



The Determinants of Profit-Sharing Rates for Mudharabah Deposits: The Case of Islamic Banks in Indonesia

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Abstract: Collecting Islamic bank funds with mudharabah contracts, such as mudharabah deposits, will offer depositors a profit-sharing rate. This study aims to obtain empirical evidence regarding the determinants of the profit-sharing rate for mudharabah deposits. The determinants in this study are non-performing financing, operational efficiency, capital adequacy, and third-party funds. The sample used in this study was 11 Islamic commercial banks in Indonesia from 2015-2019. The results show that only capital adequacy affects the profit-sharing rate for mudharabah deposits. The increase in the capital adequacy ratio of Islamic banks in the study period significantly impacted the decrease in the rate of profit-sharing on deposits received by third parties, especially from 2017 to 2018. The results also show that non-performing financing, operational efficiency, and third-party funds do not affect profit-sharing deposits. Problem financing and operational efficiency are still the main problems Islamic banks face in Indonesia, so they do not impact the profit-sharing rate for mudharabah deposits. Third-party funds also tend to decrease during the study period so that it does not impact the profit-sharing rate for mudharabah deposits. The study's findings are expected to generate theoretical contributions to scientific development in concepts and empirical research in the Islamic banking sector, practical contributions to Islamic banks in their operational activities, and policy contributions to regulators in setting policies in the Islamic banking sector.

Keywords: Profit-sharing, non-performing financing, operational efficiency, capital adequacy, third party funds

JEL Classification: M41 Accounting, G21 Banks

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Introduction

Empirically, research with a sample of Islamic banks mainly examines the determinants of profitability (Rosiana, 2019; Afkar et al., 2020; Kamila et al., 2021), determinants of profit-sharing financing such as mudharabah and musyarakah (Winarsih & Asokawati, 2019; Nasfi et al., 2021), determinant of murabahah financing (Hasnadina & Mulazid, 2019; Nanda, 2020), and the determinants of non-performing financing (Effendi et al., 2017; Indrajaya et al., 2019). The current study investigates the factors influencing the profit-sharing rate for mudharabah deposits.

Previous research that investigated the effect of non-performing financing on the profit-sharing rates for mudharabah deposits showed contradictory results. These studies (Juliana & Mulazid, 2017; Irwansyah & Hidayat, 2021). found a positive and significant effect of non-performing financing on the rate of profit sharing on mudharabah deposits. On the other hand, Syamsiyah (2021) found a negative and significant effect of non-performing financing on the rate of profit sharing on mudharabah deposits. On the other hand, Oktaviani (2021) did not find the effect of non-performing financing on the profit-sharing rate for mudharabah deposits.

Research investigating the effect of operational efficiency on the profit-sharing rate for mudharabah deposits also shows contradictory results. Empirical studies conducted by Aulia & Saputri (2021) and Sudarsono & Saputri (2018) found a negative and significant effect of operational efficiency ratio (OER) represented by operating expenses divided by operating income on the profit-sharing rates on mudharabah deposits. Bramandita & Harun (2020) and Harfiah et al. (2018) found a positive and significant effect of BOPO on the rate of profit-sharing for mudharabah deposits. In contrast, Ardana et al. (2021) did not find operational efficiency's effect on the profit-sharing rate for mudharabah deposits.

Literature Review

The Effect of Non-Performing Financing on the Profit-Sharing Rate of Mudharabah Deposits

The collection of funds in the form of time deposits is a time deposit that can only be withdrawn at a specific time based on the depositor's agreement with the bank (DSN-MUI, 2000a). Deposits that meet sharia criteria are deposits using a mudharabah contract, where sharia banks are the fund managers (*mudharib*), and the

customer is the owner of the funds (*shahibul maal*) (Salman, 2017). The profit-sharing rate for customers and sharia banks is stated in a ratio and clearly stated at the time of account opening.

One of the factors that affect profit-sharing rates is non-performing financing. Conceptually, it can be understood that the larger the non-performing financing, the lower the profit-sharing rate for the mudharabah deposits. One of the reasons is that non-performing financing decreases the profit of Islamic banks, which will be distributed to depositors. Non-performing financing does not provide benefits for Islamic banks in the form of profit-sharing, and Islamic banks must bear the risk of business losses as the owner of the funds.

In the context of the financing contract, the Islamic bank acts as the owner of the funds (*shahibul maal*), while the customer acts as the manager (*mudharib*). If a business loss is managed by the mudharib and is not caused by negligence, intentional or breach of contract, the fund owner must be responsible for the loss. On the other hand, profit is divided according to the agreed profit-sharing ratio (DSN-MUI, 2000b). Conceptually, it can be understood that non-performing financing can affect profit-sharing rates received by mudharabah depositors. The lower the level of non-performing financing, the better the financing that Islamic banks have distributed. The mudharabah financing provides a share received by the Islamic bank as the owner of the funds. It causes more income to be received by Islamic banks and will provide a more significant profit-sharing rate to mudharabah depositors.

The results of empirical research conducted by Syamsiyah (2021), Juliana & Mulazid (2017), and Irwansyah & Hidayat (2021) support this concept. These studies found a significant effect of non-performing financing on the profit-sharing rate for mudharabah deposits. Based on the description and development of this hypothesis, the research hypothesis is formulated as follows:

H_1 : *Non-performing financing affects the profit-sharing rate of mudharabah deposits*

The Effect of Operational Efficiency on the Profit-Sharing Rates of Mudharabah Deposits

In collecting third-party funds, Islamic banks act as managers (*mudharib*), while customers are the owners of funds (*shahibul mal*). The greater the revenue or profit generated by Islamic banks, the more significant the rates of profit-sharing

that customers can receive. The revenue or profit is divided according to the agreed ratio between the Islamic bank and the customer. Operational efficiency is related to Islamic banks' ability to carry out these operational activities. The smaller the operational efficiency ratio of Islamic banks, the better the Islamic banks at controlling operating expenses. It indicates that the financial performance of Islamic banks is getting healthier. This condition will impact increasing the distribution of profit sharing that will be received by mudharabah deposit depositors (Ardana et al., 2021). The results of previous empirical research (Aulia & Saputri, 2021; Bramandita & Harun, 2020; Harfiah et al., 2018) Operational Cost of Operating Income (BOPO support the previous concept and find that the operational efficiency of Islamic banks affects the rate of profit sharing on mudharabah deposits. On the other hand, a high operational efficiency ratio indicates a high operating expense that must be borne by Islamic banks so that it will have an impact on the lower amount of profit-sharing that mudharabah deposit customers will receive. Based on the previous description, the following hypotheses can be formulated:

H₂: Operational efficiency affects the profit-sharing rate of mudharabah deposits

The Effect of Capital Adequacy on the Profit-Sharing Rates of Mudharabah Deposits

Conceptually, it is known that the capital adequacy of Islamic banks can affect the rate of profit-sharing for mudharabah deposits. *Capital adequacy* is a minimum capital requirement that Islamic banks must meet. Islamic banks with a relatively high capital adequacy ratio can increase the financing channeled to business managers (shahibul maal). Thus, Islamic banks can obtain higher profit-sharing income, and the proceeds will be distributed back to mudharabah depositors. Several studies by Wahyudi et al. (2018) and Fitrianiingsih and Rani (2020) Bank Indonesia, Otoritas Jasa Keuangan (OJK found a significant effect of the capital adequacy ratio on the profit-sharing rate for mudharabah deposits. Fitrianiingsih and Rani (2020) Bank Indonesia, Otoritas Jasa Keuangan (OJK used a relatively minor number of samples, namely seven Islamic commercial banks in Indonesia in the 2013-2020 period and used a different analytical approach, namely multiple linear regression. Wahyudi et al. (2018) Financing to Deposit Ratio (FDR used a sample of 11 Islamic commercial banks in Indonesia in the 2011-2015 period. Based on this description, the following hypotheses can be formulated:

H₃: Capital adequacy affects the profit-sharing rate of mudharabah deposits

The Effect of Third-Party on the Profit-Sharing Rates of Mudharabah Deposits

The level of third-party funds shows how much savings, current accounts and deposits based on a mudharabah contract are compared to the amount of temporary syirkah funds. Conceptually, it is known that the greater the number of third-party funds that Islamic banks have collected from third parties, the greater the profit-sharing rates that will be received by mudharabah depositors. It is because Islamic banks can roll back the funds they have collected in various forms of financing, both profit-sharing-based financing and buying and selling-based financing. This concept is supported by empirical findings from Prasetyoningrum (2015), which found a positive influence on the return of third-party funds on the level of third party funds. Prasetyoningrum (2015) used a sample of Islamic commercial banks in Indonesia in the 2010-2012 period. Based on the previous description, the following hypotheses can be formulated:

H₄: Third-party funds affect the profit-sharing rate of mudharabah deposits

Methods

The research population is all Islamic commercial banks in Indonesia in 2015-2019. Based on predetermined criteria, namely the completeness of financial statement data and all research variables, eleven Islamic commercial banks in Indonesia were obtained in 2015-2019. The research data source is secondary data taken from the financial statements and annual reports of 11 Islamic banks in Indonesia in the 2015-2019 period. The eleven Islamic commercial banks are Bank Syariah Mandiri (BSM), Bank Muamalat Indonesia (BMI), Bank Negara Indonesia Syariah (BNIS), Bank Rakyat Indonesia Syariah (BRIS), Bank Syariah Bukopin (BSB), Bank Central Asia (BCA) Syariah, Bank Jabar Banten (BJB) Syariah, Maybank Syariah, Bank Mega Syariah, Bank Panin Dubai Syariah, and Bank Victoria Syariah.

The dependent variable studied in this study is profit-sharing rates in mudharabah deposits, while the independent variables include non-performing financing, operational efficiency, capital adequacy and third-party funds. Islamic banks receive from managing funds as mudharib. The mudharabah contract in this study is a fund-raising contract where the Islamic bank is the manager (mudharib), and the customer is the owner of the funds (shahibul mal) with a ratio agreed at the beginning of the contract (Salman, 2017, 2020; DSN-MUI, 2000b, 2000a). The

profit-sharing rate of mudharabah deposits in this study is measured by two indicators. The first indicator ($Y_{1,1}$) is the growth ratio of third-party rights to profit sharing of temporary syirkah funds, calculated from the number of third-party rights this year minus the number of third-party rights in the previous year divided by the number of third-party rights in the previous year. The second indicator ($Y_{1,2}$) is calculated from the ratio of third-party rights to the profit-sharing of temporary syirkah funds divided by the total income.

Non-performing financing is financing provided by Islamic banks to customers that contains a fairly significant risk where the customer cannot return the principal amount of the bank's capital and the amount of profit-sharing that is the right of the Islamic bank. Problem financing in this study refers to Mutawali et al. (2019), Indrajaya (2019), Salman (2021), Permataningayu & Mahdaria (2019), Effendi et al. (2017) will have an impact on the sustainability of the bank. Therefore, the analysis of NPF factors should be conducted as a preventive measure and a risks controller of business activities. This research analyzes the factors influencing NPF at *sharia* banking (BUS, and Afkar et al. (2020) it is done because many research results are inconsistent with the theory. Quantitative research methods are used to make generalizations using a sample of 14 Islamic Commercial Banks in Indonesia with time series data collection techniques for 5 years. The data analysis technique used is multivariate analysis using the Warp PLS structural equation model. The results showed that the level of profitability of Islamic banks is always overshadowed by the occurrence of credit risk that causes non-performing financing from financing of the type of natural uncertainty contracts because it is type of financing is a financing that does not provide certainty of results. The results of this study are consistent with agency theory that explains the existence of information asymmetry, and consistent with the theory of mixing that by providing opportunities to manage business to business managers (mudharib/must-yarik. The non-performing financing ratio is calculated by the number of non-performing financing divided by the total financing. The first indicator ($X_{1,1}$) is net non-performing financing (NPF net). The second indicator ($X_{1,2}$) is non-performing gross (NPF gross).

Operational efficiency in this study refers to the efficiency level of Islamic banks in managing their operational activities. Indicator measurement refers to Jeong & Phillips (2001) a new loss classification scheme for computing the overall equipment effectiveness (OEE, Gill et al., 2014; Abd-Elmageed et al., 2020), ROA, ROE, gross profit margin, current ratio, asset turnover, inventory turnover, To-

bin's Q ratio and firm size on capital structure using the earnings management as a moderator variable. Findings indicate that ROE, gross profit margin and firm size have a positive significant impact on company' capital structure, while operational efficiency, ROA, Tobin's Q ratio and all liquidity ratios used in the first regression model (current ratio, asset turnover and inventory turnover, and Kanghai (2010). Two indicators measure operational efficiency. The first indicator ($X_{2,1}$) is the ratio of operating expenses divided by operating income. The second indicator ($X_{2,2}$) is the growth in operational efficiency, calculated from the BOPO ratio this year minus the BOPO ratio in the previous year divided by the BOPO ratio in the previous year.

Capital adequacy in this study refers to the ability of Islamic banks to maintain sufficient bank capital and the ability of banks to manage risks that may affect bank capital. Measurement of capital adequacy indicators refers to Safitri et al. (2021), Yolanda (2017), Atuahene et al. (2021), Usman & Lestari (2019), and Murdiyanti et al. (2015). Two indicators measure capital adequacy in this study. The first indicator (X3.1) is the ratio of bank capital divided by risk-weighted assets. The second indicator (X3.2) is capital adequacy growth calculated from this year's capital adequacy ratio minus the previous year's capital adequacy ratio divided by the previous year's capital adequacy ratio.

Third-party funds in this study refer to funds collected by banks from the public through savings, current accounts, and time deposits (Kasmir, 2018). In Islamic banks, third-party funds refer to savings, current accounts, and deposits using wadiah and mudharabah contracts and are presented on the liability side and temporary syirkah funds (Salman, 2017). Measurement of third-party funds refers to Salman (2021), Alamsyah (2020), Nanda (2020), Tanjung & Affiah (2021), Hasnadina & Mulazid (2019), Indiastary et al. (2020). Two indicators measure third-party funds. The first indicator (X4.1) is the ratio of demand deposits, savings, and mudharabah deposits divided by temporary syirkah funds. The second indicator (X4.2) is the growth of temporary syirkah funds, calculated from the temporary syirkah funds this year minus the temporary syirkah funds in the previous year divided by the temporary syirkah funds in the previous year.

Furthermore, the data is processed using a partial least squares (PLS) approach using the latest version of the SmartPLS software, version 3.3.7. Several considerations for using the PLS approach are (1) the number of Islamic banks used as the research sample is relatively small (2) limitations in the theories and concepts that underlie this research. In the convergent validity test, a loading factor of 0.60 is used, and the construct reliability test is carried out by looking at the Cronbach's

alpha, rho_A, and composite reliability values, as well as the average variance extracted (AVE) where all variables have a value > 0.7 (Hair et al., 2011). The value of R square is 0.75; 0.50; 0.25 describes a strong, medium, and weak model. The f-square value of 0.35 is categorized as having a significant effect, the f-square value of 0.15 is categorized as a medium effect, and the f-square value of 0.02 is a small effect (Sarstedt et al., 2017). In hypothesis testing, the research hypothesis is accepted if it has a p-value < 0.05 and the hypothesis is rejected if it has a p-value > 0.05.

Results and Discussion

Descriptive Statistics

Descriptive statistics of the research data are shown in Table 1, based on which it is known that the net non-performing financing ratio ($X_{1,1}$) in Islamic banks in Indonesia in the 2015-2019 period has a maximum value of 0.05, which is a rounding number and is almost close to the limit required by the Financial Services Authority, namely 5%. In addition, the operational efficiency ratio of Islamic banks, as indicated by the $X_{2,1}$ indicator, has an average of more than 1, which is 1.03, which indicates that operating expenses exceed operating income, indicating that Islamic banks are inefficient in their operational activities. The capital adequacy ratio variable shown by the $X_{3,1}$ indicator has a minimum value of 12%, meaning that Islamic banks already have capital adequacy above the minimum capital requirement determined by the regulator, which is 9%-10%. In terms of the number of third-party funds that Islamic banks have collected, as indicated by indicator $X_{4,1}$, it shows an average of 90% of temporary syirkah funds in mudharabah contracts. However, there are still Islamic banks with a minimum value of 0%, indicating that there are no temporary syirkah funds in the form of mudharabah. In the $Y_{1,2}$ indicator, it can be seen that the return that is the right of mudharabah depositors divided by the total income that is shared has an average of 46.8%. The remaining 53.2% becomes profit-sharing rights received by Islamic banks.

Table 1

Descriptive Statistics

	Mean	Min	Max	Standard Deviation
$X_{1,1}$	0.027	0.000	0.050	0.016
$X_{1,2}$	0.059	0.000	0.440	0.076
$X_{2,1}$	1.031	0.810	2.170	0.276

X _{2,2}	0.041	-0.580	1.770	0.378
X _{3,1}	0.278	0.120	2.420	0.364
X _{3,2}	0.078	-0.380	1.150	0.290
X _{4,1}	0.909	0.000	1.000	0.222
X _{4,2}	0.050	-1.000	0.420	0.216
Y _{1,1}	0.018	-1.290	0.720	0.315
Y _{1,2}	0.468	-0.070	0.850	0.179

Convergent Validity

The validity test used the Fornell-Larcker criterion, cross-loading, and heterotrait-monotrait ratio (HTMT) tests. The results of the Fornell-Larcker criterion test show that the loading of each variable exceeds its cross-loading (Table 2). Similarly, the cross-loading score shows that all variables have the highest correlation compared to the correlations on other variables (Table 3). The results of the convergent validity test show that all of them have an outer loading score > 0.6 as a condition to proceed to the validity test (Figure 2).

Figure 1

Outer Loading

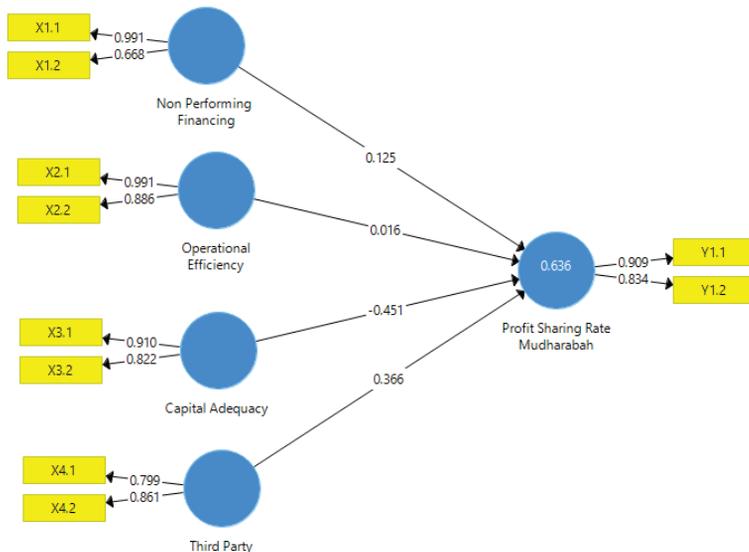


Table 2

Fornell-Larcker Criterion

Variables	CAR	NPF	OER	PSRM	TPF
Capital Adequacy Ratio (CAR)	0.867				
Non Performing Financing (NPF)	-0.305	0.845			
Operational Efficiency Ratio (OER)	0.120	0.383	0.940		
Profit Sharing Rate of Mudharabah (PSRM)	-0.754	0.321	-0.140	0.872	
Third Party Fund (TPF)	-0.729	0.142	-0.410	0.706	0.831

Table 3

Cross-Loading

	CAR (X₃)	NPF (X₁)	OER (X₂)	PSRM (Y₁)	TPF (X₄)
X _{1,1}	-0.323	0.991	0.319	0.345	0.172
X _{1,2}	-0.091	0.668	0.584	0.064	-0.074
X _{2,1}	0.156	0.415	0.991	-0.161	-0.431
X _{2,2}	-0.024	0.217	0.886	-0.046	-0.277
X _{3,1}	0.910	-0.346	0.171	-0.743	-0.692
X _{3,2}	0.822	-0.156	0.015	-0.541	-0.560
X _{4,1}	-0.640	0.311	-0.220	0.535	0.799
X _{4,2}	-0.579	-0.044	-0.444	0.632	0.861
Y _{1,1}	-0.721	0.265	-0.116	0.909	0.728
Y _{1,2}	-0.581	0.302	-0.133	0.834	0.473

Construct Reliability

The construct reliability test was carried out by looking at Cronbach’s alpha, rho_A, composite reliability values, and average variance extracted (AVE). The results showed that all variables had a value > 0.7 (Table 4).

Table 4

Construct Reliability

	Cronbach’s Alpha	rho_A	Composite Reliability	Average Variance Extracted(AVE)
Capital Adequacy Ratio (CAR)	0.777	0.724	0.858	0.752
Non-Performing Financing (NPF)	0.717	2.615	0.828	0.714
Operational Efficiency Ratio (OER)	0.900	2.194	0.938	0.884

Profit Sharing Rate of Mudharabah (PSRM)	0.791	0.728	0.864	0.761
Third Party Fund (TPF)	0.753	0.763	0.816	0.790

R-Square and f-Square

The f-square test shows the variables determining the profit-sharing rate for mudharabah deposits. The R-Square test results show a value of 0.606, indicating that non-performing financing, operational efficiency, capital adequacy and third-party funds used in the model affect 60.6% of the profit-sharing rate. In comparison, other factors outside the research model determine 39.4%. Capital adequacy has the highest f-square value of 0.2319 compared to other variables (Table 5).

Table 5

f-Square

Variables	f Square
CAR	0.2319
NPF	0.0308
OER	0.0004
TPF	0.1316

Hypothesis Testing

The results of the hypothesis test show that third-party funds have a p-value of 0.016 (< 0.05), while non-performing financing, operational efficiency, and capital adequacy have a p-value of 0.519, 0.210, and 0.216 (> 0.05). These results empirically prove that third-party funds have a negative and significant effect on the profit-sharing rate of mudharabah deposits. In contrast, non-performing financing, operational efficiency, and capital adequacy have no significant effect on the profit-sharing rate of mudharabah deposits (Table 6).

Table 6

Path Coefficients

	Original Sample (O)	T Statistics (O/STDEV)	P Values
NPF → PSRM	0.116	1.151	0.250
OER → PSRM	0.064	0.099	0.921
CAR → PSRM	-0.354	2.141	0.033
TPF → PSRM	0.411	1.572	0.117

The Effect of Non-performing Financing on the Profit-Sharing Rate of Mudharabah Deposits

Non-performing financing measures non-performing financing compared to financing disbursed by Islamic banks. The smaller this ratio, the better the financing quality, with the optimal category if the ratio of non-performing financing is less than 5%. The study results show that non-performing financing does not affect the profit-sharing rate of mudharabah deposits. This finding is because Islamic banking in Indonesia still faces problems related to the high number of problem financing. The ratio of non-performing financing to Islamic banks in Indonesia in 2019 was 3.49% per year, worse than in 2018 at 3.26%. In addition, several Islamic banks during the study period (2015-2019) had non-performing financing ratios (NPF-net) close to the 5% required by the Financial Services Authority (PBI No. 20, 2021). This condition reinforces the study findings that non-performing financing does not affect the profit-sharing rate of mudharabah deposits.

The study results are also supported by the non-performing financing data trend and the profit-sharing rate for mudharabah deposits. The average non-performing financing during the research period (2015-2019) has decreased, namely Net NPF of 0.30% per year and Gross NPF of 1.07% per year, indicating better management of non-performing financing levels during the study period. The downward trend in non-performing financing should correlate with the increasing profit-sharing rate from mudharabah depositors. However, the growth rate of mudharabah profit sharing received by third parties in the 2015-2019 period tends to decrease; only from 2018 to 2019 it increased from -16.90% to 6.8%. This data phenomenon supports research findings that non-performing financing does not affect the profit-sharing rate for mudharabah deposits.

The results of this study support Sulfiani and Mais (2019) and Oktaviani (2021) who did not find the effect of non-performing financing on the rate of profit sharing on mudharabah deposits. Although Oktaviani (2021) used one sample of Islamic commercial banks in Indonesia with a research period of 2010-2019, the study results also did not find the effect of non-performing financing on the rate of profit-sharing for-profit mudharabah deposits. Sulfiani and Mais (2019) used a sample of Islamic commercial banks from 2012-2018. Although using a more extended period than the current study, the findings show consistent results; namely, non-performing financing does not significantly affect the profit-sharing rate for mudharabah deposits. On the other hand, these findings differ from those of Juliana and Mulazid (2017), Irwansyah and Hidayat (2021) and Syamsiyah (2021).

Differences with the results of previous studies occur due to differences in the research period, the number of research samples, and the use of data analysis techniques. Syamsiyah (2021) found a negative effect of non-performing financing on the profit-sharing rate on mudharabah deposits, while Juliana and Mulazid (2017) found a positive effect of non-performing financing on the amount of mudharabah deposit deposits. Syamsiyah (2021) used Islamic commercial banks' monthly financial report data in the 2019-2020 research period with an error correction model. Irwansyah and Hidayat (2021) used quarterly financial reports from March 2016 to December 2020. On the other hand, Juliana and Mulazid (2017) only used 11 Islamic commercial banks in Indonesia with a research period of 2011-2015.

The Effect of Operational Efficiency on Profit Sharing Rates of Mudharabah Deposits

The operational efficiency ratio is used to measure Islamic bank management's ability to control operational costs to operating income, according to the provisions as stipulated in SE. No.6/ 23 /DPNP (2004), a bank is categorized as having a reasonably good efficiency level if it has an operational efficiency ratio (OER) between 94% to 96%. Operational expenses include profit sharing and bonuses (annualized) while operating income is generated from the distribution of funds (SEOJK, 2017). The study results empirically prove that the operational efficiency of Islamic banks does not affect the profit-sharing rate for mudharabah deposits in the 2015-2019 period. This finding contradicts the previous theory and concept, which explained that operational efficiency affects the profit-sharing rate for mudharabah deposits. This finding is explained in descriptive statistics that the average operational efficiency ratio during the research period (2015-2019) is above 100%, which is 103%, meaning that operating expenses exceed operating income and have a value of a maximum of 217%. In addition, the average operational efficiency ratio during 2015-2018 was above 100%, exceeding the maximum limit determined by regulation, which is 94-96%. Thus, the still high operational efficiency ratio obtained by Islamic banks is relatively low in the profit-sharing rate for mudharabah deposits.

The results of this study support Umiyati and Syarif (2019)Capital Adequacy Ratio (CAR and Ardana et al., 2021) who did not find the effect of operational efficiency on the profit-sharing rate for mudharabah deposits. Ardana et al. (2021) used monthly financial reports from 2017 to 2019, the findings align with this study, whereas Umiyati and Syarif (2019)Capital Adequacy Ratio (CAR used a sample of 12 Islamic commercial banks in Indonesia and monthly data from January 2011 to June 2015. On the other hand, the results of this study provide diffe-

rent findings from Sudarsono and Saputri (2018), Bramandita and Harun (2020) Operational Cost of Operating Income (BOPO et al., 2021) and Cahya et al. (2020). From monthly financial report data from Islamic commercial banks from January 2011 to October 2017, Sudarsono and Saputri (2018) found a negative effect of operational efficiency on the profit-sharing rate on mudharabah deposits. Aulia and Saputri (2021) found a negative effect of operational efficiency on the profit-sharing rate on mudharabah deposits with a sample of Islamic People's Financing Banks (BPRS) in Indonesia in 2015-2019. Bramandita and Harun (2020) Operational Cost of Operating Income (BOPO found a positive effect of operational efficiency on the profit-sharing rate for mudharabah deposits using the monthly financial statements of BNI Syariah in the period January 2016 – December 2018. Harfiah et al. (2018) found a positive effect of operational efficiency on the rate of profit sharing of mudharabah deposits using quarterly financial report data from the 2011-2014 period and Cahya et al. (2020) found a positive effect of operational efficiency on the profit-sharing rate on mudharabah deposits with data from seven Islamic commercial banks in Indonesia in the 2014-2018 period.

The Effect of Capital Adequacy on Profit Sharing Rates of Mudharabah Deposits

The capital adequacy ratio for Islamic banks is used to show the ability of Islamic banks to provide funds to overcome the possible risk of loss. The study results prove empirically that capital adequacy affects the profit-sharing rate for mudharabah deposits. This result is consistent with the theory and concept which suggests that capital adequacy impacts the profit-sharing rate of mudharabah deposits. The more significant the core capital and complementary capital as of the total capital owned by Islamic banks, the greater the amount of financing that Islamic banks can channel. The findings also align with the provisions governing the minimum capital requirement for Islamic commercial banks as regulated in POJK 21 (2014) dated November 18, 2014, and Circular Letter of the Financial Services Authority No. 10 of 2017. POJK 21 (2014) regulates bank capital adequacy under the bank's risk profile and determines the strategy to maintain the bank's capital level. The higher the risk, the greater the capital must be provided to anticipate the risk. Based on data on the average capital adequacy ratio, information was obtained that the average CAR in the 2015-2019 period was around 20-40% and was above the required CAR ratio of between 9-10% by POJK 21 (2014). In addition, no Islamic banks had a CAR ratio below 10% during the study period (2015-2019).

During the research period (2015-2019), there was an increase in the capital adequacy ratio of 4.89% per year. The capital adequacy ratio increased from 23.95% in 2017 to 33.31% in 2018 and from 33.31% in 2018 to 39.72% in 2019. In that period (2017-2018), the growth of the capital adequacy ratio was 22.21%, which was the most significant growth during the research period (2015-2019). The profit-sharing rate shows the opposite condition compared to the capital adequacy data. There was a tendency to decrease the growth ratio of third-party rights to profit sharing. It decreased from 5.44% in 2017 to -16.90% in 2018. Based on the findings, it is empirically proven that a significantly increased capital adequacy ratio influences the decline in the profit-sharing rate.

The study results support Wahyudi et al. (2018) Financing to Deposit Ratio FDR and Fitriainingsih and Rani (2020) Bank Indonesia, Otoritas Jasa Keuangan (OJK who found a negative and significant effect of the capital adequacy ratio on the profit-sharing rate for mudharabah deposits. Fitriainingsih and Rani (2020) Bank Indonesia, Otoritas Jasa Keuangan OJK used a relatively minor number of samples, namely seven Islamic commercial banks in Indonesia in the 2013-2020 period and used a different analytical approach, namely multiple linear regression. Although there are differences in the number of research samples and the data analysis technique used, there is consistency in the results with Fitriainingsih and Rani (2020) Bank Indonesia, Otoritas Jasa Keuangan OJK (Wahyudi et al., 2018) Financing to Deposit Ratio FDR used a sample of 11 Islamic commercial banks in Indonesia in the 2011-2015 period and the current study results are consistent with their findings.

The Effect of Third-Party Funds on Profit Sharing Rates of Mudharabah Deposits

The results showed that the findings differed from the existing concept, namely that third-party funds had no significant effect on the profit-sharing rate for mudharabah deposits. The study results prove empirically that third-party funds do not affect the profit sharing rates. The average percentage of fundraising products in mudharabah compared to temporary syirkah funds is 90.9%. However, the minimum value is 0% because several Islamic banks still need to raise funds in mudharabah contracts. In addition, the growth ratio of temporary syirkah funds during the study period (2015-2019) contained Islamic banks with a value of -100%, showing a very significant decrease in temporary syirkah funds.

This empirical finding is reinforced by the trend of data on third-party funds and the profit-sharing rate for mudharabah deposits. The most significant decrease in the profit-sharing rate growth ratio occurred from 2017 to 2018, wherein, in 2017, it grew by 5.44% and decreased in 2018 by -16.90%. A significant decrease in the ratio of third-party funds occurred in 2017, from 97.08% to 87.84% in 2018. Based on the findings, it is empirically proven that changes in the profit-sharing rate are not significantly affected by changes in the ratio of the number of third-party funds. The current study results support previous empirical research from Ali (2018), which did not find the effect of third-party funds on the profit-sharing rate for mudharabah deposits. Ali (2018) used a sample of one Islamic commercial bank, namely BNI Syariah, with quarterly report data from 2010 to 2015. Although there are differences in the number of samples and the period studied, the current findings are consistent with Ali (2018).

Conclusion and Policy Implication

This study examines non-performing financing, operational efficiency, capital adequacy, and third-party funds, which are suspected to affect the profit-sharing rate of mudharabah deposits. Based on the discussion, it is found that the capital adequacy ratio has a significant effect on the profit-sharing rates. The greater the capital adequacy ratio, the smaller the profit-sharing rate for mudharabah deposits. This finding aligns with the trend of increasing capital adequacy ratios and decreasing profit-sharing rates of 11 Islamic commercial banks in Indonesia during the 2015-2019 period. This finding provides practical implications for Islamic banks to maintain the capital adequacy ratio because it impacts the level of profit sharing on mudharabah deposits. In addition, these findings also provide policy implications for regulators in setting the minimum capital adequacy ratio that must be complied with by Islamic banks and setting sanctions for those that do not comply. Other factors, such as non-performing financing, operational efficiency, and the ratio of third-party funds, do not affect the rate of profit sharing on mudharabah deposits. There are several Islamic banks whose non-performing financing ratios are close to the requirements required by the regulator, so this condition does not impact the profit-sharing rate for mudharabah deposits. The operational efficiency ratio also needs serious attention from Islamic banks because the value of this ratio during the 2015-2018 period exceeds one. This condition resulted in a decrease in the profit-sharing rate for mudharabah deposits.

The study's limitations are related to the low-reliability value on several variables based on the reliability test results, so future research can increase the strength of the research model by using different indicators. In addition, suggestions for further research can be directed at other variables, such as profit-sharing-based income and ijarah fees, which are indicated to affect the profit-sharing rate for mudharabah deposits. In addition, samples of other sharia entities can be used for further research, such as savings and loan cooperatives and sharia financing, sharia insurance, and other sharia entities.

References

- Adeyemi, A. A. & Haron R. (2016). The behavioral biases of Muslims in Islamic banking and finance: A second-order self-reported religiosity measurement invariance. *Journal of Islamic Thought and Civilization (Special Issue: Islamic Banking and Finance)*, 87-114.
- Ansari, V.A. (2006). Behavioural finance: A review. *SCMS Journal of Indian Management*, October-December, 3(4), 18-28.
- Abd-Elmageed, M. H., Abdel Megeid, N. S. & Riad, N. M. A. H. (2020). Impact of Operational Efficiency and Financial Performance on Capital Structure using Earnings Management as a Moderator Variable. *ATASU*, 24(3), 1029–1059. <https://doi.org/10.21608/atasu.2020.160431>
- Afkar, T., Chandrarin, G. & Pirmaningsih, L. (2020). Moderation of Non Performing Financing on Natural Uncertainty Contracts To The Profitability of Islamic Commercial Bank In Indonesia. *International Journal of Economics, Business and Accounting Research (IJEBAR)*, 4(02), 330–339. <https://doi.org/10.29040/ijebar.v4i02.1051>
- Alamsyah, M. H. (2020). *The Effect of Third Party Funds and Non-Performing Financing on the Performance of Islamic Banks (Case Study at PT Bank Muamalat Indonesia Tbk)*, 14103–14116.
- Ali, H. (2018). Analisis Hubungan antara Pendapatan, Dana Pihak Ketiga, dan Return On Asset dengan Tingkat Bagi Hasil Deposito Mudharabah. *Journal of Finance and Islamic Banking* 1(1)). <https://doi.org/10.22515/jfib.v1i1.731>
- Ardana, Y., Syamsiyah, N., Rohmi, M. L. & Renfiana, L. (2021). *Error Correction Model Analysis in Measuring the Effect of Bank Internal Factors on Mudharabah Deposits for Islamic Commercial Banks*. 1(2), 109–118. <https://doi.org/10.33830/elqish.v1i1.1518.2021>
- Atuahene, S. A., Yusheng, K., Benturn-Micah, G. & Aboagye, A. K. (2021). Impact of Capital Adequacy on Banks' Performance: Considering the Basel International Regulatory Framework for Banks. *Etikonomi*, 20(1), 45–54. <https://doi.org/10.15408/etk.v20i1.15590>
- Aulia, F. U. & Saputri, D. E. (2021). The Effect of ROA , BOPO , and Interest Rate on Profit Sharing Rate of Mudharabah Deposit at BPRS in Indonesia during 2015-2019. *JIFA: Journal of Islamic*

- Finance and Accounting*, 4(1), 57–70. <https://doi.org/10.22515/jifa.v4i1.3422>
- Bramandita, B. & Harun, H. (2020). The Impact of ROA, BOPO, FDR, CAR, NPF on Mudharabah Profit Sharing Rate. *Journal of Islamic Economic Laws*, 3(2), 86–107.
- Cahaya, B. T., Zakiyah, R., Rukmini, R. & Kusuma, A. M. (2020). Analisis Tingkat Bagi Hasil Mudharabah: di Tinjau dari Rasio Return on Assets (ROA), Financial to Deposit Ratio (FDR) dan Biaya Operasional dari Pendapatan Operasional (BOPO) (Studi pada Bank Umum Syariah di Indonesia Periode 2014-2018). *Jurnal Ilmiah Ekonomi Islam*, 6(2), 321. <https://doi.org/10.29040/jiei.v6i2.1003>
- DSN-MUI. (2000a). Fatwa Dewan Syari'ah Nasional No. 03/DSN-MUI/IV/2000 Tentang Deposito. *Himpunan Fatwa DSN MUI*, 4.
- DSN-MUI. (2000b). Fatwa Dewan Syari'ah Nasional No. 07/DSN-MUI/IV/2000 Tentang Pembiayaan Mudharabah (Qiradh). *Himpunan Fatwa DSN MUI*, 5. <http://mui.or.id/wp-content/uploads/files/fatwa/07-Mudharabah.pdf>
- Effendi, J., Thiarany, U. & Nursyamsiah, T. (2017). Factors Influencing Non-Performing Financing (NPF) at Sharia Banking. *Walisongo: Jurnal Penelitian Sosial Keagamaan*, 25(1), 109. <https://doi.org/10.21580/ws.25.1.1540>
- Fitriyaningsih, C. & Rani, L. N. (2020). Determinan Tingkat Bagi Hasil Deposito Mudharabah Pada Bank Umum Syariah Di Indonesia. *Jurnal Ekonomi Syariah Teori Dan Terapan*, 7(9), 1714. <https://doi.org/10.20473/vol7iss20209pp1714-1730>
- Gill, A., Singh, M., Mathur, N. & Mand, H. S. (2014). The Impact of Operational Efficiency on the Future Performance of Indian Manufacturing Firms. *International Journal of Economics and Finance*, 6(10). <https://doi.org/10.5539/ijef.v6n10p259>
- Hair, J. F., Ringle, C. M. & Sarstedt, M. (2011). PLS-SEM: Indeed a Silver Bullet. *Journal of Marketing Theory and Practice*, 19(2), 139–152. <https://doi.org/10.2753/MTP1069-6679190202>
- Harfiah, L., Purwati, D. A. S. & Ulfah, P. (2018). Analysis the Effect of Profitability (ROA), Cost Ratio (BOPO), and Financing to Deposit Ratio (FDR) on the Profit Sharing Mudharabah in Islamic Banking in Indonesia. *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.2752444>
- Hasnadina, P. S. & Mulazid, A. S. (2019). Analyze the Effect of Third Party Fund (Tpf), Non-Performing Financing (Npf), Financing To Deposit Ratio (Fdr) and Profit Margin on Murabahah Financing of Sharia Commercial Bank. *Al-Masraf: Jurnal Lembaga Keuangan Dan Perbankan*, 4(1), 17. <https://doi.org/10.15548/al-masraf.v4i1.227>
- Indiastary, D., Suprayogi, N. & Indrawan, I. W. (2020). a Meta-Analysis of the Determinant of Third Party Fund on Islamic Banking in Indonesia. *Jurnal Ekonomi Dan Bisnis Islam (Journal of Islamic Economics and Business)*, 6(2), 175. <https://doi.org/10.20473/jebis.v6i2.12766>

- Indrajaya, I. (2019). Determinan Non-Performing Financing Pada Bank Umum Syariah Di Indonesia. *Jurnal Ekonomi Dan Bisnis Islam (Journal of Islamic Economics and Business)*, 5(1), 68. <https://doi.org/10.20473/jebis.v5i1.13180>
- Irwansyah, R. & Hidayat, S. (2021). *The Effect of Capital Adequacy Ratio , non Performing Financing , and Financing to Deposit Ratio on Returns for Deposit Results of Sharia Commercial Banks.* 4618–4634.
- Jeong, K. & Phillips, D. T. (2001). Operational efficiency and effectiveness measurement. *International Journal of Operations & Production Management*, 21(11), 1404–1416. <https://doi.org/10.1108/EUM000000006223>
- Juliana, S. & Mulazid, A. S. (2017). Analisa Pengaruh BOPO, Kecukupan Modal, Pembiayaan Bermasalah, Bagi Hasil Dan Profitabilitas Terhadap Simpanan Mudharabah Pada Bank Umum Syariah Periode 2011-2015. *Li Falah : Jurnal Studi Ekonomi Dan Bisnis Islam*, 2(1), 24–45.
- Kamilah, K. (2021). The Effect of Murabahah Financing and Profit Sharing on the Profitability of Return on Assets (ROA) Through Non Performing Financing (NPF) In Sharia Commercial Banks. *Budapest International Research and Critics Institute-Journal (BIRCI-Journal)*, 4(3), 4873–4886. www.bircu-journal.com/index.php/birci
- Kanghwa, C. (2010). From operational efficiency to financial efficiency. *Asian Journal on Quality*, 11(2), 137–145. <https://doi.org/10.1108/15982681011075943>
- Kasmir (2018). *Bank dan Lembaga Keuangan lainnya*. RajaGrafindo Persada.
- Murtiyanti, S., Azam Achsani, N. & Budiman Hakim, D. (2015). Capital adequacy of the banking industry in Indonesia Article Info. *Economic Journal of Emerging Markets*, 7(2), 69–77. <http://jurnal.uui.ac.id/index.php/jephttp://dx.doi.org/10.20885/ejem.vol7.iss2.art1>
- Mutawali, M., Rodoni, A. & Said, M. Bin. (2019). Prevention Effectiveness of Non-Performing Financing in the Indonesian Islamic Bank. *Etikonomi*, 18(2), 259–274. <https://doi.org/10.15408/etk.v18i2.11262>
- Nanda, R. (2020). Can Third Party Funds, Financing to Deposit Ratio, and Capital Adequacy Influence Murabaha Financing? Study of Islamic Banks in Indonesia. *Journal of Accounting Research, Organization and Economics*, 3(1), 84–101. <https://doi.org/10.24815/jaroe.v3i1.15412>
- Nasfi, N., Yunimar, Y., Sabri, S., Eka, F. & Asnah, A. (2021). The effect of profit sharing and financing ceiling on non-performing financing islamic banks. *INOVASI: Jurnal Ekonomi, Keuangan Dan Manajemen*, 17(4), 850–858.
- Oktaviani, N. R. S. R. (2021). Pengaruh Non Performing Financing , Financing To Deposit Ratio , Dan Capital Adequacy Ratio Terhadap Tingkat Bagi Hasil Deposito Mudharabah Pendahuluan Bank adalah badan usaha yang berfungsi (Dalam Jutaan Rupiah. *Jurnal Ilmu Manajemen*,

- 10(2), 123–132. <https://doi.org/10.32502/jimn>.
- PBI. (2021). *Perubahan Ketiga atas Peraturan Bank Indonesia Nomor 20/8/PBI/2018 tentang Rasio Loan To Value Untuk Kredit Properti, Rasio Dinancing To Value Untuk Pembiayaan Properti dan Uang Muka Untuk Kredit atau Pembiayaan Kendaraan Bermotor*.
- Permataningayu, G. & Mahdaria, S. (2019). Deposit Ratio to Volume of Financing of Islamic Banks in Indonesia. *Asian Journal of Islamic Management (AJIM)*, 1(1), 28–37. <https://doi.org/10.1108/AJIM.vol1.iss1.art3>
- POJK 21. (2014). *Kewajiban Penyediaan Modal Minimum Bank Umum Syariah.pdf*.
- Prasetyoningrum, A. K. (2015). Analysis bi rate and return of third party fund on rate of third party fund on Islamic banking in Indonesia. *Conference In Business, Accounting, And Management (CBAM)*, 2(1), 104–116. <http://jurnal.unissula.ac.id/index.php/cbam/article/view/296>
- Riyadi, S., Iqbal, M., Pangastuti, A. A. & Muditomo, A. (2021). Optimization of Profit-Sharing Financing at Islamic Banking in Indonesia. *Jurnal Keuangan Dan Perbankan*, 25(2), 260–279. <https://doi.org/10.26905/jkdp.v25i2.5212>
- Rosiana, R. (2019). The Influence of Profit Sharing Financing , Murabaha Financing , Non-Performing Financing , Inflation and Exchange Rates on Profitability of Sharia Commercial Banks in Indonesia. *Journal of Islamic Economics, Finance and Banking*, 3(1), 22–48.
- Safitri, J., Rahmati, A., Jayadi, J. & Affandi, M. A. (2021). Do Liquidity and Capital Adequacy Ratio Matter for Islamic Banks Performance in Indonesia? an Analysis Using Financing Risk As Mediator. *Share: Jurnal Ekonomi Dan Keuangan Islam*, 10(1), 138. <https://doi.org/10.22373/share.v10i1.8104>
- Salman, K. R. (2017). *Akuntansi Perbankan Syariah Berbasis PSAK Syariah* (B. Sarwiji (ed.); Edisi Kedu). PT Indeks.
- Salman, K. R. (2020). *Akuntansi Syariah Pendekatan Akad dan Wa'd* (S. Nurachma (ed.); Edisi 1, C). PT RajaGrafindo Persada.
- Salman, K. R. (2021). the Effect of Non-Performing Financing and Third Party Funds on the Profitability Through Ps/Rs and Pls Financing. *International Journal of Islamic Banking and Finance Research*, 6(1), 19–31. <https://doi.org/10.46281/ijbfr.v6i1.1320>
- Sarstedt, M. Ringle, C. M. & Hair, J. F. (2017). Partial Least Squares Structural Equation Modeling, in C. Homburg, M.Klarmann, & A. Vomberg (eds), *Handbook of Market Research*, 1-40. Springer International Publishing. https://doi.org/10.1007/978-3-319-05542-8_15-1
- SE. /DPNP. (2004). *Sistem Penilaian Tingkat Kesehatan Bank Umum*.
- SEOJK (2017). *Surat Edaran Otoritas Jasa Keuangan Nomor 13 /Seojk.03/2017*.

- Sударsono, H. & Saputri, M. A. (2018). The Effect of Financial Performance toward Profit-Sharing Rate on Mudharabah Deposit of Sharia Banking in Indonesia. *Muqtasid: Jurnal Ekonomi Dan Perbankan Syariah*, 9(1), 82. <https://doi.org/10.18326/muqtasid.v9i1.82-92>
- Sulfiani, N. & Mais, R. G. (2019). Analisis Pengaruh Kinerja Keuangan Terhadap Tingkat Bagi Hasil Deposito Mudharabah Pada Bank Umum Syariah Di Indonesia Tahun 2012–2018. *Jurnal STEI Ekonomi*, 28(01), 122–142. <https://doi.org/10.36406/jemi.v28i01.263>
- Syamsiyah, N. & Rohmi, M.L. (2021). The Effect of Inflation , Financial Problem , and Financing to Deposit Ratio (FDR) On Islamic Bank Deposits : Error Correction Model Analysis. *International Journal of Islamic Economics*, 3(2), 125–136.
- Tanjung, A. A. & Affiah, H. (2021). Efforts to Improve Mudharabah Finance of Sharia Commercial Banks through Third Party Funds and Return on Asset. *Budapest International Research and Critics Institute (BIRCI-Journal): Humanities and Social Sciences*, 4(2), 3079–3086. <https://doi.org/10.33258/birci.v4i2.2026>
- Umiyati, U. & Syarif, S. M. (2019). Kinerja Keuangan Dan Tingkat Bagi Hasil Deposito Mudharabah Pada Bank Umum Syariah Di Indonesia. *Jurnal Akuntansi Dan Keuangan Islam*, 4(1), 45–66. <https://doi.org/10.35836/jakis.v4i1.29>
- Usman, B. & Lestari, H. S. (2019). Determinants of share prices on manufacturing company: Evidence in Indonesia stock exchange. *International Journal of Advanced Science and Technology*, 29(5), 427–436.
- Wahyudi, S., Nofendi, D., Robiyanto, R. & Hersugondo, H. (2018). Factors affecting return on deposit (ROD) of Sharia banks in Indonesia. *Business: Theory and Practice*, 19, 166–176. <https://doi.org/10.3846/BTP.2018.17>
- Winarsih, W. & Asokawati, W. (2019). Determinan of Implementation Profit Sharing Financing in Islamic Banking. *International Journal of Islamic Business Ethics*, 4(1), 582. <https://doi.org/10.30659/ijibe.4.1.582-594>
- Yolanda, Y. (2017). Capital Adequacy Ratio And Its Influencing Factors On The Islamic Banking In Indonesia. *Ikonomika*, 2(2), 162. <https://doi.org/10.24042/febi.v2i2.1881>