Causality of Islamic Banking Financial Performance in Indonesia

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ARTICLE INFO

Article history:
Accepted
November
Accepted
December

Keywords
Capital Structure, Liquidity, Finaning to Deposit Ratio (FDR), Operational Efficiency Ratio (OER), Financial Performance

ABSTRACT

This study aims to test whether capital structure, liquidity, financing to deposit ratio (FDR), and operations efficiency ratio (OER) affect financial performance in Islamic banking companies registered with the Financial Services Authority (OJK) in 2019-2023. Data collection uses secondary data obtained from financial reports, using purposive sampling techniques. The population in this study is Islamic banking companies registered with the Financial Services Authority (OJK) in 2019-2023, with a total of 14 observations, while the sample taken is 40 observations. The analysis method uses multiple linear regression techniques and hypothesis testing. The results of the study indicate that capital structure has a significant positive effect on financial performance, liquidity has a significant positive effect on financial performance, financing to deposit ratio (FDR) does not affect financial performance, and operations efficiency ratio (OER) does not affect financial performance.

1.Introduction

The existence of Islamic Banks in Indonesia has received a positive response from the public because basically Islamic banks adhere to various Islamic principles and have a halal banking system. According to Law No. 10 of 1998 concerning Banking No. 7 of 1992, Islamic principles can be understood to include the rules in Islamic law between banks and various other parties for financing or fund storage contracts with Islamic principles, for example Mudharabah or profit sharing, Musyharakah or financing involving capital and elements of pure sale and purchase of rent and without options or ijarah. It is important for a bank to maintain sustainability by achieving maximum operational results, which can be seen from the increase in financial performance compared to the previous period.(Syakhrun et al., 2019).

Rapidly expanding Islamic banks must raise the caliber of their financial performance. One technique to evaluate Islamic banks' financial performance is to look at their profitability as measured by the Return On Asset (ROA) level. This ratio is significant because it measures the bank's productive assets, which are financed by third-party money, and highlights the bank's profitability (Suryani, 2011). The more efficient asset management is, the greater the ROA ratio, which is a measure of management effectiveness.(Iqbal and Anwar, 2022a).

1.1 Background

Assessing a company's application of financial implementation criteria is the goal of financial performance analysis (Hutabarat, 2020). The profitability ratio, or ROA, is used in this study to gauge the Bank's financial performance. Profitability is the capacity of a business to turn a profit within a specific time frame. Financial performance is a subjective metric used to evaluate how well a corporation can use the assets of its owners to achieve its goals and make money.(Ni Komang & Ni Ketut, 2022).

The phenomenon that occurs in the profitability of one of the Islamic banking companies registered with the OJK, namely Bank Mega Syariah. Judging from the data in the annual report of Bank Mega Syariah Tbk, there are fluctuations in profitability and liquidity. In 2018, FDR fell 0 points (17%) compared to 2017, and ROA fell 0 points (63%). The condition where ROA fell 0 points 4% from 2018 but FDR rose 3 points 64% from 2018 occurred in 2019. Meanwhile, from 2019 to 2020, ROA rose 0 points 85 while FDR fell 93 points 89 percent. Every year from 2017 to 2018, the company size increased by 0 points 5%. From 2019 to 2020 there was a decrease of 6 points 2%. However, ROA fell between 2018 and 2019. One of the factors that can affect the profitability or financial performance of a bank is the capital structure. According to Keown and Martin (2010) explained in (Budhi Gunawan, 2019) that the capital structure is a combination of long-term funding sources used by a company. The capital structure is calculated using the *debt to equity ratio.*

Liquidity is the company's ability to pay its current debts (short-term liabilities). A company that has a large paying capacity so that it is able to meet all its financial obligations that must be met immediately is said to be liquid, and according to Horne and Wachowicz (2009) in (Kristianti, 2018) which states that profitability is inversely proportional to liquidity. Where liquidity does not affect the profit received by the company so that it does not have the ability to pay, the company is not liquid. Financing to Deposit Ratio (FDR) is used to measure the bank's ability to pay short-term debts and repay depositors, as well as meet credit requests submitted by the public in a timely manner. In showing banking capabilities, FDR can channel funds to debtors while also repaying depositors by relying on credit channeled as a source of liquidity.(Iqbal and Anwar, 2022b).

Operational Efficiency Ratio (OER) is defined as a ratio used to project the operational efficiency of a bank. Widyaningrum & Septiarini (2015), stated that the smaller the OER ratio, the smaller the operational cost expenditure, allowing the bank to obtain high profits and indicating that the bank is not in a problematic condition. Previous studies by Fakhruddin & Purwanti (2015), Ramadhani (2017), and Karim & Hanafia (2020) confirmed that OER has a significant negative effect on ROA. This is different from the results of research by Widyaningrum & Septiarini (2015) and Agustin & Darmawan (2018) which stated that OER has a significant positive effect on ROA. Due to differences in the results of previous studies, further research is needed.

Based on the background above, the hypothesis in this study is:

H1: Capital structure affects financial performance.
H2: Liquidity has an effect on financial performance
H3: Financing to deposit (FDR) has an effect on financial performance
H4: Operational efficiency ratio (OER) has an impact on financial performance.

1.2 Problem Statement

The problem formulation in this research is:

a. Does capital structure affect financial performance in Islamic banking companies registered with the Financial Services Authority (OJK) in 2019-2023?

b. Does liquidity affect financial performance in Islamic banking companies registered with the Financial Services Authority (OJK) in 2019-2023?
c. Does the financing to deposit ratio (FDR) affect the financial performance of Islamic banking companies registered with the Financial Services Authority (OJK) in 2019-2023?
d. Does the operational efficiency ratio (OER) affect the financial performance of Islamic banking companies registered with the Financial Services Authority (OJK) in 2019-2023?

1.3 Objectives and Scope

The objectives of this study are:

a. To test the effect of capital structure on financial performance in Islamic banking companies registered with the Financial Services Authority (OJK) in 2019-2023.
b. To test the effect of liquidity on financial performance in Islamic banking companies registered with the Financial Services Authority (OJK) in 2019-2023.
c. To test the effect of Financing To Deposit Ratio (FDR) on financial performance in Islamic banking companies registered with the Financial Services Authority (OJK) in 2019-2023.
d. To test the effect of Operational Efficiency Ratio (OER) on financial performance in Islamic banking companies registered with the Financial Services Authority (OJK) in 2019-2023.

2. Literature Review

Financial performance

Financial performance is a picture of a company's financial condition based on previously established goals, standards, and criteria. Financial reports can be used as a measure of financial performance in the form of interpretation of financial data that has been successfully collected as an initial step in the form of financial reports to meet the company's internal and external information needs (Mubarok & Lestari, 2024). This study uses Return on Assets (ROA) as a reference in measuring banking profitability. The ratio used to measure the bank's ability to generate profit before tax from the total assets used. Systematically, ROA can be calculated using the following formula:

$$ROA = \frac{Laba\ Bersih}{Total\ Aset}\ X\ 100\%$$

Capital Structure

Capital structure is an important thing in a company which is a mixture of equity and debt. Every company carries out all activities, both operational and non-operational, with the aim of making a profit. Financial managers must be able to improve the company's capital structure so that banking goals are also achieved. Financing with high debt also has a high risk, namely high interest rates. Banks must be careful in using debt in their capital structure because until now there has been no definite mathematical model regarding the composition of the optimal capital structure in a company (Alifia, 2021).This study uses DER as a reference in measuring capital structure so that banking objectives can be achieved. Systematically, Debt to Equity Ratio (DER) can be calculated using the following formula:

$$DER = \frac{Total\ Liabilitas}{Total\ Ekuitas}\ X\ 100\%$$

Liquidity

The liquidity ratio is an important figure that represents the company's ability to pay short-term obligations (debts). This means that if the company is billed and the company is able to pay off its debts that are due (Lestari, 2021). In this study *Current Ratio* (CR) is used

as a reference in measuring the bank's ability to meet its short-term obligations with its current assets. Systematically, this ratio can be calculated using the formula:

$$CR = \frac{Hutang\ Lancar}{Aktiva\ Lancar}\ X\ 100\%$$

Financing to Deposit Ratio

FDR is a comparison of loans provided by a bank with third party funds successfully collected by the bank. In conventional banking, the FDR formula is slightly different, namely the comparison between credit and public funds, but in Islamic banking there is no term credit, but rather financing. The FDR value permitted by Bank Indonesia is in the range of 78% to 100%.(Syakhrun et al., 2019). Systematically the Financing to Deposit Ratio with a comparison of financing with third party funds. With the following formula:

$$FDR = \frac{Pembiayaan}{Dana\ Pihak\ Ketiga}\ X\ 100\%$$

Operational Efficiency Ratio

Operational Efficiency Ratio (OER) is defined as a ratio used to project the operational efficiency of a bank. Cost efficiency in operational activities is important to do. This ratio is useful in measuring the level of efficiency and banking capabilities in operational activities. The assumption is that the more effective the operational costs incurred by Islamic banks, the more efficient the bank will be and will generate greater profitability. The smaller the OER ratio, the smaller the operational costs incurred, allowing the bank to obtain high profits and indicating that the bank is not in a problematic condition (Iqbal & Anwar, 2022). Systematically *Operational Efficiency Ratio* (OER) can be calculated using the following formula:

$$OER = \frac{Biaya\ Operasional}{Pendapatan\ Operasional}\ X\ 100\%$$

3. Research Methods

The research approach used in this study is a quantitative research method.Quantitative method is a research method that uses numbers. This researchusing secondary data in the form of financial reports and annual reports of Islamic banking companies registered with the Financial Services Authority (OJK) in 2019-2023. The population used in this study is Islamic Banking Companies registered with the Financial Services Authority (OJK) in 2019-2023, namely 14 companies. In this study, the sampling technique used is Non Probability Sampling with Purposive Sampling technique. Based on the criteria of the companies used as samples in this study, namely, Islamic banking companies registered with the Financial Services Authority (OJK) in 2019-2023, companies that did not publish their financial reports in 2019-2023, companies that experienced losses in 2019-2023.Thus, the amount of data used in this study is 40 sustainability reports and 40 financial reports from 8 Islamic commercial banks that have met these criteria.

3.1 Data Collection

The form of data collection in this study is Time Series, namely the type of data collected from elements or variables arranged based on time sequence on one or more of the same objects in a time period.

3.2 Analysis Techniques

1. Descriptive Statistical Analysis

According to Sugiyono (2019:206) Descriptive statistics are statistics used to analyze data by describing data or depicting data that has been collected as it is without intending to make conclusions that apply to the public or generalization. Descriptive statistical analysis in this study is the average value, maximum value and minimum value to describe the research variables.

2. Inferential statistical analysis

Inferential statistics is a statistical technique used to analyze sample data and the results are applied to the population (Sudaryono, 2017:349). The analysis used is multiple linear analysis which is used to determine the direction of the relationship between independent variables and dependent variables. Multiple linear regression analysis is an analysis based on the existence of a causal relationship between two or more independent variables and the dependent variable. The multiple linear regression equation is as follows:

$$\mathbf{Y} = \boldsymbol{a} + ß_1\mathbf{X_1} + ß_2\mathbf{X_2} + ß_3\mathbf{X_3} + ß_4\mathbf{X_4} + \mathbf{e}$$

Information :

Y	:Financial performance
α	: Constant
$ß_1 ß_2 ß_3 ß_4$	:Regression Coefficient
X1	:Capital Structure
X2	: Liquidity
X3	: Financing to Deposit Ratio (FDR)
X4	: Operational Efficiency Ratio (OER)
e	: Error or disturbance (residual error)

3.3 Validation

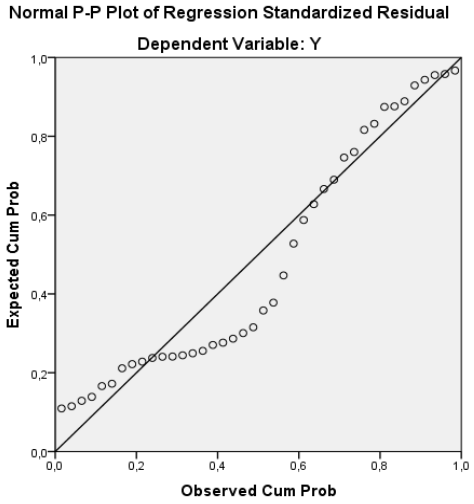
The classical assumption test is used to determine the feasibility of using the regression model in this study. The classical assumption test consists of four, namely the normality test, multicollinearity test, autocorrelation test, and heteroscedasticity test.

4. Results and Discussion

Classical assumptions

a. Normality Test Results

Table 4.1 Normality Test



It can be concluded that the tested data in normally distributed because the data is around the diagonal line.

b. Multicollinearity Test Results

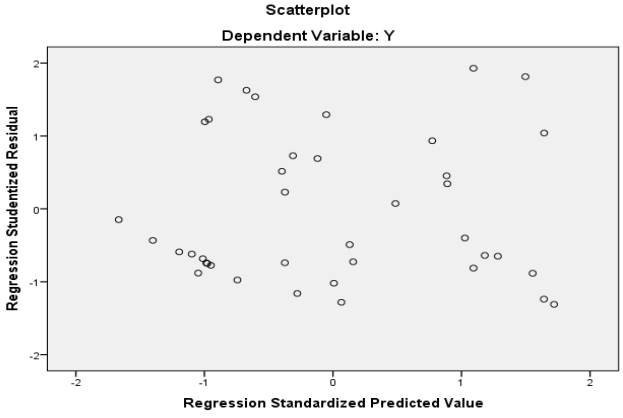
Table 4.2 Multicollinearity Test Results

edible fruit	Tolerance	VIF
Capital Structure (X1)	0.722	1.386
Liquidity (X2)	0.969	1,032
Financing to Deposit Ratio (X3)	0.710	1,408
Operational efficiency ratio (X4)	0.940	1,063

The variables of capital structure, liquidity, financing to deposit ratio (FDR) and operational efficiency ratio (OER) have a tolerance value greater than 0.1 and VIF less than 10, which indicates that the regression equation model does not show symptoms of multicollinearity, so the data is suitable for use in research.

c. Heteroscedasticity Test Results

Table 4.3 Heteroscedasticity Test Results



In a good regression model. Usually does not experience heteroscedasticity. Through the scatterplot graph can be known whether a regression model experiences heteroscedasticity

or not. If there is a certain pattern on the graph, then it indicates that heteroscedasticity has occurred. From Figure 4.3 it can be seen that the points are randomly distributed, both above and below the number 0 on the Y axis. We can be conclude that the regression model used in this study does not exhibit heteroscedasticity.

Hypothesis Testing

Table 4.4 Partial Test Results (t-Test)

Variables	B	T Count	Signature	Information
Financial Performance (Y)	-38,347	-0.437	0.665	
Capital Structure (X1)	0.002	3.417	0.002	H1 Accepted
Liquidity (X2)	0.032	2.120	0.041	H2 Accepted
Financing to deposit ratio (X3)	0.013	1,097	0.280	H3 Rejected
Operational efficiency ratio (X4)	-0.002	-0.540	0.593	H4 Rejected

a. Based on the results of the t-test, the capital structure variable has a calculated t value of 3.417 with a significance value of 0.002, so it can be concluded that the capital structure variable has a significant positive effect on financial performance.
b. The liquidity variable has a t-value of 2.120 with a significance value of 0.041 so it can be concluded that the liquidity variable has a positive effect on financial performance.
c. The financing to deposit ratio (FDR) variable has a t value of 1.097 with a significance value of 0.280 so it can be concluded that the FDR variable has no influence on financial performance.
d. The Operational Efficiency Ratio (OER) variable has a t value of -0.50 with a significance value of 0.593 so it can be concluded that the OER variable has no influence on financial performance.

Table 4.5 Results of the Determination Coefficient Test (R2)

Model Summary

Model	R	R Square	Adjusted R Squared	Standard Error of Estimate
1	,676a	0.457	0.395	90.71541

a. Predictors: (Constant), X4, X1, X2, X3

b. Dependent Variable: Y

Based on the results of multiple regression processing, it can be seen that the coefficient of determination (R2) can be seen in *Adjusted R Squared*with a value of 0.395 which means that only 39.5% of Financial Performance can be explained by independent variations, namely Capital Structure, Liquidity, Financing to Deposit Ratio (FDR), and Operational Efficiency Ratio (OER), the rest (100% - 39.5% = 60.5%) is explained by other variables not included in this regression model.

4.1 Main Findings

The capital structure variable has a significance value of 0.002, which means it is smaller than 0.05, which means that the capital structure has a positive influence on financial performance, so the first hypothesis is accepted.

The liquidity variable has a significance value of 0.041, which means it is smaller than 0.05, which means that the liquidity variable has a positive influence on financial performance, so the second hypothesis is accepted.

The financing to deposit ratio (FDR) variable has a significance value of 0.280, which

means it is greater than 0.05, which means that the FDR variable has no influence on financial performance, so the third hypothesis is rejected.

The Operational Efficiency Ratio (OER) variable has a significance value of 0.593, which means it is greater than 0.05, which means that the OER variable has no influence on financial performance, so the fourth hypothesis is rejected.

4.2 Interpretation of Results

Capital structure has a positive effect on the Company's financial performance. Increasing capital structure indicates an increase in the company's debt level. This condition will create an obligation for the company to meet debt payments so that it can encourage the management of productive assets so that it can increase profits for the company.

Liquidity has a positive effect on the Company's financial performance. The ability of a business to pay its short-term debts in known as liquidity. A liquid company has more cash and current assets that can be used to pay its debts. Thus, a liquid company can manage its cash flow more efficiently. The higher the company's liquidity, the better its financial performance will be. This is because the company can pay its obligations on time and optimize the use of its assets.

Financing to deposit ratio (FDR) has no effect on financial performance. This result shows that the bank's ability to pay its debts is not optimal, so that customers have less confidence in the bank to make investments. This is contrary to the signaling theory which states that information about the current condition of the bank is used to attract customers to make investments. This shows that FDR cannot affect financial performance because the high or low value of FDR is not a signal to customers.

Operational efficiency ratio (OER) does not affect financial performance. The lower the OER ratio level means the better the performance of bank management because it is more efficient in using the resources available in the company. If the OER ratio level is higher, the bank's operational activities are inefficient so that the bank's financial performance decreases. The lower the OER, the more efficient the bank's operational activities so that it can be concluded that the bank's financial performance is increasing.

5. Discussion

The implications of this study indicate that to improve the financial performance of Islamic commercial banks, it is necessary to pay attention to the efficiency of capital structure and liquidity as well as paying attention to other ratios simultaneously.

5.1 Comparison with Previous Research

The results of this study indicate that capital structure has a significant positive effect on financial performance, this is in contrast to the results of research conducted by The Story of Wahidah Arsyad, 2024 which states that capital structure does not affect financial performance.

The results of the liquidity study have a significant positive effect on financial performance. This is different from research that states that liquidity has no effect on financial performance.

The results of this study indicate that the Financing to Deposit Ratio does not have a significant effect on financial performance, in contrast to the results of research conducted by Asbi Amin, 2019 which stated that the Financing to Deposit Ratio has an effect on financial performance.

The results of this study indicate that the Operational Efficiency Ratio does not have a significant effect on financial performance, in contrast to the results of research conducted by Muhamat Iqbal, 2022 which stated that the Operational Efficiency Ratio has a negative effect

on financial performance.

5.2 Limitations

When conducting research, there were several Islamic commercial banks whose financial reports were difficult to access on their respective Islamic commercial bank websites.

5.3 Future Research

For further researchers, other variables can be added that can influence financial performance.

6. Conclusion

This study examines the effect of capital structure, liquidity, financing to deposit ratio (FDR), and Operational Efficiency Ratio (OER) on financial performance in Islamic banking companies registered with the Financial Services Authority (OJK) in 2018-2022.

The results of the first hypothesis test concluded that capital structure has a significant positive effect on financial performance, the results of the second hypothesis test concluded that liquidity has a significant positive effect on financial performance. The results of the third hypothesis test financing to deposit ratio has no effect on financial performance, then the Operational efficiency ratio variable concluded that the Operational efficiency ratio has no effect on financial performance.

7. Recommendations

Based on the research above, the suggestions that can be given are as follows: For further researchers, it is expected to add dependent variables; The research object is expected to be expanded and not limited to Islamic banking companies only but also manufacturing companies such as the transportation, food and beverage sectors or other manufacturing sectors so that it can produce better results.

Attachment

Table 4.1 Normality Test

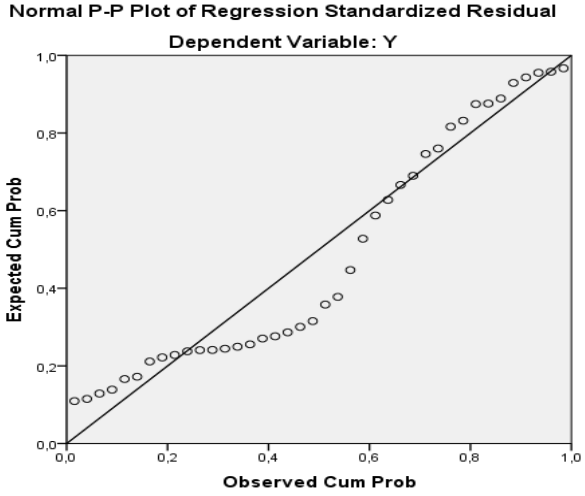
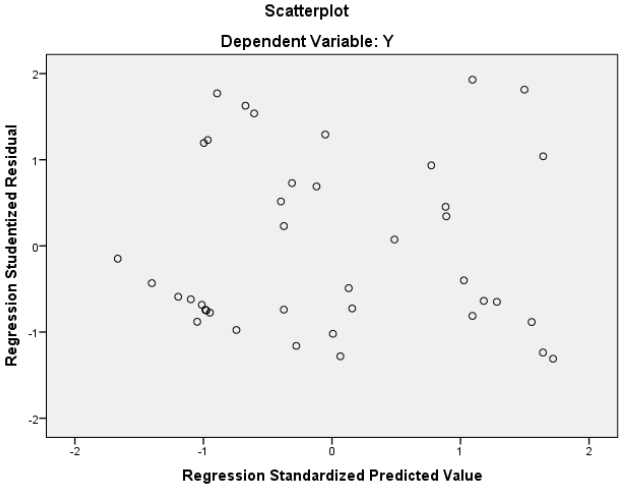


Table 4.2 Multicollinearity Test

Table 4.3 Heteroscedasticity Test Results



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b. Dependent Variable: Y

Confession

My deepest gratitude goes to the STIEM BONGAYA Makassar campus which has provided facilities to participate in this activity. The author would also like to thank Mrs. Dr. Asbi Amin SE, M.Ak and Mr. Anwar SE, M.Si who have patiently provided very valuable direction and corrections. The author would also like to express his deepest gratitude to both parents who have provided support and prayers while the author participated in this activity.

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