

# The Effect of Ratio of Financing to MSMEs and CAR to ROA on Islamic Banks

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## Abstract

*The role of MSMEs is very crucial in the domestic economy. During the 1998 crisis, MSMEs became the key to economic growth because they could help the domestic economy recover. The growth of MSMEs after the Covid-19 crisis is starting to show an upward trend. The growth of MSMEs can be an opportunity for sharia banking as a place to channel financing and can be a threat because financing in the micro sector can pose a risk of bad credit. Sharia banking profitability must be the goal amidst the high risk of default, this is an initial mitigation of the types of risks that can impact sharia banking. This research aims to analyze the influence of the financing ratio channeled to the real sector through MSMEs and sharia banking capital adequacy on sharia banking businesses earning profits from assets managed. The research uses time-series data and the Ordinary Least Square (OLS) method. The research results show that financing channeled to the real sector through MSMEs and capital adequacy play an important role in sharia banking in gaining profits from managed assets. The implication of the research is that stricter supervision is needed in channeling financing to the micro sector while still adhering to sharia principles in helping to improve micro, small and medium enterprises.*

**Keywords:** Financing Ratio to MSMEs, CAR, ROA, OLS.

## Introduction

Indonesia's economic development is influenced by various factors, one of which is the activity of Micro, Small and Medium Enterprises (MSMEs). The presence of MSMEs encourages the economy to absorb labor and create job opportunities. MSMEs have driven GDP by 57.08% by creating employment opportunities by 97.02% and encouraging investment in Indonesia by 53.24% (Setiawan, 2021). Currently, MSME financing has become the biggest driver of the country's economy. The existence of a financing system is an important factor in overcoming capital requirements with a financing system for business activities with limited capital (Fuan Ertiyant & Nur Latifah, 2022).

Indonesia experienced the Corona virus or Covid-9 pandemic in March 2020. The impact caused by Covid-9, namely the economic and health crisis, is getting worse. The sector most affected by the negative impact is the MSME sector, which has reduced income due to limited direct market activity. Efforts to reduce the impact of the pandemic through sharia economics. Sharia banks are one part of the sharia economy that distributes financing to various economic sectors, including MSMEs (Setiawan, 2021).

According to (Dr. Muhammad Syafii Antonio, 2011) The function and aim of Islamic banking in the economy is to create prosperity, increase economic growth, and achieve full employment. UURI No. 21 of 2008 article 1 paragraph 25 concerning Sharia Financing is the provision of funds or bills which are equated to profit sharing transactions in the

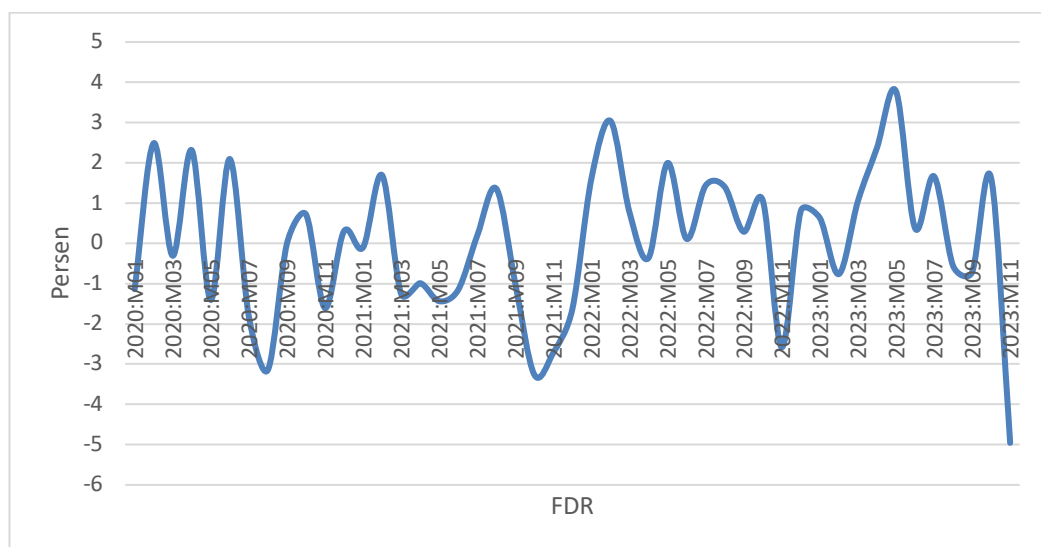
form of mudharabah and musyarakah. Sharia banks carry out mudharabah distribution due to financing risks or financial risks. Financing risk is the potential loss experienced by a bank when a borrower or customer receiving financing is unable to pay their obligations to the bank (Edriyanti et al., 2020).

To measure the level of financing risk that is often used is the Non Performing Financing (NPF) ratio. NPF is the calculation ratio of problematic financing to the total financing disbursed by sharia banks. Problematic financing consists of doubts in fulfilling obligations, substandard payments, and failure to pay to the bank. (Pradana, 2018).

Mudharabah means business cooperation between two people where the first party (shohibulmaa) provides all the capital, while the other party acts as the manager. Business profits are shared according to the agreement in the contract, and if there is a loss, it is borne by the capital owner as long as the loss is not the result of the manager's negligence (Dr. Muhammad Syafii Antonio, 2011). Sharia banks obtain funds which will then be channeled through financing with the aim of obtaining profits which in the banking world is known as the Return On Assets (ROA) Ratio. (Pratiwi & Nabila, 2022).

This analysis is in accordance with the results of Resti Romadloni's 2024 research entitled "Analysis of the Impact of Loans and Musyarakah on Liquidity (Case Study of Sharia Commercial Banks in Indonesia 2018 - 2021)", which revealed that Mudharabah financing has a significant influence on the liquidity of Sharia Commercial Banks in 2018 - 2021 (Saputri et al., 2024). The CAR analysis also shows the same results as previous research. This research shows that CAR has a positive impact on MSME financing, meaning that the higher the CAR, the higher the bank's ability to provide credit, including to MSMEs. (Pratiwi & Nabila, 2022)

Fluctuations from 2020 to 2023 show a general trend with sharp increases and decreases shown in percent. In July 2020, there began to be a very drastic decline of around -3.14% due to the impact of the beginning of Covid 19. This affected the company's performance which limited the provision of financing to the public. A decline also occurred in October 2021 of -3.26% because providing financing to the public during a crisis resulted in a large risk of bad credit. Recovery will begin in May 2023, resulting in an increase of up to 3.77% with the democratic party which causes consumption confidence among the public to rise.



Source: Financial Services Authority (OJK), data processed

Figure 1. FDR fluctuations 2020M01 – 2023M12

The occurrence of the pandemic resulted in the community's economy being unstable, this had an impact on businesses financed by banks. There are restrictions on economic mobility where domestic demand has not yet recovered, causing The decline in FDR was also due to weak credit demand from the household and business sectors. The uncertain economy makes many parties reluctant to take out new loans even though interest rates are relatively low, so banks have difficulty disbursing credit.(Haryono, 2022). Financing to Deposit Ratio or FDR is a comparison ratio between financing and third party funds. The higher the FDR ratio, the higher the risk for the bank. FDR also depended on the domestic economy.(Indrajaya, 2019).

### **Literature Review.**

Sharia banking is a bank whose performance is interest-free based on the Al-Qur'an and Hadith. Sharia Bank is a financial company that provides financing and circulates money based on Islamic sharia principles. The sharia banking system has a profit sharing system based on the work agreement between the capital owner and the recipient of the capital. Collection of public funds in sharia banking consists of: savings, deposits and current accounts. Financing that has been managed will be evaluated using ROA. The ROA concept is a measure of how well a company has used its funds and sees that the investment funds invested are able to provide a profit return(Engel, 2014).

Conventional banks and Islamic banks are basically different in function and principles. Traditional banks are based on an interest rate system where profits are made from the difference between the interest paid to depositors and the interest charged to borrowers. Islamic banks, on the other hand, operate based on Islamic sharia principles which prohibit usury (interest). Sharia banking profits are obtained through a profit sharing system that divides business profits and losses between the bank and its customers in accordance with the initial agreement.(Perbandingan et al., 2022).

Apart from that, Islamic banks also apply principles such as mudharabah (business partnerships) and musyarakah (capital partnerships) in their investments. This approach reflects the increasing involvement of banks and customers in economic activities. In contrast, traditional banks focus on interest-based loans and investments. According to (Prasetyo, 2020) found that Islamic banks tend to have different liquidity and profitability ratios than conventional banks, reflecting fundamental differences in business models and demonstrated financial risks.

### **Research Methods**

This research was conducted to analyze factors that influence fluctuations in MSMEs due to the COVID 19 pandemic. The data used in the research is in the form of a time series (monthly), namely 2020M01 to 2023M12. The variables used are FDR, CAR, ROA, Mudharabah and NPF Mudharabah

Method usedThe Ordinary Least Square (OLS) method is a regression method that minimizes the number of squared errors, with multiple linear regression. Multiple linear regression is a statistical calculation where the number  $q$  is smaller than the number of observations ( $n$ ) and which is used to calculate a relationship model for one response variable ( $Y$ ) using several predictor variables up to  $q$ (Syahputra & Karim, 2016). In this research, the

impact of macroeconomic variables on Indonesia's trade balance is examined to determine the effect of independent variables on the dependent variable. The following is the equation for the OLS method:

$$\ln Y = \beta_0 + \beta_1 \ln X_1 + \beta_2 X_2 + \beta_3 \ln X_3 + \beta_4 X_4 + e_t$$

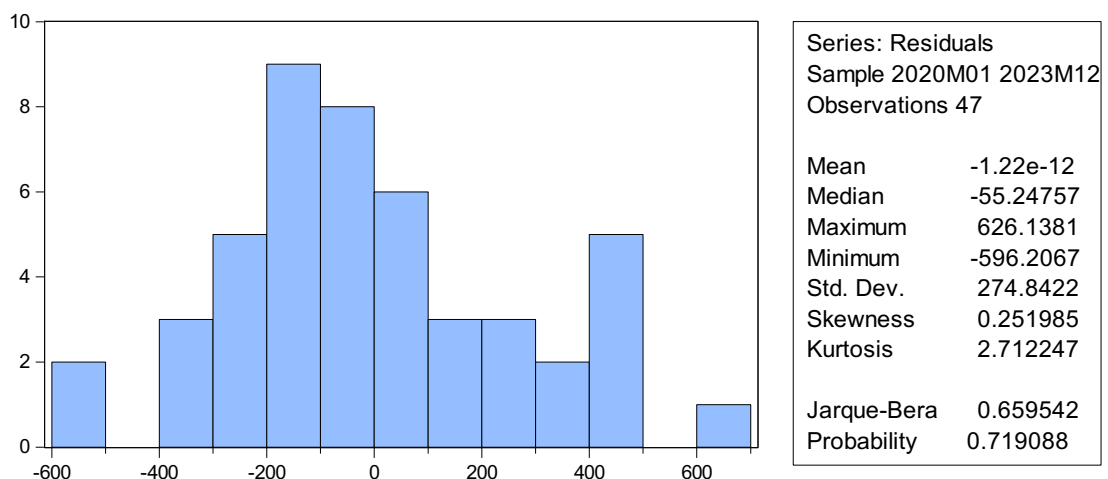
Where Y is FDR, is CAR, is ROA, is Mudharabah, is NPF Mudharabah, is Constanta value, is the coefficient value of the independent variable; is the error term and is the logarithmic form. To fulfill the BLUE concept (best linear unbiased estimator), the research applies a classic assumption test consisting of normality, autocorrelation, multicollinearity and heteroscedasticity.

## Results and Discussion

This study uses time series data covering the period 2020M01 to 2023M12. The variables FDR, CAR, ROA, Mudharabah, and NPF Mudharabah are included in the econometric model. When using a multiple linear regression model, an OLS derivative test is required to confirm the impact of the independent factors on the dependent variable.

### A. Classic assumption test

#### 1. Normality test



Jarque Berra's probability value is  $0.659542 > 0.05$ , which indicates that the remaining research data is normally distributed, in accordance with the results of the normality test that has been carried out. From this it is clear that the normality test was not violated in this study.

#### 2. Multicollinearity Test

Variables	Coefficient Variance	Uncentered VIF	Centered VIF
C	1700079.	965.8096	NA
CAR	0.174747	552.8765	3.764732
ROA	49616.99	99.04299	1.860731
Mudharabah	0.004598	330.3589	2.584425
NPF Mudharabah	5.31E-05	26.79028	4.623655

The CAR variable is 2.865897, the ROA variable is 1.607661, the Mudharabah variable is 3.517271, and the NPF Mudharabah variable is 1.982975. Based on the results of the multicollinearity test, it can be seen that the Centered VIF value is less than 10. Thus, it can be said that this regression model is free from multicollinearity. Thus, it can be said that the multicollinearity test of this study was not violated.

### 3. Autocorrelation Test

F-statistic	0.331459 Prob. F(32.10)	0.9915
Obs*R-squared	24.19189 Prob. Chi-Square(32)	0.8374

The Prob value is displayed by the autocorrelation test. Because there are no signs of autocorrelation and the chi-square value is 0.8374, meaning the prob value is greater than 0.05, it can be said that this research analysis does not contain autocorrelation.

### 4. Heteroscedasticity Test

#### Heteroskedasticity Test: Glejser

F-statistic	2.098403 Prob. F(4.42)	0.0980
Obs*R-squared	7.828369 Prob. Chi-Square(4)	0.0981
Scaled explained SS	7.006916 Prob. Chi-Square(4)	0.1355

From the results of the heteroscedasticity test using the Glejser method, the value of Prob. Chi-Square 0.0981, equal to  $0.0981 > 0.05$ , it can be concluded that there was no violation of the Heteroscedasticity test in this study.

## B. Statistic test

### 1. Coefficient of Determination

Variables	Coefficient	Std. Error	t-Statistics	Prob.
C	3568.420	1303.871	2.736789	0.0091
CAR	0.820099	0.418028	1.961828	0.0564
ROA	-3.416128	222.7487	-0.015336	0.9878
Mudharabah	0.183061	0.067810	2.699609	0.0100
NPF Mudharabah	0.005189	0.007288	0.712072	0.4804

The t-statistic and t-table values must be compared when conducting a t test. The independent variable significantly influences the dependent variable if the t-statistic value is greater than the t-table value. On the other hand, it can be concluded that the independent variable does not have a real influence on the dependent variable if the t-statistic value is smaller than the t-table value. Where

the FDR of Sharia Banks for 2020-2023 is researched using many coefficients to determine the extent of the influence of CAR, ROA, Mudharabah, and NPF Mudharabah.

### Discussion

Looking for t-table values In this study, there were 48 observations (n), and the error rate ( $\alpha$ ) was 10%, or 0.10. In addition, a two-way test will be used. Next, determine the value of the degrees of freedom, which is as follows:

$$Df = 48 - 1 = 47$$

So the t-table value is 1.67793

a. Influence of CAR Value on FDR

The results of multiple regression analysis show that the value is 1.961828. this indicates that  $1.961828 > 1.67793$ , then CAR has a positive influence on the amount of FDR, where  $H_0$  is rejected and  $H_1$  is accepted. This result is contradictory to the research results (Septiyanti & Alam, 2023) where CAR does not show that it has no influence on FDR. The CAR value can influence FDR due to the existence of surplus parties who have excess capital, this can help channel capital financing to FDR which depends on the domestic economy. The higher the CAR, the better the bank is at bearing the risk of capital financing (Pravasanti, 2018).

b. Influence of ROA Value on FDR

The results of multiple regression analysis show that value -0.015336. This indicates that  $-0.015336 < 1.67793$ , then ROA has a negative influence on the amount of FDR, where  $H_0$  is accepted and  $H_1$  is rejected. This shows the same results as the analysis carried out by (Rahmadila & Haryono, 2021) where ROA does not affect the amount of FDR. This is due to an increase in general costs which are usually not in line with the overall performance of sharia banking.

c. The Influence of Mudharabah Values on FDR

The results of multiple regression analysis show the value is 2.699609. This indicates that  $2.699609 > 1.67793$ , where  $H_1$  is accepted and  $H_0$  is rejected. So Mudharabah has a positive influence on the amount of FDR. These results are supported by the analysis carried out by (Saputri et al., 2024) where Mudharabah has a significant effect on the amount of FDR. This is because the higher the profit sharing system set by the bank can influence the amount of FDR in the Sharia banking industry.

d. Influence of Mudharabah NPF Value on FDR

The results of multiple regression analysis show the value is 0.712072. this states that  $0.712072 < 1.67793$ , then NPF Mudharabah has a negative influence on FDR, where  $H_0$  is accepted and  $H_1$  is rejected. This is supported by research conducted by (Azzahra, 2020) where NPF has a significant negative change in the amount of FDR. This is because if the higher the NPF level of a bank, the higher the bank's problematic financing/bad credit will have a negative impact on the bank, causing the bank to have a bad reputation. With a bad reputation, it will have difficulty attracting new funds, resulting in a reduction in available funds. for new financing (FDR).

### Conclusion

Based on the results of this research, it can be concluded that the independent variables that have an influence on the dependent variable are CAR and Mudharabah on FDR, except for the ROA and NPF Mudharabah variables. The CAR value has the effect that the capital owner has greater funds and is able to distribute capital financing to micro businesses at a higher rate. So higher financing will increase the productivity of MSMEs. Even during the Covid 19 pandemic, companies are creating e-commerce innovations, namely using technology to sell and buy products. So that income from domestic products continues to increase even amidst market limitations.

Mudharabah is usually applied to fund raising and financing products. On the fund accumulation side, mudharabah is applied to: (1) term savings, namely savings intended for special purposes, such as hajj savings, sacrificial savings, and so on; (2) ordinary deposits, special deposits (special investments), where funds entrusted by customers are specifically for a particular business, for example only murabahah or only ijarah.

Suggestions that researchers can convey. The influence of these variables must continue to be monitored to ensure the sustainability and economic prosperity of MSMEs supported by Islamic banks.

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