INTERNATIONAL JOURNAL OF ACADEMIC RESEARCH IN BUSINESS & SOCIAL SCIENCES

Vol 14, Issue 10, (2024) E-ISSN: 2222-6990

Unpacking Capital Structure Decisions: Analyzing Short-Term Debt to Equity Dynamics in Shariah Compliant Financially Distressed Firms

Nor Arni Nazira Othman, Abdul Hafiz Yusof, & Norhisam Bulot

Faculty of Business and Management, Universiti Teknologi MARA Perlis Branch Arau Campus, 02600 Malaysia

To Link this Article: http://dx.doi.org/10.6007/IJARBSS/v14-i10/22971 DOI:10.6007/IJARBSS/v14-i10/22971

Published Date: 15 October 2024

Abstract

This research paper investigates the capital structure decisions of financially distressed Shariah-compliant firms, focusing on the dynamics between short-term debt and equity. Using a sample of Shariah-compliant firms classified as financially distressed, the study fills a significant gap in the existing literature by examining this unique sector under the constraints of Islamic financial principles, which prohibit interest-based financing and emphasize ethical considerations. The research employs a comprehensive analysis of key determinants influencing capital structure, including liquidity, profitability, efficiency, growth opportunities, firm size, and tangible assets. The study's methodology includes a rigorous variable selection process, ultimately excluding political connection and corporate governance from the final model. This exclusion highlights the relative insignificance of these variables for the sample of Shariah-compliant firms, challenging conventional assumptions about their impact on capital structure. Our findings reveal that liquidity and profitability play critical roles in shaping capital structure decisions, while efficiency, growth opportunities, firm size, and tangible assets also significantly influence the balance between short-term debt and equity. The results underscore the importance of operational metrics and financial performance in managing capital structure during financial distress, providing new insights into the unique challenges faced by Shariah-compliant firms. This paper contributes valuable knowledge to both academic research and practical financial management. It suggests that financial managers and policymakers should focus on improving liquidity and profitability as primary strategies for managing capital structure in distressed Shariah-compliant firms. Additionally, the research provides a basis for future studies to explore broader contexts and additional factors affecting capital structure decisions. In conclusion, this paper advances the understanding of capital structure dynamics in Shariah-compliant firms and offers actionable insights for enhancing financial stability and decision-making in this distinct sector.

Keywords: Capital Structure, Financial Distress, Firm Performance, Variable Selection Technique, Shariah Compliant Firms.

Introduction

In today's complex financial landscape, understanding the details of capital structure decisions is crucial, particularly for firms navigating financial distress. This research focuses on a unique and underexplored area: the capital structure dynamics of financially distressed Shariah-compliant firms. While much of the existing literature has concentrated on conventional firms or broader contexts, this study delves into the specific challenges and decision-making processes faced by Shariah-compliant firms when managing their capital structure. The novelty of this research lies in its focus on Shariah-compliant financially distressed firms, a sector that operates under distinct regulatory and ethical frameworks compared to conventional firms. By analysing the short-term debt to equity dynamics within this context, the study provides fresh insights into how these firms prioritize and balance their financial resources (Ali et al., 2014; Saiti et al., 2018). Unlike traditional models that focus on variables such as liquidity, profitability, efficiency, growth opportunities, firm size, and tangible assets, as highlighted in previous literature (Jensen, 1986; Harris & Raviv, 1991), this research emphasizes the relative importance of new variables, including political connections and corporate governance, in determining capital structure. Moreover, this study employs a rigorous variable selection process to refine the model, revealing that political connection and corporate governance were less significant for the sample in question. These finding challenges existing assumptions and offers a better understanding of capital structure decisions in financially distressed Shariah-compliant firms (Chong & Liew, 2011; Khatri & Noor, 2009). By filling this gap in the literature, the research contributes valuable knowledge to both academic and practical fields, offering new perspectives on how firms within this unique sector manage financial adversity. In summary, this research not only addresses a gap in the existing literature but also provides actionable insights for financial managers and policymakers involved with Shariah-compliant firms. Its focus on the distinctive factors influencing capital structure decisions in this niche market underscores its originality and relevance (Brealey & Myers, 2003; Titman & Wessels, 1988).

Literature Review

Theoretical Background

Capital structure theory explores how firms finance their operations through a mix of debt and equity. The foundational theories in this area include the Modigliani-Miller Theorem, which initially proposed that capital structure is irrelevant in a perfect market but later acknowledged the impact of taxes, bankruptcy costs, and agency costs (Modigliani & Miller, 1958). Pecking Order Theory, introduced by Myers and Majluf (1984), suggests that firms prefer internal financing over external debt and equity, which aligns with the notion that financial distress influences capital structure decisions. Trade-off Theory, on the other hand, posits that firms balance the benefits of debt, such as tax shields, against the costs of financial distress and bankruptcy (Kraus & Litzenberger, 1973). These theories provide a framework for understanding how firms might adjust their capital structures in response to financial distress and operational challenges.

Determinants of Capital Structure

The capital structure of a firm is influenced by various factors, each impacting the balance between debt and equity:

- Liquidity: Liquidity is a critical determinant as firms with higher liquidity are better positioned to meet short-term obligations without relying heavily on external financing (Jensen, 1986). High liquidity can reduce the need for debt, as firms can use available cash flows to finance operations and growth.
- Profitability: Profitability affects capital structure decisions by influencing a firm's ability to generate sufficient earnings to cover debt payments. Firms with higher profitability are generally less reliant on debt as they can finance growth and operations through retained earnings (Myers & Majluf, 1984).
- Efficiency: Operational efficiency impacts capital structure by affecting a firm's cash flow and ability to service debt. More efficient firms can generate higher returns on their assets, reducing the risk associated with high levels of debt (Titman & Wessels, 1988).
- Growth Opportunity: Firms with high growth opportunities may opt for equity financing to avoid the risk of financial distress associated with high debt levels. Growth opportunities often require significant investment, which can be better supported by equity rather than debt (Brealey & Myers, 2003).
- Firm Size: Larger firms typically have better access to capital markets and may have more diversified operations, which can lower the risk associated with debt financing. Size can therefore influence a firm's choice of capital structure, with larger firms often having a higher proportion of debt (Frank & Goyal, 2003).
- Tangible Assets: The presence of tangible assets can support higher levels of debt because these assets can be used as collateral. Firms with substantial tangible assets are perceived as less risky by lenders, facilitating access to debt financing (Harris & Raviv, 1991).

- **Corporate Governance:** Corporate governance refers to the frameworks and practices that dictate how a company is managed and controlled, with an emphasis on accountability, fairness, and transparency in relationships with stakeholders (Shleifer & Vishny, 1997). Effective corporate governance can impact a firm's capital structure by influencing financial policies and risk management strategies. According to Jensen and Meckling (1976), strong governance mechanisms, such as an independent board of directors, can reduce agency costs and enhance investor confidence, potentially facilitating access to capital and affecting debt costs. Firms with robust governance practices might secure favorable terms for financing due to perceived lower risk. However, in the context of Shariah-compliant firms, the relevance of corporate governance may differ. Research indicates that for these firms, traditional governance mechanisms might be less influential in capital structure decisions compared to other financial metrics (Ali et al., 2014). The unique regulatory environment and adherence to Shariah principles could overshadow the impact of corporate governance, suggesting that other factors, such as liquidity and profitability, play a more prominent role in determining capital structure (Saiti et al., 2018).
- **Political Connections:** Political connections involve relationships between firms and government officials or institutions, which can affect a firm's access to resources, credit, and regulatory advantages (Fisman, 2001). In many studies, political connections are considered a key determinant of capital structure, as they can provide firms with preferential treatment and lower borrowing costs (Faccio, 2006). Firms with strong political ties might experience reduced costs of debt and better access to

financing, which influences their capital structure decisions. For Shariah-compliant firms, however, political connections were found to be less significant in capital structure decisions. This finding suggests that the influence of political ties may be diminished in these firms due to the strict adherence to Shariah laws and ethical standards (Saiti et al., 2018). The regulatory and ethical framework governing Shariah-compliant firms might limit the impact of political connections, making financial metrics such as liquidity and profitability more decisive factors in capital structure management.

Financially Distressed Firms in Malaysia

Financial distress among firms in Malaysia has been a significant concern, particularly in the wake of economic fluctuations and regulatory changes. Studies indicate that Malaysian firms facing financial distress often struggle with liquidity issues, high leverage, and operational inefficiencies. The Asian Financial Crisis of 1997-1998 highlighted the vulnerability of Malaysian firms to financial distress, leading to increased interest in understanding the factors influencing capital structure in this context (Khatri & Noor, 2009). Research on distressed Malaysian firms suggests that these firms may adopt conservative financing strategies, focusing on restructuring their debt and improving operational efficiency to navigate financial challenges (Chong & Liew, 2011).

Shariah-Compliant Firms

Shariah-compliant firms, which adhere to Islamic financial principles, operate under a unique set of regulations that distinguish them from conventional firms. These firms are prohibited from engaging in interest-based financing and must comply with ethical and social guidelines outlined in Shariah law. Consequently, their capital structure decisions are influenced by both financial performance and adherence to Islamic principles (Saiti et al., 2018). Studies on Shariah-compliant firms indicate that they may rely more on equity financing due to the prohibition of interest and the emphasis on profit-and-loss sharing arrangements (Ali et al., 2014). The distinct regulatory and ethical framework of Shariah-compliant firms adds complexity to their capital structure decisions, making them a unique area of study in financial distress contexts

Methodology

Population and Sample

The target population of the research was all shariah-compliant firms listed as financially distressed by Bursa Malaysia under the requirement of Practice Note 17 of Bursa Malaysia.

Model Specification

The capital structure of Shariah-compliant financially distressed firms can be influenced by various internal and external factors. To explore these determinants, the following regression model is employed:

$$CS_{it} = \beta_0 + \beta_1 LIQ_{it} + \beta_2 PROF_{it} + \beta_3 EFF_{it} + \beta_4 GROW_{it} + \beta_5 SIZE_{it} + \beta_6 TANG_{it} + \beta_7 CG_{it} + \beta_8 PC_{it} + \varepsilon_{it} \quad (1)$$

Where:

CS_{it} = Capital Structure

$\beta_1 LIQ_{it}$ = Liquidity

β_2PROF$_{it}$ = Profitability
β_3EFF$_{it}$ = Efficiency
β_4GRO$_{it}$ = Growth Opportunity
β_5SIZE$_{it}$ = Firm Size
β_6TANG$_{it}$ = Asset Tangibility
β_7CG$_{it}$ = Corporate governance
β_8PC$_{it}$ = Political Connection
ε_{it} = Error term

In this model, CSit represents the capital structure of firm i at time t, while the explanatory variables— β_1LIQ$_{it}$ (liquidity), β_2PROF$_{it}$ (profitability), β_3EFF$_{it}$ (efficiency), β_4GRO$_{it}$ (growth), β_5SIZE$_{it}$ (size), β_6TANG$_{it}$ (tangibility of assets), β_7CG$_{it}$ (corporate governance), and β_8PC$_{it}$ (political connections)—are expected to influence the firm's financing decisions. The error term, εit, accounts for unobserved factors affecting capital structure. This model aims to provide insights into the specific factors that impact the capital structure decisions of financially distressed, Shariah-compliant firms in Malaysia.

Data Analysis Steps

The econometric model of indirect financial distress costs as presented in equation (1) is estimated by using panel data analysis steps as illustrated in Figure 1.

The first step is to determine the most optimal combination of predictors. In this study, Stata command, V*select*, developed by Lindsey and Sheather (2010) was used to determine whether certain variable should be included in the model. Generally, higher variance explained by the model R2ADJ and lower C, AIC, AICC and BIC values indicate the best fitting model (Lindsey & Sheather, 2010). Similar Stata command, vselect, was also used by previous researchers from various fields of studies (Anwar & Sun, 2012; Butler, Keefe, & Kieschnick, 2014; Makumi, 2013; Mehrara & Mohammadian, 2015).

The second step is to choose the most appropriate panel data estimator. The two available alternatives for analyzing short panel data are static and dynamic techniques. In this paper, the main criterion for choosing between the two alternatives is by looking at the coefficient of the lagged dependent variable. The significance of the lagged dependent variable (p-value < 0.05) will indicate the need to go for dynamic model, as it (dynamic model) is more appropriate and useful when the dependent variable depends on its own past realizations (Brañas-Garza et al., 2011), otherwise static model is to be preferred (p-value > 0.05).

The third step is to choose the most appropriate static or dynamic panel data analysis technique. The choice of the most appropriate static technique depends upon three types of tests as suggested and outlined by Park (2011). The tests are F-test, Breusch-Pagan Lagrange Multiplier (LM) test, and Hausman test. For dynamic model, System Generalized Method of Moment (SGMM) is preferred against Difference Generalized Method of Moment (DGMM). This is consistent with the previous literature that SGMM is better (Blundell & Bond, 1998) and more efficient (Ahn & Schmidt, 1995) than DGMM.

The fourth and final step is to perform the diagnostic tests and to find the correct strategy to rectify the problem(s) identified (if any). The strategy to rectify the problem(s) will be based on the suggestion by Hoechle (2007).

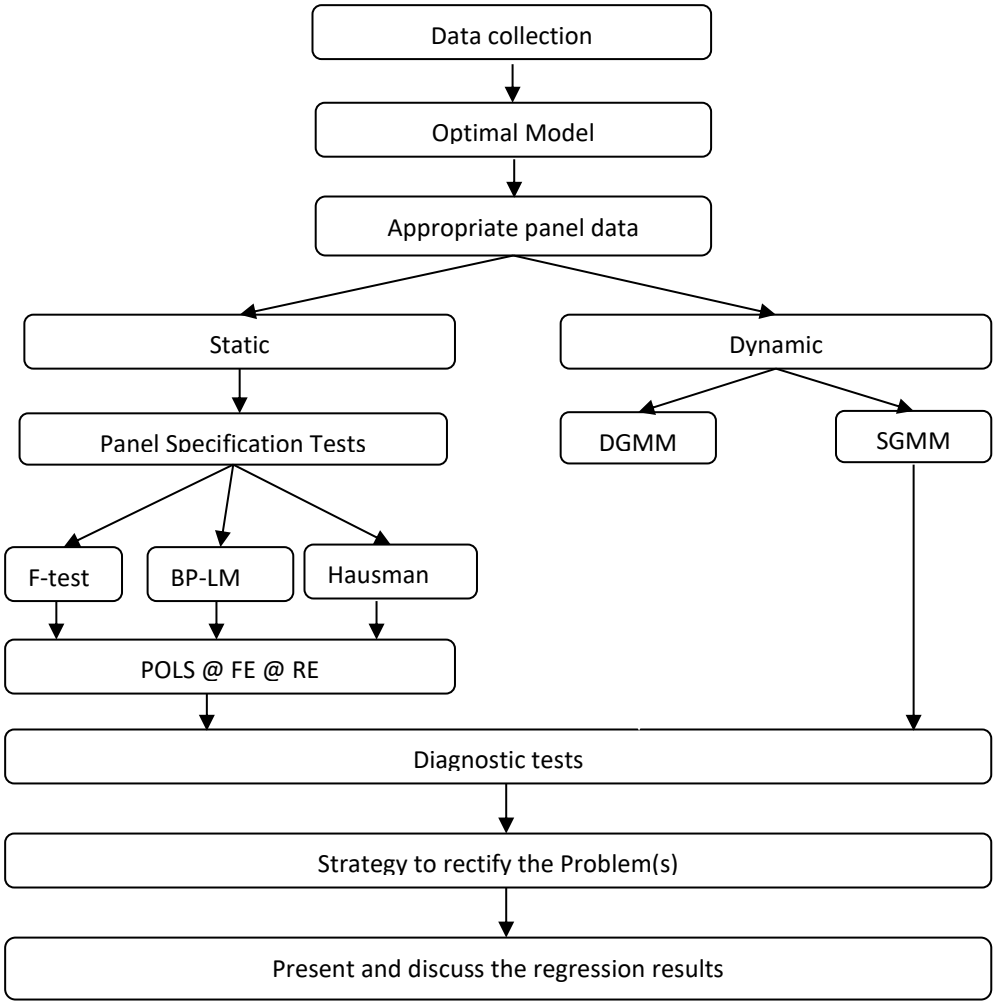

Figure 1 Data Analysis Steps

Findings and Discussion

Using the short-term debt to equity (STDTE) as the proxy for capital structure, this section investigates the determinants of capital structure for all shariah compliant firms classified as financially distressed under the requirement of PN4, PN17 and APN17 of Bursa Malaysia. The sample consists of 375 observations. The summary statistics of the STDTE over the sample period are presented in Table 4.1. The average STDTE for the period of study is 1.40 and it ranges from a minimum value of 0.01 to a maximum value 97.99. With a clear understanding of the STDTE distribution, the next step involves determining the most optimal combination of predictors for the analysis.

Table 0.1
Descriptive Statistics

Descriptive Statistics				
N	Mean	SD	Min	Max
375	1.40	5.09	0.01	97.99

Notes: N=Number of Observations, SD=standard deviations, Min=Minimum, Max=Maximum

The first step in the data analysis involved using the *vselect* variable selection technique to identify the most optimal combination of predictors for the model. Initially, eight independent variables were considered: liquidity, profitability, efficiency, growth opportunity, firm size, tangible assets, political connection, and corporate governance. As shown in Table 4.2, the selection criteria yielded varying optimal model sizes, with eight predictors chosen for R^2ADJ, C, and AIC, six for AICC, and five for BIC. In this paper, using AICC as the primary criterion for selection (Burnham & Anderson, 2002; Hurvich & Tsai, 1989), the six-predictor model was determined to be the most appropriate. The six selected variables—liquidity, profitability, efficiency, growth opportunity, firm size, and tangible assets—were identified as key determinants of capital structure for Shariah-compliant financially distressed firms. Political connection and corporate governance, while initially considered, were excluded from the final model. This outcome indicates that these two variables were less influential in shaping the capital structure decisions of the firms in question, reinforcing the importance of focusing on financial and operational metrics in such analyses (Chen & Huang, 2014; Kumar & Rao, 2015).

Table 0.2
Variable Selection

Variable Selection					Optimal Model	
R2ADJ	C	AIC	AICC	BIC	#	Independent Variables
8	8	8	6	5	6	LIQ PROF EFF GRO SIZE TANG

Notes:
(1) C= Mallow's $C_{p,}$, R2ADJ = Adjusted R^2, AIC = Akaike's information criterion, AICC = Akaike's corrected information criterion, BIC = Bayesian information criterion.
(2) # = number of variables.
(3) LIQ = liquidity, PROF = profitability, EFF = efficiency, GRO = growth opportunity, SIZE = firm size, TANG = asset tangibility.

The next step is to select the most appropriate panel data estimator. The two available options are static and dynamic models. As indicated in Table 4.3, the coefficient for the lagged dependent variable is significant (p-value < 0.05), suggesting that a dynamic model is more suitable for the analysis. Once the appropriate panel data analysis technique—namely, the dynamic model—was identified, this research had to determine which dynamic panel approach to apply. The two prominent alternatives are the Difference Generalized Method of Moments (DGMM), introduced by Arellano and Bond (1991), and the System Generalized Method of Moments (SGMM), developed by Arellano and Bover (1995) and Blundell and Bond (1998). As discussed in the methodology section, SGMM offers a significant advantage over DGMM, as it yields more efficient and precise estimates by mitigating finite sample bias

(Baltagi, 2008). Given its ability to improve estimation accuracy and reduce bias, this study selects SGMM as the preferred method for dynamic panel data analysis.

Table 0.3
Panel Specification Test

p-values of the test & appropriate technique	
Lagged DV	Technique
0.0050	Dynamic Model (SGMM)

Various diagnostic tests were then performed to check for the validity and reliability of the obtained results. The results of the diagnostic tests are presented in Table 4.4.

First, the Wald test indicates that the regressors are jointly significant (p-value < 0.05) in explaining the dependent variable. Second, this thesis used Sargan statistics of over-identifying restriction, which tests for the absence of correlation between the instrument and the error term. The result of the Sargan test indicates that the validity of the instruments is satisfied (p-value > 0.05). Third, the insignificant AR(2) indicates the absence of second order auto correlation as required for a GMM estimation. In addition to that, following the recommendation by Roodman (2006), the number of instruments is also reported. Even though there is no clear rule concerning how many instruments are too many (Roodman 2006; Roodman 2007), some rules of thumb may be used. In this thesis, following previous papers such as Efendic et al. (2009), the number of instruments should not exceed the number of observations, which in this case here (17 instruments < 309 observations).

Table 0.4
Diagnostic Tests

p-values of the tests					
VIF	Sargan	AR1	AR2	Inst	Strategy
1.19	0.5627	0.0001	0.9770	17	System dynamic panel-data estimation

Notes:
(1) VIF= Variance Inflation Factor
(2) Sargan=sargen hansen, AR1 & AR2= Arellano-Bond
(3) Inst: Number of instruments.

Considering the various diagnostic tests that have been conducted, this paper may say that there is enough evidence to conclude that the examined statistical test satisfies the key assumptions of the SGMM estimation. The results as presented in Table 4.5 show that three independent variables were found to have a statistically significant relationship with the dependent variable. The three independent variables are the lagged STDTE (L. STDTE), profitability and firm size. Lagged STDTE, profitability and firm size are positively related to the STDTE, whereas liquid assets, investment opportunities, change in investments, leverage, time in distress and expected earnings growths do not appear to be significantly related to STDTE. In addition to that, lagged dependent variable (L. STDTE) seems to have the greatest influence on the firm capital structure, which is explained by the highest t-value of 4.71.

The regression results presented in Table 4.5 provide several key insights into the determinants of capital structure for Shariah-compliant financially distressed firms in Malaysia. The lagged dependent variable, L.STDTE, shows a highly significant positive

coefficient (0.23, $p < 0.01$), indicating that previous levels of short-term debt to equity (STDTE) have a strong influence on current STDTE. This suggests that firms facing financial distress may have a persistent reliance on short-term debt over time, aligning with previous findings on the capital structure behavior of distressed firms (Myers, 1984).

Profitability (PROF) also has a positive and significant effect on STDTE (0.04, $p < 0.01$), suggesting that more profitable firms are likely to rely on short-term debt. This is somewhat counterintuitive, as higher profitability typically reduces the need for external financing (Modigliani & Miller, 1958). However, in the case of distressed firms, it could indicate that they are leveraging profits to secure debt to meet immediate liquidity needs.

Liquidity (LIQ) and growth (GRO), represented by their respective coefficients, show no significant relationship with STDTE. The insignificant coefficient for liquidity (0.02, $p = 0.95$) suggests that liquidity management may not be a critical factor for distressed firms when determining their short-term debt levels. This finding contrasts with previous research, which indicates that more liquid firms tend to rely less on debt (Titman & Wessels, 1988). Similarly, the growth coefficient (0.06, $p = 0.03$) implies that growth opportunities do not play a significant role in these firms' capital structure decisions.

Tangibility (TANG) is found to have an insignificant and negative relationship with STDTE (-0.00, $p = 0.30$), supporting previous studies suggesting that financially distressed firms may have limited collateralizable assets to support short-term borrowing (Harris & Raviv, 1991). In contrast, firm size (SIZE) is significant and positive (1.29, $p < 0.05$), indicating that larger distressed firms are more likely to use short-term debt. This could be due to larger firms having better access to credit markets, even in times of distress (Rajan & Zingales, 1995).

Efficiency (EFF) does not show a significant relationship with STDTE (0.00, $p = 0.18$), which suggests that operational efficiency may not be a determining factor for short-term debt decisions in distressed firms. This is consistent with findings from prior studies that indicate efficiency may not be a primary concern for firms under financial pressure (Berger & Bonaccorsi di Patti, 2006).

Overall, the regression results highlight that profitability, firm size, and past levels of short-term debt are significant determinants of capital structure in financially distressed Shariah-compliant firms, while liquidity, growth, tangibility, and efficiency appear to have limited influence. These findings contribute to the understanding of financial distress and capital structure in the context of Shariah-compliant firms and are consistent with capital structure theories such as trade-off theory and pecking order theory (Myers, 1984; Modigliani & Miller, 1958).

Table 0.5
Regression Results

	STDTE
L.STDTE	0.23***
	(4.71)
PROF	0.04***
	(3.60)
LIQ	0.02
	(0.95)
GRO	0.06
	(0.03)
TANG	-0.00
	(-0.30)
SIZE	1.29*
	(1.79)
EFF	0.00
	(0.18)
N	309
Chi2	72.91
p-value	0.0000

Notes:
(1) *t* statistics in parentheses
(2) * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$
(3) LIQ = liquidity, PROF = profitability, EFF = efficiency, GRO = growth opportunity, SIZE = firm size, TANG = asset tangibility, CG = corporate governance.
(4) N = number of observations, R^2 = R-squared, R^2_a = adjusted R-squared, R^2_o = Overall R-squared

Conclusion

This study investigates how financially distressed Shariah-compliant firms manage their capital structure, focusing on the dynamics between short-term debt and equity. We found that key factors influencing capital structure decisions include liquidity, profitability, efficiency, growth opportunity, firm size, and tangible assets. Interestingly, political connection and corporate governance were not significant for this sample, indicating that traditional financial metrics are more critical in these firms.

The findings offer several implications. Theoretically, they suggest that models of capital structure should be tailored to the specific context of Shariah-compliant firms, rather than relying on general assumptions about political connections or corporate governance. Practically, financial managers should prioritize improving liquidity, profitability, and operational efficiency. Policy-makers should also consider the unique needs of Shariah-compliant firms when developing regulations and support mechanisms.

This study has some limitations. It focuses solely on Shariah-compliant firms in Malaysia, which may not be representative of other regions or types of firms. The exclusion of political connection and corporate governance, while based on empirical evidence, might

overlook their indirect effects. Additionally, reliance on secondary data could introduce issues related to data accuracy and completeness.

Future research should consider broader contexts by including a variety of firms beyond Shariah-compliant ones and exploring different regions. Longitudinal studies could provide insights into how capital structure decisions change over time. Additionally, investigating other potential factors affecting capital structure and using qualitative methods could offer deeper insights into the decision-making processes.

Corresponding Author
Norhisam Bulot
Faculty of Business and Management
Universiti Teknologi MARA, Perlis Branch
Arau Campus, 02600 Arau, Perlis
Malaysia
e-mail: norhisam@uitm.edu.my

References

Ahn, S. C., & Schmidt, P. (1995). Efficient estimation of models for dynamic panel data. *Journal of Econometrics, 68*(1), 5-27.

Ali, M., Kayed, R. N., & Abozaid, A. (2014). Islamic banking and corporate governance: A comprehensive review. *Journal of Islamic Accounting and Business Research, 5*(1), 24-40.

Andrade, G., & Kaplan, S. N. (1998). How costly is financial (not economic) distress? Evidence from highly leveraged transactions that became distressed. *The Journal of Finance, 53*(5), 1443-1493.

Anwar, S., & Sun, S. (2012). Trade liberalisation, market competition and wage inequality in China's manufacturing sector. *Economic Modelling, 29*(4), 1268-1277.

Arellano, M., & Bond, S. (1991). Some tests of specification for panel data: Monte Carlo evidence and an application to employment equations. *The Review of Economic Studies, 58*(2), 277-297.

Arellano, M., & Bover, O. (1995). Another look at the instrumental variable estimation of error-components models. *Journal of Econometrics, 68*(1), 29-51.

Berger, A. N., & Bonaccorsi di Patti, E. (2006). Capital structure and firm performance: A new approach to testing agency theory and an application to the banking industry. *Journal of Banking & Finance, 30*(4), 1065–1102.

Brañas-Garza, P., Bucheli, M., & Garcia-Muñoz, T. (2011). Dynamic panel data: A useful technique in experiments. *Universidad de Granada Working Papers*, 10-22.

Burnham, K. P., & Anderson, D. R. (2002). *Model selection and multimodel inference: A practical information-theoretic approach* (2nd ed.). Springer Science & Business Media.

Butler, A. W., Keefe, M. O. C., & Kieschnick, R. (2014). Robust determinants of IPO underpricing and their implications for IPO research. *Journal of Corporate Finance, 27*, 367-383.

Chen, L. W., & Huang, L. H. (2014). Corporate governance and capital structure: Evidence from Taiwanese companies. *Journal of Corporate Finance, 25*, 185-200. https://doi.org/10.1016/j.jcorpfin.2014.01.005

Elali, W., & Trainor, T. (2009). *Advanced corporate finance: A practical approach*. Pearson Addison Wesley.

Faccio, M. (2006). Politically connected firms. *American Economic Review, 96*(1), 369-386.

Fisman, R. (2001). Estimating the value of political connections. *American Economic Review, 91*(4), 1095-1102.

Gertner, R., & Scharfstein, D. (1991). A theory of workouts and the effects of reorganization law. *The Journal of Finance, 46*(4), 1189-1222.

Harris, M., & Raviv, A. (1991). The theory of capital structure. *The Journal of Finance, 46*(1), 297-355.

Hoechle, D. (2007). Robust standard errors for panel regressions with cross-sectional dependence. *Stata Journal, 7*(3), 281.

Hurvich, C. M., & Tsai, C. L. (1989). Regression and time series model selection in small samples. *Biometrika, 76*(2), 297-307. https://doi.org/10.1093/biomet/76.2.297

Jensen, M. C. (1991). Corporate control and the politics of finance. *Journal of Applied Corporate Finance, 4*(2), 13-34.

Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs, and ownership structure. *Journal of Financial Economics, 3*(4), 305-360.

Korteweg, A. G. (2007). The costs of financial distress across industries (Doctoral dissertation, The University of Chicago).

Kumar, S., & Rao, P. (2015). A conceptual framework for identifying financing preferences of SMEs. *Small Business Economics, 44*(4), 673–691. https://doi.org/10.1007/s11187-014-9610-0

Lang, L., Poulsen, A., & Stulz, R. (1995). Asset sales, firm performance, and the agency costs of managerial discretion. *Journal of Financial Economics, 37*(1), 3-37.

Lindsey, C., & Sheather, S. (2010). Variable selection in linear regression. *Stata Journal, 10*(4), 650.

Makumi, A. N. (2013). *Faculty of Health Sciences School of Public Health* (Doctoral dissertation, School of Public Health, University of Witwatersrand Johannesburg).

Mehrara, M., & Mohammadian, M. (2015). The determinants of Gini coefficient in Iran based on Bayesian model averaging. *Hyperion