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Abstract

**Purpose** - This study aims to analyze the factors affecting the profitability (proxied by profit expense ratio) of sharia commercial banks (BUS) in Indonesia and Malaysia in 2014-2020.

**Methodology** - This study gathered secondary data from Islamic banking statistical reports published on the official website of each company. This research uses a comparative method using a quantitative approach. Sampling was carried out using the purposive sampling method, resulting in twelve banks from Indonesia and ten banks from Malaysia. The data are analyzed using panel data regression (regression pooling) in Eviews version 10 software.

**Findings** - The results of this study show that debt financing, equity financing, and third-party funds (DPK) simultaneously affect the profitability of BUS both in Indonesia and Malaysia. Separately, debt financing and equity financing have a significant positive effect on the profitability of BUS in Indonesia, while DPK does not significantly affect it. In Malaysia BUS, debt financing, and equity financing do not affect profitability, while DPK does. This study offers a comparative analysis of profitability driven using the two ASEAN countries with the largest Muslim population, expected to contribute to Islamic banking literature.

**Keywords** - Covid-19, profit expense ratio (PER), debt financing, equity financing, third-party fund (DPK)

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1. INTRODUCTION

At the end of March 2021, 198 countries confirmed positive cases of Covid-19 (kemenkeu.go.id, 2020). Samhan (2020) explained in his research that the Covid-19 pandemic was detrimental to Islamic financial institutions. So governments in various countries had to make policies to minimize the impact immediately. Indonesia and Malaysia are two countries from Southeast Asia that play an essential role in the growth and development of Islamic banks worldwide. In addition, geographically, these two countries have similarities in terms of culture and adopt a dual banking system, which recognizes the validity of the conventional banking system and the Islamic banking system (BNM, 2020; OJK, 2020).

One effort made by the Indonesian government to tackle the Covid-19 pandemic is imposing Large-Scale Social Restrictions (PSBB), reducing the mobility of people from one region to another (djkn.kemenkeu.go.id, 2020). OJK issued POJK No. 11/POJK.03/2020 to provide relaxation for banking customers, including Islamic banking, in which the process of restructuring and rescheduling is easy for customers (MSMEs) and non-MSMEs (OJK, 2020). The strategy used by the Malaysian government is to carry out a Movement Control Order (MCO), which is a lockdown policy for all government and private places, including economic activities (State Safety Council, 2020). Malaysia also issued a Concerned People’s Economic Stimulation Package policy to address the local economy, which would be disrupted, especially in low-income communities (Ministry of Authority Malaysia, 2020).

However, with the PSBB and lockdown policies, the impact was felt in Islamic banking. This is due to a slowdown in the distribution of financing, and many companies that work with banks cannot operate optimally or even stop for a while, which can impact the profits of Islamic banks (Safitri, Fasa, & Suharto 2021).

Islamic banks aim to generate profits without violating Islamic principles and without having to leave their contribution to improving the quality of the people’s economy. Therefore in assessing the performance of Islamic banks, apart from focusing on the ability to generate profits, they also focus on compliance with Islamic principles (Wahyuni, Tandika, & Azib, 2016-2017).

In this study, the ratio used to measure the profitability of Islamic banks is the profit-expense ratio (PER). PER is the ratio used by Samad and Hassan (2002) for assessing the performance of Bank Islam Malaysia in the period 1984-1997. Their study focuses on profitability for assessing cost efficiency. If this ratio shows a high value, the bank uses costs efficiently and generates high profits under the expenses that must be borne (Hidayat, 2012).
Figure 1 shows PER data based on calculations from twelve sharia (Islamic) commercial banks (BUS) in Indonesia and ten in Malaysia. We can see that the PER ratio of Indonesian and Malaysian Islamic commercial banks from 2014 to 2020 fluctuated. In 2020 both Indonesia and Malaysia’s levels of PER tended to decrease. It also indicates that sharia commercial banks in both countries experienced declining efficiency. However, Malaysia BUS has a more stable PER value than Indonesia. One of the factors might be that the growth of Indonesian Islamic banking is still not fast enough in working on Islamic business compared to Malaysia.

To get big profits, management must be carried out efficiently, and every leader of an institution or company must possess this attitude. When efficiency measurements are carried out, banks are faced with obtaining optimal output levels with existing input levels or obtaining minimum input levels with certain output levels (Susilawati, 2016).

In the research of Kholis and Kurniawati (2018), it is stated that if Islamic banking can manage its funding sources and distribute funding to sources of income, such as financing optimally, then the bank will be able to produce a high level of profitability. Based on Indonesia’s Banking Statistics, the main pattern of financing that dominates Islamic banks is the principle of buying and selling (debt financing) and profit sharing (equity financing) (Rahman & Rochmanika, 2012). Financing using the debt financing system is indeed permissible in Islam. However, it would be nice if, in practice, financing using the equity financing system gets a more significant portion than financing using the debt financing system, considering that the goal of Islamic banks is not only to make a profit (Sadique, 2010). Studies conducted by Hidayat (2012) and Firdaus and Prasetyo (2017) show that debt financing and equity financing significantly affect profitability.

Funds owned by the biggest and most reliable banks in their business activities come from third-party funds (DPK) or funds from the public (Setiawan & Indriani, 2016). According to Kasmir, the third-party fund is one factor that affects profitability. Third-party funds are a component of liquid liabilities, whose funds can be re-rolled quickly to increase profitability (Kasmir, 2013). Setiawan and Indriani (2016) mentioned that partially the DPK variable has a significant positive effect on profitability.
Based on previous research, this study examines the effect of debt financing, equity financing, and third-party funds on the profitability of sharia commercial banks in Indonesia and Malaysia. Thus, the proposed research questions are as follows.

**RQ1:** what are the levels of profitability, debt financing, equity financing, and DPK of sharia commercial banks in Indonesia and Malaysia in 2014-2020?

**RQ2:** is there any effect of debt financing on the profitability of sharia commercial banks in Indonesia and Malaysia in 2014-2020?

**RQ3:** is there any effect of equity financing on the profitability of sharia commercial banks in Indonesia and Malaysia in 2014-2020?

**RQ4:** is there any effect of DPK on the profitability of sharia commercial banks in Indonesia and Malaysia in 2014-2020?

The structure of this paper is outlined as follows. This section introduces the study’s background, followed by section two, comprising a literature review. Section three discusses the method and data of the study, followed by section four of the results and discussion. The fifth section is the conclusion, where the study summary is presented.

2. LITERATURE REVIEW

2.1. Financial Performance

Islamic banks must continuously monitor their development by assessing their financial performance annually. Thus, they can adequately carry out their operational activities better each year. In assessing the financial performance, apart from focusing on the ability to generate profits, it is also essential to study their compliance with sharia principles (Wahyuni, Tandika, & Azib, 2016-2017). Financial performance, according to Sutrisno (2005), is a series of financial activities in a certain period that is reported in the form of financial statements, including profit and loss statements and balance sheets. Financial analysis needs to be carried out by Islamic banks so that banks can find out their position compared to other Islamic banks. In analyzing financial performance, several ratios must be analyzed, including; liquidity, solvency, activity, and profitability ratios (Dangnga & Haeruddin, 2018). In this study, the profitability ratio at BUS in Indonesia and Malaysia is proxied by the Profit Expense Ratio (PER).

2.2. Sharia Bank Profitability

Profitability can be interpreted as the profit the bank obtains, mainly from the credit (financing) provided (Machmud & Rukmana, 2010). Profitability is critical because it is used to evaluate Islamic banking performance in one period (Kasmir, 2013). One of the principles applied to Islamic banks in achieving their goals is the prohibition of making maximum profits. However, Islamic banks are still required to generate profits without violating Islamic principles and abandoning their primary goal, which is to improve the quality of the people’s economy (Wahyuni, Tandika, & Azib, 2016-2017). One way to measure profitability in Islamic banks is PER (Profit Expenses Ratio). PER is the ratio used by Samad and Hassan (2002) in their research to assess the profitability performance of Bank Islam Malaysia from 1984-1997. If this ratio shows a high value, it indicates the bank uses costs efficiently and generates high profits with the burdens it must bear. PER can be calculated using the following formula (Hidayat, 2012):
Profit Expense Ratio (PER) = \frac{\text{Profit}}{\text{Total expenses}}

2.3. Debt Financing

Financing with a buying and selling system (debt financing), according to Muhammad (2002), is financing carried out by Islamic banks where the profit level has been determined in advance and becomes part of the price of the goods or services sold; this type of debt financing is carried out by buying and selling techniques (Muhammad, 2002). Return on buying and selling financing comes from the difference between the selling and buying prices, called the profit margin (Ishmael, 2011). Products included in debt financing include murabahah, salam, istisna, hiwalah, rahn, and qard. If this ratio is high, Islamic banking has not entirely performed its social role as a community empowerment component. The risks the bank bears are relatively smaller even though it is not entirely under its initial establishment. With the amount of this financing, the resulting operating and non-operating expenses will affect the profitability of the Islamic bank concerned. Thus, the following hypothesis can be formulated:

H1: Debt financing affects profitability

The level of debt financing can be calculated using the following formula (Darmoko & Nuriyah, 2012):

\[
\text{Debt financing} = \frac{\text{Total Debt financing}}{\text{Total financing}}
\]

2.4. Equity Financing

Financing with a profit-sharing system (equity financing) is a cooperation contract between banks as owners of capital and customers as managers of capital to obtain profits and share profits based on an agreed ratio (Wahyuni, Tandika, & Azib, 2016-2017). Two things need to be considered by both parties, namely the agreed profit-sharing ratio and the actual level of business profit obtained. The products from equity financing include musyarakah and mudharabah. If these ratios are high, Islamic banking is good at carrying out its social role as a community empowerment component (Darmoko & Nuriyah, 2012). If financing increases, the profit sharing received by the bank will also increase. Thus, it will affect the profitability of the bank. The following hypothesis is formulated:

H2: Equity financing affects profitability

In providing equity financing, the bank first needs to review the party to be provided with the financing. Even though equity financing has a small value compared to debt financing, equity financing has a unique market segmentation with loyal customers (Hidayat, 2012). The formula for calculating Equity Financing is as follows (Darmoko & Nuriyah, 2012):

\[
\text{Equity financing} = \frac{\text{Total equity financing}}{\text{Total financing}}
\]
2.5. Third-Party Fund

One of the functions of a bank is as a financial intermediary, whose primary function is to be an intermediary between deficit and surplus units. Financial intermediation is the process of purchasing funds from surplus units (savers) to be channeled back to deficit units (borrowers), which consist of the business sector, the government, and individuals/households (Fitria & Widiati, 2018). Fundraising at Islamic banks can be done with savings, current accounts, and deposits that use sharia principles (Karim, 2010).

Third-party funds, known as DPK in Indonesia, are funds originating from the public, both individuals and business entities, which are obtained by the bank using various deposit product instruments owned by the bank (Kuncoro & Suhardjono, 2002). In most banks, these public funds are generally the most significant funds owned. It aligns with the function of the bank as a collector of public funds (Sihombing & Yahya, 2016). DPK is the managed customer deposit funds channeled back to people who need funds (Afkar, 2012). Dendawijaya (2020) states that third-party funds collected from the public are the largest source of funds, so banks rely on them the most for creating profit (reaching 80% - 90% of all funds managed by banks). Thus, the following hypothesis can be proposed:

H3: The level of third-party funds affects profitability

The measurement of third-party funds can be calculated using the formula:

\[ \text{Third-party fund} = \text{current accounts} + \text{savings} + \text{sharia based deposit} \]

3. METHODOLOGY

This study uses a comparative method using a quantitative approach. Comparative research is intended to compare one with more sample data (Suryani & Hendryadi, 2015). This research uses descriptive comparative type to compare the same variables for different samples. Descriptive research aims to provide a detailed and specific description of a situation, environment, or relationship (Ferdinand, 2014). The method used in this study is quantitative research. In comparison, the type of data in this study is panel data or a combination of time series and cross-section data. The data in this study are financial data of companies within a certain time.

The population in this study is Islamic commercial banks in Indonesia and Malaysia. The sampling technique used was purposive sampling. There are twelve BUS in Indonesia and ten sharia banks in Malaysia. The data analysis technique used in this study is panel data regression analysis using the Eviews 10 software.

4. RESULTS AND DISCUSSION

4.1. Profitability of Islamic Commercial Banks in Indonesia and Malaysia

One way to measure profitability in Islamic banks is PER (Profit Expenses Ratio). PER is the ratio used by Samad and Hassan (2002) in assessing the performance of Bank Islam Malaysia in the period 1984-1997 in terms of profitability. Based on the results of calculations from the financial statements of BUS, it can be seen that the PER of BUS in Indonesia and Malaysia both experience
fluctuations. BUS in Indonesia had the lowest PER in 2017, which was -0.25, which illustrates that in that year, BUS in Indonesia suffered losses. Whereas at BUS in Malaysia, the lowest PER level occurred in 2020 of 0.16. In 2018-2020, the PER BUS level in Malaysia was lower than BUS in Indonesia, but BUS in Malaysia had a more stable PER level throughout 2014-2020 than BUS in Indonesia. The best PER level for BUS in Indonesia was in 2019, which was 0.29, and in Malaysia was 0.19.

Furthermore, in 2020, BUS in Indonesia and Malaysia experienced a decline, but BUS in Indonesia experienced a significant decline compared to BUS in Malaysia. This also indicates that sharia commercial banks in Indonesia and Malaysia experienced a decline in cost efficiency in 2020 (Samad & Hassan, 2002). The average value of PER for BUS in Indonesia is 0.04, while for BUS in Malaysia is 0.18. So, we can see that the average size of PER at BUS in Malaysia is higher than BUS in Indonesia.

4.2. BUS Debt Financing in Indonesia and Malaysia

Based on the calculation results from the financial statements of BUS, the debt financing of BUS in Indonesia and Malaysia experienced fluctuations but not significantly. The lowest debt financing rate for BUS in Indonesia occurred in 2020, which was 0.53, while in BUS Malaysia was in 2016 of 0.59. Throughout 2018-2020 BUS in Indonesia tended to experience a decrease in this financing, while BUS in Malaysia in the same year experienced an increase yearly. As mentioned in Firdaus and Prasetyo's research (2017), the distribution of financing to Islamic banking is mainly channeled through debt financing, reaching 70%. It also happens to BUS in Indonesia and Malaysia.

One reason banks emphasize this type of debt financing is that the risk faced by banks in debt financing is lower than in other types of financing (Zahara, Islahuddin, & Musnadi, 2014). The average level of debt financing for 2014-2020 for BUS in Indonesia is 0.58, while for BUS in Malaysia was 0.63. So, it can be concluded that the level of debt financing for BUS in Malaysia is higher than for BUS in Indonesia.

4.3. BUS Equity Financing in Indonesia and Malaysia

Based on the results of calculations from BUS financial reports, the equity financing provided by BUS in Indonesia is much higher and more stable than BUS in Malaysia. Furthermore, the level of equity financing for BUS in Indonesia was the lowest in 2014, namely 0.33. The highest level of equity financing for BUS in Indonesia occurred in 2020, namely 0.45. Furthermore, BUS in Malaysia had the highest level of equity financing in 2019 and 2020, with the same value of 0.18.

The distribution of equity financing is lower than debt financing, as explained in a previous study (Hidayat, 2012). It shows that there is still a lack of understanding of Islamic banking and its essence. In other words, Islamic banks are still business-oriented, and the quality and quantity of their resources are still inadequate. Besides, there is an attitude of aversion to effort and risk. This type of financing requires a high level of honesty from the party given the financing, so the Islamic bank’s assessment of this financing has considerable risk. The banks are often feared of experiencing problems that may reduce bank profits. It is because, in this financing, there is not only profit sharing but also loss sharing (Susilawati, 2016; Anwar & Amelia, 2020).

The average level of equity financing for 2014-2020 for BUS in Indonesia was 0.38, while for BUS in Malaysia was 0.24. So, it can be concluded that the average equity financing for BUS in Indonesia is higher than that for BUS in Malaysia.
4.4. Third-Party Funds

Based on the calculation results from BUS financial reports in 2014-2020, DPK at BUS in Indonesia increased. The lowest DPK rate occurred in 2014, amounting to Rp.14,229,852, and the highest in 2020, namely Rp.24,497,502. BUS in Malaysia in 2014-2020 tended to increase even though it fell in 2016 but increased in the following years. As explained in Hermuningsih's research (2019), the high level of DPK owned by Islamic banks illustrates the increasing public trust in banks, and the more funds channeled through Islamic bank financing, the higher the profits obtained by banks, assisting in returning capital and obtaining profits. The average DPK rate for BUS in Indonesia in 2014-2020 is Rp18,433,479, and for BUS in Malaysia is 41,927 ringgit (if converted into rupiah, it becomes Rp147,077,432). So, it can be concluded that the average level of DPK at BUS in Malaysia is more significant than BUS in Indonesia.

4.5. STATISTICAL RESULTS

4.5.1. Data Analysis Test Results

This test was carried out using the panel data regression analysis. The software used to perform data analysis is Eviews version 10. Following are the results of the stages of analysis using the panel data regression analysis.

4.5.1.1. Model Selection

4.5.1.1.1. Chow Test

The Chow test determines the most appropriate model for estimating panel data between the common effect model (CEM) and the fixed effect model (FEM) (Basuki & Prawoto, 2015). If the Chi-square Cross-Section probability value is greater than 0.05, the correct model is the common effect model. However, if the probability value is less than 0.05, the correct model is the fixed effect model. Here are the Chow test results using Eviews 10:

<table>
<thead>
<tr>
<th>Table 1. Indonesian BUS Chow Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equation: FEM</td>
</tr>
<tr>
<td>Test cross-section fixed effects</td>
</tr>
<tr>
<td>Effect Test</td>
</tr>
<tr>
<td>Statistics</td>
</tr>
<tr>
<td>df</td>
</tr>
<tr>
<td>Prob.</td>
</tr>
<tr>
<td>Cross-section F</td>
</tr>
<tr>
<td>Chi-square cross-sections</td>
</tr>
</tbody>
</table>

Source: Research Data

As seen in Table 1, the results show that the probability value of the chi-square cross-section is less than 0.05. Therefore, a good model used in this study is the FEM (fixed effect model).
Table 2. Malaysian BUS Chow Test Results

<table>
<thead>
<tr>
<th>Redundant Fixed Effects Tests</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Equation: FEM</td>
<td>Statistics</td>
</tr>
<tr>
<td>Test cross-section fixed effects</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Effect Test</th>
<th>Statistics</th>
<th>df</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cross-section F</td>
<td>3.657028</td>
<td>(9.57)</td>
<td>0.0012</td>
</tr>
<tr>
<td>Chi-square cross-section</td>
<td>31.905584</td>
<td>9</td>
<td>0.0002</td>
</tr>
</tbody>
</table>

Source: Research Data

As seen in Table 2 above, the Chi-square cross-section value for BUS in Malaysia has a probability of 0.0002 < 0.05 which means that the chosen model is FEM.

4.5.1.1.2. Hausman Test

After doing the Chow test and the selected model is the fixed effect model, the next stage is the Hausman test to determine which fixed effect model or random effect model is more appropriate for this regression. If the Hausman Prob. statistical value is less than 0.05, then the correct model for panel data regression is the Fixed Effect Model. Conversely, if the Hausman statistical value (probability) is more than 0.05, the suitable model for panel data regression is the Random Effect Model, and then the test will be continued with the Lagrange Multiplier Test $H_0$ ($Ghazali I., 2013$). The following is the Hausman test using Eviews 10.

Table 3. Indonesian BUS Hausman Test Results

<table>
<thead>
<tr>
<th>Correlated Random Effects – Hausman Test</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Equation: FEM</td>
<td></td>
</tr>
<tr>
<td>Test cross-section random effects</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Test Summary</th>
<th>Chi-Sq. Statistics</th>
<th>Chi-Sq. df</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Random cross-sections</td>
<td>14.646449</td>
<td>3</td>
<td>0.0021</td>
</tr>
</tbody>
</table>

Source: Research Data

As seen in Table 3 above, the Chi-square cross-section value for BUS in Indonesia has a probability of 0.0021 < 0.05, which means that the best model for BUS research in Indonesia is the FEM model.

Table 4. Malaysia BUS Hausman Test Results

<table>
<thead>
<tr>
<th>Correlated Random Effects – Hausman Test</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Equation: FEM</td>
<td></td>
</tr>
<tr>
<td>Test cross-section random effects</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Test Summary</th>
<th>Chi-Sq. Statistics</th>
<th>Chi-Sq. df</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Random cross-sections</td>
<td>5.556962</td>
<td>3</td>
<td>0.1353</td>
</tr>
</tbody>
</table>

Source: Research Data

As seen in Table 4 above, the Chi-square cross-section value for BUS in Malaysia based on the table above is 0.1353 > 0.05, which means that the selected model is REM.
4.5.1.1.3. Lagrange Multiplier (LM) Test

Lagrange Multiplier (LM) test is used to determine whether the Common Effect or Random Effect models are the most appropriate for estimating data. If the p-value > 0.05, it is accepted, and the model used is $H_0$ Common Effect Model. However, if the p-value < 0.05, then rejected, the model used is the Random Effect Model $H_0$ (Ghozali I., 2013). Following are the results of the LM test using Eviews 10 for Malaysia BUS.

<table>
<thead>
<tr>
<th>Null (no ran. effect) alternative</th>
<th>Cross-section One-sided</th>
<th>Period One-sided</th>
<th>Both</th>
</tr>
</thead>
<tbody>
<tr>
<td>Breusch-Pagan</td>
<td>6.309480 (0.0120)</td>
<td>0.64055 (0.4235)</td>
<td>6.950036 (0.0084)</td>
</tr>
</tbody>
</table>

Source: Research Data

Based on Table 5, if the p-value <0.05 is rejected, the best model to use is the REM Random Effect Model $H_0$.

4.5.1.2. Classic Assumption Test

4.5.1.2.1. Multicollinearity Test

Multicollinearity testing can be seen from the correlation coefficient between the independent variables. If the correlation coefficient is below 0.85, then it is suspected that there is no multicollinearity problem in the model or that $H_0$ is accepted. Meanwhile, if the correlation coefficient is more than 0.85, a problem is suspected of multicollinearity (Widarjono, 2009).

<table>
<thead>
<tr>
<th></th>
<th>DEBT</th>
<th>EQUITY</th>
<th>DPK</th>
</tr>
</thead>
<tbody>
<tr>
<td>DEBT</td>
<td>1.000000</td>
<td>-0.969295</td>
<td>0.059296</td>
</tr>
<tr>
<td>EQUITY</td>
<td>-0.969295</td>
<td>1.000000</td>
<td>-0.005494</td>
</tr>
<tr>
<td>DPK</td>
<td>0.059296</td>
<td>-0.005494</td>
<td>1.000000</td>
</tr>
</tbody>
</table>

Source: Research Data

Based on the results of the multicollinearity test in Table 6 above, all variables have a low coefficient, which is below 0.85, indicating that this study is not affected by multicollinearity.

4.5.1.2.2. Heteroscedasticity Test

The heteroscedasticity test aims to test whether there is an inequality of variance in the regression model from the residuals of one observation to another. Testing with this method is by looking at the Chi Squares probability value of R-Square greater than $\alpha = 5\%$ or 0.05, so the model is homoscedasticity or not heteroscedasticity, meaning it is accepted (Widarjono, 2009).
### Table 7. Indonesian BUS Heteroscedasticity Test Results

| Heteroskedasticity Test: Breusch-Pagan-Godfrey |  |
|---|---|---|
| F-statistics | 1.317791 | Prob. F (3,80) | 0.2744 |
| Obs*R-squared | 3.955568 | Prob. Chi-Square (3) | 0.2663 |
| Scaled explained SS | 29.59706 | Prob. Chi-Square (3) | 0.0000 |

Source: Research Data

Based on the results of the heteroscedasticity test in Table 7, it can be seen that the probability value of each variable is greater than 0.05. Thus, there is no heteroscedasticity in this study.

### Table 8. Malaysia BUS Heteroscedasticity Test Results

| Heteroskedasticity Test: Breusch-Pagan-Godfrey |  |
|---|---|---|
| F-statistics | 0.752727 | Prob. F (3,66) | 0.5247 |
| Obs*R-squared | 2.315806 | Prob. Chi-Square (3) | 0.5095 |
| Scaled explained SS | 2.357605 | Prob. Chi-Square (3) | 0.5016 |

Source: Research Data

Based on the results of the heteroscedasticity test in Table 8, the probability value of each variable is greater than 0.05. Therefore, there is no heteroscedasticity in this study.

### 4.5.1.3. Hypothesis Testing

#### 4.5.1.3.1. Panel Data Regression Analysis

The best estimation method used in this study for BUS in Indonesia is the fixed effect model (FEM). The following are the results of the regression analysis:

### Table 9. Results of the Fixed Effect Model on Indonesian BUS

<table>
<thead>
<tr>
<th>Variables</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>t-Statistics</th>
<th>Prob</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>-6.261431</td>
<td>1.056766</td>
<td>-5.925088</td>
<td>0.0000</td>
</tr>
<tr>
<td>DEBT</td>
<td>5.989832</td>
<td>1.043977</td>
<td>5.737516</td>
<td>0.0000</td>
</tr>
<tr>
<td>EQUITY</td>
<td>7.320857</td>
<td>1.307358</td>
<td>5.599732</td>
<td>0.0000</td>
</tr>
<tr>
<td>DPK</td>
<td>1.79E-10</td>
<td>7.89E-09</td>
<td>0.022733</td>
<td>0.9819</td>
</tr>
</tbody>
</table>

| R-squared | 0.422460 | Mean dependent var | 0.041014 |
| Adjusted R-squared | 0.305278 | SD dependent var | 0.575161 |
| SE of regression | 0.479397 | Akaike info criterion | 1.527857 |
| Sum squared residue | 1.585768 | Schwarz criterion | 1.961931 |
| Likelihood logs | -49.16999 | Hannan-Quinn criterion | 1.702351 |
| F-statistics | 3.605163 | Durbin-Watson stat | 2.332842 |
Based on Table 9, the multiple linear regression model is obtained as follows:

\[ \text{PER} = -6.261431 + 5.989832 \text{DF} + 7.320857 \text{EF} + 1.79 \text{TPF} + \epsilon \]

The constant value of 6.26 shows that if the value of debt financing, equity financing, and DPK is assumed to be zero, then the profitability variable will decrease by 6.26. The value of the debt financing coefficient is obtained by 5.99, which means if variable debt financing experience an increase of 1% while other variables are considered zero, it will cause an increase in the profitability variable of 5.99. Furthermore, the value of the equity financing coefficient was obtained at 7.32, which means if variable equity financing experience an increase of 1% while other variables are considered zero, it will cause an increase in the profitability variable of 7.32. The DPK coefficient value is 1.79, which means if variable DPK has increased by 1% while other variables are considered zero, it will cause an increase in the profitability variable of 1.79.

Unlike Indonesian BUS, the best estimation method used in this research on BUS in Malaysia is the random effect (REM) model. Following are the results of the regression analysis.

<table>
<thead>
<tr>
<th>Variables</th>
<th>coefficient</th>
<th>std. Error</th>
<th>t-Statistics</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>0.142935</td>
<td>0.036941</td>
<td>3.869318</td>
<td>0.0003</td>
</tr>
<tr>
<td>DEBT</td>
<td>0.021628</td>
<td>0.044869</td>
<td>0.482032</td>
<td>0.6314</td>
</tr>
<tr>
<td>EQUITY</td>
<td>-0.032273</td>
<td>0.050492</td>
<td>-0.639178</td>
<td>0.5249</td>
</tr>
<tr>
<td>DPK</td>
<td>6.96E-07</td>
<td>2.56E-07</td>
<td>2.721914</td>
<td>0.0083</td>
</tr>
</tbody>
</table>

Swamy and Arora estimator or component variances

<table>
<thead>
<tr>
<th>Effects Specification</th>
<th>SD</th>
<th>Rho</th>
</tr>
</thead>
<tbody>
<tr>
<td>Random cross-sections</td>
<td>0.028325</td>
<td>0.3153</td>
</tr>
<tr>
<td>Idiosyncratic random</td>
<td>0.041736</td>
<td>0.6847</td>
</tr>
</tbody>
</table>

Weighted Statistics

<table>
<thead>
<tr>
<th>R-squared</th>
<th>Adjusted R-squared</th>
<th>SE of regression</th>
<th>F-statistics</th>
<th>Prob(F-statistic)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.140980</td>
<td>0.101933</td>
<td>0.042537</td>
<td>3.610567</td>
<td>0.0177702</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Unweighted Statistics

<table>
<thead>
<tr>
<th>R-squared</th>
<th>Mean dependent var</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.276093</td>
<td>0.177928</td>
</tr>
</tbody>
</table>
Based on Table 10, the multiple linear regression model is obtained as follows:

\[
\text{PER} = 0.142935 + 0.021628\text{DF} - \\
0.032273\text{EF} + 6.96\text{DPK} + e
\]

The constant value of 0.14 shows that if the value of debt financing, equity financing, and DPK is assumed to be zero, then the profitability variable will increase by 0.14. The value of the debt financing coefficient is obtained by 0.02, which means if variable debt financing experiences an increase of 1% while other variables are considered zero, it will cause an increase in the profitability variable of 0.02. Furthermore, the equity financing coefficient value is -0.03, which means if variable equity financing experiences an increase of 1% while other variables are considered zero, it will cause a decrease in the profitability variable of 0.03. The DPK coefficient value is 6.96, which means if variable DPK has increased by 1% while other variables are considered zero, it will cause an increase in the profitability variable of 6.96.

### 4.5.1.3.2. Simultaneous Test (F-Test)

F-test shows whether all independent variables (X) simultaneously affect the dependent variable (Y) (Ghozali, 2011). The basis for decision-making in this test is to look at the significance value of the F-statistic, with the condition that it must be <0.05 (α = 0.05); then it is rejected, meaning that there is a relationship between variables X and variable Y. Then if the significance value of F is calculated > 0.05 then accepted, meaning that there is no relationship between variable X and variable Y.\(H_0\)

Based on the results of Table 11, we can see that the prob (F-statistic) value is 0.000180, which is less than 0.05. So, it can be interpreted that the independent variables of debt financing, equity financing, and DPK simultaneously affect the PER of Islamic commercial banks in Indonesia in 2014-2022.
Based on the results of Table 12, we can see that the value of the prob (F-statistic) is 0.017702, which is less than 0.05. With the condition outlined earlier, it can be interpreted that the variables of debt financing, equity financing, and DPK simultaneously affect the PER of Islamic commercial banks in Malaysia in 2014-2022.

4.5.1.3.3. Partial Test (t-test)

This t-test was conducted to show the influence of one independent variable (X) individually or partially in explaining the variation of the dependent variable (Y). The basis for decision-making in this test, according to Ghozali (2011) and Rohmana (2013), is to look at the significance value of the t-count. If the prob. is less than 0.05 ($\alpha = 0.05$), the H0 is rejected, which means that there is an influence of variable X on variable Y. Alternatively, a t-table can also be used. The t-table value in the t-distribution and $\alpha = 0.05$, the degree of freedom (df) obtained, with the formula $df = n – k = 84 – 4 = 80$, is 1.664 for BUS in Indonesia.

Based on the results of the t-test in Table 13 above, the following results are obtained. First, for the debt financing variable, the t-count value is 5.737516, larger than the t-table of 1.664, which means rejecting H0 and accepting H1. Besides, the probability level is 0.0000, smaller than $\alpha = 0.05$. Therefore, it can be concluded that variable debt financing significantly influences the profitability of BUS in Indonesia. Second, for the equity financing variable, the value of the t-count is 5.599732, also larger than the t-table value of 1.664, which means rejecting H0 and accepting H1. Similarly, the probability value is 0.0000, less than $\alpha = 0.05$. Thus, it can be concluded that the equity financing variable significantly affects the profitability of BUS in Indonesia. Finally, for the DPK variable, the t-count value is 0.022733, smaller than the t-table value of 1.664, which indicates that H0 is accepted and H1 is rejected. The probability obtained is 0.9819, greater than $\alpha = 0.05$. Based on this, it can be concluded that the DPK variable does not significantly affect the profitability of BUS in Indonesia.

Furthermore, for Malaysia BUS, the t-table value obtained from the distribution of t and $\alpha = 0.05$, degree of freedom (df) with the formula $df = n – k = 70– 4 = 66$, is 1.668.
Table 14. Results of the t-test on BUS in Malaysia.

<table>
<thead>
<tr>
<th>Variables</th>
<th>coefficient</th>
<th>std. Error</th>
<th>t-Statistics</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>0.142935</td>
<td>0.036941</td>
<td>3.869318</td>
<td>0.0003</td>
</tr>
<tr>
<td>DEBT</td>
<td>0.021628</td>
<td>0.044869</td>
<td>0.482032</td>
<td>0.6314</td>
</tr>
<tr>
<td>EQUITY</td>
<td>-0.032273</td>
<td>0.050492</td>
<td>-0.639178</td>
<td>0.5249</td>
</tr>
<tr>
<td>DPK</td>
<td>6.96E-07</td>
<td>2.56E-07</td>
<td>2.721914</td>
<td>0.0083</td>
</tr>
</tbody>
</table>

Source: Research Data

Based on the results of the t-test in Table 14 above, the following results are obtained. First, for the debt financing variable, the t-count value is 0.482032, smaller than the t-table of 1.668, which means accepting H0 and rejecting H1. The probability level is 0.6314, greater than α = 0.05. Therefore, it can be concluded that variable debt financing does not influence the profitability of BUS in Malaysia. For the equity financing variable, the calculated t-value is -0.639178, smaller than the t-table value, which is 1.668, which means accepting H0 and rejecting H1. The probability value obtained is 0.5249, greater than α = 0.05, so it can be concluded that the equity financing variable does not affect the profitability of BUS in Malaysia. Finally, for the DPK variable, its calculated t value is 2.721914, larger than the t-table value of 1.668, indicating that H0 is rejected and H1 is accepted. Then, the probability value is 0.0083, smaller than α = 0.05. Thus, it can be concluded that the DPK variable significantly affects the profitability of BUS in Malaysia.

4.5.1.3.4. Coefficient of Determination (R2)

The coefficient of determination test) aims to measure model’s ability to explain the variation of the dependent variable. The coefficient of determination is between zero and $R^2$ (Ghozali, 2011).

Table 15. Regression Coefficient Results for BUS in Indonesia

<table>
<thead>
<tr>
<th>Item</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>R-squared</td>
<td>0.422460</td>
</tr>
<tr>
<td>Adjusted R-squared</td>
<td>0.305278</td>
</tr>
<tr>
<td>SE of regression</td>
<td>0.479397</td>
</tr>
<tr>
<td>Sum squared residue</td>
<td>15.85768</td>
</tr>
<tr>
<td>Likelihood logs</td>
<td>-49.16999</td>
</tr>
<tr>
<td>F-statistics</td>
<td>3.605163</td>
</tr>
<tr>
<td>Prob(F-statistic)</td>
<td>0.000180</td>
</tr>
</tbody>
</table>

Source: Research Data

Based on Table 15, the adjusted R-squared of 0.305278 shows that around 30% of the dependent variable, namely the profitability of BUS in Indonesia, can be explained by the independent variables in this study (debt financing, equity financing, and DPK). The remaining 70% is explained by other variables outside the model that are not in this study.

Table 16. Regression Coefficient Results on BUS in Malaysia

<table>
<thead>
<tr>
<th>Item</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>R-squared</td>
<td>0.140980</td>
</tr>
<tr>
<td>Adjusted R-squared</td>
<td>0.101933</td>
</tr>
<tr>
<td>SE of regression</td>
<td>0.042537</td>
</tr>
<tr>
<td>F-statistics</td>
<td>3.610567</td>
</tr>
<tr>
<td>Prob(F-statistic)</td>
<td>0.017702</td>
</tr>
</tbody>
</table>

Source: Research Data
Based on Table 16, the adjusted R-squared of 0.101933 shows that around 10% of the dependent variable, namely profitability at BUS in Malaysia, can be explained by the independent variables (debt financing, equity financing, and DPK). The remaining 90% is explained by other variables outside the model that are not in this study.

4.6. DISCUSSION

4.6.1. Effect of Debt Financing on the Profitability of BUS in Indonesia and Malaysia

The regression analysis results in Indonesia BUS show that variable debt financing positively and significantly affects PER. So the first hypothesis is accepted. The results of this study align with Susilawati’s research (2016), which states that debt financing affects the profitability of Islamic banks, one of the causes described in this study is the higher funds provided in this type of debt financing compared to other types of financing. This result might be stimulated by the dominance of customer interest in Indonesia in this type of debt financing.

Based on the regression analysis results on BUS in Malaysia, the debt financing variable does not affect the PER. So the first hypothesis is rejected. This result aligns with Anwar and Amelia’s research (2020), which states that debt financing does not affect PER based on Bank Syariah Mandiri data from 2010-2019. So, it can be said that the increase in debt financing is not in line with the increase in profitability at Islamic Commercial Banks in Malaysia in 2014-2020.

As stated in the previous chapter, the profitability level of BUS in Indonesia is very volatile, and in 2016 and 2017, the profitability was minus, meaning that BUS in Indonesia experienced losses. So this can reflect that the distribution of debt financing has not been efficient in processing the funds distributed, so profitability has also decreased. However, as time passes, BUS in Indonesia could be more efficient in processing this type of debt financing. We can see this in the previous chart where even though from 2018 to 2020 there has been a decline in the distribution of debt financing, the profitability of BUS in Indonesia slowly increased.

With the significant influence of debt financing on profitability, it is necessary for BUS in Indonesia to always maintain efficiency in processing costs for this type of financing so that the profitability value of BUS in Indonesia can be more stable going forward and further advance Islamic banking in Indonesia.

Whereas for BUS in Malaysia, this type of financing does not affect bank profitability. Even though debt financing increased, it was not always followed by increased profitability. In the debt financing chart, we can see that over the last three years, the distribution has consistently increased. Even so, the level of profitability at BUS in Malaysia has a more stable value than BUS in Indonesia. So, it can be interpreted that for BUS in Malaysia, other factors are more dominant in affecting BUS profitability. Based on the analysis above, we can conclude that sharia commercial banks in Indonesia are better than Malaysia at utilizing debt financing to increase profitability.

4.6.2. Effect of Equity Financing on the Profitability of BUS in Indonesia and Malaysia

Based on the results of the regression analysis on BUS in Indonesia, it is known that the equity financing variable has a significant effect on PER. So, the second hypothesis can be accepted. This result is in line with the results of research from Firdaus & Prasetyo (2017) and Hidayat (2012). Customers using the equity financing system are more oriented towards working capital. They use it to finance their business to mutually share profits and losses to minimize the occurrence of bankruptcy, and of course, this collaboration must be based on honesty from both parties. Day by
day, the development of equity financing can show better. Equity financing is more productive than a debt financing type of financing system, although there is still little demand for it.

The distribution of financing using an equity financing system must be carried out selectively to customers who already have a business. With a contract agreement on profits and losses that will be borne together and the profit-sharing ratio agreed upon at the beginning, the equity financing system will be more apparent because the business is monitored. Furthermore, as mentioned by Samad and Hassan (2002), large funds channeled through equity financing show that Islamic banks are firmly committed to building the quality of Muslims.

Meanwhile, the results of the regression analysis of research on BUS in Malaysia show that the equity financing variable does not influence PER. So the first hypothesis regarding Malaysia BUS is rejected. The results of this study align with Susilawati’s research (2016), which states that financing through equity financing does not affect PER at Bank Muamalat Indonesia and Bank Syariah Mandiri.

In equity financing, there are two types of financing, i.e., mudharabah and musyarakah, which use a profit-sharing system. In mudharabah, the bank acts as shohibul maal, which means that 100% of the capital comes from the bank and the mudharib carries out 100% of business processing. So if there is a loss, 100% will be borne by the bank while the mudharib will experience a loss of energy and time, but if the negligence of the mudharib causes the loss, the mudharib must be responsible for the loss. This is an external obstacle because this financing requires high honesty from the party receiving the financing.

Based on previous data, the last few years for BUS in Malaysia have shown an increase in the distribution of financing through equity financing. It illustrates that sharia commercial banks in Malaysia have more attention than before to this financing. However, based on the results of the hypothesis above, sharia commercial banks in Malaysia are still not optimal in managing this type of equity financing, so it could not affect their profitability.

Even though Indonesia and Malaysia sharia commercial banks experienced an increase in the distribution of equity financing, the relationship between equity financing and profitability in Malaysia is negative. Based on the results of the hypothesis testing, it can be interpreted that bank profitability declines every time there is an increase in equity financing. Based on the analysis above, we can conclude that sharia commercial banks in Indonesia are better at utilizing their equity to generate profit.

4.6.3. Effect of DPK on the Profitability of BUS in Indonesia and Malaysia

Based on the results of the regression analysis on BUS in Indonesia, it is known that the DPK variable does not affect PER. So, the third hypothesis is rejected. The results of this study are not in line with the results of Hermuningsih’s research (2019) that DPK positively influences profitability. It happens because the processing of third-party funds is still not optimal, so the obtained DPK did not affect the profitability of BUS in Indonesia in 2014-2020.

However, BUS in Malaysia shows that the DPK variable significantly affects PER. This result is in line with Setiawan and Indriani’s research (2016) which states that DPK has a positive and significant influence on profitability. The higher the level of DPK owned by Islamic banks, the higher the level of public trust in those banks. It can be interpreted that sharia commercial banks in Malaysia could better manage their third-party funds than Indonesian sharia commercial banks. Sharia commercial banks in Malaysia could manage their DPK more efficiently to generate profit.
5. CONCLUSION

This study examines the effect of debt financing, equity financing, and third-party funds (DPK) on the profitability of sharia commercial banks (BUS) in two ASEAN countries with the largest Muslim population: Malaysia and Indonesia. Based on the statistical results, it was found that debt financing significantly influences the profitability of BUS in Indonesia but not in Malaysia. Similarly, the equity financing variable significantly affects the profitability of BUS in Indonesia but not in Malaysia. However, the DPK variable does not significantly affect the profitability of BUS in Indonesia but does in Malaysia. Based on the results, several implications can be made.

First, to increase profitability, sharia commercial banks in Indonesia must optimize various financing products because the increase in debt financing and equity financing can affect profitability. Monitoring the financing provided to customers is essential, especially equity financing. Likewise, funds management must always be carried out efficiently so that public trust is maintained in investing in BUS. Second, sharia commercial banks in Malaysia must be more selective and careful in choosing customers who will receive this financing so that customers who are given this financing can return funds in the form of an agreed ratio.

This study has some limitations. First, the countries being investigated are limited to two countries. Thus, further studies may examine other countries or regions. Second, this study only uses one proxy of profitability, namely, PER. Thus, further studies may employ other profitability ratios, such as return on equity (ROE) and return on assets (ROA).

6. REFERENCES


