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Efficiency, Risk and Profitability of Islamic Banks: Under Pressure in the Competition of the Banking Industry in Indonesia

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Abstract

This study analyses the factors that affect the profitability of Islamic banks in Indonesia. The independent variable consists of efficiency, risk, liquidity, CAR, and macroeconomic conditions: GDP and inflation. The dependent variable is profitability. This research was conducted in the Islamic banking industry in Indonesia. The research uses quarterly data from 2006-2019. The purpose of this study is to analyse the effect of efficiency, risk, liquidity, capital, and macroeconomic conditions on the profitability of Islamic banks in Indonesia. Data analysis techniques used multiple regression. The results showed that the efficiency and risk had a positive effect on profitability. Inflation has a negative effect on profitability. While liquidity, CAR, and GDP do not affect the profitability of Islamic banks.

Keywords: Islamic bank; Financing; Net Operating Margin; *Profitability*.

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1. Introduction

Sharia bank market share finally at the end of 2019 has penetrated 5% of the national banking industry. The stigma of Sharia banks which are always below 5% was finally resolved in 2019. The proportion of Sharia banks is 12.73%. When viewed from the market share, of course, the ability of Islamic banks is still low. Indonesia with a Muslim majority, of course, this market share is small.

Islamic banking in Indonesia continues to experience rapid development. As of 2019, there were 14 Sharia banks, with 1,922 offices. In addition to enhancing the network of bank offices to support business expansion, it also supports increasing public access to the financial system. The increase in access can be measured among others by the ratio of the number of bank offices to the population or density ratio. This fast-growing Islamic bank shows that Islamic banks are starting to take an important role in the national banking system in Indonesia.

Law No. 21 of 2008 further enhance the existence of Islamic banks in Indonesia. UU no. 21 is a clearer operational basis for Islamic banks [1] . The development of Islamic banks in Indonesia must be accompanied by an increase in the quality and quantity of Islamic banks, in order to gain more trust in the eyes of their customers. One effort to maintain the existence of Islamic banks, the management needs to pay attention to the criteria for measuring health and banking performance. Increasing the existence of Islamic banks requires management to be able to manage its productive assets so that it will provide benefits to stakeholders and shareholders.

Increasing levels of bank competition demand banks to be healthy, including Islamic banks. Profitability is an important indicator of bank health. The higher profitability shows the ability of management to manage banks the better.

Net Operating Margin (NOM) indicates the ability of banks to generate net interest income by earning productive assets, where an increasingly large NOM shows the bank's performance in generating profits. NOM is important to evaluate the ability of banks to manage risk. The high NOM reflects the low level of banking efficiency and the uncompetitive banking market conditions. High NOM reflects inadequate regulation in the banking sector and high asymmetry information (Claeys & Vennet, 2007). A high NOM is indicated by a high-risk premium, whereas in conditions of increasing competition will encourage speculative behavior from banks which can lead to financial system instability.

The performance of Islamic banks up to 2019 is still not very encouraging. In addition to the still low market share, the risk of Islamic bank financing is relatively high. Figure 1 shows that the NPF of Islamic banks is higher than conventional banks. A large NPF will certainly have an impact on the financing and performance of Islamic banks. Islamic bank expansion will be constrained by NPF which is still high.

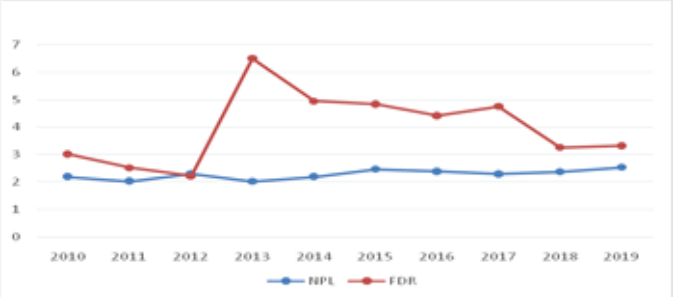

Figure 1: Non Performing Loans and Non Performing Financing of the Banking Industry in Indonesia

Several studies related to the profitability of Islamic banks have been conducted but showed inconsistent results related to factors that influence the profitability of Islamic

banks. Besides, research related to the profitability of Islamic banks, especially in terms of net operating margin (NOM) is still very rarely done. Research on NOM is mostly done at conventional banks. This study aims to analyze the effect of efficiency, risk, liquidity, capital and macroeconomic conditions on the profitability of Islamic banks in Indonesia.

2. Method

This research is a quantitative descriptive study using quarterly data. The observation period was carried out in 2006-2019. Data sources used in the form of secondary data sourced from http://ojk.go.id and http://bi.go.id. The type of data is in the form of quantitative data. Independent variables in this study: Efficiency that is proxied by BOPO, risk is projected with NPF, liquidity is proxied by FDR, capital is proxied by CAR and macroeconomic conditions are proxied by GDP and Inflation. Dependent variable is profitability proxied by Net Operating Margin (NOM). The multiple regression equation model is formulated as follows:

Model 1

$$Y = \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + e$$

Model 2

$$Y = \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \beta_6 X_6 + e$$

Where:

Y: Net Income Margin (NIM)

β_{1-6}: Regression coefficient

X1: Bank efficiency measured by the value of BOPO

X2: Bank risks measured from NPF

X3: Liquidity measured by Financing to Deposits Ratio (FDR)

X4: Bank capital (CAR)

X5: Gross Domestic Product (GDP)

X6: Inflation

e: Error

3. Result and Discussion

3.1. Empirical Results

Table 1 shows that the average net operating margin (NOM) during 2006-2019 was an average of 1,775. This shows the performance of Islamic banks is quite good. The higher the NOM indicates better bank performance. The management of sharia banks is able to manage their productive assets to obtain net profit. BOPO is the number of operational costs incurred by banks to obtain operating income. The high NOM of Islamic banks in the condition of inefficient banks will tend to be expensive financing by Islamic banks. The higher BOPO indicates the lower level of efficiency of Islamic banks. The level of efficiency of Islamic banks is on average 85,196. This shows that the level of efficiency of Islamic banks is quite good. The average non-performing financing (NFP) of Islamic banks is still high, although it is still under Bank Indonesia regulations. The average NPF of Islamic banks is higher than the average national bank NPL in Indonesia. CARs of Islamic banks have fulfilled Bank Indonesia regulations. The ability of Islamic banks to finance an average of 90,652. By capital, Islamic banks in Indonesia are healthy. Indonesia's macroeconomic conditions show a relatively stable condition, this is indicated by the average low inflation value.

Table 1: Description of the variables.

	BOPO	NPF	FDR	CAR	GDP	Inflation	NOM
Mean	85.196	4.346	90.652	15.797	1692106	4.685	1.775
Median	84.930	4.330	91.400	15.150	1958396	4.300	1.800
Maximum	97.010	7.740	104.428	24.100	2818887	11.060	3.570
Minimum	74.650	2.220	77.630	11.070	412698.8	0.210	0.519
St. Deviasi	7.579	1.259	7.188	3.365	835757.5	2.268	0.817

The matrix correlation between variables is shown in Table 2. Table 2 shows the correlation between profitability (NOM) with bank efficiency, non-performing financing, Financing to deposits ratio, CAR, Gross Domestic Product, and inflation. financing risk The correlation coefficient value indicates a relatively small value. This shows there is no multicollinearity between independent variables.

The results of regression analysis with Sharia bank time series data in Indonesia show that for model 1 and model 2, (table 3) efficiency influences profitability. BOPO harms profitability. A large BOPO shows that bank efficiency is getting lower. This shows that the higher the efficiency of Islamic banks, the higher the profitability. Banks can reduce operational costs, so the margin obtained will be higher. More efficient banks will be able to compete so that their market share will be even greater. Banks with

Table 2: Correlation matrix among variables.

	NOM	BOPO	NPF	FDR	CAR	GDP	Inflation
NOM	1.000						
BOPO	-0.826	1.000					
NPF	0.101	0.250	1.000				
FDR	0.508	-0.494	0.312	1.000			
CAR	0.059	0.120	0.402	-0.071	1.000		
GDP	-0.520	0.487	0.167	-0.351	0.692	1.000	
Inflation	0.089	-0.091	0.292	0.387	0.129	0.012	1.000

Note: NOM (Net Operating Margin) as an indicator of profitability; BOPO (operating costs against operating income) as a measure of efficiency; NPF (Non-Performing Financing) as a measure of the level of financing risk; FDR is a Financing to deposit ratio; CAR capital adequacy ratio, as a measure of bank capital, GDP is Gross Domestic Product and inflation as a measure of macroeconomic conditions.

high efficiency will be able to sell financing products at lower prices so that financing that can be done by Islamic banks will be even higher. Banks with low efficiency will tend to charge higher profit-sharing, to cover high costs. Commissions or profit-sharing imposed by Islamic banks will be higher when bank efficiency is low. As a result, the ability of banks to conduct financing will be even smaller. The bank will tend to be less competitive.

The findings of this study are in line with the findings of previous studies in the context of banks, both Islamic banks and conventional banks. Efficiency affects profitability [2],[3], [4], [5], [6], [7], [8]. Bank efficiency has a positive effect on bank profitability. However, this study is not in line with the findings of other studies conducted, where efficiency does not affect profitability [9].

For model 1, financing risk (NPF) has a positive effect on profitability. This shows that the higher the risk of financing undertaken by Islamic banks, the bank will charge a higher margin. This high margin is an effort to cover the risks that arise. Islamic banks will charge higher profit sharing on financing with high risk. The risk of Islamic bank financing in Indonesia, on average, is still quite high. In model 2 shows that risk does not affect the profitability of Islamic banks. This shows that macroeconomic conditions influence risk. Macroeconomic conditions are relatively stable and conducive will tend to have an impact on low risk, so that the risk does not affect the net operating margin of Islamic banks. The relatively high NPF indicates that Islamic bank financing management still needs to be improved.

The results of this study are in line with the findings of previous studies, where risk affects profitability [10],[11], [12], [13], [14], [15], [16]. Financing risk has a positive effect on

the bank's net operating margin. However, this study is not in line with research findings, where NPF has no effect on profitability [17].

Table 3: Regression results

	Model 1		Model 2	
	Coefficients	Prob.	Coefficients	Prob.
BOPO	-0.950	0.000*	-0.711	0.003*
NPF	0.348	0.000*	0.231	0.654**
FDR	-0.068	0.456**	-0.034	0.000*
CAR	0.028	0.704**	0.408	0.000*
GDP	-	-	-0.505	0.187**
Inflation	-	-	-0.077	0.000*
R-Squared	: 0.788			: 0.873
Adjsted R-Squared	: 0.771			: 0.857
F-Statistic	: 46.332			: 55.124
Prob. (F-statistic)	: 0.000			: 0.000

Financing to deposit ratio describes the level of liquidity of Islamic banks. The higher the FDR, the lower the liquidity of Islamic banks. The results of the research in model 1 show that liquidity does not affect the profitability of Islamic banks. This shows that the size of the financing carried out by Islamic banks, Islamic banks do not change the percentage of profit sharing. The average FDR of a Sharia bank is still within the limits of Bank Indonesia regulations. As for model 2, it shows that FDR harms margins. This shows that the greater the FDR, the profitability of Islamic banks will be lower. This happens because an increase in financing can have an impact on the NPF if the financing management is not good. NPF of Islamic banks in 2006-2019 was on average higher than conventional banks.

The characteristics of Islamic banks are certainly different from conventional banks, in conventional banks can enforce profitability (NOM) by increasing credit interest rates, by being able to reduce the cost of funds or deposit interest. In Islamic banks with profit-sharing systems, the increase in FDR tends not to be able to have much effect on profitability (NOM). This happens because the profit-sharing system carried out in Islamic banks.

The results of this study are in line with the findings of previous studies, where liquidity does not affect profitability [3], [18], [16], [19]. Bank liquidity does not affect profitability. However, this study is not in line with other research findings, where bank liquidity affects profitability [20].

The results showed that CAR did not affect the profitability of Islamic banks. Bank CAR functions to cover if the bank suffers losses and also to develop bank branches. Bank CAR is not a source of financing. So the size of the CAR of a bank does not affect bank profitability. However, the existence of CAR is very important for a bank, because it is an indicator of bank health. The average CAR of a Sharia bank is already above the provisions of Bank Indonesia. Banks with CAR are getting bigger, then banks will have the ability to expand, both opening branches and for developing technology. The greater implication of CAR is to maintain the health and stability of the banking system (Karim 1996).

GDP does not affect the profitability of Islamic banks. This shows that Sharia banks have not yet reached many people's needs. The development of the real sector has not used many sources of financing from Islamic banks. The relatively small market share of Islamic banks, reflecting the still limited access of the people to Islamic banks. Since the Sharia bank was first established on November 1, 1991 (Bank Muamalat Indonesia) only at the end of 2019 the market share of Sharia banks can reach more than 5%.

The results of this study are not in line with the findings of previous studies [21], [22]. The results of this study indicate that the performance of Islamic banks will be good at high GDP.

Inflation affects profitability in a negative direction. This shows that the higher the inflation, the bank's profitability will decrease. High inflation indicates increasingly high economic risks. Economic conditions with high inflation will result in costs will also tend to increase, this condition will have an impact on increasing costs. The increase in inflation will erode the margins obtained by banks, as a result profitability will fall. Besides, if inflation is high, investment will tend to fall. Banks will be relatively difficult to increase profitability when economic conditions are unstable.

The results of this study are in line with the findings of previous studies, where inflation affects profitability [22], [23]. Economic stability will have a positive effect on Islamic banks.

4. Conclusion

Based on the results and discussion, the research findings show that efficiency and risk have a positive effect on profitability. Inflation harms profitability. While liquidity, CAR and GDP do not affect the profitability of Islamic banks.

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