

## Comparative Analysis of Bank Health Levels towards the Profitability of Sharia Banks in Indonesia and Malaysia

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### *Author's contribution*

*The sole author designed, analyzed, interpreted and prepared the manuscript.*

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### ABSTRACT

**Aims:** To analyze and compare the effect of bank health on profitability in Islamic banks in Indonesia and Malaysia.

**Study design:** The research method used is quantitative descriptive research.

**Place and Duration of Study:** The sampling technique used was purposive sampling. The study was conducted on Sharia Banks registered with the Indonesian Financial Services Authority and Sharia Banks listed on the Malaysia Stock Exchange with a research period of four years, from 2016-2019.

**Methodology:** The type of data obtained in this study is documentary data. The source of data used in this study is secondary data, namely data on audited financial statements of Islamic banks in Indonesia and Malaysia which were taken through the websites [www.idx.co.id](http://www.idx.co.id) and [www.bursamalaysia.com](http://www.bursamalaysia.com) in 2016-2019. Data analysis was performed using multiple regression analysis using IBM SPSS to see the effect of the independent variables on the dependent variable, including the Descriptive Statistics Test and Multiple Regression Test.

**Results:** The results of this study indicate that in Islamic banks in Indonesia and Islamic banks in Malaysia there is no difference in the results of testing the effect of NPF on ROA, namely NPF is not significant in affecting profitability as proxied by ROA. However, the results of testing the effect of OER on ROA are different in the two samples. In the sample of Islamic banks in Indonesia, OER has a significant effect on ROA. While OER is not significant in influencing ROA in the sample of Islamic banks in Malaysia. Testing the effect of CAR on ROA also shows results that are not

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different between the samples of Islamic banks in Indonesia and Islamic banks in Malaysia, namely CAR has a significant effect on ROA. In terms of soundness level analysis, Islamic banks in Malaysia tend to be superior in the perspective of Risk Profile (NPF) and Earnings (OER), where most Islamic banks in Malaysia get the title of Very Healthy compared to Islamic banks in Indonesia. While in the perspective of Capital (CAR), both samples get the same predicate, namely Very Healthy.

**Conclusion:** The health level of Islamic banks in Malaysia is superior compared to the health level of Islamic bank in Indonesia.

*Keywords: ROA; NPF; OER; CAR; Bank's health level.*

## 1. INTRODUCTION

Indonesia as a country with the largest Muslim population in the world, which is estimated at 229 million or 87.2% of the total population of Indonesia [1] should be able to maximize the sharia economic system. The enthusiasm to start using the sharia economic system has been felt since the establishment of the first Islamic bank in Indonesia, namely Bank Muamalat Indonesia in 1991 which was initiated by the Indonesian Ulama Council [2] and this spirit has continued to increase until now many Islamic banks have emerged.

Until now, there are 14 Sharia Commercial Banks registered with the Financial Services Authority [3] and publish their financial reports on the Indonesia Stock Exchange. In terms of growth, the average Total Asset, Third Party Funds (DPK), and Disbursed Financing (PYD) of Islamic Commercial Banks in Indonesia continue to experience positive growth until December 2019 [3]. Even so, Indonesian Islamic banking still has not been able to catch up with Malaysia. Based on the 100 best rankings of Islamic banks in Asia, Indonesia is in 33rd place represented by Bank Syariah Mandiri, 53rd place represented by Bank BNI Syariah, and 55th place represented by BRI Syariah. Meanwhile, Malaysia is in 4th place, represented by Maybank Islamic [4].

Malaysia's rating can be proven by the performance of Malaysian Islamic banks. In December 2019, Malaysia's sharia banking

sector experienced an increase of 63.38 billion Ringgit or equivalent to 2,789 trillion Rupiah. Besides, total financing across all industries increased to 618.2 billion Ringgit by the end of 2019 [5]. Comparison of Total Assets and Financing Disbursed by Islamic Banks in Indonesia and Malaysia can be shown in the Table.

The increase in asset value in Islamic banking is expected to be in line with the bank's financial performance which also continues to experience positive growth. Financial performance can be assessed through profitability. Banking profitability assesses a bank's ability to carry out its operations by comparing the profits earned with assets or equity owned. The higher the profitability of a bank, the better the bank's performance (Suryani, 2010 in [6]).

The level of profitability of the bank measured using ratios Return on Assets (ROA), it is caused by Bank Indonesia as a manager and supervisor of banks prefer the value of profitability as measured by assets and the fund largely from savings fund society [6].

Bank profitability can be affected by the health of the bank. The health level of an Islamic bank also reflects whether or not the bank's financial performance is good [7]. The better the health level of the bank, the higher its financial performance. So that investors do not worry about the funds they have invested.

**Table 1.Total Assets and PYD of Sharia Banks in Indonesia and Malaysia in 2019**

|  | Indonesia | Malaysia  |
|--|-----------|-----------|
| Total Assets (Rp billion)              | 323,438   | 2,789,000 |
| Disbursed Financing - PYD (Rp billion) | 225,146   | 2,064,392 |

*Source: OJK and Republika.co.id*

Based on the results of research by Hakiim & Rafsanjani [8], it was found that the bank's health indicator to measure its profitability had a high relationship, while partially CAR had no significant effect on profitability. The FDR variable partially has a negative and insignificant effect on profitability. It is different from OER (Operating Expense on Operating Income) which partially has a negative and significant effect on ROA.

Agustina, Djaelani, & Priyono [9] in their research, the results of the simultaneous test (F test) show that the health of the bank has an effect on profit growth. The results of the partial test (T test) show that ROA and CAR have an effect on profit growth, while NPF, FDR and OER have no effect on profit growth. In addition, it is known that there is a relationship between the level of financial health of the company as seen from the NPF, FDR, ROA, OER, CAR variables with profit growth in Islamic banking.

While the results of research from Fakhruddin & Purwanti [7] show that the Capital Adequacy Ratio (CAR), Non Performing Ratio (NPF), Operational Efficiency Ratio (OER), Financing to Deposit Ratio (FDR), Quality of Productive Active (KAP) simultaneously have an effect against Return of Assets (ROA). The CAR variable has a significant positive effect on ROA. NPF has a significant negative effect on ROA. OER has a significant negative effect on ROA. KAP has a negative effect on ROA.

## **2. LITERATURE REVIEW, HYPOTHESIS DEVELOPMENT AND RESEARCH METHODS**

### **2.1 Literature Review**

#### **2.1.1 Signaling theory**

Spence [10] in his research that every information becomes important in an important decision-making process. This is then known as signaling theory. Signaling theory shows that information from the company is important information for investors as a decision-making material. When a bank will provide loans to household consumer customers and determine interest rates, banks need information about individual attributes such as assets, marital status, homeownership, and so on.

In the banking world, the bank's health every period is a signal for stakeholders. The good

performance of the bank and continues to increase gives a signal of good news for stakeholders, thus managers need to continue to maintain the performance that has been achieved well. If the manager believes the company has good prospects, and wants to increase the number of shares, then the manager needs to communicate it to investors [11]. Likewise, if the bank's health is bad or the bank's performance has decreased, this can be bad news for the bank's performance, so that it becomes a note for managers to improve and improve bank performance.

#### **2.1.2 Profitability**

According to Brigham & Houston [12] profitability ratios are ratios that show the combination of the influence of the company's ability to fulfill its obligations, asset management, and equity on operating results. Profitability ratios include calculating the ratio of profit margins to sales, the ratio of basic ability to generate profits, the rate of return on total assets, and the rate of return on equity of common stock.

ROA (Return On Asset) is used as an indicator in measuring the level of bank profitability. This is because Bank Indonesia as a manager and supervisor of the banking prioritize profitability as measured by the value of the fund assets largely from public savings fund [6].

#### **2.1.3 Bank's health**

A bank can be said to be healthy if the bank is able to maintain and maintain the trust of the public, can carry out the function of channeling funds properly, can help smooth financial traffic and payments and can be relied on by the government in carrying out various policies, especially monetary policy [13]. So that the bank can determine a business strategy in the future and is expected to provide better service to customers and help the government in terms of the country's economy.

#### **2.1.4 Bank health assessment methods**

Based on Article 29 of Law no. 7 of 1992, as amended by Law no. 10 of 1998 concerning Banking, a bank is obliged to maintain its soundness level with the provisions that it fulfills aspects of capital adequacy, asset quality, management quality, financial performance, and other aspects related to the bank's business and is required to conduct business activities in accordance with prudential principles.

The method for assessing the health of a bank is regulated in Bank Indonesia regulation No.13 / 1 / PBI / 2011 concerning the Assessment of the Health of Commercial Banks with a risk approach which includes an assessment of four factors, namely Risk Profile, Good Corporate Governance (GCG), Earnings (Rentability), and Capital (Capital) which is called the RGEC method. Based on Law no. 21 of 2008 concerning Islamic banking and Bank Indonesia Regulation No. 4/1 / PBI / 2002 Article 1 Paragraph 9, Commercial banks that apply sharia principles.

### 2.1.5 Risk profile

According to Bank Indonesia Regulation No. 13/1 / PBI / 2011 risk profile is an assessment of inherent risk and the quality of risk management implementation in bank operations. Banks are required to pay attention to the scope of risk management implementation as stipulated in the applicable regulations regarding the implementation of risk management for commercial banks, sharia commercial banks, and sharia business units [14]. According to Bank Indonesia Circular no. 13/24 / DPNP dated 25 October 2011 concerning the Rating of Commercial Banks consisting of eight risks, namely, credit, market, liquidity, operational, legal, strategic, compliance, and reputation risks.

In this aspect, what is assessed is the credit risk proxied by the Non-Performing Finance (NPF) and the liquidity risk proxied by the Finance to Deposit Ratio (FDR). NPF is a risk caused by customers who are unable to repay their loan amounts from Islamic banks with a predetermined period [6]. Meanwhile, FDR describes the bank's ability to repay withdrawals made by depositor customers by relying on credit provided as a source of liquidity [15].

### 2.1.6 Earnings

Earnings assessment uses the profitability ratio to measure the level of business efficiency and profitability achieved by the bank. Assessment of profitability factors includes evaluation of profitability performance, sources of profitability, and sustainability of bank profitability by considering aspects of the level, trend, structure, and stability by taking into account the performance per group and management of bank profitability, both through analysis of quantitative and qualitative aspects [13].

In this aspect, what is assessed is the level of efficiency and ability of the bank in its operational activities. This assessment is based on the ratio of OER (Operating Expenses divided by Operating Income). OER is considered to be an important determining factor for bank profitability because banks can increase profitability by focusing attention on proper cost control and operating efficiency (Sumarlin, 2016).

### 2.1.7 Capital

Capital or capital factor is assessed based on indicators of bank capital adequacy to anticipate potential losses from risk profiles accompanied by good capital management, under the characteristics, business scale, and complexity of the bank's business [16].

In this aspect, what is assessed is the level of capital adequacy and management of capital owned by the bank based on the bank's minimum capital adequacy requirement. The assessment is based on the CAR (Capital Adequacy Ratio) set by Bank Indonesia [17]. According to Qureshi, Nausherwani, & Shaikh (2020), this ratio is used to protect depositors and improve the stability and efficiency of financial institutions.

## 2.2 Hypothesis Development

### 2.2.1 The effect of non performing finance ratio (npf) on profitability

Non-Performing Finance (NPF) is the risk due to the customer's inability to return the loan amount received from Islamic banks along with the rewards in accordance with a predetermined period of time [6]. The higher the NPF value of a bank, the greater the risk borne by the bank on returning customer loans. The higher the NPF indicates the soundness of the bank is less healthy and can have an impact on decreasing the profitability of the bank. As shown by the results of research by Ansori & Safira [15] which states that NPL (NPF in Islamic banking) has a negative and significant effect on ROA (profitability).  
H1: NPF has a negative effect on ROA.

### 2.2.2 The effect of oer on profitability

According to Veithzal, et al (2007:722) in Hakiim & Rafsanjani [8] OER is a comparison between operational costs and operating income in measuring the level of efficiency and ability of

banks to carry out their operations. The lower the OER value indicates the healthier a bank is, because it has a high level of efficiency in carrying out its operational activities. The more efficient the company in carrying out its operational activities, it is expected to increase ROA. This is evidenced by Hakiim & Rafsanjani [8] in their research which states that OER has a negative and significant effect on ROA (profitability).

H2: OER has a negative effect on ROA.

### 2.2.3 The effect of capital adequacy ratio (car) on profitability

One indicator to measure the fulfillment of capital obligations is the CAR ratio (Capital Adequacy Ratio), which is a ratio that measures the adequacy of a bank's capital (Kasmir, 2014:346 in Ansori & Safira [15]). The higher the CAR ratio of a bank, it indicates that the bank is very healthy. This means that the higher the bank's ability to bear the risk due to any credit or risky productive assets by using its capital. This is in line with the results of research by Mahmudah & Harjanti [6] which states that CAR has a significant positive effect on ROA (profitability).

H3: CAR has a positive effect on ROA.

## 2.3 Research Methods

### 2.3.1 Research design

This study will analyze the percentage ratio of Risk Profile, Earnings and Capital and describe

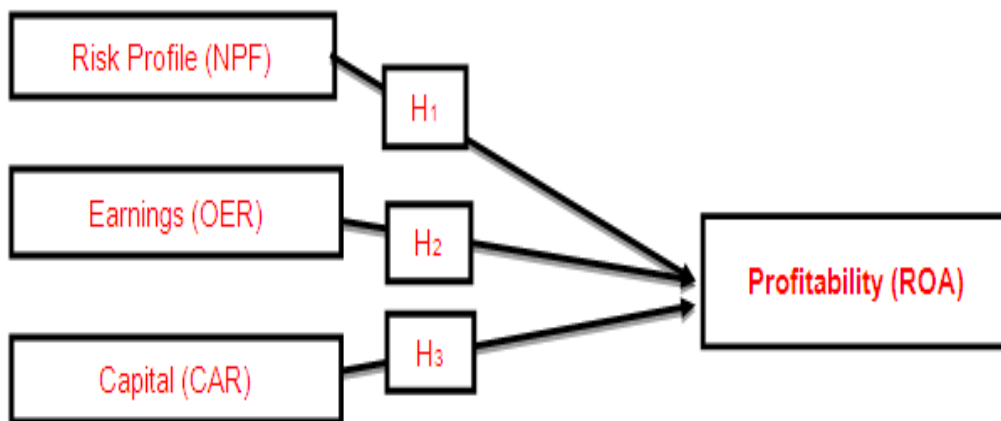
by explaining the ratio of Risk Profile, Earnings and Capital in analyzing the condition of the soundness of Islamic commercial banks which are the object of research. In addition, each ratio of Risk Profile, Earnings and Capital will be seen how it affects profitability. The results of each analysis are then compared between Islamic banks in Indonesia and Malaysia.

### 2.3.2 Population and research samples

The population in this study used Sharia banks registered with the Financial Services Authority (OJK) and Islamic banks in Malaysia in 2016-2019. Sampling was done by purposive sampling which is part of the non-probability sampling method. For ineligible members of the population, not selected as the study sample. Sampling with the criteria of Sharia Banks registered with the OJK and Malaysia in the 2016-2019 period, Sharia Banks that provide the data needed for research in the 2016-2019 period.

### 2.3.3 Data collection technique

The type of data obtained in this study is documentary data. The source of data used in this study is secondary data, namely data on audited financial statements of sharia banks in Indonesia and Malaysia which were taken through the websites [www.idx.co.id](http://www.idx.co.id) and [www.bursamalaysia.com](http://www.bursamalaysia.com) in 2016-2019.



**Fig 1. Theoretical Framework**

Source: Ansori & Safira [15], Hakiim & Rafsanjani [8], Mahmudah & Harjanti [6]

**2.3.4 Analysis method**

The type of research used is descriptive quantitative research, namely the data depiction approach by referring to the bank's health level assessment indicators and data processing through statistical or mathematical methods collected from secondary data. It is hoped that the conclusions obtained in a study will be more measurable and comprehensive. The data presentation analysis method used is comparative analysis, which is to compare the health level of Islamic banks in Indonesia and Malaysia.

The research data hypothesis was tested through multiple regression analysis. To measure the effect of the independent variable on the dependent variable. By going through descriptive statistical test stages and classical assumption tests. The regression equation model in this study is as follows:

$$Y = a + b_1X_1 + b_2X_2 + b_3X_3 + e$$

Information:

- Y = Profitability (ROA)
- b1-b3 = independent variable regression coefficient
- X1 = NPF
- X2 = OER
- X3 = CAR
- e = Error

**3. RESULTS AND DISCUSSION**

**3.1 Results**

**3.1.1 Analysis of the bank's health level of islamic banks**

Based on the calculation of the NPF, OER and CAR values and categorized in the predicate according to the criteria for the bank's health level, the following results are obtained:

**a. Risk Profile (Non Performing Finance - NPF)**

From a risk profile perspective, measured using the NPF (Non-Performing Finance) of Islamic banks in Indonesia which are included in the predicate very healthy 30.77 percent, healthy 46.15 percent, quite healthy 15.38 percent, and less healthy 7.7 percent. While Islamic banks in Malaysia which are included in the predicate very healthy 92.3 percent, and Healthy 7.7 percent. Thus, it can be concluded that Islamic banks in Malaysia are better able to handle non-performing financing than Islamic banks in Indonesia.

**b. Earnings (Operational efficiency Ratio - OER)**

From the perspective of the Earnings, based on the value of OER, the number of Islamic banks in Indonesia that received the very healthy predicate was 53.84 percent, healthy 7.7 percent and less healthy 38.46 percent. While, based on OER, the number of Islamic banks in Malaysia that received the very healthy predicate is 100 percent. Thus, Islamic banks in Malaysia are still superior in terms of operational efficiency and cost control.

**c. Capital (Capital Adequacy Ratio - CAR)**

Based on the perspective of Capital, which is seen from the CAR value, both Islamic banks in Indonesia and Islamic banks in Malaysia, 100% of the samples have received very healthy predicate. It can be concluded that the Islamic banks in both countries have good capital adequacy rates to deal with financial risks.

**3.1.2 Islamic bank statistical analysis**

**a. Descriptive Statistical Test of Islamic Banks in Indonesia**

The descriptive statistical tests shown in table 2 are the results of testing 52 sample data with a span of 4 years (2016-2019) with a total sample of 13 Islamic banks in Indonesia.

**Table 2. Descriptive Statistical Test of Islamic Banks in Indonesia**

|                    | Descriptive Statistics |         |         |         |
|--------------------|------------------------|---------|---------|---------|
|                    | N                      | Minimum | Maximum | Mean    |
| ROA                | 52                     | -10.77  | 13.60   | 1.2888  |
| NPF                | 52                     | .32     | 22.04   | 3.9933  |
| OER                | 52                     | 58.10   | 217.40  | 93.6867 |
| CAR                | 52                     | 11.51   | 44.60   | 21.6940 |
| Valid N (listwise) | 52                     |         |         |         |

The average value (mean) of ROA is 1.29 percent which shows that the average sample of Islamic banks in Indonesia is still not able to utilize assets effectively in generating profits. The minimum ROA value of -10.77 percent is the ROA of PT Bank Panin Dubai Syariah in 2017 and the maximum value of ROA of 13.6 percent is the ROA of PT Bank Tabungan Pensiunan Nasional Syariah in 2019.

The average value (mean) of the NPF is 3.99 percent which indicates that the average sample of Islamic banks in Indonesia has a healthy level of bank health in accordance with the results of the analysis of the health level in the previous sub-chapter. The minimum NPF value of 0.32 percent is the NPF value of PT BCA Syariah in 2017 and the maximum NPF value of 22.04 percent is the NPF value of PT Bank Jabar Banten in 2017.

The average value (mean) of OER is 93.69 percent which shows the average sample of Islamic banks in Indonesia has good efficiency in carrying out their operational activities. The minimum OER value is 58.10 percent which is the OER value of PT Bank Tabungan Pensiunan Nasional Syariah in 2019. The maximum OER value is 217.4 percent which is the OER value of PT Bank Panin Dubai Syariah in 2017.

The average value (mean) of 21.69 percent means that the average Islamic bank in Indonesia has a good capital adequacy rate so that on average it gets the Very Healthy criteria. The minimum CAR value is 11.51 percent which is the CAR value of PT Bank Panin Dubai Syariah in 2017 and the maximum CAR value is 44.6 percent which is the CAR value of PT Bank Tabungan Pensiunan Nasional Syariah in 2019.

#### **b. Coefficient of Determination Test (R<sup>2</sup>) of Islamic Banks in Indonesia**

Based on the results of the coefficient of determination test, the adjusted R<sup>2</sup> value of the model for Islamic banks in Indonesia is 0.707, this means that 70.7 percent of the variation in ROA can be explained by variations of the three independent variables NPF, OER, and CAR. While the remaining 29.3 percent is explained by other factors outside the model.

#### **c. Simultaneous Significance Test (F Test) of Islamic Banks in Indonesia**

The results of the simultaneous significance test (F test) for the sample of Islamic banks in Indonesia show the calculated F value of 42,089 while the significance level of 0.05 with df1 (k-1) is 2 (3-1=2) and df2 (nk-1) is 48 (52-3-1) the result of F table is 3.191, then F count > F table is 42.089 > 3.191 with a significance probability of 0.000. The probability value of this test is smaller than the significance level of 0.05, so the regression model can be used to predict ROA, or the variables NPF, OER, and CAR simultaneously or together can affect ROA.

#### **d. Individual Parameter Statistical Test (T Test) of Islamic Banks in Indonesia**

The results of the T test in table 4 above show that of the three independent variables included in the regression model, the significance probability value of the NPF variable is 0.232 which is greater than the 0.05 significance level, so the NPF variable is not significant in influencing ROA. While the OER and CAR variables can be concluded to have a significant effect on ROA. This is due to the significance probability value of both being 0.000 and 0.009, respectively, which is smaller than the 0.05 significance level. So it can be concluded that ROA is influenced by OER and CAR with the following mathematical equation.

$$ROA = 9.011 - 0.127 NPF - 0.105 OER + 1.19 CAR$$

- 1) The constant of 9,011 states that if the independent variable is considered constant, then the average ROA is 9,011 percent.
- 2) The OER regression coefficient of -0.105 states that for every 1 percent increase in ROA, it will decrease OER by 0.105 percent.
- 3) The CAR regression coefficient of 1.19 states that for every 1 percent increase in ROA, it will increase the CAR by 1.19 percent.

**Table 3 Coefficient of Determination Test (R2)**

| Model Summary <sup>b</sup> |                   |          |                   |                            |
|----------------------------|-------------------|----------|-------------------|----------------------------|
| Model                      | R                 | R Square | Adjusted R Square | Std. Error of the Estimate |
| 1                          | .851 <sup>a</sup> | .725     | .707              | 2.09724                    |

a. Predictors: (Constant), CAR, NPF, OER

b. Dependent Variable: ROA

**Table 4. Individual Parameter Statistical Test (T Test)**

| Coefficients <sup>a</sup> |            |                             |            |                           |        |      |
|---------------------------|------------|-----------------------------|------------|---------------------------|--------|------|
| Model                     |            | Unstandardized Coefficients |            | Standardized Coefficients | T      | Sig. |
|                           |            | B                           | Std. Error | Beta                      |        |      |
| 1                         | (Constant) | 9.011                       | 2.162      |                           | 4.167  | .000 |
|                           | NPF        | -.127                       | .105       | -.130                     | -1.211 | .232 |
|                           | OER        | -.105                       | .019       | -.606                     | -5.393 | .000 |
|                           | CAR        | .119                        | .044       | .241                      | 2.739  | .009 |

a. Dependent Variable: ROA

**Table 5. Descriptive Statistical Test of Islamic Banks in Malaysia**

| Descriptive Statistics |    |         |         |         |
|------------------------|----|---------|---------|---------|
|                        | N  | Minimum | Maximum | Mean    |
| ROA                    | 52 | -.62    | 1.37    | .6644   |
| NPF                    | 52 | .09     | 3.84    | 1.3748  |
| OER                    | 52 | 18.50   | 96.35   | 50.2187 |
| CAR                    | 52 | 13.60   | 31.27   | 18.8454 |
| Valid N (listwise)     | 52 |         |         |         |

**Table 6. Coefficient of Determination Test (R2)**

| Model Summary <sup>b</sup> |                   |          |                   |                            |
|----------------------------|-------------------|----------|-------------------|----------------------------|
| Model                      | R                 | R Square | Adjusted R Square | Std. Error of the Estimate |
| 1                          | .615 <sup>a</sup> | .379     | .340              | .31275                     |

a. Predictors: (Constant), CAR, OER, NPF

b. Dependent Variable: ROA

#### e. Descriptive Statistical Test of Islamic Banks in Malaysia

The descriptive statistical test shown in table 2 is the result of testing 52 sample data with a time span of 4 years (2016-2019) with a total sample of 13 Islamic banks in Malaysia.

The average (mean) ROA of 0.66 percent indicates that the average sample of Islamic banks in Malaysia has a fairly healthy level of health. The minimum ROA value of -0.62 percent is the ROA value of Kuwait Finance House (Malaysia) Berhad in 2019, while the maximum ROA value of 1.37 percent is the ROA value of Bank Islam Malaysia Berhad in 2016.

The average NPF value is 1.37 percent, meaning that the health of Islamic banks in Malaysia is in the Very Healthy predicate

because the average NPF value is <2%. The minimum NPF value is 0.09 percent which is the NPF value from Affin Islamic Bank Berhad in 2016. The maximum NPF value is 3.84 percent which is the NPF value from OCBC Al-Amin Bank Berhad in 2018. The average value (mean) of the OER is 50.22 percent. This indicates that the average Islamic bank in Malaysia is in a very healthy condition with the criteria of 94 percent. The minimum OER value of 18.5 percent is the OER value of Affin Islamic Bank Berhad in 2016. The maximum OER value of 96.35 percent is the OER value of Al Rajhi Banking & Investment Corporation (Malaysia) Berhad in 2016.

The average CAR value is 18.84 percent, it can be concluded that most Islamic banks in Malaysia choose a good capital adequacy rate and are included in the criteria of a Very Healthy bank. The minimum CAR value of 13.60 percent



is the CAR value of Affin Islamic Bank Berhad in 2016. The maximum CAR value of 31.27 percent is the CAR value of Kuwait Finance House (Malaysia) Berhad in 2019.

**f. Coefficient of Determination Test (R2) of Islamic Banks in Malaysia**

Table 6 shows the coefficient of determination of this research model. It is known that the R2 value is 0.379 and the adjusted R2 is 0.340. This shows that the variability of the ROA variable can be explained by the variability of the NPF, OER, and CAR variables of 0.340 or 34%. While 66% is explained by other variables not examined in this study.

**g. Simultaneous Significance Test (F Test) of Islamic Banks in Malaysia**

The results of the simultaneous significance test (F test) for the sample of Islamic banks in Malaysia can be seen in table 5.13 above which shows the calculated F value of 9.752 while the significance level of 0.05 with df1 (k-1) is 2 (3-1 = 2) and df2 (nk-1) is 48 (52-3-1), the result is F table 3,191, then F count > F table is 9,752 > 3,191 with a significance probability of 0.000. The probability value of this test is smaller than the significance level of 0.05, so the regression model can be used to predict ROA, or the

variables NPF, OER, and CAR simultaneously or together can affect ROA.

**h. Individual Parameter Statistical Test (T Test) of Islamic Banks in Malaysia**

The results of the T test in table 7 show that of the three independent variables included in the regression model, the significance probability value of the NPF variable is 0.164 and the OER variable is 0.153 which is greater than the 0.05 significance level, so the NPF and OER variables are not significant in influencing ROA. While the CAR variable can be concluded to have a significant effect on ROA. This is because the CAR significance probability value of 0.000 is smaller than the 0.05 significance level. So it can be concluded that ROA is influenced by CAR with the following mathematical equation:

$$ROA = 1.840 + 0.081 NPF - 0.004 OER - 0.058 CAR$$

- 1) The constant of 1,840 states that if the independent variable is considered constant, then the average ROA is 1,840 percent.
- 2) The CAR regression coefficient of -0.058 states that for every 1 percent increase in ROA, it will decrease the CAR by 0.058 percent.

**Table 7. Individual Parameter Statistical Test (T Test)**

|       |            | Coefficients <sup>a</sup>   |            |                           | T      | Sig. |
|-------|------------|-----------------------------|------------|---------------------------|--------|------|
| Model |            | Unstandardized Coefficients |            | Standardized Coefficients |        |      |
|       |            | B                           | Std. Error | Beta                      |        |      |
| 1     | (Constant) | 1.840                       | .230       |                           | 7.997  | .000 |
|       | NPF        | .081                        | .058       | .174                      | 1.412  | .164 |
|       | OER        | -.004                       | .003       | -.168                     | -1.451 | .153 |
|       | CAR        | -.058                       | .012       | -.613                     | -4.954 | .000 |

a. Dependent Variable: ROA

**Table 8. Comparison of Islamic Banks in Indonesia and Malaysia**

| Measurement       |              | Islamic Banks in Indonesia | Islamic Banks in Malaysia |
|-------------------|--------------|----------------------------|---------------------------|
| F-Test            | Significance | 0.000                      | 0.000                     |
| T-Test            | Significance | NPF                        | 0.232                     |
|                   |              | OER                        | 0.000                     |
|                   |              | CAR                        | 0.009                     |
| Adjusted R Square |              | 0.707                      | 0.340                     |

Source: secondary data processed 2021

### 3.1.3 Comparison of Bank's Health Levels based on NPF, OER and CAR Against Profitability in Islamic Banks in Indonesia and Islamic Banks in Malaysia

The following can be concluded from Table 8, among others:

- a. Judging from the significance of the F test, both Islamic banks in Indonesia and Islamic banks in Malaysia both have a significance probability value of 0.000. This means that in the two samples tested, the level of health proxied by NPF, OER and CAR has a simultaneous effect on profitability (ROA). Therefore, there is no difference between the simultaneous test on Islamic banks in Indonesia and Islamic banks in Malaysia.
- b. The NPF variable between Islamic banks in Indonesia and Islamic banks in Malaysia has no significant effect on profitability (ROA). Where the probability value of the significance of the NPF of Islamic banks in Indonesia is 0.232 and Islamic banks in Malaysia are 0.164, both of which have a value greater than the significance level of 0.05. Therefore, in terms of NPF there is no difference between Islamic banks in Indonesia and Islamic banks in Malaysia.
- c. There is a difference in the T test of the OER variable between Islamic banks in Indonesia and Islamic banks in Malaysia. Where the probability value of OER significance in Islamic banks in Indonesia is 0.000, which is smaller than the 0.05 significance level, which means that the OER variable has a significant effect on profitability (ROA). While the probability value of OER significance at Islamic banks in Malaysia is 0.153, which is greater than the 0.05 significance level, which means that the OER variable does not have a significant effect on profitability (ROA).
- d. The CAR variable in Islamic banks in Indonesia and Islamic banks in Malaysia both have a significant effect on profitability. It can be seen that the probability value of CAR in Islamic banks in Indonesia and Islamic banks in Malaysia is smaller than the 0.05 significance level, which are 0.009 and 0.000 respectively. thus there is no difference between the effect of CAR on profitability (ROA) in Islamic banks in Indonesia and Islamic banks in Malaysia.
- e. Judging from adjusted R2, the variability of ROA which can be explained by the variability of the three independent variables NPF, OER, and CAR at Islamic banks in Indonesia is greater than that of Islamic banks in Malaysia. Where in Islamic banks in Indonesia is 0.707 or 70.7 percent while Islamic banks in Malaysia are 0.340 or 34 percent.

### 3.2 Discussion

- a. The lower the NPF value of a bank, it means that the risk borne by the bank on returning customer loans is getting smaller. The lower the NPF indicates the health of the bank is getting healthier and can have an impact on increasing the profitability of the bank. In both Islamic banks in Indonesia and Islamic banks in Malaysia, NPF is not significant in influencing profitability as proxied by ROA. These results are in line with the research of Setiawan (2017) and Agustina et al. (2017). The lower the NPF value does not necessarily increase the ROA. This can be seen from the low average ROA value, even though the NPF value is low. It can be indicated that the return of funds from customers is still not maximal so that it has an impact on total assets, so that the assets owned by Islamic banks in Indonesia and Malaysia have not been very effectively used in their efforts to increase company profits. The results of this study contradict the results of Ansori & Safira's (2018) research which states that NPL (in Islamic banking known as NPF) has a negative and significant effect on ROA.
- b. The lower the OER value indicates the healthier a bank is, because it has a high level of efficiency in carrying out its operational activities. The more efficient the company in carrying out its operational activities, it is expected to increase ROA. In the sample of Islamic banks in Indonesia, the hypothesis is acceptable. The results of the OER T test on ROA show that OER has a significant effect on ROA. These results are in line with the research of Fakhruddin & Purwanti (2015), Hakiim & Rafsanjani (2016), and Setiawan (2017) which states that OER has a negative and significant effect on ROA (profitability). However, the research by Fakhruddin & Purwanti (2015), Hakiim &

Rafsanjani (2016), and Setiawan (2017) was rejected in the case of OER testing on ROA from a sample of Islamic banks in Malaysia which showed that OER was not significant in influencing ROA, but these results are in line with the research by Agustina et al. (2017). This can be seen from the test data which shows a small OER value does not necessarily increase the ROA value. So it can be indicated that the more efficient the company is in carrying out its operational activities, if it is not followed by the effective use of assets to increase company profits, it cannot increase ROA (profitability).

- c. The higher the CAR ratio of a bank, it indicates that the bank is very healthy. This means that the higher the bank's ability to bear the risk due to any credit or risky productive assets by using its capital. When the capital owned can cover the decline in assets due to losses caused by risky assets, this is indicated by the high value of CAR. The high value of CAR in banking companies can contribute to bank profitability. The results of this study, both in the sample of Islamic banks in Indonesia and Islamic banks in Malaysia, show that CAR has a significant effect on ROA. The results of this study are in line with the research of Fakhruddin & Purwanti (2015), Mahmudah & Harjanti (2016) and Agustina et al. (2017), namely CAR has a significant effect on ROA (profitability).

#### 4. CONCLUSION

- A. There is no difference in T test results between the sample of Islamic banks in Indonesia and Islamic banks in Malaysia, namely Non Performing Finance (NPF) does not have a significant effect on ROA. In terms of the level of health based on the criteria in the NPF, Islamic banks in Malaysia are better able to handle non-performing financing than Islamic banks in Indonesia. This is due to the number of Islamic banks in Malaysia, most of which have a very healthy predicate compared to Islamic banks in Indonesia.
- b. There is a difference in the results of the T test between the sample of Islamic banks in Indonesia and Islamic banks in Malaysia, namely OER (Operating Costs divided by Operating Income) has a significant effect on ROA in the sample of

Islamic banks in Indonesia and OER (Operating Costs divided by Operating Income) does not have a significant effect on ROA. significant effect on ROA in the sample of Islamic banks in Malaysia. In terms of the level of health based on the criteria in the OER, Islamic banks in Malaysia are still superior in terms of operational efficiency and cost control. This is due to the number of Islamic banks in Malaysia, most of which have a very healthy predicate compared to Islamic banks in Indonesia.

- C. There is no difference in the results of the T test between the sample of Islamic banks in Indonesia and Islamic banks in Malaysia, namely CAR (Capital Adequacy Ratio) has a significant effect on ROA. Judging from the capital seen from the CAR value, both Islamic banks in Indonesia and Islamic banks in Malaysia, the entire sample received a very healthy predicate. It can be concluded that Islamic banks in both countries have a good level of capital adequacy to deal with financial risks.

#### 5. SUGGESTION

- a. Looking at the results of research based on several categories of assessments that show the health of Islamic banks in Malaysia is superior to the health of Islamic banks in Indonesia. It is hoped that in the future, Islamic banks in Indonesia can improve their performance, especially in the perspective of risk profile (non performing finance-npf) and earnings perspective (operational efficiency and cost control-oer). So that Islamic banks in Indonesia can compete with Islamic banks from other countries especially Islamic bank in Malaysia.
- b. For Islamic banking in Indonesia, it is expected to be a motivational material to continue to improve its services by continuously improving capital performance so that it is expected to increase total assets and total funds distributed to customers which can indirectly help expand the market share of Islamic banking in Indonesia.
- c. For Islamic banking in Malaysia, this research can be used as a reference in looking at the bank soundness level variables that can affect profitability. Thus, it is expected to strengthen the financial

- performance of Islamic banking which has been running very well.
- d. In this study, the analysis of bank health only uses guidelines from Bank Indonesia. Researchers did not find published data on bank health guidelines in Malaysia, so it is likely that different results will be obtained on the health of Islamic banks in Malaysia if analyzed using the health level guidelines of the Central Bank of Malaysia. Therefore, for further research, it is expected to use the guidelines for measuring the level of health from the Central Bank of Malaysia.
  - e. This study did not use the Good Corporate Governance variable, due to the lack of understanding of researchers in determining the composite value in the Good Corporate Governance report for Islamic banks in Malaysia. It is hoped that further researchers will understand in determining the composite value in Good Corporate Governance reports for Islamic banks in Malaysia, so that similar research can be carried out using the RGEC method.

## COMPETING INTERESTS

Author has declared that no competing interests exist.

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