

# Analysis of the Effect of Internal and External Factors on the Efficiency toward Profitability of Islamic Banking Industry in Indonesia

Muhammad Asril Maulana<sup>1</sup>

<sup>1</sup>Post Graduate Program of Islamic Finance and Banking, Politeknik Negeri Bandung, Bandung, Indonesia

**Keywords:** Bank Size, Non Performing Finance, Inflation, Efficiency, Profitability, Islamic Banking Industry.

**Abstract:** Getting profits is the main goal of establishing a business entity, one of which is Islamic banking. One of the ways to increase the profitability of Islamic banking is efficiency. This study aims to examine the internal and external factors that affect Islamic banking industry inefficiencies which consist of internal factors, namely Non-Performing Finance (NPF) and bank size, as well as external factors, namely inflation, and the impact of Islamic banking inefficiency on the profitability of Islamic banking. Every bank needs to maintain a level of bank operational efficiency. Islamic banking needs to know how to control it so that bank operations remain efficient with the aim of banks being able to increase profits. The populations of this study are all Bank Umum Syariah (BUS) and Unit Usaha Syariah (UUS) in Indonesia. The sample used in this study is all BUS and UUS in Indonesia with research time limits of the period 2007-2018. The data analysis technique used is path analysis. The results of the analysis shown that Non Performing Finance (NPF), and bank size have a significant impact on Islamic banking inefficiency, and the results of data analysis show that inflation does not have a significant impact on Islamic banking inefficiency, and Islamic banking industry inefficiency has a negative and significant impact on profitability. The results of this study can be used as a consideration for the Islamic banking industry management to increase efficiency in bank operations, because of efficiency can be a positive signal to encourage increased profits earned by Islamic banking industry.

## 1 INTRODUCTION

As a country with the largest Muslim populations in the world, Indonesia has great potential to become a center of development of the Islamic Finance Industry (OJK, 2018a). The growth of Islamic banking in Indonesia is indicated by the increasing number of BUS, UUS, and BPRS. From 1992 to October 2018, the number of BUS in Indonesia reached 14 banks, UUS reached 34 units and BPRS reached 168 banks (OJK, 2018b).

Obtaining profits is the main goal of the establishment of a business entity, both business entities in the form of Perseroan Terbatas (PT), foundations and other forms of business entities (Sintiya, 2018), and one of them is Islamic banking. The growth of Islamic banking industry in Indonesia can be seen from the growth net profit both BUS, UUS, and BPRS which have increased every year (OJK, 2018b).

One of the ways to increase the profitability of Islamic banking industry is efficiency. Efficiency measurements are used to analyze bank performance (Majeed and Zainab, 2017). Efficiency in the banking

system is very important because the efficiency of a bank shows the progress of the bank. If the bank does not operate efficiently, it will cause problems for the bank. Therefore the efficiency of the banking system is emphasized because of the efficiency of the banking system will cause banks to get high profits (Husain et al., 2012). The current measure of efficiency of Islamic banking is the percentage of BOPO (Biaya Operasional dan Pendapatan Operasional).

Despite increasing profits, the percentage of Islamic banking BOPO fluctuated. This can be seen from the percentage of BOPO, Bank Umum Syariah until 2018 which is still at the level of 89.36%. Judging from the BOPO percentage, the operations of Bank Umum Syariah are still inefficient. Even though the lower the BOPO percentage, that is better because it shows an increasingly efficient bank. BI continues to press the BOPO percentage to be 60% -70%. This aims to approach BOPO of Southeast Asian banks which reach 40-60% (Sutaryono, 2013).

With these conditions, the challenges of Islamic banking in carrying out their activities are also getting bigger. Islamic banks industry need to improve

their efficiency in operational activities (Puteh et al., 2017). The efficiency of Islamic banking is influenced by internal and external factors. Efficiency describes performance in producing the desired maximum output from a number of inputs provided with available technology. Efficiency is said to increase when maximum output is produced without changes in inputs or with fewer inputs (Wahab and Rahman, 2012).

This research is intended to discuss the factors that influence inefficiency in Islamic banks which consist of problematic financing (NPF), bank size, and inflation, and the impact of Islamic bank inefficiency on profit. The identified model can help understand the factors that influence the inefficiency of Islamic banks and their impact on profit.

## 2 LITERATURE REVIEW

### 2.1 Profitability

Profitability is one way to assess a company's management ability to make a profit (Sintiya, 2018). Profitability is an indicator of the company's success, especially its ability to generate profits by utilizing its resources such as assets or equity (Mubarok and Rohman, 2013). Some measures for calculating the level of profitability include ROE (Return on Equity), ROA (Return on Assets) and Net Profit Margin. Companies with high profitability will reveal more information. This is because high profitability indicates how companies can manage risk well. The ratio commonly used to measure the performance of profitability or rentability is ROA. ROA shows the ability of bank management to generate income from the management of assets owned (Sintiya, 2018).

### 2.2 Efficiency

performance (Majeed and Zainab, 2017). Efficiency in the banking system is very important because the efficiency of a bank shows the progress of the bank in performance that will have an impact on increasing profits (Hussain et al., 2012). Banking efficiency can be observed from two sides, namely in terms of costs (cost efficiency) and profitability (Suseno, 2008). In terms of costs (cost efficiency), banks are compared with other banks to find out the management of costs and production with the same output and technology. Whereas in terms of profit (profit efficiency), the ability of banks to generate profits in each input unit is used to measure the level of banking efficiency (Suseno, 2008).

### 2.3 Non-Performing Finance to Inefficiency

High Non-Performing Financing (NPF) will increase the cost so that it has the potential for bank losses. The higher the ratio, the worse the quality of bank financing that causes the number of problematic financing to increase, and therefore the bank must bear the losses in its operational activities so that it affects the decrease in the level of efficiency and the decrease in profits obtained by the bank (Wahab, 2015).

NPF causes the potential profit to be obtained to be smaller, because the bank will allocate funds to form Penyisihan Aktiva Produktif (PPAP). Therefore, the bank needs to reserve it as an attitude to deal with it by charging a certain percentage of the financing disbursed. This Penyisihan Aktiva Produktif (PPAP) in the balance sheet of Islamic banking has the character of reducing earning assets, thus influencing efficiency and profitability (Kasmir, 2003). Based on the explanation above can be drawn a hypothesis:

H1: Non-Performing Financing (NPF) has a positive and significant effect on inefficiency

### 2.4 Bank Size (Assets) to Inefficiency

Bank size is a description of the size of a company. The size of the bank can be expressed by total assets, financing, and market capitalization (Amran et al., 2009). Bank size is one of the characteristics that are specific to banks that are generally and are determinants and efficiency of banks (Sari and Saraswati, 2017). Banks with relatively large total assets will have a better level of efficiency because they have relatively large total revenue as a result of increased product sales. With the increase in total revenue, it will increase the company's profit (Wahab, 2015). Based on the explanation above can be drawn a hypothesis:

H2: Bank size has a negative and significant effect on inefficiency

### 2.5 Inflation to Inefficiency

purchasing power accompanied by a decrease in the ability to save funds in banks (Endri, 2015). The decrease in the amount of funds deposited in banks due to high inflation rates has an impact on the performance of banks burdened with high operational costs, while their income from interest is reduced so that the bank becomes inefficient in its operational activities. Inflation has the potential to hinder the growth of credit itself. While income from the credit sector

will be small. This affects the profitability of the bank concerned (Wibowo and Syaichu, 2013).

When inflation is at a normal level, the economic enthusiasm will increase the bank's profitability, so banks can improve their efficiency. Preferably, when economic conditions are depressed and on the other hand inflation is higher, it will increase the risk of profitability and / or decrease bank efficiency, unless the bank is able to race faster to increase interest (for conventional banks) or for Islamic banks to increase bank service revenues or rent from sharia products (Asngari, 2013). Based on the explanation above can be drawn a hypothesis:

H3: Inflation has a positive and significant effect on inefficiency

### 2.6 Inefficiency to Profitability

The efficiency of the banking system needs to be considered because the efficiency of the banking system will cause banks to get high profits (Hussain et al., 2012). The current measure of efficiency of Islamic banking is the percentage of BOPO. Biaya Operasional dan Pendapatan Operasional (BOPO) is a comparison between operating costs and operating income. The operational cost ratio is used to measure the level of efficiency and ability of banks in conducting operations. The lower BOPO means the more efficient the bank is in controlling its operational costs, with the existence of cost efficiency, the profits obtained by the bank will be even greater (Sintiya, 2018). Based on the explanation above can be drawn a hypothesis:

H4: inefficiency has a negative and significant effect on the profitability of Islamic banking

## 3 METHODS AND EQUIPMENT

This study is intended to discuss the factors that influence inefficiency in Islamic banking industry which consists of Non-Performing Finance (NPF), Bank Size, and inflation, and the impact of Islamic banking inefficiency on Islamic banking profit. The research method used is quantitative, because the research data in the form of numbers and analysis using statistics. The population in this study is the Bank Umum Syariah (BUS) and Unit Usaha Syariah (UUS) which publishes monthly reports to Bank Indonesia (BI) or the Otoritas Jasa Keuangan (OJK) for the period 2009-2018, so this research uses time series data. In other words, the method used in this research is the census method. Refers to the opinions of experts(Hair Jr et al., 2016)(SUHARTANTO et al.,

2018), Data analysis techniques used in this study are path analysis (analysis path) using the PLS-SEM (Partial Least Square Structural Equation Modeling) method. Data processing is done using WarpPLS 6.0 software (Hair Jr et al., 2016)(SUHARTANTO et al., 2018).

## 4 RESULT

The results of data processing carried out showed that the percentage of goodness of fit (GoF) was 0.885, and indicated that the suitability of the ideal model. Furthermore, Average block VIF (AVIF) has an acceptable percentage of 2.076 and Average full collinearity VIF (AFVIF) also has an acceptable and ideal percentage at a value of 4.978 as well as Sympton's paradox ratio (SPR) which has an acceptable percentage of 0.667 . Finally, the R-squared contribution ratio (RSCR) shows an acceptable percentage as well at 0.960 and a Statistical suppression ratio (SSR) of 1,000 can fulfill the model match. As per the indicators that must be fulfilled in WarpPLS, the models compiled in this study are appropriate.

### 4.1 Path Analysis

Based on the conditions that must be fulfilled in the PLS-SEM analysis using the WarpPLS analysis tool, it can be concluded through the final results which will be shown in the figure below:

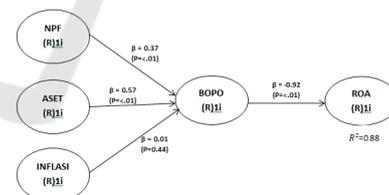


Figure 1: Result of Testing The Model

Non-Performing Finance (NPF) and Bank Size have a positive and significant effect on sharia banking inefficiencies with coefficients of 0.37 with significance  $\leq 0.01$  and 0.57 with significance  $\leq 0.01$ . This shows the greater the Non-Performing Finance (NPF) and the greater the size of the bank, the higher the bank inefficiency. This shows that the management of Islamic banks must maintain that the percentage of Non Performing Finance (NPF) and bank size is always maintained. In addition, inflation does not have a significant effect on bank inefficiency. This shows that the rise and fall of inflation does not affect the level of bank inefficiency at all. This is influenced by

the majority of Islamic bank financing is murabahah which requires banks to first buy goods in full, so that the rising and falling percentage of inflation does not affect the inefficiency of Islamic banks. This shows that the rise and fall of inflation does not affect the level of efficiency of the bank. Inefficiency has a negative and significant effect on bank profit with a coefficient of -0.92 with a significance of  $\leq 0.01$ . Based on the results of this study, it can be seen that bank inefficiencies affect bank profits, the higher bank inefficiencies it will reduce bank profits.

## 5 CONCLUSION, LIMITATION AND FUTURE RESEARCH

The main of this study was to examine the effect of Non-Performing Finance (NPF), bank size, and inflation on Islamic banking industry inefficiencies and the effect of Islamic banking industry inefficiencies on profitability. Overall, the results of this study indicate that non-performing finance internal factors and bank size have a significant effect on Islamic banking industry inefficiency, although this study also revealed that inflation external factors have no significant effect on inefficiencies. Other results reveal that inefficiency has a significant effect on the profitability of Islamic banking industry.

This research shows that every bank needs to know the steps so that the Islamic banking industry in Indonesia remains efficient in carrying out bank operations. Islamic Banking needs to reduce the level of Non-Performing Finance (NPF) respectively, and control asset variables to be efficient. Although the results show that inflation does not have a significant effect on the efficiency of Islamic banking industry, Islamic banking industry management must remain vigilant against various other external variables.

This study has several limitations. First, the variables that affect profitability in this study are only one variable, namely the inefficiency indicated by the BOPO percentage. For further research other variables that can affect profitability can be added, so that a comparison of which variables can have a greater impact on the Islamic banking industry can be made. Second, further research is recommended to add variables that have not been studied in this study and add internal factors and other external factors that influence inefficiencies, such as exchange rates, Islamic finance, and overhead costs.

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