Determinants of Islamic Banking Profitability: A Comparative Analysis of Indonesia and Malaysia

Syifa Nurmilla Fathiyyah, Muhammad Muflih
Islamic Finance, Accounting, Politeknik Negeri Bandung, Bandung, Indonesia
syifanurmillaf@gmail.com, m.muflih@polban.ac.id

ABSTRACT

Islamic banking in Indonesia and Malaysia experienced differences in asset growth and market share, potentially causing dissimilarity in profitability performance. This study aims to evaluate the factors that influence the increase in profitability of Islamic banking in Indonesia and Malaysia using signaling theory including market concentration (HHI), company size and financing risk (NPF), and national income (GDP) as control variables. It analyzed the Indonesian and Malaysian Islamic banks during the period 2017-2021. The method used in this study is comparative descriptive with panel data regression analysis measuring instruments. Based on the results of empirical analysis, factors that affect the profitability of Islamic banking in Indonesia are financing risk, while in Malaysia, it is financing risk and national income. The results of this study update the view on the profitability of Islamic banking in Indonesia and Malaysia. In addition, from the managerial side, this study contributes to creating NPF control in Indonesian Islamic banking because these factors can increase the profitability of the country's Islamic banking. The study also contributes to the development of market concentration strategies, company size, and financing risks in Malaysian Islamic banking as all these factors can increase the profitability of the country's Islamic banking.

Keywords: Islamic Banking, Profitability, Market Concentration, Company Size, Financing Risk

ABSTRAK

Perbankan syariah Indonesia dan Malaysia mengalami perbedaan dalam pertumbuhan aset dan market share sehingga berpotensi menimbulkan perbedaan kinerja profitabilitas. Studi ini bertujuan untuk mengevaluasi faktor yang mempengaruhi peningkatan profitabilitas perbankan syariah di Indonesia dan Malaysia dengan menggunakan signaling theory diantaranya konsentrasi pasar (HHI), ukuran perusahaan dan risiko pembiayaan (NPF) serta pendapatan nasional (GDP) sebagai variabel kontrol. Studi ini menganalisis bank syariah di Indonesia dan Malaysia selama periode 2017-2021. Metode yang digunakan oleh studi ini adalah komparatif deskriptif dengan alat ukur analisis regresi data panel. Berdasarkan hasil analisis empiris, faktor yang mempengaruhi profitabilitas perbankan syariah Indonesia adalah risiko pembiayaan sedangkan di Malaysia adalah risiko pembiayaan serta pendapatan nasional. Hasil penelitian ini memperbaharui pandangan tentang profitabilitas perbankan syariah Indonesia dan Malaysia. Selain itu dari sisi manajerial, studi ini berkontribusi dalam menciptakan pengendalian NPF pada perbankan syariah Indonesia karena faktor tersebut mampu meningkatkan profitabilitas perbankan syariah negara tersebut. Selain itu studi ini juga berkontribusi dalam pengembangan strategi konsentrasi pasar, ukuran perusahaan dan risiko pembiayaan pada perbankan syariah Malaysia karena semua faktor tersebut mampu meningkatkan profitabilitas perbankan syariah negara tersebut.

Kata Kunci: Bank Syariah, Profitabilitas, Konsentrasi Pasar, Ukuran Perusahaan, Risiko Pembiayaan
I. INTRODUCTION

The State of the Global Islamic Economy report (2022) explained that the economic condition of Muslim countries grew by about 7% in 2021. This growth is in line with the health level of the global Islamic financial industry with an indicator value of 114 points in that particular year (Karnadi, 2022). Indonesia and Malaysia, two Muslim countries, can maintain this position with high values of knowledge and awareness indicators (Bernama, 2022; Karnadi, 2022). The third position is Saudi Arabia, the fourth position is Bahrain, and the fifth position is the United Arab Emirates.

![Image of Islamic Finance Development Indicators]


Figure 1 shows the different performance of the Islamic financial industry in Indonesia and Malaysia. Moreover, based on The Asian Banker (2021) website, one of the differences is in the overall profitability level of the Islamic banking sector, where Malaysia has a profitability of 33.5% while Indonesia achieves 19.5%. However, the identification of profitability is not complete without integrating the role of industry factors (market concentration) and bank-specific factors (firm size and funding risk), as these two groups represent the precise strength of Islamic banks (Adelopo et al., 2018; Ponraj & Rajendran, 2012; Widyastuti & Armanto, 2013). Therefore, it is imperative to evaluate the profitability of Islamic banks based on the role of these two variables.

Previous empirical studies have identified the profitability of the banking industry through the role of market concentration, company size, and risk (Bolarinwa et al., 2019; O’Connell, 2022; Sarpong-Kumankoma et al., 2018). However, studies that specifically estimate the relationship between these three variables and the profitability of Islamic banking are relatively scarce. In the context of Islamic banking, analyzing the effect of market concentration on profitability is essential to determine the ability of banks to optimize business productivity (Fadhillah, 2022; Hamza, 2014). In addition, estimating the effect of firm size on profitability is necessary to identify banks’ ability to grow assets (Dewi & Sudiartha, 2017). Similarly, investigating the effect of risk on the profitability of Islamic banks is also important to reveal banks’ capability in dealing with funding risks (Farid, 2021). Considering the importance of these three factors to sharpen the prediction of Islamic banks’ profitability, this study used them as predictors. In addition, national income was used as a control variable to highlight the comparison of the economic conditions of Indonesia and Malaysia (Fauziana et al., 2014). With the involvement of three predictor variables and one control variable, the prediction of Islamic bank profitability is expected to be more comprehensive. In this study, Indonesian and Malaysian Islamic banks were compared based on three reasons. First, the two countries have different asset growth in the last year, where Malaysia stands at 23% and Indonesia at 2%. This difference has the potential to show differences in the ability of each Islamic banking group to penetrate the market and industry (GBO Specialist, 2022). Second, the market share of Islamic banking in the two countries is also different, where the market share of Indonesia is less than 7% and Malaysia is 25-30%, so these gaps may cause differences in business capabilities and profit generation. Thirdly, the previous research explained that the profitability of Islamic banks in Malaysia showed higher performance compared to Islamic banks in Indonesia (Hosen & Muhari, 2018). However, the role of Islamic banking in both countries is essential to increase economic growth at the national and global levels. Therefore, a comparative study of the profitability of Islamic banking in both countries is crucial. In this
This recent study, this comparison was carried out in order to assist stakeholders in increasing the capacity of Islamic banking in each of these countries and accelerating the improvement of profitability in each of these countries.

This research contributed in two important ways. First, from a theoretical perspective, this research enriched the development of signaling theory by analyzing the profitability of Islamic banking in Indonesia and Malaysia. Second, from the managerial side, this research will improve the profitability performance of Islamic banking through the role of market concentration, company size, and financing risk.

II. LITERATURE REVIEW

This research compared the profitability performance of Islamic banking in Indonesia and Malaysia through the role of industry, bank-specific, and macroeconomic factors in order to enhance the competitiveness of Islamic banking in each country and increase economic growth in the Southeast Asian regions. Due to the unique view on the profitability of Islamic banking in these two countries, this study built a profitability model based on the guidance of various credible pieces of literature based on signaling theory. In full, we describe the study as follows.

**Signaling Theory**

In financial studies, signaling theory is useful to explain accurate and precise information about a company's performance provided to investors. Spencer (1973) made the first mention of signaling theory, which is basically related to the asymmetry of information between two parties. Experts have affirmed that this theory shows a company's efforts to provide appropriate and prospective cues to investors based on the dynamics that occur around it, both at the national and regional levels (Hardjo & Tourani-Rad, 2011; Supriadi, 2020). In the context of Islamic banking, signaling theory helps managers to increase profitability by using external and internal factors that become the basis for investment decisions (Putri, 2020). A prospective signal can increase profitability and promote public confidence. In addition, this theory is useful to answer the gap of this study by predicting industry factors, internal bank factors, and macroeconomic factors on the profitability of Islamic banking because investors and stakeholders will invest in this industry if the profitability performance of this industry is very good. Thus, to understand the profitability of Islamic banking in Indonesia and Malaysia, researchers used signaling theory to uncover the determinants of profitability and as a reference for decision-making that can improve the competitiveness of the Islamic banking industry in these two countries.

**Profitability**

Scholars defined profitability as an indicator of a company's ability to generate net profits from its business operations, and it shows how efficiently assets are managed by the bank to generate income (Pasiouras & Kosmidou, 2007; Prihadi, 2011). The profitability ratio serves to measure a company's ability to generate profits based on information from financial statements (Suriani, 2022). Profitability is divided into several types: return on assets (ROA), return on equity (ROE), and net interest margin (NIM). Among these types, ROA is highly prioritized because it symbolizes the company's performance in generating profits based on existing assets and is the main source of evaluation in formulating company policies (Hargrave, 2022). This study used ROA as a profit parameter to determine the profitability of Islamic banking because through ROA predictions for profits become more complete and more adaptable to signaling theory.

**Market Concentration**

Market concentration functions to analyze the structure of competition between companies in controlling the same market share (Hendra & Hartomo, 2017). Experts defined market concentration as a parameter of a company's ability to control market share compared to other best competitors (Affandi, 2021). In practice, market share is measured based on the Herfindahl-Hirschman Index (HHI) formula, by summing a company's sales against the total sales of all companies in the sample (Sari et al., 2019). This recent study measured market concentration based on the level of market share of the best Islamic banking companies in Indonesia and Malaysia, which then becomes the reference for comparison.

Many studies have been conducted to estimate the relationship between market concentration and ROA. Abbas & Arizah (2019), Bolarinwa et al (2019) and Mirzae & Moore (2014) found that market concentration can enhance bank performance through the role of ROA. In addition, Ozili P & Uadiale O (2017) banks in Nigeria with high market concentration are able to achieve high ROA. Furthermore, profit maximization by banks with good management is assumed to have high market power because it has a
relatively low structural impact. Therefore, this study assumed that concentrated banks will have high market power, which leads to an increase in ROA. These findings encourage the authors to assume the relationship between the market concentration and ROA of Islamic banking in Indonesia and Malaysia. The hypotheses proposed are:

H1A. Market concentration has a positive effect on the ROA of Islamic banking in Indonesia.
H1B. Market concentration has a positive effect on the ROA of Islamic banking in Malaysia.

Company Size

Existing literature explains that company size determines the total assets of a company through the incorporation of company resources for business activities (Novari & Lestari, 2016). Company size is measured using ordinal scales with classifications of large, medium, and small classifications (Riadi, 2020). Many studies have been conducted on the relationship between company size and profitability have been widely conducted. The results mainly show that as asset ownership increases, bank profitability also increases (Hashmi et al., 2020; Oktavianti, 2015; Taquddin, 2019). This premise supports the theoretical signal in terms of internal forces, as total assets represent the bank’s ability to execute its business strategy. In addition, company with a large size can obtain external funding sources, which makes it easier for them to win the competition. This argument encourages the authors to assume that firm size affects the profitability of Islamic banking in Indonesia and Malaysia. Therefore, the proposed hypotheses are:

H2A. Company size has a positive effect on the ROA of Islamic banking in Indonesia.
H2B. Company size has a positive effect on the ROA of Islamic banking in Malaysia.

Financing Risk

Risk is defined as uncertainty that can cause losses in business and investment activities (Suryanto, 2019). Market risk is also part of this risk because it can threaten the existence of Islamic banking both now and in the future (Wahyudi et al., 2015). In the context of Islamic banking, financing risk is measured using NPF or financing ratio, a parameter of a customer's inability to pay bank financing within a certain period of time (Kurnia et al., 2017). In the calculation system, NPF is calculated from the ratio of non-performing financing to total financing with a critical value of more than 5% (Almunawwaroh & Rina, 2018). Previous studies have highlighted the ability of NPF to influence profitability in the Islamic banking industry. That is, a high NPF indicates a high value of financing entering Islamic banks, which eliminates the possibility of earning income from the provided financing and leads to a decrease in the value of ROA. They found a negative relationship between the two (Bolarinwa et al., 2019; Sarpong-Kumankoma et al., 2018; Wibowo & Syaichu, 2012). Driven by this explanation, the hypotheses proposed are:

H3A. Financing risk has a negative effect on the ROA of Islamic banking in Indonesia.
H3B. Financing risk has a negative effect on the ROA of Islamic banking in Malaysia.

National Income

National income represents the ability of people in a country to carry out production and business activities (Hamza & Agustien, 2019). This factor is beneficial in determining the economic and business structure of a country based on the performance of each sector (Yoshanda, 2020). Experts interpret national income as the part of people’s income that is used for consumption and saving; therefore, income affects the amount of savings in banking institutions (Arrohmah & Soelistyo, 2010). National income is identified based on gross domestic product (GDP), which is the result of the sum of consumption, investment, and government expenditure as well as the deviation between exports and imports (Syukri, 2020; Taquddin, 2019).

This study examined market concentration, company size, and financing risk to determine the profitability of Indonesian and Malaysian Islamic banks by using GDP as a control variable. The role of GDP per capita can provide information on the influence of a country’s domestic population so that the empirical model will be more complete. On the other hand, previous studies have used GDP as a determinant of profitability. Moreover, GDP is a measure that can represent economic growth based on the output produced by that economy in each period. GDP is observed to see whether it plays a role in controlling the effect of market concentration, company size, and financing risk on profitability.

This study compared the findings of the hypotheses for both Indonesian and Malaysian Islamic banking. This comparison is useful in looking at the strength of industry factors and bank-specific factors of each country and makes it easier to accelerate the increase in profitability in each of these countries. Based on this idea, this study formulates a comparative model of the profitability of Indonesian and
Malaysian Islamic banking into a figure. For more information, we show in Figure 2.

Figure 2. Research Model

The research model shows that H1A depicts the influence of market concentration on the profitability of Indonesian Islamic banking, and H1B depicts the influence of market concentration on the profitability of Malaysian Islamic banking. H2A describes the effect of company size on the profitability of Indonesian Islamic banking, and H2B describes the effect of company size on the profitability of Malaysian Islamic banking. Finally, H3A portrays the effect of financing risk on the profitability of Indonesian Islamic banking, and H3B portrays the effect of financing risk on the profitability of Malaysian Islamic banking.

III. RESEARCH METHOD

The study used the descriptive comparative quantitative method to answer the research questions by explaining numerical data, answering statistical hypotheses, and drawing accurate conclusions. The population of this study consisted of Islamic banks operating in Indonesia (12 Islamic banks) and Malaysia (16 Islamic banks). This study employed the random sampling method since it gives equal opportunity for all members of the population to be evaluated, has less risk of error, and is easy to conduct (Zurimi, 2018). In brief, the implications of random sampling are (1) each element in the population has an equal chance of being included in the sample and (2) each conceivable sample combination has an equal chance of being selected (Kothari C.R, 2004). The sample criteria used were Islamic banks that publish financial statements and are registered with the Otoritas Jasa Keuangan and Bank Negara Malaysia. This sampling method resulted in 6 Indonesian Islamic banks and 6 Malaysian Islamic banks, including:

Table 1. Sample Data

<table>
<thead>
<tr>
<th>No</th>
<th>Banks Indonesia</th>
<th>No</th>
<th>Bank Malaysia</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Bank Muamalat Syariah</td>
<td>7</td>
<td>Public Islamic Bank Berhad</td>
</tr>
<tr>
<td>2</td>
<td>Bank Victoria Syariah</td>
<td>8</td>
<td>Hong Leong Islamic Bank Berhad</td>
</tr>
<tr>
<td>3</td>
<td>Bank Jabar Banten Syariah</td>
<td>9</td>
<td>Alliance Islam Bank Berhad</td>
</tr>
<tr>
<td>4</td>
<td>Bank BCA Syariah</td>
<td>10</td>
<td>Bank Islam Malaysia Berhad</td>
</tr>
<tr>
<td>5</td>
<td>Bank Panin Dubai Syariah</td>
<td>11</td>
<td>RHB Islamic Bank Berhad</td>
</tr>
<tr>
<td>6</td>
<td>Bank Mega Syariah</td>
<td>12</td>
<td>CIMB Islamic Bank Berhad</td>
</tr>
</tbody>
</table>

The research data was obtained from the banks’ financial statements in the period 2017-2021. Meanwhile, the control variable data was gotten from the World Development Indicators website for 2017-2021.

Table 2. Calculation of Variables

<table>
<thead>
<tr>
<th>Variable</th>
<th>Description</th>
<th>Formula</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dependent</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Profitability (ROA)</td>
<td>ROA is measured using earnings after tax divided by total assets. (Abbas &amp; Arizah, 2019)</td>
<td>[ \text{ROA} = \frac{\text{EAT}}{\text{Total Asset}} \times 100% ]</td>
</tr>
<tr>
<td>Market Concentration (HHI)</td>
<td>HHI is measured using a comparison between the sum of squares of total net income in each Islamic bank and total income in all samples of Islamic banks. (Abbas &amp; Arizah, 2019)</td>
<td>[ \text{HHI} = s_1^2 + s_2^2 + s_3^2 + \cdots + s_n^2 ]</td>
</tr>
</tbody>
</table>
Bank specifics

Company Size (SIZE)  
SIZE is measured by the logarithm of the total assets. (Deari et al., 2022)  
SIZE = \text{Log}\text{total asset}

Financing Risk (NPF)  
NPF is measured based on the bank's non-performing financing to the total financing. (O’Connell, 2022)  
NPF = \frac{\text{non performing financing}}{\text{total financing}}

Control-Macro Economics

National Income (GDP per capita)  
GDP per capita is measured based on the sum of the gross value added of all producers plus product taxes (minus subsidies) divided by the midyear population. (The World Bank, n.d.)  
Y = C + I + G + (X - M)

Model Estimation

This study used regression panel data to investigate the profitability of Indonesian and Malaysian Islamic banking. This procedure is suitable for analyzing cross-sectional and time series data (Sakti I, 2018). To determine the proper panel data model, this study employed the Ordinary Least Square (OLS) and Generalize Least Square (GLS) systems because they can produce unbiased coefficients and can represent actual population conditions. The Chow test, Hausman test, and Lagrange Multiplier test were also used to identify the best panel data regression model. To test the effect of industry factors and bank-specific factors on profitability, the following equation was used:

\[
\text{ROA} = a + \beta_1 \text{HHI}_{1it} + \beta_2 \text{SIZE}_{2it} - \beta_3 \text{NPF}_{3it} + \beta_4 \text{GDP}_{4it} + e_{it}
\]

IV. RESULTS AND DISCUSSION

Results

Table 3. Descriptive Statistics

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>Median</th>
<th>Std. Dev</th>
<th>Max</th>
<th>Min</th>
</tr>
</thead>
<tbody>
<tr>
<td>ROA</td>
<td>0.004</td>
<td>0.007</td>
<td>0.020</td>
<td>0.041</td>
<td>-0.108</td>
</tr>
<tr>
<td>HHI</td>
<td>0.517</td>
<td>0.503</td>
<td>0.230</td>
<td>0.912</td>
<td>0.213</td>
</tr>
<tr>
<td>SIZE</td>
<td>10.628</td>
<td>10.838</td>
<td>1.703</td>
<td>12.983</td>
<td>7.415</td>
</tr>
<tr>
<td>NPF</td>
<td>0.022</td>
<td>0.011</td>
<td>0.002</td>
<td>0.125</td>
<td>0.003</td>
</tr>
<tr>
<td>GDP</td>
<td>73.576</td>
<td>71.558</td>
<td>33.840</td>
<td>111.320</td>
<td>38.390</td>
</tr>
</tbody>
</table>

Table 3 shows the descriptive statistics of the dependent and independent variables which include the mean, and standard deviation values. Based on 60 observations on the samples, the average profitability of Islamic banking in Indonesia and Malaysia was 0.04% and the standard deviation value was 0.02%. The average market concentration is higher than the standard deviation (51% > 23%). Furthermore, the average bank size is greater than the standard deviation (10.62 > 1.70). The average financing risk is greater than the standard deviation (0.2% > 0.02%). Finally, the average GDP per capita is greater than the standard deviation (73.5 < 33.8).

Panel Data Model Analysis

Table 4. The Chow Test Estimation Result

<table>
<thead>
<tr>
<th>Effects Test</th>
<th>Indonesia</th>
<th>Malaysia</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>State</td>
<td>Prob.</td>
</tr>
<tr>
<td>Cross-section F</td>
<td>1.531398</td>
<td>0.2249</td>
</tr>
<tr>
<td>Cross-section Chi-square</td>
<td>9.724388</td>
<td>0.0834</td>
</tr>
</tbody>
</table>

Table 4 presents the results of the Chow Test analysis on the selection of the Common Effect Model and Fixed Effect Model. The results show that in Indonesian Islamic banking, the probability value of Cross-section Chi-square was 0.0834 (> 0.05). This explains that the hypotheses are accepted, and the common effect model is tentatively considered appropriate for analysis. Then it is necessary to do the next test, the Lagrange Multiplier test. Meanwhile, the analysis of Malaysian Islamic banking showed a probability value of Chi-square cross-section of 0.0031 (< 0.05). This explains that the hypotheses are rejected, and the selected model is a fixed effect; thus, the Hausman test is necessary.

Table 5. The Hausman Test Result

<table>
<thead>
<tr>
<th>Summary Test</th>
<th>Malaysia</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Chi-Sq. Stat</td>
</tr>
<tr>
<td>Cross-section random</td>
<td>0.000000</td>
</tr>
</tbody>
</table>
Table 5 presents the results of the Hausman’s analysis to determine the Fixed Effect Model and Random Effect Model. The results showed a random cross-section probability value of 1.0000 (>0.05). The results of the analysis show the acceptance of the hypothesis, so this study chose a random effect model. Next, it is necessary to conduct the Lagrange Multiplier test to determine the most appropriate model (between the Common Effect Model and the Random Effect Model).

Table 6. The Lagrange Multiplier Test Estimation

<table>
<thead>
<tr>
<th>Test Hypothesis</th>
<th>Indonesia</th>
<th>Malaysia</th>
</tr>
</thead>
<tbody>
<tr>
<td>Breusch-Pagan</td>
<td>Cross-section</td>
<td>0.365360</td>
</tr>
<tr>
<td></td>
<td>Both</td>
<td>0.76631</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.056128</td>
</tr>
<tr>
<td></td>
<td></td>
<td>7.888141</td>
</tr>
<tr>
<td></td>
<td>Both</td>
<td>0.365360</td>
</tr>
</tbody>
</table>

Table 7 shows the results of the multicollinearity test of the two countries with the correlation value between X1, X2, and X3 did not exceeding 0.90, so there is no multicollinearity problem in the research variable. Thus, no high correlation was found between the data of each independent variable.

Table 7. Multicollinearity Test Result

<table>
<thead>
<tr>
<th>X1_HH1</th>
<th>X2_SIZE</th>
<th>X3_NPF</th>
</tr>
</thead>
<tbody>
<tr>
<td>X1_HH1</td>
<td>1.000000</td>
<td>-0.081761</td>
</tr>
<tr>
<td>X2_SIZE</td>
<td></td>
<td>1.000000</td>
</tr>
<tr>
<td>X3_NPF</td>
<td></td>
<td>1.000000</td>
</tr>
</tbody>
</table>

Table 8 shows the autocorrelation in Indonesia with Prob values. If Chi-Square(2) is 0.1718 > 0.05, then the data does not autocorrelated. Thus, the research regression model is known to have no confounding in one period with the previous period.

Table 8. Autocorrelation Test Result

<table>
<thead>
<tr>
<th>White Test</th>
<th>Indonesia</th>
<th>Malaysia</th>
</tr>
</thead>
<tbody>
<tr>
<td>Breusch-Godfrey Serial Correlation LM Test:</td>
<td>Obs*R-square</td>
<td>3.523237</td>
</tr>
<tr>
<td>Prob. Chi-Square(2)</td>
<td>0.6608</td>
<td>0.509948</td>
</tr>
</tbody>
</table>

Table 9 shows the results of the heteroscedasticity test of Prob values. The Chi-Square of Indonesia was 0.6608 > 0.05, and the Prob. The Chi-Square of Malaysia was 0.6511 > 0.05, so it can be concluded that both data do not exhibit symptoms of heteroscedasticity. Thus, the test form of the regression model does not have the same variance of residuals in one observation in other observations.

Table 9. Heteroskedasticity Test Result

<table>
<thead>
<tr>
<th>Variances</th>
<th>Indonesia</th>
<th>Malaysia</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prob. Chi-Square(13)</td>
<td>0.6608</td>
<td>0.6511</td>
</tr>
</tbody>
</table>

Feasibility test of the model

The results of regression estimation of the Common Effect Model panel data using the Ordinary Least Square method and the Random Effect Model using the Generalized Least Square method are presented in the following paragraphs.

Table 10. Model Regression Estimation

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Column 1 Indonesia</th>
<th>Column 2 Malaysia</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Coeff.</td>
<td>t- Stat.</td>
</tr>
<tr>
<td>C</td>
<td>-0.018095</td>
<td>0.537522</td>
</tr>
<tr>
<td>HHI</td>
<td>0.017300</td>
<td>-0.623509</td>
</tr>
<tr>
<td>SIZE</td>
<td>-0.520953</td>
<td>-2.762072</td>
</tr>
<tr>
<td>NPF</td>
<td>0.001270</td>
<td>0.476147</td>
</tr>
<tr>
<td>GDP</td>
<td>0.142571</td>
<td>0.509948</td>
</tr>
<tr>
<td>Adjusted R2</td>
<td>2.05515</td>
<td>6.241317</td>
</tr>
<tr>
<td>Prob(F-state)</td>
<td>0.097433</td>
<td>0.001262</td>
</tr>
</tbody>
</table>
The model shows that the market concentration variable measured by Herfindahl-Hirschman Index (HHI) has no impact on the profitability of Islamic banks in both Indonesia and Malaysia. Thus, H1A and H1B are rejected. Company size that represents the size of Islamic banking assets is not significant in increasing the profitability of Islamic banking in Indonesia and Malaysia. Thus, H2A and H2B are also rejected. Furthermore, financing risk as measured by Non-performing Financing (NPF) influences the profitability of both Indonesian and Malaysian Islamic banking. Therefore, H3A and H3B are accepted. Simultaneously, there is a significant impact of market concentration, company size, and financing risk on the profitability of Malaysian Islamic bank. In addition, based on the results of regression estimation and the influence of the independent variables on the dependent variables, the adjusted R2 for Indonesia was 0.14257, which means that the level of influence is close to moderate. Meanwhile, the adjusted R2 for Malaysia was 0.509948, which means that the level of influence is substantial.

The explanation shows the differences in the panel data regression analysis models for Indonesia and Malaysia. The data model parameters in Indonesia are based on common effect model procedures that combine time series and cross-sections concerning time and individual differences. Meanwhile, the estimation of panel data in Malaysia relies on random effect model procedures by estimating the existence of error variables that have a relationship between time and individuals. Then, according to the role of GDP, there are differences in the regression estimation results in Islamic banking in the two countries. In Indonesia, the GDP hypothesis is not accepted, meaning that Indonesia's GDP per capita does not affect ROA. In Malaysia, on the other hand, the regression coefficient of GDP is positive, so the hypothesis is accepted. The difference is due to the fact that Malaysia was one of the highest economic growth principles in Asia in the early 1980s (DOSM, 2019). Moreover, in the last decade, there has been a significant increase in the operations, assets, and capital of the Islamic financial industry in Malaysia, which includes Islamic banking, Islamic capital markets, and takaful (Islamic insurance) (Gani & Bahari, 2021). It means that an increase in GDP per capita will increase ROA.

Market Concentration and Profitability

The result of the research on Islamic banking in Indonesia and Malaysia shows that the relationship between market concentration and profitability is positive but insignificant. The finding shows that market concentration has no impact on the profitability of Islamic commercial banks in both countries due to conflicting monopoly market structures that gain excessive benefits. This is less sustainable with sharia. Also, the production efficiency of Islamic banks in both countries tends to be low compared to market prices. Thus, banks that do not have a strong market tend to have low profitability. Boone J & Weigand J (2000) affirmed that tougher competition in the banking industry can give an impact on uncertain bank performance. Besides Le & Ngo (2020) affirmed that bank profitability may be worse in highly concentrated markets due to more non-price competition. This finding is not consistent with previous studies (Bolarinwa et al., 2019; Ozili & Ndah, 2021; Sarpong-Kumankoma et al., 2018). However, based on this finding, this study encouraged the exploration of more precise variables to obtain predictive results that match expectations. After all, proper information on profitability will always be important for the advancement of Islamic banking.

Company Size and Profitability

Empirical estimation of Indonesian and Malaysian Islamic banking shows that company size and profitability are negatively and insignificantly related. This means that the bank assets in the two countries are not the driving factor to increase profitability. This result is not in accordance with previous studies (Alsharari & Alhmoud, 2019; Deari et al., 2022; Derbali, 2021; O’Connell, 2022; Ozili & Ndah, 2021). It means that banks have not been able to optimize the assets used. Also, it is incompatible with signaling theory because the increase in profitability of Islamic banking depends on other factors beyond this assumption. Therefore, it is necessary to investigate more precise variables so that the profitability of Islamic banking in the two countries can increase as expected.

Financing Risk and Profitability

The research result shows that financing risk has a significant impact on profitability. It explains that when banks successfully manage risk capabilities in the failure of customers to return financing, the profitability will increase significantly. In addition, the findings mean that Islamic banks in Indonesia and Malaysia are very successful in carrying out risk control procedures optimally which affects the profitability of the firm. This is in line with previous studies (Bolarinwa et al., 2019; O’Connell, 2022).
Therefore, this study suggests that attention to risk management is very important in improving the profitability of Islamic banks.

V. CONCLUSION

The study reveals that among various predictors, it was found only financing risk had a negative and significant effect on the profitability of Indonesian and Malaysian Islamic banking. However, at the same time, Islamic banking in Malaysia can link market concentration, company size, and financing risk with profitability. Meanwhile, the role of GDP per capita as the control variable is only able to increase the profitability of Malaysian Islamic banking. This result distinguishes the facts of Islamic banking in Indonesia and Malaysia. These results clearly show the difference in the profitability of Islamic banking in Indonesia and Malaysia, so the public knowledge of the performance of Islamic banking in the two countries is complete and confirms the novelty of this study.

Theoretically, this study enriches the knowledge of the profitability of Islamic banking, especially in Indonesia and Malaysia. The role of financing risk in affecting profitability shows that NPF control of Islamic banking is very significant. The ability of market concentration, company size, and financing risk to affect profitability simultaneously shows that the strategic policy of controlling these three factors is crucial for Islamic banking today. In addition, this study contributes to the development of Islamic banking performance models in developing countries.

From a managerial point of view, this study has two implications. First, Islamic banking directors need to keep working on practicing KYC (Know Your Customers) checks, starting from a customer selection system for financing recipients to a monitoring system for financing activities. Second, Islamic banking directors need to develop strategies to control market concentration, company size, and financing risk within the same time frame, as these three factors can simultaneously increase the profitability of Islamic banking. The implementation of these implications can strengthen the performance of Islamic banking. The implication for regulators is that it is necessary to create a stimulus for increasing market concentration, company size, and financing risk in order to support the increased profitability of Islamic banking at the national and global levels.

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