeast Asia and revealed that credit risk—measured by Non-Performing Financing (NPF)—negatively affects profitability. The study highlighted that riskier financing portfolios directly reduce the banks' returns and indirectly increase operational costs due to the need for loan loss provisions. Furthermore, the authors emphasized that strong risk management systems are essential for mitigating the impact of NPF on financial performance.

Wardana and Lestari (2023) analyzed the relationship between liquidity, capital, and profitability in Islamic commercial banks and discovered that CAR has a positive and significant effect on ROA. They concluded that banks with higher capitalization are better equipped to absorb potential losses and to support expansion activities that enhance profitability. However, their study also cautioned that maintaining excessively high capital levels without effective asset utilization could constrain profitability growth.

Zaman and Ahmad (2020) explored risk management practices and profitability in Islamic banks using panel data from multiple countries. Their results showed that sound risk management strategies—especially in assessing financing quality—play a crucial role in improving bank performance. The authors recommended that Islamic banks focus on developing robust risk assessment systems to reduce NPF ratios and strengthen financial stability.

Mubarok, Wibowo, and Latif (2024) evaluated Islamic banking performance in Indonesia after the BSI merger and found that the consolidation successfully increased total assets, capital, and third-party funds. Nevertheless, their study noted that profitability did not rise in proportion to asset and funding growth, mainly due to inefficiencies in financing and

rising NPF levels. This finding reinforces the argument that financial integration alone is insufficient to guarantee improved profitability without effective post-merger management.

Yusuf and Hassan (2022) investigated the mediating role of capital strength in the relationship between financing and profitability. They found that capital adequacy not only supports stability but also moderates the negative impact of NPF on profitability. Their research implied that higher CAR levels enhance the capacity of Islamic banks to sustain profitability during periods of financial stress.

Overall, previous studies show varying conclusions regarding the influence of DPK, financing, and CAR on profitability, and many scholars agree that NPF plays a crucial mediating role. This indicates the need for more comprehensive empirical testing using recent data, especially in the post-merger era of Islamic banking in Indonesia.

Conceptual Framework

Third Party Fund (DPK)

Third Party Funds represent the total deposits collected from customers in the form of savings, current accounts, and time deposits. In Islamic banks, these funds are mobilized through contracts like wadiah (safe-keeping) and mudharabah (profit-sharing). DPK is essential because it reflects public trust and provides the financial resources for banks to extend financing to productive sectors.

An increase in DPK generally leads to an expansion in financing activities, which can generate higher income for the bank. However, when DPK is not managed effectively or when the growth in deposits is not matched by productive financing, profitability gains may not materialize. Prior studies have shown that DPK has a positive influence on ROA because greater liquidity supports lending and investment capacity.

H1: Third Party Funds have a positive effect on Profitability.

H4: Third Party Funds have a negative effect on Non-Performing Financing.

Financing

Financing activities are the main source of revenue for Islamic banks. Financing is distributed to individuals or businesses through Sharia contracts such as murabahah, musyarakah, mudharabah, and ijarah. These financing activities contribute to the bank's income through margins, profit-sharing, or rental payments. However, if borrowers fail to meet their obligations, these transactions become non-performing, leading to a rise in NPF. High-quality financing should contribute positively to profitability, but excessive or poorly monitored financing can increase default risk. Therefore, the relationship between financing and profitability can be both positive and negative depending on the effectiveness of risk control mechanisms.

H2: Financing has a positive effect on Profitability.

H5: Financing has a positive effect on Non-Performing Financing.

Capital Adequacy Ratio (CAR)

The Capital Adequacy Ratio is a key indicator that measures the bank's financial strength and ability to absorb potential losses. It reflects the ratio between the bank's capital

and its risk-weighted assets. A higher CAR indicates that the bank has sufficient capital to support operations and withstand unexpected shocks.

According to the Capital Buffer Theory, maintaining an adequate level of capital enhances confidence among depositors and investors and allows the bank to expand its activities safely. Banks with strong capital positions are more likely to achieve sustainable profitability because they can manage risk effectively while pursuing growth opportunities. However, an excessively high CAR may indicate underutilization of capital, which can reduce efficiency.

H3: CAR has a positive effect on Profitability.

H6: CAR has a negative effect on Non-Performing Financing.

Non-Performing Financing (NPF)

NPF measures the percentage of financing that becomes problematic due to delayed or defaulted payments. High NPF indicates weak risk management and low asset quality, which directly impacts profitability. Managing NPF effectively is crucial for maintaining financial health. Several studies have identified NPF as a mediating variable that connects internal performance indicators with profitability. For instance, strong DPK or high CAR might not increase profitability if the bank's NPF level remains high. Conversely, low NPF reflects efficient management, allowing the bank to maximize returns from its assets.

H7: NPF has a negative effect on Profitability.

H8: NPF mediates the relationship between DPK, Financing, and CAR on Profitability.

Theoretical Framework

1. Financial Intermediation Theory (Gurley & Shaw, 1955)

Financial Intermediation Theory explains that banks function as intermediaries that channel funds from surplus units (depositors) to deficit units (borrowers). Gurley and Shaw (1955) stated that financial intermediaries play a critical role in promoting economic growth by mobilizing savings and facilitating investment. Over time, the theory has evolved to incorporate the concept of information asymmetry, which underlies the need for financial institutions to assess and monitor credit risk. In Islamic banking, this theory is particularly relevant because fund mobilization and financing must comply with profit-and-loss-sharing principles. It helps explain the relationship between DPK (as collected funds) and financing (as allocated assets), which together affect profitability.

2. Capital Buffer Theory (Calem & Rob, 1999)

The Capital Buffer Theory posits that banks maintain a cushion of excess capital to absorb unexpected losses and mitigate the risk of insolvency. Calem and Rob (1999) developed this concept to explain how banks use capital as a strategic tool for risk management and regulatory compliance. The theory suggests that higher capital buffers enhance financial stability but may also constrain profitability if excess capital is not efficiently deployed. In the context of Islamic banking, CAR acts as both a protective mechanism against NPF and a determinant of profitability through its influence on lending capacity and risk-taking behavior.

3. Risk Management Theory (Holton, 1992)

Risk Management Theory, as articulated by Holton (1992), emphasizes the systematic identification, measurement, and control of risks to ensure financial stability. In Islamic banking, where interest-based instruments are prohibited, risk management focuses primarily on credit and operational risks associated with financing contracts. The theory highlights that effective risk management minimizes Non-Performing Financing (NPF) and supports sustainable profitability. It provides the conceptual foundation for understanding the mediating role of NPF in linking financial variables (DPK, financing, and CAR) with profitability.

METHODS

The methods used in completing this study are explained in this section. This research applies a quantitative associative approach to examine the causal relationship among variables. The model is designed to analyze the effect of Third Party Funds (DPK), Financing, and the Capital Adequacy Ratio (CAR) on Profitability (ROA), with Non-Performing Financing (NPF) as a mediating variable.

Research Design

This study uses a causal quantitative research design to determine both direct and indirect effects between variables. The research framework consists of three independent variables (DPK, Financing, CAR), one mediating variable (NPF), and one dependent variable (ROA). The analysis technique employed is Structural Equation Modeling–Partial Least Squares (SEM-PLS), which is suitable for testing complex relationships involving mediation effects.

Population and Sample

The population of this study consists of all Islamic Commercial Banks (Bank Umum Syariah) operating in Indonesia during the period of 2021–2024. The sampling method used is purposive sampling, selecting banks that meet the following criteria:

1. Banks that publish complete and audited financial statements for 2021–2024.
2. Banks with publicly available data on DPK, Financing, CAR, NPF, and ROA.

Types and Sources of Data

The research uses secondary data obtained from official publications such as:

1. The Financial Services Authority (OJK) – Islamic Banking Statistics;
2. Annual and quarterly reports of Islamic Commercial Banks;
3. Bank Indonesia (BI) and the Indonesia Stock Exchange (IDX) official websites.

Variable Definitions and Measurement Formulas

The operational definitions and formulas used in this research are as follows:

1. Third Party Funds (DPK)

DPK represents the total amount of funds collected from customers in the form of savings, current accounts, and deposits. It shows the bank's ability to attract public trust and serve as a main source of financing.

DPK = Giro + Savings + Deposits.....(1)

Giro = current account funds,

Savings = total savings collected,

Deposits = total time deposits.

2. Financing

Financing is the total amount of funds distributed by the bank to customers under Sharia contracts such as murabahah, mudharabah, and musyarakah.

Financing = Total Outstanding Financing.....(2)

This variable indicates the bank's role in channeling funds to productive sectors.

3. Capital Adequacy Ratio (CAR)

CAR measures the ability of a bank to maintain sufficient capital to cover its risk-weighted assets.

$CAR = \text{Capital} / \text{Risk Weighted Assets} \times 100\% \dots (3)$

Capital = total equity owned by the bank,

Risk Weighted Assets (RWA) = assets adjusted to risk levels determined by OJK.

A higher CAR indicates better capital strength and stability.

4. Non-Performing Financing (NPF)

NPF shows the percentage of problematic or defaulted financing in the total financing portfolio.

$NPF = \text{Non Performing Financing} / \text{Total Financing} \times 100\% \dots (4)$

Non Performing Financing = total financing overdue or in default for more than 90 days.

A lower NPF ratio reflects effective credit risk management.

5. Profitability (ROA)

Profitability, measured by Return on Assets (ROA), shows how efficiently a bank utilizes its assets to generate profits.

$ROA = \text{Net Income} / \text{Total Assets} \times 100\% \dots (5)$

Net Income = profit before tax,

Total Assets = total assets owned by the bank.

A higher ROA indicates better financial performance and operational efficiency.

Data Analysis Technique

The data are analyzed using Structural Equation Modeling–Partial Least Squares (SEM-PLS) with SmartPLS software. The analysis stages include:

1. Descriptive Statistics

Describing data characteristics such as minimum, maximum, mean, and standard deviation for each variable.

2. Outer Model Evaluation

Testing the validity (convergent and discriminant) and reliability (composite reliability and Cronbach's alpha) of measurement indicators.

3. Inner Model Evaluation

Assessing the structural model using R-Square (R^2) to determine the explanatory power, and examining path coefficients to evaluate the direction and strength of relationships between variables.

4. Hypothesis Testing

Conducted through the bootstrapping procedure to test the significance of direct and indirect (mediated) effects. Hypotheses are accepted if t-statistics > 1.96 and p-value < 0.05.

5. Mediation Analysis

Evaluating whether NPF mediates the relationship between DPK, Financing, and CAR on Profitability. The mediation effect is confirmed when the indirect path through NPF is statistically significant.

Conceptual Model (Thinking Framework)

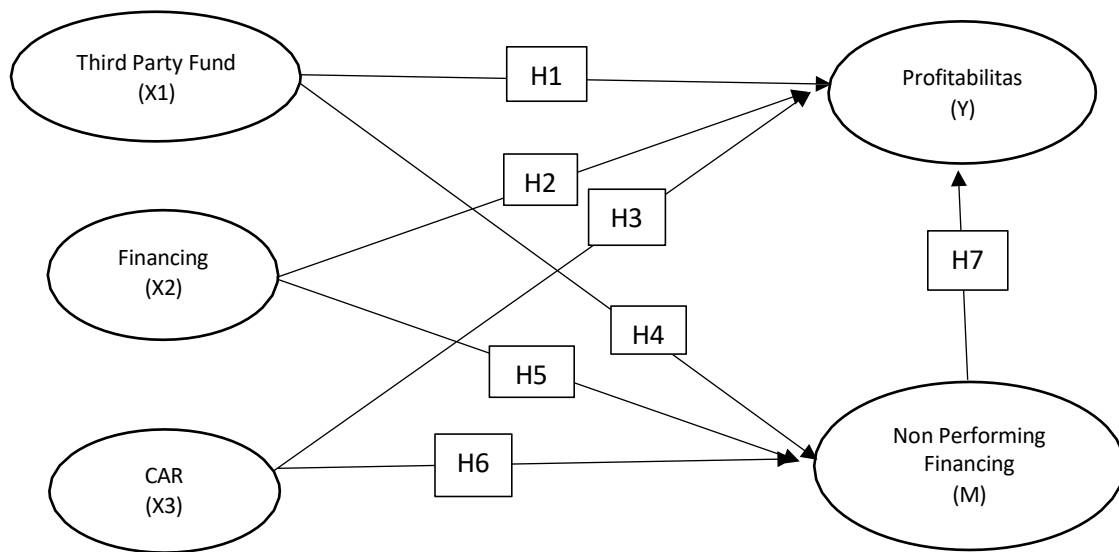


Figure 1. Model analysis

REFERENCES

- Afkar, T. (2018). The effect of non-performing financing on the profitability of sharia banks. *Journal of Islamic Accounting and Business Research*, 9(4), 345–362.
- Antonio, M. S. (2001). *Banking and Finance in the Islamic Perspective*. Jakarta: Tazkia.
- Calem, P. S., & Rob, R. (1999). The role of capital buffers in bank behavior. *Journal of Banking Regulation*, 1(2), 89–108.
- Fleischer, D. (2020). Financial intermediation and banking risk. *Journal of Financial Intermediation*, 42, 102–119.
- Gitman, L. J. (2009). *Principles of Managerial Finance* (12th ed.). Pearson.
- Gurley, J. G., & Shaw, E. S. (1955). Financial Intermediation Theory. *The American Economic Review*, 45(3), 515–538.
- Holton, G. (1992). *Risk Management: An Introduction*. Risk Books.
- Jufrizen, J., Sari, M., & Rahma, N. (2018). Determinants of profitability in Islamic banking. *International Journal of Economics and Business*, 5(2), 44–56.
- Kasmir. (2014). *Bank dan Lembaga Keuangan Lainnya*. Jakarta: Raja Grafindo Persada.

- Mubarok, F., Wibowo, M., & Latif, S. D. (2024). Safeguarding stability and enhancing profitability: The case of Islamic banking in Indonesia. *International Journal of Islamic Economics and Finance*, 7(1), 45–64.
- Meilani, S. W., & Rosyadi, I. (2024). Determinants of profitability in Islamic commercial banks. *Indonesian Interdisciplinary Journal of Sharia Economics*, 8(1), 1–19.
- Rahman, F., & Hanif, M. (2021). Impact of credit risk on the profitability of Islamic banks. *Journal of Islamic Economics*, 13(2), 119–135.
- Wardana, G. K., & Lestari, R. D. (2023). The profitability of Islamic banking in the world. *International Journal of Banking and Finance Research*, 3(3), 1–20.
- Yusuf, A., & Hassan, S. (2022). Capital strength, financing risk, and Islamic bank profitability in Indonesia. *Asian Journal of Islamic Finance*, 10(1), 55–72.
- Zaman, R., & Ahmad, K. (2020). Risk management practices and profitability of Islamic banks. *International Review of Financial Analysis*, 71, 101–112.
- Farooq, M., & Zaheer, S. (2015). Profitability drivers of Islamic banks. *Emerging Markets Finance & Trade*, 51(4), 765–778.
- Tahlil, A., & Rashid, A. (2021). Financial risk and performance in Islamic banking. *Asian Economic and Financial Review*, 11(6), 470–485.
- Zulfiqar, M., & Jamil, F. (2022). Impact of capital adequacy and credit risk on bank profitability. *Journal of Banking and Financial Studies*, 8(3), 12–29.
- Calvo, J., & Morales, P. (2020). Determinants of bank profitability: Evidence from Islamic banks. *Journal of Islamic Economics, Banking and Finance*, 16(2), 45–62.
- Otoritas Jasa Keuangan (OJK). (2023). *Islamic Banking Statistics*. Jakarta: OJK.