

The effect of third-party funds, temporary *syirkah* funds, and non-performing financing on profitability with financing as an intervening variable in commercial Islamic banks in Indonesia

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Abstract

This study examines how Third-Party Funds (DPK), Temporary Syirkah Funds (DST), and Non-Performing Financing (NPF) affect the profitability of Islamic commercial banks in Indonesia by placing financing (P) as an intervening variable. The research uses annual report data from Islamic commercial banks for the 2020–2024 period. The data were analyzed through descriptive analysis, outer model analysis, and inner model analysis. The findings indicate that Third-Party Funds (DPK) do not significantly influence profitability, which is measured using Return on Assets (ROA). In contrast, Temporary Syirkah Funds (DST) and Non-Performing Financing (NPF) show significant negative effects on profitability. The results also reveal that Third-Party Funds (DPK) and Temporary Syirkah Funds (DST) significantly and positively affect financing, while Non-Performing Financing (NPF) does not have a significant impact on financing. Furthermore, financing (P) has a significant positive effect on profitability. However, financing does not significantly act as a mediating variable in the relationship between DPK, DST, and NPF and profitability. Overall, these results indicate that effective and efficient management of Sharia-based funds is essential for enhancing the profitability of Islamic commercial banks.

Keywords

Third-party funds, Temporary *syirkah* funds, Non-performing financing, Financing, Profitability

Introduction

Several factors may determine the profitability of Sharia banks. These include Third-Party Funds (DPK), which are collected from public deposits; Temporary Syirkah Funds (DST), which are customer investment funds managed on a profit-sharing basis; and Non-Performing Financing (NPF), which represents the level of problematic or defaulted

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financing. However, previous studies have shown inconsistent results. Rais et al. [1] reported that third-party funds significantly and positively affect profitability, while Tusiyanı et al. [2] found no significant effect. Novalista [3] concluded that temporary syirkah funds have a significant positive impact on profitability. In contrast, Rasyid et al. [4] and Rahmagiasti [5] found that non-performing financing significantly reduces profitability, whereas Astuti [6] stated that it has no significant effect.

In response to these differing findings, this study replicates and re-examines the relationship between DPK, DST, and NPF and ROA, with total financing included as an intervening variable. The study is also intended to reinforce the relevance of earnings management theory and agency theory in explaining profitability in Sharia banking. Financing may serve as a mediating mechanism in the relationship between DPK, DST, NPF, and profitability. Rais et al. [6] found that financing mediates the effects of third-party funds and non-performing financing on profitability. However, Finandiarsi [7] presented different results, indicating that this mediating role remains debatable.

Based on this background, this study analyzes the direct and indirect effects of third-party funds, temporary syirkah funds, and non-performing financing on the profitability of Islamic commercial banks in Indonesia. The indirect effect is examined through financing as a mediating variable. The data used in this study consist of annual reports of Islamic commercial banks that were consistently published during the 2020–2024 period. Accordingly, the research question is formulated as follows: Do DPK, DST, and NPF influence profitability, measured by ROA, with financing (P) acting as an intervening variable in Islamic commercial banks in Indonesia?

Method

This research applies a quantitative method. The study population includes all Islamic Commercial Banks (BUS) in Indonesia that were registered with the Financial Services Authority (OJK) from 2020 to 2024. The research sample was determined through purposive sampling by applying several requirements, namely: (1) the bank had to be registered with the OJK; (2) the bank had to publish complete annual reports throughout the research period; and (3) the bank had to prepare its financial statements based on Sharia PSAK No. 401. After applying these criteria, 10 Islamic commercial banks were selected as the sample. The data were obtained through documentation by collecting annual reports from the official websites of each bank. The variables observed in this study consisted of DPK, DST, NPF, total financing, and ROA during the 2020–2024 period. Data analysis was conducted using multiple linear regression with the assistance of the SmartPLS application. The research framework developed in this study is illustrated in Figure 1.

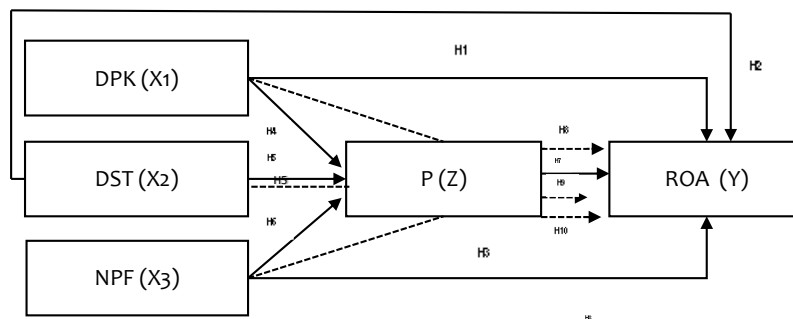


Figure 1. The research model

The hypotheses of this research are:

H1: DPK has a positive and significant effect on ROA at Islamic Commercial Banks in Indonesia.

H2: DST has a positive and significant effect on ROA at Islamic commercial banks in Indonesia.

H3: NPF has a negative and significant effect on ROA at Islamic commercial banks in Indonesia.

H4: DPK has a positive and significant effect on financing at Islamic commercial banks in Indonesia.

H5: DST has a positive and significant effect on financing at Islamic commercial banks in Indonesia

H6: NPF has a negative and significant effect on financing at Islamic commercial banks in Indonesia.

H7: Financing has a positive and significant effect on ROA at Islamic commercial banks in Indonesia.

H8: DPK have a positive and significant effect on ROA through financing as an intervening variable in Islamic commercial banks in Indonesia.

H9: DST have a positive and significant effect on ROA through financing as an intervening variable in Islamic commercial banks in Indonesia.

H10: NPF has a negative and significant effect on ROA through financing as an intervening variable in Islamic commercial banks in Indonesia.

Results and discussion

Results

1. Outer model test
 - a. Convergent validity test

An indicator is considered valid if the loading factor is ≥ 0.70 and the AVE is ≥ 0.50 . All indicators have a loading factor and AVE of 1,000, indicating that each indicator fully represents its construct. This is because each variable consists of only one indicator, thus maximizing convergent validity.

b. Discriminant Validity Test and Reliability Test

The cross-loading results indicate that each indicator has the highest value in its construct, so that all constructs can be distinguished empirically and discriminant validity is met. Composite Reliability (CR) and Cronbach's Alpha values ≥ 0.70 indicate good reliability. All variables have CR and Cronbach's Alpha values of 1.000, meaning each construct has perfect internal consistency.

2. Inner model test

a. R-Square Test (R^2)

The R^2 value indicates that Financing has a value of 0.913, meaning that 91.3% of the variation is explained by DPK, DST, and NPF, which is considered strong (≥ 0.67). Conversely, ROA only has an R^2 of 0.289, indicating weak explanatory power (< 0.33), suggesting that other variables outside the model are more dominant in influencing ROA.

Discussion

1. Hypothesis testing

Hypothesis testing was conducted through bootstrapping, resulting in path coefficients, t-statistics, and p-values in [Table 1](#). A relationship is considered significant if the t-statistic is > 1.96 or the p-value is < 0.05 at the 5% significance level. A positive path coefficient indicates a unidirectional influence, while a negative coefficient indicates an inverse influence. The analysis includes both direct and indirect effects through the mediating variable, financing.

Table 1. Path coefficient bootstrapping direct effect results

Path Coefficient	Original Sample (O)	T Statistics	P Values	Description
DPK -> ROA	0,213	1,225	0,221	Not influential
DST -> ROA	-0,851	2,164	0,031	Influential
NPF -> ROA	-0,501	4,618	0,000	Influential
DPK -> P	0,171	2,219	0,027	Influential
DST -> P	0,808	11,174	0,000	Influential
NPF -> P	-0,016	0,319	0,750	Not influential
P -> ROA	0,665	2,134	0,033	Influential

Source: Processed results

The test results show:

- a. DPK have no effect on ROA. This is evident from the path coefficient of 0.213, with a T-statistic of 1.225 and a P-value of 0.221, where the T-statistic falls short of the minimum threshold of 1.96 and the P-value exceeds 0.05.

- b. DST have a significant negative effect on ROA. This is indicated by a coefficient of -0.851 , with a p-value of 0.031 and a T-statistic of 2.164 , which is less than the significance threshold of 0.05 and reaches the minimum threshold of 1.96 .
- c. NPF has a significant negative effect on ROA. This is indicated by a coefficient value of -0.501 with a significance level (p-value) of 0.000 and a T-statistic of 4.618 , well below the 0.05 threshold and reaching the minimum threshold of 1.96 .
- d. DPK have a positive and significant influence on P distribution in Islamic Commercial Banks. This result is indicated by a coefficient value of 0.171 , a T-statistic of 2.219 , and a p-value of 0.027 , which is below the 0.05 significance level and reaches the minimum threshold of 1.96 .
- e. DST have a positive and significant influence on P with a coefficient value of 0.808 , a T-statistic of 11.174 , and a p-value of 0.000 , which is far less than the 0.05 significance level. with a T-statistic value exceeding 1.96 .
- f. NPF has no effect on P, with a coefficient of -0.016 , a T-statistic of 0.319 , and a P-value of 0.750 . The T-statistic value has not yet reached the minimum threshold of 1.96 and the P-value is greater than 0.05 .
- g. P has a significant positive effect on ROA, with a coefficient of 0.665 , a T-statistic of 2.134 , and a P-value of 0.033 , with a T-statistic value exceeding 1.96 and a P-value below 0.05 .

Table 2. Path Coefficient Bootstrapping Indirect Effect Results

Path Coefficient	Original Sample (O)	T Statistics	P Values	Information
DPK -> P -> ROA	0,113	1,719	0,086	Not influential
DST -> P -> ROA	0,538	1,942	0,052	Not influential
NPF -> P -> ROA	-0,010	0,291	0,771	Not influential

Source: Processed results

The test results show:

DPK have no effect on ROA through P. This is indicated by a coefficient value of 0.113 , a T-statistic of 1.719 , and a P-value of 0.086 . The T-statistic falls short of the minimum threshold of 1.96 and the P-value exceeds 0.05 . This finding indicates that although third-party funds play a role in supporting the intermediation function, their contribution to bank profits is not optimal show at Table 2. Kasmir [8] stated that funds that are not used productively will not contribute significantly to profitability. Empirical data shows that the portion of DPK in some banks is relatively small compared to total financing, making them not a major driver of increased Return on Assets. Saona [9] found that deposit growth does not significantly improve bank profitability when credit allocation is inefficient. This research is inconsistent with Third-Party Funds (TPF) through current accounts, savings, and time deposits, which are the primary source of funding to support financing Ismail, [10]. Based on financial intermediation theory, optimal TPF reflects the level of public trust in banks and increases the bank's capacity

to channel productive financing, which ultimately contributes to increased profits, Prasetyoningrum [11].

DST have no effect on ROA through P. The coefficient value is 0.538, a T-statistic of 1.942, and a P-value of 0.052.086. The T-statistic falls short of the minimum threshold of 1.96 and the P-value exceeds 0.05. Theoretically, DST are investment funds based on *mudharabah* or *musyarakah* contracts that provide banks with flexibility in disbursing financing. Therefore, the greater the amount of DST collected, the greater the bank's obligation to pay a share of profits to customers Suhendi, [12]. However, high profit-sharing costs can depress net profit, especially if financing profits do not exceed profit-sharing obligations to customers, Kasmir [8]. Mollah & Zaman [13] found that profit-sharing investment accounts (PSIA) can suppress the profitability of Islamic banks due to the high profit distribution obligations. Profit-sharing investment funds (UPSIA) can depress bank performance due to displaced commercial risk and the need to establish reserves/return smoothing, which has implications for profitability, Rouetbi et al., [14]. In theory, efficiently managed temporary Syirkah Funds will increase bank income through productive investments.

NPF has no effect on ROA through P. The resulting coefficient is -0.010 with a T Statistics of 0.291 and a P Value of 0.771, where the T Statistics value has not reached the minimum limit of 1.96 and the P Value is more than 0.05. This indicates that non-performing financing directly reduces a bank's ability to generate profits. This is consistent with risk management theory, which emphasizes that increased non-performing financing reduces margin income and increases expenses Khaddafi et al., [15]. The negative finding of NPF on ROA is consistent with international empirical evidence that increasing NPL/NPF suppresses profitability through increasing credit risk and provisioning costs, Do et al., [16]; Singh et al., [17]. From a banking risk perspective, non-performing loans typically reduce margins or interest income, increase loss provisions, and require additional managerial resources for monitoring and recovery, all of which can depress profitability.

Conclusion

Based on the findings of the study, it can be concluded that: (1) DPK have no significant effect on ROA; (2) DST have a significant negative effect on ROA; (3) NPF has a significant negative effect on ROA; (4) DPK and DST have a significant positive effect on financing; (5) NPF has no significant effect on financing (P); (6) financing (P) has a significant positive effect on ROA; and (7) financing (P) does not mediate the relationship between DPK, DST, or NPF and ROA.

References

1. Rais, Muhammad., A. Henny., Man, Stanis., "Pengaruh Dana Pihak Ketiga, Capital Adequacy Ratio, Non Performing Financing, terhadap Terhadap Profitabilitas Perusahaan dengan Pembiayaan Sebagai Variabel Intervening Pada Perbankan Syariah (Suatu Kajian Studi Literatur Manajemen

- Keuangan Perusahaan)”, *Jurnal Ilmu Manajemen Terapan*, vol 4, no. 5, pp 686-695, 2023.
2. Tusiyan, Ira., Yudiana, Fetria Eka., “Pengaruh Dana Pihak Ketiga dan Non Performing Financing (NPF) terhadap Profitabilitas dengan Pembiayaan Bagi Hasil sebagai Variabel Intervening”, *WADIAH Jurnal Perbankan Syariah*, vol. 8, no.2 pp. 346-368, 2024.
 3. Novalista, Lidiya Ayu., Anggraeni, Erika., Nurmalia, Gustika, “Analysis of the Effect of Temporary Syirkah Funds and Operational Efficiency on Profitability with NPF as a Moderating Variable (Study on Islamic Commercial Banks 2017-2022)”. 1st International Conference on Islamic Economics, Business Development and Studies, *KnE Social Sciences*, pages 768–786, 2024.
 4. Rasyid, M. F., Muchlis, S., & Suhartono, S., “Pengaruh Dana Pihak Ketiga (Dpk) Dan Non Performing Financing (Npf) Terhadap Profitabilitas Dengan Pembiayaan Murabahah Sebagai Variabel Intervening (Studi Pada Bank Umum Syariah Yang Terdaftar Di Ojk Tahun 2014-2018)”. *ISAFIR: Islamic Accounting and Finance Review*, vol. 1, no. 2, pp. 111–124, 2020.
 5. Rahmagiasti, C. O., “Pengaruh Dana Pihak Ketiga Dan Non Performing Financing Terhadap Return on Assets Melalui Pembiayaan Murabahah Sebagai Variabel Intervening Pada Bank Umum Syariah Di Indonesia Tahun 2015-2019”, 2021. Thesis, not published
 6. Rais, M., Manafe, H. A., & Man, S., “Pengaruh Dana Pihak Ketiga, Capital Adequacy Ratio dan Non Performing Financing terhadap Profitabilitas Perusahaan dengan Pembiayaan Sebagai Variabel Intervening pada perbankan Syari’ah (Suatu Kajian Studi Literatur Manajemen Keuangan Perusahaan)”, *Jurnal Ilmu Manajemen Terapan*, vol. 4, no. 5, pp. 686–695, 2023.
 - Finandarsi, E. I., “Pengaruh Dana Pihak Ketiga (DPK), Capital Adequacy Ratio (CAR), dan Non Performing Financing (NPF) terhadap Profitabilitas Bank Syariah dengan Pembiayaan sebagai Variabel Intervening”, 2021, Thesis, not published
 7. Kasmir, . (2015). *Manajemen Perbankan (Edisi Revisi)*. PT. Raja Grafindo Persada.
 8. Saona, P., “Intra- and extra-bank determinants of Latin American banks’ profitability”. *Journal of Financial Stability*, vol. 24, pp. 1–14, 2016.
 9. Ismail,. (2018). *Manajemen Perbankan: Dari Teori Menuju Aplikasi*. Kencana.
 10. Prasetyoningrum, A. K. (2015). *Risiko Bank Syariah (1st ed.)*. Pustaka Pelajar bekerjasama dengan LP2M UIN Walisongo.
 11. Suhendi, H. (2016). *Fiqh Muamalah: Membahas Ekonomi Islam*. PT. Raja Grafindo Persada.
 12. Mollah, S., & Zaman, M., “Shari’ah supervision, corporate governance and performance. *Journal of Banking & Finance*”, vol. 58, pp. 418–435, 2015.
 13. Rouetbi, M., Ftiti, Z., & Omri, A., “The impact of displaced commercial risk on the performance of Islamic banks. *Pacific-Basin Finance Journal*, vol. 79, no. 10, 2023.
 14. Khaddafi, M., Chalirafi, C., Muchsin, M., & Khairani, E., “Analisis Faktor Yang Mempengaruhi Penyaluran Pembiayaan UMKM (Studi Pada Bank Umum Syariah Di Indonesia Periode 2015-2019)”. *E-Mabis: Jurnal Ekonomi Manajemen Dan Bisnis*, vo. 23, no. 1, pp. 40–48, 2022.
 15. Do, H. L., Ngo, T. X., & Phung, Q. A., “The effect of non-performing loans on profitability of commercial banks: Case of Vietnam. *Accounting*, vol. 6, no. 3, pp. 373–386.
 16. Singh, S. K., Basuki, B., & Setiawan, R., “The Effect of Non-Performing Loan on Profitability: Empirical Evidence from Nepalese Commercial Banks. *Journal of Asian Finance, Economics and Business*, vol. 8, no. 4, pp. 709–716.