Analysis of the Effect of Debt Equity Ratio and Debt Asset Ratio on Islamic Social Reporting in Islamic Banks

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Abstract. This research provides an overview of the relationship between Debt Equity Ratio (DER) and Debt Asset Ratio (DAR) with Islamic Social Reporting (ISR) in the context of Islamic financial institutions. This study aims to analyse the effect of DER and DAR on the level of ISR disclosure by Islamic banks as one of the Islamic financial institutions. The research method used is regression analysis using financial data and financial statements from Islamic banks. The results showed that DER significantly influences ISR disclosure, while DAR has no significant influence. These results suggest that the level of dependence of Islamic banks on debt affects their disclosures related to social and environmental responsibility. This study provides important insights for Islamic financial institutions in managing their capital structure to achieve sustainable and ethical business practices.

Keywords: Debt to Equity Ratio, Debt to Asset Ratio, Islamic Social Reporting, Islamic banks.

1. Introduction

Companies as business entities have responsibilities not only to stakeholders and do not only focus on achieving single goals in the economic aspect (single bottom line). In carrying out its business operations, the company also faces obligations to the concept of the triple bottom line (3P), which includes economic (profit), social (people), and environmental (planet) aspects, which are expressed through the implementation of Corporate Social Responsibility (CSR) or corporate social responsibility.

Based on Law No. 40/2007 [16] on Limited Liability Companies, a report that presents the implementation of social and environmental responsibility is an important component of the company's annual report. This report must be prepared in a detailed and comprehensive manner. In addition, the report must contain relevant, accurate and verifiable information. In line with international standards, such as the Global Reporting Initiative (GRI) or other Sustainability Reporting Standards, this report must comply with the applicable guideline framework. By including a report on the implementation of social and environmental responsibility in the annual report, companies can demonstrate their commitment to implementing sustainable and socially and environmentally responsible business practices. This action can also improve the company's reputation in the eyes of the public and other stakeholders.

Leverage is an indicator that reflects the ratio between the value of debt and equity capital reflected in a company's annual financial statements. According to research conducted by Brigham & Houston (2006), as cited by [2], leverage has a significant role for companies because it impacts the level of risk that shareholders and the expected profit level must bear. The Debt Equity Ratio (DER) can be used to measure leverage. Previous research by Pratama [16] has shown that leverage positively influences Islamic Social Reporting (ISR) disclosure.

This study aims to analyse the correlation between leverage and the level of disclosure of Islamic Social Reporting (ISR) in Islamic financial institutions in Indonesia. In Islamic financial institutions, ISR disclosure has a significant role in building trust with stakeholders, including customers, investors, and the general public. ISR disclosures conducted transparently and thoroughly can provide relevant information for stakeholders in evaluating Islamic financial institutions' social, environmental, and ethical contributions.

This study will use data obtained from Islamic financial institutions in Indonesia to analyse the relationship between Debt to Equity Ratio (DER) and Debt to Asset Ratio (DAR) with the level of Islamic Social Reporting (ISR) disclosure. The results of this study are expected to provide a deeper understanding of the correlation between leverage and ISR disclosure. The implications of this research can be the basis for Islamic financial institutions in formulating policies that encourage the adoption of more transparent and sustainable disclosure practices in social and environmental aspects. Therefore, this study is expected to significantly contribute to developing literature on...
Islamic finance and social disclosure and provide insights to practitioners, academics, and regulators in promoting more inclusive and sustainable Islamic finance practices.

**Disclosure**

According to Hendriksen and Breda (2002: 429), disclosure is a process of communicating information [9]. There are two types of disclosure: disclosure required by regulation (mandatory) and voluntary disclosure (voluntary). Islamic financial institutions operate based on Islamic principles prohibiting riba, gharar, maysir, and haram. Islamic Social Reporting (ISR) disclosure is a voluntary initiative by Islamic financial institutions to convey information about social, environmental, and business ethics activities intended to realise Islamic values. ISR disclosure includes contributions to society, environmental sustainability, philanthropic programmes, and ethical business principles. By making ISR disclosures, Islamic financial institutions demonstrate their commitment to applying Islamic principles in their operations and fulfilling stakeholder expectations regarding social and environmental responsibility.

**Debt to Equity Ratio (DER)**

According to Harahap (2009: 306), the DER (Debt Equity Ratio) ratio is used as an indicator to measure the extent to which the company obtains funding from outside parties or through liabilities concerning the company's equity [8]. This ratio reflects the proportion of the company's financing that comes from debt compared to equity. Thus, DER provides an overview of the company's capital structure and level of financial independence.

**Debt to Asset Ratio (DAR)**

According to Siahaan, the debt ratio is the ratio between the company's total debt and assets [20]. A low debt ratio indicates less corporate funding sources through debt. Conversely, a high debt ratio indicates a greater dependence on debt funding.

**Syariah Enterprise Theory**

According to Widjaya (2012: 354), it is argued that economic power in Islamic financial institutions is not centralised in a single entity but is spread among various stakeholders [25]. This theory emphasises the importance of adopting an economic system based on the principles of Sharia, where these principles prohibit the accumulation of wealth only in a particular group of individuals. Within this framework, Islamic financial institutions have social responsibilities towards various stakeholders, including God as the main source of trust. Social responsibility disclosure in Islamic banking involves vertical accountability to God and horizontal accountability to customers, employees, communities and the environment.

**Agency Theory**

Agency theory is a theoretical framework that focuses on the relationship between the owner (principal) and the assigned agent (agent) to manage and take care of the company's resources [25]. This theory departs from the assumption that there is a potential conflict of interest between the owner and the agent, where the agent tends to behave in his interest. In this context, agency theory proposes control mechanisms, such as incentivisation and monitoring, to reduce such conflicts of interest and ensure that agents act in accordance with the interests of the owners.

**Legitimacy Theory**
According to Lindblom (1994, p. 2), it refers to the condition or status in which an entity's values align with those of the broader society in which it operates [13]. According to Gray, legitimacy theory essentially argues that an organisation's survival depends on the extent to which society perceives that the organisation's value system is compatible with the prevailing value system in society [7]. This theory also emphasises the importance of companies' social contract with society. By fulfilling this contract, organisations and their actions gain legitimacy. Zeghal and Ahmed suggest that business social disclosure responds to public demands and policies [4].

**Stakeholder Theory**

Stakeholder theory is a concept in strategic management designed to support companies in strengthening relationships with various external groups and developing competitive advantage [6].

**Methods**

This research uses a quantitative data approach using the documentation method of secondary data. The secondary data used in this study are the financial statements of companies registered with the Financial Services Authority (OJK). They can be accessed through the OJK official website (https://www.ojk.go.id/) and the websites of each bank. This research focuses on Islamic Commercial Banks consisting of 29 bank units, which are the object of research during 2019-2021.

The sample selection was done using the purposive, non-random sampling technique. In this method, the sample is selected based on certain criteria in accordance with the research objectives, namely banks that are included in the category of Islamic Commercial Banks in Indonesia and have Annual Reports and financial reports that have been published on OJK or the relevant bank's website and can be accessed for the period 2019-2021.

As explained by Ad Dainuri and Haryono in their research entitled "Analysis of Islamic Social Reporting Disclosure with Debt Equity Ratio as a Moderating Variable", the use of secondary data from company financial reports obtained through OJK and bank websites is an effective method in this study to analyse the relationship between DER and DAR on ISR disclosure in Islamic financial institutions.

**Results and Discussion**

**Classical Assumption Test**

1. **Normality Test**

To test the normality of the data, one indicator that can be considered is the distribution of points close to the diagonal line. Although there is a slight irregularity in the value range of 0.4 to 0.6, overall, the distribution of points tends to approach the diagonal line. Based on this, it can be concluded that this data has a relatively normal distribution.

![Normal P-P Plot of Regression Standardized Residual](image-url)
2. Multicollinearity Test

Based on Collinearity Statistics, the Tolerance value (0.976) is more significant than 0.1 and VIF (1.025) is smaller than 10. This indicates that there is no indication of multicollinearity in the data.

3. Heteroscedasticity Test

To test for heteroscedasticity, note the pattern of the distribution of points on the scatterplot. In the figure presented, there is no clear pattern in the data distribution, so it can be concluded that this data does not show symptoms of heteroscedasticity.

4. Autocorrelation Test
To test for autocorrelation, the Durbin-Watson value is used. By considering the number of x variables (k=2) and the number of data (87 data), the dU (1.6985) and dL (1.6046) values were obtained. According to the condition "dU < Durbin-Watson value < (4-dU)\(^a\), the Durbin-Watson value (1.869) lies between 1.6985 and 2.3015. Therefore, it can be concluded that this data does not show symptoms of autocorrelation.

5. **Hypothesis Test**

**Test Coefficient of Determination (R square)**

R-square is a measure that shows the extent to which the variability of the dependent variable (Y) can be explained by the independent variables (X1 and X2) in a multiple linear regression model. The R-square value ranges from 0 to 1, where the higher the value, the greater the proportion of Y variability that the independent variables in the model can explain.

In this context, the R-square value of 0.076 (7.6%) indicates that about 7.6% of the variability of the Financial Stability Index (ISR) can be explained by the joint influence of variables X1 (DER) and X2 (DAR) in the multiple linear regression model. This regression model cannot explain the remaining 92.4% of ISR variability and may be influenced by other factors not included in this analysis.

**Partial Test (t)**

Based on the t-test results, hypothesis H1 is accepted, indicating a significant influence between variable X1 (DER) and Y (ISR). This indicates that variable X1 (DER) changes can significantly affect variable Y (ISR). There are several factors that can explain the relationship between these two variables.

Debt to Equity Ratio (DER) is a measure that describes the company's debt level in relation to its own capital. If DER has a high value, this indicates that the company has a greater level of debt than its capital. In this context, if DER increases, it can have a negative impact on the company's Return on Investment (ROI). In other words, the higher the DER, the more likely the company will face greater interest expenses and higher debt repayments, which can negatively impact the company's profits. This negative impact on the company's ROI can then affect the value of Islamic Social Reporting (ISR).

Based on the t-test results, hypothesis H2 is rejected, indicating no significant influence between variable X2 (DAR) and Y (ISR). This indicates that changes in variable X2 (DAR) do not significantly affect variable Y (ISR) in the context of this study. Several factors can explain the absence of a relationship between these two variables.
Debt Asset Ratio (DAR) is a measure that describes the proportion of a company's assets funded by debt. If DAR has a high value, the company highly depends on debt to finance its assets. However, in the context of this study, the DAR variable may not significantly impact Islamic Social Reporting (ISR). There are several factors that may influence the absence of this relationship, such as differences in social disclosure practices in the Islamic financial institutions studied, the presence of external factors that are more dominant in influencing ISR, or other variables not included in this analysis that have a stronger influence on ISR. Therefore, further research needs to be conducted to understand more deeply the relationship between variable X2 (DAR) and variable Y (ISR) in the context of Islamic financial institutions in Indonesia.

**Simultaneous Test (F)**

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
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<td>Regression</td>
<td>701.495</td>
<td>2</td>
<td>350.747</td>
<td>3.440</td>
<td>.037b</td>
</tr>
<tr>
<td>Residual</td>
<td>8563.774</td>
<td>84</td>
<td>101.950</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>9265.269</td>
<td>86</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Dependent Variable: Y  
b. Predictors: (Constant), X2, X1

**Figure 6. Anova**

*Source: Data Proceed*

Based on the t-test results, hypothesis H3 is accepted, indicating a simultaneous significant influence between variables X1 (DER) and X2 (DAR) on variable Y (ISR). This indicates that changes in both variables X1 (DER) and X2 (DAR) together can significantly affect variable Y (ISR) in the context of this study. There are several factors that can explain the relationship between these two variables.

Although the variable X2 (DAR) has no individually significant effect on Y (ISR), when combined with the variable X1 (DER), there is a possibility of an interaction or combined effect that affects the Financial Stability Index (ISR). In some cases, the combined effect of the two variables can be stronger than their influence. This suggests that the role of variable X2 (DAR) in influencing Y (ISR) can be better understood when viewed in the context of variable X1 (DER) simultaneously. Other factors such as industry characteristics, regulations, or company policies may also influence the relationship between variables X1 (DER), X2 (DAR), and Y (ISR). Therefore, it is important to consider the influence and interaction between these two variables in analysis and decision-making in Islamic financial institutions.

**Results and Discussion**

**Effect of DER on ISR Disclosure**

Based on the results of data analysis using SPSS, it can be concluded that DER has a significant positive relationship with ISR. This indicates that the higher the DER value, the higher the level of ISR disclosure made by Islamic financial institutions. Some previous studies also found that an entity's debt level can affect the extent of disclosure in Islamic Social Reporting (ISR). When entities use debt for capital development, they tend to have higher motivation to make broader disclosures regarding social and environmental aspects.

One relevant study is by Tariq et al. (2017) entitled "The Effect of Debt Financing on Corporate Social Responsibility: Evidence from an Emerging Economy". This study was conducted in Pakistan and found that entities that use debt for funding have a higher level of CSR disclosure compared to entities that do not use debt. This suggests that debt in an entity's capital is associated with greater levels of CSR disclosure. In the context of Islamic Social Reporting (ISR), several aspects related to the relationship between Debt Equity Ratio (DER) or debt-capital ratio with ISR disclosure need to be disclosed. Some points that need to be disclosed in ISR related to DER include:

1. Debt Policy: ISRs need to disclose the debt policy adopted by the entity in managing its capital debt ratio. Information that needs to be disclosed includes capital structure, debt composition, interest rate, debt term, and
debt repayment policy.

2. Use of Debt Funds: ISRs must explain the purpose and use of funds obtained through debt. Information that must be disclosed includes the use of debt for capital development, investment in projects that comply with Sharia values, or other activities consistent with Sharia principles.

3. Debt Risk Management: ISR should disclose information about the steps taken by the entity to manage the risks associated with using debt. Information that needs to be disclosed includes risk management strategies, the use of derivative financial instruments, and risk mitigation policies adopted by the entity.

4. Effect of Debt on Financial Performance: ISRs need to disclose the impact of debt on the entity's financial performance. Information that needs to be disclosed includes changes in financial performance, such as net income, revenue, and other financial ratios that may be affected by the level of debt.

5. Shariah Compliance: In Islamic finance, Islamic Social Reporting (ISR) disclosures should reflect the entity's compliance with Sharia principles in using debt. This involves compliance with the prohibitions of riba (interest), gharar (uncertainty), and maysir (gambling), as well as fulfillment of the principles of fairness and sustainability in debt management.

It should be noted that the information that must be disclosed in Islamic Social Reporting (ISR) related to the Debt Equity Ratio (DER) may vary depending on the disclosure policies and practices adopted by the entity and the requirements applicable in a particular country or jurisdiction. Several factors may influence the level of extensive disclosure in Islamic Social Reporting (ISR) in the context of an entity's use of debt for capital. Some of these factors include:

1. Disclosure Regulations and Standards: The existence of regulations or standards that require entities to disclose social, environmental, and financial aspects in the context of Islamic finance can affect the level of extensive disclosure in Islamic Social Reporting (ISR). For example, guidelines or principles that encourage disclosure of Corporate Social Responsibility (CSR) or Good Corporate Governance (GCG) in the Islamic financial sector.

2. Stakeholder Interests: The demands and expectations of customers, investors, regulators, and society may influence entities to make more comprehensive disclosures. If entities have capital debt and want to gain trust and support from stakeholders, they tend to make more complete disclosures related to social and environmental aspects.

3. Corporate Governance Practices: Commitment and good corporate governance practices can also influence the level of extensive disclosure in ISR. Entities with a strong commitment to social and environmental responsibility and good risk management mechanisms in the use of debt capital tend to make more in-depth disclosures related to these aspects.

4. Financial Condition and Company Performance: The financial condition and performance of the company can also affect the level of extensive disclosure in ISR. Entities with stable finances and good performance have sufficient resources to make more comprehensive disclosures.

5. Perceived Shariah Value: Entities that operate in the context of Islamic finance and have a commitment to Islamic values tend to make more extensive disclosures in ISR. This is because Sharia values encourage social and environmental responsibility in business practices.

It should be noted that the above factors interact with each other, and their influence may vary depending on the context of the entity and its environment. Therefore, a combination of these factors may influence the level of extensive disclosure in ISR related to the use of debt capital.

**Effect of DAR on ISR Disclosure**

The analysis using the SPSS tool shows no significant relationship between the Debt to Asset Ratio (DAR) and the level of disclosure of Islamic Social Reporting (ISR). In the context of Islamic banks, a high level of debt does not impact the implementation of corporate social responsibility activities. These results are consistent with previous research conducted by Taufik et al. (2015) and Rosiana et al. (2015). This finding also supports the stakeholder theory proposed by Clarkson (1995) as cited in Fitria and Hartanti's (2010) research, which states that companies must maintain good relations with stakeholders through Corporate Social Responsibility (CSR) activities disclosed in the annual report, both at high and low leverage levels.

This can be understood because the leverage measurement in Islamic banks using Debt to Asset Ratio (DAR) will differ from other non-bank entities. Liabilities in the context of Islamic banks are the main source of income generated through the profit-sharing system. Meanwhile, liabilities act more as equity participation in non-bank entities to increase profits. Companies tend to adopt environmental-based performance and disclose
environmental information to justify and legitimise their existence in the eyes of society. This is because the broad influence of society can affect the allocation of financial and other economic resources. According to this understanding, legitimacy refers to a corporate management system oriented towards favouring society and government.

The company's annual report reflects its commitment to obtaining revenue from the community, which is expected to increase company profits. The company's profit growth is a reference for investors in making investment decisions. The expectations of the community towards the company will be fulfilled if the practice of social responsibility and disclosure carried out by the company is carried out properly. In conclusion, this study's results indicate no significant relationship between Debt to Asset Ratio (DAR) and Islamic Social Reporting (ISR) disclosure. This indicates that the level of debt in Islamic banks is not a determining factor in implementing corporate social responsibility. Other factors, such as corporate governance policies, stakeholder interests, and perceptions of Sharia values, may also influence the level of ISR disclosure in the context of using debt for corporate capital.

**Simultaneous Effect of DER and DAR on ISR**

The results of the analysis using the SPSS tool show that DER (Debt-to-Equity Ratio) and DAR (Debt-to-Asset Ratio) have a significant relationship and are in line with the disclosure of Islamic Social Reporting (ISR). In this context, the relationship shows that the higher the DER and DAR, the more extensive the ISR disclosure made by the company.

This factor can be understood by considering Sharia Enterprise Theory, where DER and DAR, which are directly proportional to ISR disclosures, show the company's commitment to running its operations transparently, accountably, and in accordance with Sharia principles. Extensive disclosure in ISR helps build stakeholder trust in Islamic companies, illustrates the company's compliance with Sharia principles, and encourages responsible financial management.

In this context, companies with high DER and DAR are willing to disclose more detailed information on social, environmental, and financial aspects of their ISR. This reflects transparency in the company's operations and compliance with sharia principles. Extensive disclosure in ISR also helps to strengthen stakeholders' trust in Islamic companies, as they can see that the companies are carrying out business practices that are in accordance with Sharia values.

Overall, this study's results indicate a significant relationship between DER, DAR, and ISR disclosure. This relationship illustrates the company's commitment to conduct its operations in accordance with Sharia principles and disclose relevant information to stakeholders. Extensive disclosure in ISR also plays an important role in building trust and supporting responsible financial management in Islamic finance.

**Conclusion**

Based on the findings and analyses previously described, it can be concluded that the existence of a significant correlation between Debt to Equity Ratio (DER), Debt to Asset Ratio (DAR), and Islamic Social Reporting (ISR) disclosure in the context of Islamic financial institutions has important consequences for disclosure practices that focus on social and environmental responsibility. Although it still requires further research, this study provides meaningful insights into how Islamic financial institutions' financial policies and capital structure can affect the level of disclosure in terms of social and environmental responsibility.

Based on the results of this study, several suggestions can be considered to improve ISR disclosure in Islamic financial institutions:

1. Further research: More in-depth research is needed to understand the relationship between DER, DAR, and ISR disclosure more comprehensively. This research can involve more samples of Islamic financial institutions and analyse other variables potentially affecting ISR disclosure.
2. Clear regulations and guidelines: Authorities and regulators must develop regulations and guidelines related to ISR disclosure in Islamic financial institutions. This will provide a more precise and consistent framework for socially and environmentally orientated disclosure practices.
3. Increased awareness and understanding: Islamic financial institutions must increase awareness and understanding of the importance of ISR disclosure among management and employees. This can be done through training and education focusing on Sharia principles, social responsibility, and the environment.
4. Integration of Sharia principles in capital structure: Islamic financial institutions can consider integrating Sharia principles in their capital structure policies. By considering equity-based financing and maintaining an appropriate balance between debt and equity, Islamic financial institutions can enhance their commitment to social
and environmental responsibility, as reflected in ISR disclosures.

5. Collaboration and knowledge exchange: Islamic financial institutions can actively collaborate with other stakeholders, such as community organisations, academic institutions and research institutes, to exchange knowledge and experiences in ISR disclosure. This collaboration can lead to innovations and best social and environmental responsibility practices.

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