

How Islamic Law Affects the Relationship Between Corporate Governance and Capital Structure?

Evidence from Indonesia

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Abstract. Islamic finance has vast growth potential and will significantly impact the international economy in the future. There have been many discussions on Islamic finance in the past, but it has been few discussions on corporate Islamic law, governance, and capital structure in developing countries. This article studies the influence of Islamic law and corporate governance on capital structure. The sample of this study is Indonesian-listed companies from 2012 to 2020. This study uses panel data analysis of multiple linear regression- Ordinary Least Square (OLS) with the Common Effect Model or Pooled Least Square (PLS) model. The empirical results of this paper show that board size has a negative and significant impact on debt ratios for Sharia-compliant firms. The independent directors have a positive and insignificant impact on the debt ratio for Sharia-compliant firms. Institutional ownership has a negative and significant impact on the debt ratio for Sharia-compliant firms. Insider ownership has a positive and insignificant impact on the debt ratio for Sharia-compliant firms. Since the conservative nature of Islam and financing restrictions, Islamic firms are more cautious about debt financing when considering their religious norms, resulting in a relatively low debt ratio. The principal value of this paper is the contribution of Islamic Law to the influence of corporate governance on capital structure from the Indonesian perspective.

Keywords: Islam Law · Corporate Governance · Capital Structure · Indonesia

1 Introduction

In the past, most studies on how religion affects corporate financial decisions focused on Protestantism and Catholicism. There are few studies on Islam, one of the world's three major religions. El-Hawary et al. [1] point out that Islamic banks control assets of about USD 250 billion and are expected to grow at 10% to 15% per year. Islamic finance has enormous growth potential and will significantly impact the international economy in the future. Imamah et al. [2] state that Indonesia is the most populous Islamic country in the world and is also one of the countries with rapid growth in emerging markets. Its capital market has become one of the three largest markets in Southeast Asia. However,

Indonesia's environment and legal system have not been appropriately implemented. The information disclosure of the financial system is less supervised, and investors are less protected. It also makes the traditional agency problem more severe than in other emerging countries. The difficulties of external financing also hinder the growth of enterprises and economic development. Therefore, this is still very interesting to do research in Indonesia.

Capital structure is crucial to the future development of an enterprise. A too-high debt ratio will increase the risk of bankruptcy, while a too-low debt ratio will make the enterprise unable to use leverage to create opportunities. The factors affecting capital structure have been discussed in the past literature. For example, Yildirim and Ilhan [3] suggest that company size, growth opportunities, profitability, tangible assets, and operational risks are all critical variables affecting the capital structure. In addition, it is popular nowadays to explain corporate capital structure decisions from agency theory.

Liao et al. [4] mention that corporate governance is the most effective way to adjust the debt ratio when both parties have conflicting perceptions of capital structure, especially when the capital structure is within the desired range of both parties. Furthermore, the board of directors' characteristics significantly affect the capital structure in a corporate governance mechanism. For example, independent directors provide advice on maximizing shareholders' interests through their professional opinions and make a more efficient investment by taking advantage of liabilities. Therefore, the corporate governance mechanism is an important factor affecting the decision of corporate capital structure.

This study examines the influence of Islamic law and corporate governance on capital structure. This paper has several contributions to relevant literatures: First, this paper enriches literature regarding the influence of religion on capital structure compared to other studies [5, 6]. Second, this paper takes Islamic Law in the influence of corporate governance on capital structure, compared to Grullon et al. [6] study. Third, this paper enriches the literature on corporate governance and capital structure in emerging markets. This study uses corporate governance variables, including the characteristics of the board of directors and ownership structure, to study the determinants of capital structure.

2 Literature Review and Hypotheses Development

2.1 The Relationship Between Islamic Law, Board Size, and Capital Structure

Islam might replace corporate governance mechanisms. Adams and Mehran [7] suggest that a larger board of directors makes it easier to monitor the actions of the management effectively and provide better management. Raheja [8] mentions that a larger board of directors or a higher proportion of internal staff provides more effective monitoring. However, some scholars think differently. For example, Akhtaruddin et al. [9] point out that a larger board of directors operates less efficiently than a smaller one because conflicts and disagreements among members may occur, causing negative effects and resulting in costs greater than benefits.

In the Islamic framework, however, the "Shariatic decision-making process" is considered the basic trust offered by God. As a result, people involved should bring authenticity, fairness, and "a spirit of consensus-seeking" during the process [10]. As a result,

this paper deduces that the larger the board size is, the lower the debt ratio is, which also shows that the board of directors can substitute the negative effect of the board size on the debt ratio through the restriction of Islamic Law.

Hypothesis 1: Board size has a negative impact on the debt ratio for Sharia-compliant firms compared to non-Sharia-compliant firms.

2.2 The Relationship Between Islamic Law, Independent Directors, and Capital Structure

There are views in the literature on the impact of board independence on enterprises. Berger et al. [11] suggest that the debt will be significantly reduced when the proportion of independent directors is low. Abor [12] establishes a positive correlation between debt and independent directors. Besides, Fama [13], Fama and Jensen [14] point out that outsiders can add value to companies by providing professional knowledge and supervision services. Therefore, outside directors should safeguard shareholders' interests through supervision.

Khan et al. [15] point out that from the perspective of Islam, board members must have a high reputation for moral integrity and must also understand the principles and rules related to business and finance in Sharia. Therefore, this paper deduces that the characteristics of the members of the independent directors of Sharia-compliant companies may substitute for the importance of the ratio of independent directors.

Hypothesis 2: *Independent directors have a positive impact on the debt ratio for Sharia-compliant firms compared to non-Sharia-compliant firms.*

2.3 The Relationship Between Islamic Law, Institutional Ownership, and Capital Structure

Institutional investors [16–18] are frequently discussed in corporate governance mechanisms. Balsam et al. [19] point out that institutional ownership is better experienced than non-institutional investors in obtaining timely information and making profits. The importance of institutional investors in decisions on capital structure has also been paid great attention to.

However, studies on institutional ownership in the Islamic framework show that they are limited in their ability to supervise and profit under Islamic Law. Alqahtani and Boulanouar [20] find that institutional investors prefer non-Sharia-compliant firms compared with Sharia-compliant firms. Because non-Sharia-compliant firms have a relatively low initial offering price, institutional investors will be able to earn higher returns. Alqahtani and Mayes [21] discuss the influence of Islamic Law on pricing in Saudi Arabia. They state that non-Sharia-compliant firms are grossly underpriced. Furthermore, Sharia-compliant firms have a lower percentage of institutional ownership than those do not compliant with Sharia. This is because institutional investors will choose the latter to maximize profits, which shows that Islamic Law is relatively strict about company norms, and institutional ownership may not be able to earn extraordinary returns. Therefore, in an Islamic environment, the supervision effect of institutional ownership is likely to be replaced by strict Islamic Law.

Hypothesis 3: Institutional ownership has a negative impact on the debt ratio for Sharia-compliant firms compared to non-Sharia-compliant firms.

2.4 The Relationship Between Islamic Law, Insider Ownership, and Capital Structure

Insider ownership is a clear feature of ownership structures [22, 23]. Brailsford et al. [24] found that the relationship between managerial ownership and debt ratios is non-linear, inverted U-shaped. It is argued that when managerial ownership is low, managerial ownership is positively correlated with firms' debt ratios due to the convergence of interests. However, with a high level of managerial ownership, as managers seek to reduce risk in pursuit of their interests, debt will decrease and become negatively correlated.

Due to Sharia restrictions on debt financing, other things being equal, Islamic companies may prefer internal financing rather than debt financing, so equity financing is an important source of financing for companies. Furthermore, according to Miller and Hoffmann [25], Hilary and Hui [5], religion positively correlates with risk aversion. Therefore, this paper argues that managers are more likely to accept religious rules and avoid risky behavior when they hold more shares. Thus, if a company adheres to Islamic Law, the higher the insider shareholding, the more cautious it will be about debt financing, and therefore the debt ratio will be reduced. The research hypothesis is as follows:

Hypothesis 4: Insider ownership has a negative impact on the debt ratio for Sharia-compliant firms compared to non-Sharia-compliant firms.

3 Method

This paper uses listed companies in Indonesia from 2012 to 2020 as samples to discuss the influence of Islamic Law and corporate governance on corporate capital structure. The source of information of this paper is Datastream and annual reports of listed companies of the Indonesia Stock Exchange (IDX). In order to avoid the error of study results, this paper has deleted the incorrect parts of the financial industry, public utilities, and extreme values. This paper first carries out a narrative statistical analysis of the variables used and discusses the distribution and characteristics of samples. Second, it uses correlation coefficient analysis to test whether the independent variables are colinear. Third, this study uses panel data analysis of multiple linear regression- Ordinary Least Square (OLS) is supported by the Common Effect Model or Pooled Least Square (PLS) model. Finally, the PLS regression model is used afterward to verify the research hypothesis.

This paper refers to the research of Yildirim and Ilhan [3] to establish a model for hypothetical testing. The model is shown below:

$$BLEV_{i,t} = \alpha + \beta_1 SHARIA_{i,t} + \beta_2 PROF_{i,t} + \beta_3 SIZE_{i,t}$$

$$+ \beta_4 TANG_{i,t} + \beta_5 RISK_{i,t} + \mu_i + u_t + \epsilon_{i,t}$$
(1)

BLEV_{I,t} =
$$\alpha + \beta_1 CG_{I,t} + \beta_2 PROF_{I,t} + \beta_3 SIZE_{I,t}$$

+ $\beta_4 TANG_{I,t} + \beta_5 RISK_{I,t} + \mu_i + u_t + \epsilon_{I,t}$ (2)

$$BLEV_{i,t} = \alpha + \beta_1 SHARIA_{i,t} + \beta_2 CG_{i,t} + \beta_3 SHARIA_{i,t} * CG_{i,t}$$
$$+ \beta_4 PROF_{i,t} + \beta_4 SIZE_{i,t} + \beta_5 TANG_{i,t}$$
$$+ \beta_6 RISK_{i,t} + \mu_i + u_t + \epsilon_{i,t}$$
(3)

Capital structure as a dependent variable consists of the debt ratio (BLEV), referred to Yildirim and Ilhan [3]. BLEV is calculated by total debt/total assets. Further, from IDX data, we identify and separate the sample into Sharia-compliant firms (SHARIA) and non-Sharia-compliant firms (NON-SHARIA) by using Indonesia Sharia Stock Index (ISSI). The dummy variables of SHARIA-1 and 0 are used for NON-SHARIA. Corporate Governance (CG) contains two board characteristics and two ownership structure variables. The variables of board characteristics corporate governance (CG) include the board size (BOARD_SIZE), which is calculated in the natural logarithm of the number of board members, and the independent director ratio (BOARD_IND), which is calculated by the number of independent directors in the total number of directors. The ownership structure variables contain institutional ownership (INST), which is calculated by the proportion of shares held by institutional investors in the outstanding shares [25]; and insider ownership (INSI), which is calculated by the proportion of the shares held by managers and directors to the outstanding shares [26]. Finally, SHARIA*CG is the interaction of Sharia-compliant firms and corporate governance variables.

Based on research by Yildirim and Ilhan [3], this study employs the control variables. Firm size (SIZE) is measured by the natural logarithm of total assets. Profitability (PROF) is earnings before interest and tax divided by total assets. Tangible asset (TANG) is fixed assets divided by total assets. Business risk (RISK) is the standard deviation of rolling three years of profitability. α is the intercept, β is the slope, r is the vector, i is firm, t is year, and ϵ _is error. In order to avoid collinearity, the firm fixed effect (μ _i), and the year fixed effect (μ _t) are added to the regression equation.

4 Empirical Result

This paper uses listed companies in Indonesia from 2012 to 2020 as samples to discuss the influence of Islamic Law and corporate governance on corporate capital structure, and a total of 3.449 observations are obtained. In the descriptive statistics, the book leverage (BLEV) mean (median) is 0.49 (0.48). It indicates that the leverage ratio of listed companies in Indonesia is about 49%, which is lower than that of companies in Western countries.

The correlation coefficient of all variables. The correlation coefficients are beyond the area of -0.6. The -0.6 indicates that there is no problem with multiple collinearities. Therefore, further regression analysis on all variables will be conducted.

The empirical results in examining the impact of Islamic Law (Sharia) and corporate governance (board size) on capital structure (debt ratio) are shown in Table 1. Model 1 is the impact of Sharia on the debt ratio. As shown in the Table, Sharia has a negative and significant impact on the debt ratio. It indicates that Sharia-compliant firms have a lower debt ratio. Model 2 is the impact of board size on the debt ratio. As shown in the Table, a larger board of directors has a positive and significant impact on the debt ratio. It indicates that companies with a larger board of directors have a higher debt ratio. Model 3 is the impact of the interaction between Sharia and board size on the debt ratio. It can be seen from Model 3 that Sharia and board size have a negative and significant on the debt ratio (coefficient is -0.02, p = 0.01). It shows that board size reduces the debt ratio for Sharia-compliant firms. This result supports Hypothesis 1 of this paper. However, this result does not in line with the study of Abor [12], Bokpin and Arko [27]. Therefore, the larger the board size, the check and balances between each other will make the company more cautious about debt financing and reduce the debt ratio.

In terms of the impact of Sharia and independent directors on the debt ratio, the empirical results are shown in Table 2. Model 1 is the impact of Sharia on the debt ratio. As shown in the Table, Islamic Law negatively impacts Sharia-compliant companies on their capital structure, which is statistically significant. Model 2 is the impact of independent director on the debt ratio. As shown in the Table, companies with a higher ratio of independent directors have a negative impact on their capital structure (coefficient is -0.15), but it is not statistically significant. Finally, model 3 is the influence of the

Variable	Model 1	Model 2	Model 3
С	4.44***	0.80***	1.02***
SHARIA	-0.13***		-0.20***
BOARD_SIZE		0.01***	0.03***
SHARIA*BOARD_SIZE			-0.02***
SIZE	-0.60***	-0.07***	-0.07***
PROF	-0.07*	-0.58***	-0.48***
TANG	0.10*	0.12***	0.07*
RISK	0.00***	0.00***	0.00***
Year Fixed Effect	yes	yes	yes
Firm Fixed Effect	yes	no	no
Adjusted R ²	0.61	0.05	0.13
F-statistic	10.97	12.94	28.724
No. Obs.	2570	2529	2529

Table 1. The empirical result of the impact of Sharia and board size on the debt ratio.

interaction between Sharia and independent directors on the debt ratio. As shown in the Table, the interaction of Sharia and independent directors has a positive relationship on the debt ratio (coefficient is 0.26), but it is not statistically significant. However, the direction of its influence is consistent with the expectation of this paper, as states in Hypothesis 2. In Sharia-compliant firms, however, conservative Law and rules restrict corporate debt issuance. Therefore, the empirical analysis of this study shows that the management practice influenced by Islamic Law dominates the effectiveness of corporate governance mechanisms.

The empirical results of the impact of Sharia and institutional ownership on capital structure are shown in Table 3. Model 1 is the influence of Sharia on the debt ratio. As shown in the Table, Sharia negatively impacts Sharia-compliant companies on debt ratio, which is statistically significant. Model 2 is the influence of institutional ownership on the debt ratio. As shown in the Table, institutional ownership has a negative impact on their capital structure (coefficient is -0.03), but it is not statistically significant. Finally, model 3 is the influence of Sharia and institutional ownership on the debt ratio. According to Model 3, Sharia and institutional ownership have a negative and significant impact on debt ratio (coefficient is -0.36, p = 0.01), indicating that the higher the institutional ownership of Sharia firms, the lower their debt ratio. This finding supports Hypothesis 3 of this study. This study is in line with the study of Michaely and Vincent [17]. Institutional investors will take on more debt when they aim for maximum returns. However, under the influence of Islamic Law, institutional investors will limit the company's debt and reduce the debt ratio.

Table 4 shows the empirical results of the influence of Sharia and insider ownership on the debt ratio. Model 1 is the influence of Sharia on the debt ratio. As shown in the

Table 2. The empirical result of the impact of Sharia and independent directors on the debt ratio.				
Variable	Model 1	Model 2	Model 3	

Variable	Model 1	Model 2	Model 3
С	4.44***	3.76***	3.16***
SHARIA	-0.13***		-0.19***
IND		-0.15	-0.22
SHARIA*IND			0.26
SIZE	-0.60***	-0.50***	-0.39***
PROF	-0.07	-0.04	-0.11
TANG	0.10*	0.10**	0.01*
RISK	0.00***	0.00***	0.00***
Year Fixed Effect	yes	yes	no
Year Fixed Effect	yes	yes	yes
Adjusted R ²	0.61	0.63	0.13
F-statistic	10.97	11.65	28.72
No. Obs.	2570	2520	2520

Variable	Model 1	Model 2	Model 3
С	4.44***	0.98***	1.09***
SHARIA	-0.13***	-0.13***	
INST		-0.023	0.26***
SHARIA*INST			-0.36***
SIZE	-0.60***	-0.07***	-0.07***
PROF	-0.07*	-0.71***	-0.55***
TANG	0.10*	0.09**	0.05*
RISK	0.00***	0.00***	0.00***
Year Fixed Effect	yes	yes	yes
Firm Fixed Effect	yes	no	no
Adjusted R ²	0.61	0.04	0.11
F-statistic	10.97	10.01	25.59
No. Obs.	2570	2289	2289

Table 3. The empirical result of the impact of Sharia and institutional ownership on debt ratio.

Table, Sharia negatively impacts Sharia-compliant companies on their capital structure, which is statistically significant. Model 2 is the influence of insider ownership on the debt ratio, which shows a negative influence (coefficient is -0.29, p=0.1). It indicates that the higher the insider ownership, the lower the company's debt ratio. Finally, model 3 is the influence of the interaction between Sharia and insider ownership on the debt ratio, which shows a positive relationship (coefficient is 0.77, p=0.05). It indicates that the higher the insider ownership in Sharia firms, the higher the debt ratio. This finding does not support Hypothesis 4 of this study. Furthermore, this study does not in line with the study of Bokpin and Arko [27]. The possible reason is that when the insider shareholding ratio is high, managers may increase the debt financing level in order to maximize their personal interests, thus creating more corporate value.

Variable	Model 1	Model 2	Model 3
С	4.44***	0.96***	1.26***
SHARIA	-0.13***		-0.36***
INSI		-0.29*	-0.86**
SHARIA*INSI			0.77**
SIZE	-0.60***	-0.07***	-0.07***
PROF	-0.07*	-0.71***	-0.58***
TANG	0.10*	0.10**	0.06
RISK	0.00***	0.00***	0.00***
Year Fixed Effect	yes	yes	yes
Firm Fixed Effect	yes	no	no
Adjusted R ²	0.61	0.04	0.11
F-statistic	10.97	10.5	23.16
No.Obs.	2570	2291	2291

Table 4. The empirical result of the impact of Sharia and insider ownership on debt ratio.

5 Conclusion

This paper examines the influence of Islamic Law and corporate governance on capital structure. Panel data regression is used to verify the study's hypothesis by taking the sample of listed companies in Indonesia from 2012 to 2020.

The empirical results of this paper show that board size has a negative and significant impact on debt ratios for Sharia-compliant firms. The independent directors have a positive and insignificant impact on the debt ratio for Sharia-compliant firms. Institutional ownership has a negative and significant impact on the debt ratio for Sharia-compliant firms, indicating that the conservatism of Islamic Law dominates the positive actions of institutional ownership. Finally, insider ownership has a positive and insignificant impact on the debt ratio for Sharia-compliant firms, indicating that there is still room for further study and discussion on the influence of Islamic Law on corporate management behavior.

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