Examining the Model of Islamic Bank Profitability: The Roles Islamic Social Responsibility, Firm Size, Leverage, and Board Size

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Abstract

Purpose - Profitability is very essential for the Islamic banking industry to maintain a sustainable business at a global level. However, until now Islamic banking has not been able to generate profitability competitiveness against conventional banking. Meanwhile, the increased awareness of the importance of business social responsibility has led to increased attention towards social responsibility based on Islamic values (known as Islamic Social Responsibility) since it is believed to be able to boost the profitability of Islamic banking. This study aims to reveal the effect of firm size, leverage, and board size on Islamic social responsibility and the role of Islamic social responsibility in mediating the influence of these three factors on the profitability of Islamic banking.

Methodology - Observing 14 Islamic banks in Indonesia, this study used SEM-PLS for data analysis.

Findings - The results show that board size has a positive effect on Islamic social responsibility while Islamic social responsibility itself has a positive effect on the profitability of Islamic banking. In addition, Islamic social responsibility can play a good role in linking firm size, board size, and leverage with the profitability of Islamic banking. The implications (theoretical and managerial) of this study are described at the end of the study.

Keywords: Profitability, firm size, board size, leverage, Islamic social responsibility, Islamic banking.

Submitted/Received: July 20, 2022
First Revised August: 23, 2022
Accepted: September 20, 2022
First Available online: November 10, 2022
publication Date: December 10, 2022

Cite this document:

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1. INTRODUCTION

The growth of the Islamic banking industry throughout the world has recently increased well, and it has the potential to create economic progress for various industrial sectors (Alsharari & Alhmoud, 2019). However, the profitability of this industry is still volatile with a downward trend and is not competitive compared to conventional banking (Hardianto & Wulandari, 2016). If this problem persists, investor trust will decrease and the industry will experience a decline phase. For this reason, research that can answer the problems of Islamic banking profitability through innovative models needs to be conducted in order to strengthen the existence of Islamic banking at the global level. Unfortunately, until now there has been no such research that specifically estimates profitability through the role of Islamic social responsibility as a mediation.

Firm size, leverage, and board size have been proved to be the prediction factors of Islamic banking profitability, both directly and indirectly, because these factors represent financial strength and corporate governance which are important internal factors for Islamic banking. Various studies have documented the influence of these three factors on the profitability of Islamic banking (Putra & Gantino, 2021; Lui et al., 2021; Agustini & Sulindawati, 2020; Alsharari & Alhmoud, 2019; Kapitan, 2019; Adawiyah & Suprihadi, 2017; Gunde et al., 2017; Nurulita, 2015; Hafiez et al., 2012). Meanwhile, Islamic social responsibility is also used to predict the profitability of Islamic banking because this factor symbolizes social responsibility which refers to Islamic values. In other words, Islamic social responsibility indicates the social role of Islamic banking in society. Several studies have proven the ability of this factor to improve the performance of the Islamic banking industry in various Muslim countries (Fadjar et al., 2021; Mkhaiber & Werner, 2021; Maury, 2021; Bukhari et al., 2021; Hussain et al., 2021; Rosdwianti et al., 2016).

Based on the research gap above, this research is designed to address the decreasing profitability of Islamic banking by building a model that utilizes the role of Islamic social responsibility in mediating the relationship between firm size, leverage, and board size and profitability. Through this model, we believe that the profitability of Islamic banking can increase and the industry will be able to compete optimally with conventional banking. Specifically, this research observes: (1) the role of firm size, leverage, and board size factors to predict Islamic social responsibility, and (2) the role of Islamic social responsibility to mediate the relationship between firm size, leverage, and board size and Islamic banking profitability.

This research answers the problem of the profitability of Islamic banking by limiting attention to the Islamic banking industry in Indonesia. The reasons are as follows: (a) the Indonesian Islamic banking industry operates in the largest Muslim community in the world so the increase in the profitability of this country's Islamic banks will affect the capital structure of the world's Islamic banks, (b) the Indonesian Islamic banking industry experiences a very low market share compared to the conventional one so that the increased profitability will raise public trust in this industry, and (c) the profitability of the Indonesian Islamic banking industry is less competitive than conventional banking so it needs to have a clear solution. Efforts to solve these problems can immediately clarify polemic on the profitability of Islamic banking in Indonesia and can become a role model for other Muslim countries. Figure 1 below shows a graph of corporate yield bonds in Indonesia.
2. LITERATURE REVIEW

2.1. Legitimacy Theory

Legitimacy theory describes the social contract between an institution and society as a strategic factor for future company development (Nugraheni & Yuliani, 2017). Legitimacy theory shapes corporate social responsibility so that it responds to environmental, political, social, and economic demands (Luqyana & Zunaidi, 2021). This theory also forms a social contract between communities and companies (Hussain et al., 2021). This theory is very beneficial in maintaining good relations between Islamic banking and its stakeholders as well as Allah through fulfilling Islamic religious norms (Mukhibad & Fitri, 2019). Thus, this legitimacy theory is very suitable to be applied as the foundation of the social role model of Islamic bank in society which is directed at achieving the better performance of Islamic banking.

2.2. Firm Size

Firm size describes the identification level of the company size as measured by company value, asset value, or capital value (Mkhaiber & Werner, 2021). This research proxies the size of a company into the average total assets because the greater the total assets, the larger the size of the company, and the more capital investment can be made (Rizzani & Lubis, 2019). Bigger companies have the opportunity to obtain more funding from a wider variety of sources. Thus, this factor is very appropriate to be used to build the company's success.

2.3. Leverage

Leverage describes the level of use of debt as a source of company financing (Brigham & Daves, 2007). This study measures leverage based on DAR (debt to asset ratio) because this factor can predict the capability of banks to invest (Chen & Lee, 2017). Greater leverage implies greater risk. Therefore, leverage is a solution for banks to maintain their resilience and a prospective factor to form strong banking performance.
2.4. Board Size

In Islamic banking, the size of the board of directors describes the management's ability to improve the efficiency of handling and solving problems, especially the disclosure of ISR (Harun et al., 2020). Scholars highlight the importance of the board of directors as a determinant of corporate governance as this factor helps oversee corporate entities and ensures good corporate governance (Hussain et al., 2021). Larger board size will increase the company's monitoring ability, and this gives a good impact on ISR disclosure and Islamic bank performance. Therefore, this factor is important to be included in the predictor structure of Islamic banking performance.

2.5. Islamic Social Responsibility (ISR)

ISR describes a company's social responsibility and sensitivity to stakeholders' needs that are conducted based on Islamic values (Al-Haija & Kolsi, 2021). The ISR index consists of six elements covering funding and investment, products and services, employees, community, environment, and corporate governance with a total of 45 items. The implementation of ISR brings many benefits, including lowering the company's operating costs, increasing sales volume and market share, and attracting potential investors through a positive image (Probahudono et al., 2022). Through ISR also, Islamic banking can achieve the main goal, namely high profitability, without ignoring the needs of stakeholders and environmental sustainability as a form of responsibility for the impacts that have been caused by its operational activities. Therefore, this research involves ISR in predicting the profitability of Islamic banks.

2.6. Profitability

Profitability is a measure of the effectiveness of Islamic banking in obtaining profits and maintaining the flow of capital sources (Hafiez et al., 2012). In Islamic banking, profitability is the company's ability to generate profits by using embedded capital or by selling its products and services (Adawiyah & Suprihhadi, 2017). This research measures profitability with Return on Assets (ROA) as a parameter that expresses the ability of total assets to generate profits (Mkhaiber & Werner, 2021). This parameter is very useful in predicting the business performance of Islamic banks.

2.7. Hypothesis Development

Firm size has been widely used in various studies as the main determinant of ISR disclosure. In today's modern era, firm size contributes to the complexity of the Islamic banking business. The disclosure of its effects on social and environmental performance as well as corporate stakeholders is, therefore, needed (Mkhaiber & Werner, 2021; Qoyum et al., 2022; Hussain et al., 2021). Previous research has proven that firm size affects ISR disclosure (Lui, 2021; Luqyana & Zunaidi, 2021; Mučko, 2021; Qoyum et al., 2022; Zhou et al., 2021; Hussain et al., 2021; Rizfani & Lubis, 2019; Santosso et al., 2018; Faisal et al., 2012; Chen & Lee, 2017; Darus et al., 2014; Naser et al., 2013). Therefore, this study formulates the following hypothesis:

H1: Firm size of Islamic bank has a positive effect on ISR disclosure.
The leverage ratio describes the company's ability to pay its obligations if the company is liquidated. Companies that have a high level of leverage are less likely to make ISR disclosures (Luqyana & Zunaidi, 2021). They will consider disclosing social information to avoid monitoring and scrutiny of investors. In addition, companies with high leverage will concentrate more on dealing with problems that arise from their loans than investing in socially responsible practices. In other words, there is a negative relationship between leverage and ISR disclosure, as has been found in research (Kiliç & Kuzey, 2017; Belkaoui & Karnik, 1989). Therefore, we create the hypothesis as follows.

H2: Leverage has a negative effect on ISR disclosure in Islamic banking.

This research involves the board size since the board of directors is an important factor to oversee corporate entities and ensure that they must run well (Hussain et al., 2021). Several previous studies have stated that board size has a positive effect on ISR disclosure (Luh et al., 2021; Lui et al., 2021; Hussain et al., 2021; Harun et al., 2020; Utami, 2018). Following signaling theory, the size of the board that actively attends meetings has a constructive relationship with ISR disclosure. Thus, this research formulates the following hypothesis.

H3: Board size has a positive effect on ISR disclosure in Islamic banking.

Through ISR, Islamic banking can increase customer and investor trust in its products and reputation which then leads to the use of the bank’s products by the customers (Pratiwi et al., 2020). Several previous studies have found that ISR is positively related to the profitability of Islamic banking (Fadjar et al., 2021; Mkhaiber & Werner, 2021; Maury, 2021; Bukhari et al., 2021; Hussain et al., 2021; Rosdwianti et al., 2016). Therefore, this study proposes the following hypothesis.

H4: ISR has a positive effect on the profitability of Islamic banking.

Firm size reflects the size of the company based on the total value of the company's assets (Adawiyah & Suprihhadi, 2017). In the context of Islamic banking, the larger the size of the bank, the greater the resources and assets for its profit. Several previous studies have found that firm size has a positive relationship with profitability (Agustini & Sulindawati, 2020; Alsharari & Alhmoud, 2019; Adawiyah & Suprihhadi, 2017; Hafiez et al., 2012). Therefore, this study establishes the following hypothesis.

H5: ISR can mediate the relationship between firm size and Islamic banking profitability.

Leverage exists due to the use of assets and funding sources that leave a constant strain on Islamic banks’ operational activities (Prasetyoningrum, 2018). If the proportion of leverage is bad, profitability will decrease because of the fixed expenses. Several previous studies have found that leverage has a negative relationship with profitability (Putra &gantino, 2021; Kapitan, 2019; Gunde et al., 2017). Therefore, this study raises the following hypothesis.

H6: ISR can mediate the relationship between leverage and Islamic banking profitability.
Companies generally need a board of directors to run their business professionally (Herizona et al., 2021). Several previous studies have stated that board size has a positive relationship with profitability (Putra & Gantino, 2021; Lui et al., 2021; Nurulita, 2015). Therefore, the study formulates the following hypothesis.

H7: ISR can mediate the relationship between board size and Islamic banking profitability.

Based on the description above, then figure 2 below shows the research model of this study.

![Research Model](image)

Figure 2. The model of Islamic banking profitability through the role of FS (Firm Size), LV (Leverage), BS (Board Size), and ISR (Islamic Social Responsibility).

3. METHODOLOGY

This research employed the quantitative method to predict profitability through the role of firm size, leverage, board size, and ISR through statistical analysis. The population of this research is 14 Islamic Commercial Banks registered in the Financial Services Authority of Indonesia in 2020. This study used non-probability sampling through the purposive sampling method for three reasons: (a) this study could not collect data through random sampling, (b) this method was really suitable to address the research problems, and (c) some criteria could only be met using purposive sampling. The criteria of the sample are: (1) published the 2018-2020 annual reports, and (2) registered for three consecutive years in the Financial Services Authority. The variables used in this study are shown in the following table 1.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Indicator</th>
<th>Scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>Profitability (ROA)</td>
<td>Net Profit</td>
<td>Ratio</td>
</tr>
<tr>
<td></td>
<td>ROA = Total Assets</td>
<td></td>
</tr>
<tr>
<td>Islamic Social Responsibility (ISR)</td>
<td>Actual Score</td>
<td>Ratio</td>
</tr>
<tr>
<td></td>
<td>ISR = Maximum Score</td>
<td></td>
</tr>
</tbody>
</table>
This study used the Structural Equation Model–Partial Least Square (SEM-PLS) method to analyze research data. It was chosen because (1) PLS does not require a large sample quantity with a minimum range of 30-100 observations, (2) SEM-PLS analysis does not require the use of normal data, (3) SEM-PLS is a multivariate statistical technique that can handle independent variables, and (4) this technique can be used even if there is multicollinearity between independent variables (Ramzan & Khan, 2010).

4. RESULTS AND DISCUSSION

4.1. The Measurement Model Evaluation

The Table 2 below shows the results of testing the data using WarPLS 7.0.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>SEM</th>
<th>PLS</th>
<th>PLS-SEM</th>
<th>SEM-PLS</th>
<th>PLS-SEM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Firm Size</td>
<td>1.000</td>
<td>1.000</td>
<td>1.000</td>
<td>1.200</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Leverage</td>
<td>1.000</td>
<td>1.000</td>
<td>1.000</td>
<td>1.303</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Board Size</td>
<td>1.000</td>
<td>1.000</td>
<td>1.000</td>
<td>1.140</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ISR</td>
<td>0.42</td>
<td>0.375</td>
<td>1.000</td>
<td>1.483</td>
<td>0.430</td>
<td></td>
</tr>
<tr>
<td>ROA</td>
<td>0.07</td>
<td>0.022</td>
<td>1.000</td>
<td>1.208</td>
<td>0.360</td>
<td></td>
</tr>
</tbody>
</table>

The table above explains that R Squared can clearly describe the coefficient of determination. The R Squared value of ISR is 0.420, indicating the ability of the independent variables (firm size, leverage, and board size) in explaining the variation of changes in the dependent variable by 42%. The remaining 58% is explained by other factors outside the study model. The ISR of this study is categorized into moderate criteria. R Squared profitability (ROA) has a value of 7.8%, and the remaining 92.2% can be explained by other factors outside the study model.

4.2. Hypothesis Testing
This study tested the hypothesis intending to prove the prediction of the profitability factor of Islamic banking through the role of firm size, leverage, board size, and ISR with a significance level of 5%. Through SEM-PLS and with the application of WarPLS 7.0, this study revealed the results of hypothesis testing. In figure 3.

Figure 3. The results of profitability prediction

The hypothesis testing results are presented in the following table 3.

Table 3. Path Coefficients

<table>
<thead>
<tr>
<th></th>
<th>Firm Size (Size)</th>
<th>Leverage (Lev)</th>
<th>Board Size (Board)</th>
<th>ISR Size</th>
<th>ISR Lev</th>
<th>ISR Board</th>
</tr>
</thead>
<tbody>
<tr>
<td>ISR</td>
<td>0.069</td>
<td>0.332</td>
<td>0.432</td>
<td>0.162</td>
<td>0.362</td>
<td>-0.341</td>
</tr>
<tr>
<td>ROA</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.142</td>
</tr>
</tbody>
</table>

The hypothesis testing results are presented by *P*-Values in the following table 4.

Table 4. *P*-Values

<table>
<thead>
<tr>
<th></th>
<th>Firm Size (Size)</th>
<th>Leverage (Lev)</th>
<th>Board Size (Board)</th>
<th>ISR Size</th>
<th>ISR Lev</th>
<th>ISR Board</th>
</tr>
</thead>
<tbody>
<tr>
<td>ISR</td>
<td>0.033</td>
<td>0.022</td>
<td>&lt;0.001</td>
<td>0.014</td>
<td>&lt;0.001</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>ROA</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.017</td>
</tr>
</tbody>
</table>

Based on the table of path coefficients and *p*-values, the results of hypothesis testing can be described as follows. First, H1 states that firm size has a positive effect on ISR disclosure. The test results show a path coefficient of -0.069 and a *p*-value of 0.033. *P*-value shows a significant effect but with a negative path coefficient. Then H1 is rejected; firm size has a significant negative effect on ISR disclosure in Islamic banking. Second, H2 states that leverage has a negative effect on ISR disclosure. The test results show a path coefficient of 0.332 and a *p*-value of 0.022. The *P*-value shows a significant effect, and the path coefficient is positive. This means that H2 is rejected; leverage has a significant positive effect on ISR disclosure in Islamic banking.
Third, H3 states board size has a positive effect on ISR disclosure. The test results show a path coefficient of 0.432 and a p-value of <0.001. The P-value shows a very significant effect, and the path coefficient is positive. This means that H3 is accepted; board size has a significant positive effect on the ISR disclosure in Islamic banking. Fourth, H4 states that ISR has a positive effect on profitability (ROA). The test results show a path coefficient of 0.162 and a p-value of 0.014 (significant). This means that H4 is accepted; ISR has a significant positive effect on profitability (ROA) in Islamic banking. Fifth, H5 states that ISR can mediate the relationship between firm size and the profitability (ROA) of Islamic banking. The test results show a path coefficient of 0.362 and a p-value of <0.001 (significant). Then, H5 is accepted; ISR can significantly and positively mediate the relationship between firm size and Islamic banking profitability. Sixth, H6 states that ISR can mediate the relationship between leverage and Islamic banking profitability (ROA). The test results show a path coefficient of -0.341 and a p-value of <0.001 (significant). It means that H6 is accepted; ISR can significantly and negatively mediate the relationship between leverage and Islamic banking profitability. Seventh, H7 states that ISR can mediate the relationship between board size and the profitability (ROA) of Islamic banking. The test results show a path coefficient of 0.142 and a p-value of 0.017. The P-value obtained shows a significant effect. Therefore, H7 is accepted; ISR can significantly and positively mediate the relationship between board size and Islamic banking profitability. From the explanation, it can be concluded that five of the seven hypotheses of this study can be proven empirically.

4.3. Roles of Islamic Social Responsibility, Firm Size, Leverage, and Board Size on Profitability of Islamic Banks

This study discovers that Islamic social responsibility (ISR) plays a significant role in increasing the profitability of Islamic banking. This finding supports the previous analysis results of Fadjar et al. (2021); Mkhaiber & Werner (2021); Maury (2021); Bukhari et al. (2021); Hussain et al. (2021); Rosdwianti et al. (2016). Furthermore, this study finds that board size plays a role in increasing ISR, and ISR can mediate the effect of board size on profitability. It implies that the more members of the board of directors, the more intense the activities in favor of ISR, and the better the performance of Islamic banking. This situation makes this institution can compete with various types of financial institutions at the national, regional, and global levels. This finding is in line with Lui et al. (2021); Hussain et al. (2021); Harun et al. (2020); Putra &Gantino (2021); Lui et al. (2021); Nurulita (2015).

This study also reveals that firm size and leverage contribute very well to changing the level of profitability of Islamic banking through the mediating role of ISR. Based on this finding, it can be understood that firm size and leverage have very significant strengths in building the financial capabilities of Islamic banking and at the same time, support the active role of Islamic banking in the social sector. It is in line with Agustini & Sulindawati (2020); Alsharari & Alhmoud (2019); Adawiyah & Suprihadi (2017); Hafiez et al. (2012); Putra &gantino (2021); Kapitan (2019); Gunde et al. (2017).

Theoretically, this study expands knowledge about the legitimacy theory by revealing that firm size, board size, leverage, and ISR help Islamic banking increase its profitability. Through in-depth analysis, this study finds its original view on the ability of Islamic social responsibility (ISR) in increasing the profitability of Islamic banking. The fulfillment of the six elements of ISR, namely funding and investment, products and services, employees, community,
environment, and corporate governance, increases Islamic banking profitability because ISR can reduce operating costs, increase revenue and market share, and attract potential investors through the positive image it creates. This shows that apart from financial aspects, Islamic banking stakeholders are also concerned with non-financial aspects. Meanwhile, board size is an important determinant of ISR. As an element of corporate governance, the board of directors has the power to encourage ISR practices and disclosures and boost the profitability of Islamic banking through ISR mediation. A solid and professional strength of management/board of directors is the key to building good Islamic banking performance. At the same time, this study contributes to demonstrating the ability of ISR to mediate the influence of firm size and leverage to change the profitability of Islamic banking. Firm size and financial strength of the investment, in this case, can convincingly grow social and business performance. Thus, serious attention to firm size, leverage, board size, and ISR will raise the competitiveness of Islamic banking against its all competitors.

From the managerial perspective, this study gives insight to Islamic banking managers regarding the importance of firm size, leverage, board size, and ISR since these factors are the key to the success of Islamic banks in creating convincing profitability achievements. The implication can be realized by increasing the capacity of the board of directors in managing the bank in the context of organizing both social activities and business activities. In addition, Islamic banking managers need to continuously develop their assets and strengthen their leverage power through the expansion of investment sectors because these factors are the key to achievements in Islamic banking social and business activities.

5. CONCLUSION

This research has shown its capacity to pinpoint the factors that affect the profitability of Islamic banking. However, it has clear limitations. First, this study only observes Islamic banking in Indonesia so the results cannot be generalized to all Islamic banks in the world. We recommend further studies to expand the exploration of Islamic banking to regional and even global levels. Second, this study is not fully successful in predicting the profitability of Islamic banking because several factors do not significantly affect the profitability of the industry. We recommend further studies to choose other factors that are more appropriate. By implementing all these recommendations, the prediction of the profitability of Islamic banking will be more comprehensive.
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