Information Management and Business Review (ISSN 2220-3796)
Vol. 15, No. 4(SI), pp. 38-47, December 2023

Capital Structure–Firm Performance Nexus: The Moderating Effect of Board Independence

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Abstract: The purpose of this study is to investigate the relationship between capital structure and firm performance by exploring the moderating effect of one of the corporate governance mechanisms, namely board independence. Panel data regression was employed based on a sample of 492 non-financial listed companies in Malaysia from 2010 to 2019. The results showed that capital structure has a significant positive impact on firm performance. Meanwhile, board independence significantly and negatively moderates the relationship between capital structure and firm performance. The findings of this study shall provide better insights for investors, firm managers, and policymakers on the critical role of corporate governance mechanisms in enhancing firm performance, particularly in implementing suitable actions and policies.

Keywords: *Capital structure, Firm performance, corporate governance, Board independence.*

1. Introduction and Background

Capital structure is one of the crucial considerations for any corporation. It involves making decisions on an efficient mix of different financing sources available namely debts versus equity to minimize the weighted average cost of capital (WACC). Essentially, decisions about capital structure provide a clear direction for firms in financing their overall operations and growth to achieve corporate goals. Financial managers are responsible for identifying the best and most optimal capital structure to minimize the cost of investment and ultimately maximize firms' profit. Therefore, any decision regarding capital structure choice is associated with multiple benefits and costs, which will eventually affect firm value and performance.

The relationship between capital structure and firm performance has been a major theoretical and empirical debate. However, existing studies (see for example, Ul Islam and Mazhar Iqbal, 2022, Ahmed, Nugraha and Hágen, 2023, Gill, Biger and Mathur, 2011; Alarussi and Alhaderi, 2018; Ha et al., 2019) provide mixed and inconsistent findings. It is argued that the reasons behind such findings are contingency and situational factors that could influence the relationship (Jermias, 2008; Pham and Nguyen, 2020a). Additionally, Pham and Nguyen (2020b) stated that the magnitude and direction of capital structure and firm performance association could change as a result of these moderating factors. Hence, it is crucial to identify the factors that could moderate the capital structure and firm performance association.

In relation to corporate governance mechanisms, the Agency Theory posits that one of the approaches to address the monitoring managers problem is by increasing the proportion of independent directors to the board (Jensen and Meckling, 1976). The positive impact of having independent outside directors is based on the notion that they are independent of the management, and thus, can better exercise the monitoring role to avoid any opportunistic behaviors and ensure that decisions made by the board will benefit the firm. It is further argued that managers will use debt financing more effectively and prudently under the high presence of independent directors. On this note, the effectiveness of debt financing towards firm performance can be moderated by corporate governance mechanisms such as board independence (Ronoowah and Seetanah, 2023; Wu, Alkaraan and Le, 2023). Nonetheless, empirical works investigating the role of board independence in moderating the impact of debt financing on firm performance remain scarce, particularly in emerging economies such as Malaysia.

To bridge such a gap, this study aims to explore the moderating effect of board independence on the relationship between capital structure and firm performance by focusing on the Malaysian market. Having a deeper understanding of the role of board independence is vital as capital structure choice may affect firms' strategic decisions. Besides, investigating the influence of board independence on the effectiveness of debt financing shall provide a more comprehensive understanding and offer useful implications for corporate

governance practices in emerging economies.

2. Literature Review

Theoretical Background on Capital Structure: Capital structure refers to the method by which a firm finances its operation through a mixture of debt and equity. An optimal capital structure mix relies on a trade-off between risk and return, which is anticipated to reduce the cost of capital and enhance performance. Hence, decision-making on capital structure is crucial for every firm not only for profit maximization purposes but also for the sustainability and achievement of its overall goals**.** A number of theoretical frameworks have been established in the finance literature to explain firms' capital structure decisions.

The origin of Capital Structure Theory can be traced back to the seminal work presented by Modigliani and Miller (1958) in which a firm's cost of capital does not affect firm value under the restrictive assumptions of no taxes, transaction costs, or bankruptcy. However, in 1963, Modigliani and Miller presented new evidence indicating that borrowing could contribute to tax advantage which would result in a tax shield, hence reducing the cost of borrowing while increasing firm value or performance (Modigliani and Miller, 1963).

Later, Myers (1977) presented the Trade-Off Theory which combines both advantages and disadvantages of debt. The theory states that to maximize firm value, a firm will trade off the benefit of debt which comes from its tax benefit and the cost of debt derived from the bankruptcy costs. This theory further asserts that a firm can decide on the optimal composition of debt in its capital structure to maximize the benefit against the cost of debt. Hence, the Trade-Off Theory anticipates a positive association between debt and profitability until it reaches the optimal level of indebtedness.

In 1984, Myers and Majluf introduced the Pecking Order Theory which advocates the need for firms to follow the hierarchy of financial choices. Based on the advocate, firms would first use internal financing rather than external financing. In cases where external financing is needed, debt is preferred over equity as it is associated with a lower cost of financing. Accordingly, this theory posits an inverse relationship between debt and profitability where profitable firms are assumed to have a lower debt level in their capital structure.

The Agency Theory proposed by Jensen and Meckling (1976) states that there are two types of agency cost, namely agency cost of equity and agency cost of debt. Agency cost of equity focuses on the potential misalignment of interest between the shareholders (principal) and managers (agent) in maximizing a firm's returns and value. Issuing debt reduces the agency's cost as it encourages the managers to act in the shareholders' interest instead of indulging in any discretionary behaviors or wasting resources on unprofitable projects. This will improve the firm's performance, giving rise to a positive relationship between debt and firm performance. Meanwhile, the agency's cost of debt relates to the potential conflict between equity holders and debtholders. Increasing the debt level creates higher agency costs due to the diverging interests of both shareholders and debtholders. For instance, in cases where the leverage is high, debtholders would demand higher interest to compensate for the greater risk of liquidation whilst shareholders would invest sub-optimally (Harris and Raviv, 1991; Myers, 1977). Thus, a negative relationship is suggested between debt and firm performance.

Capital Structure and Firm Performance: Empirical evidence regarding the association between capital structure and firm performance provides mixed and contradictory results. On one hand, several studies demonstrate that leverage is positively correlated with profitability and value. For instance, Abdulkarim and Bahamman (2021) revealed that capital structure has a significant positive impact on profitability, implying that higher leverage will enhance firm performance. Gill, Biger, and Mathur (2011) reported a positive relationship between debt and firm profitability, suggesting a greater tendency for profitable firms to rely more on debt mainly due to interest tax shield benefits. A study by Ramli, Latan and Solovida (2019) observed a positive significant correlation between firm leverage and financial performance among Malaysian firms. These results posit that increasing the level of debt will reduce agency costs and increase firms' performance.

Conversely, other empirical studies have exhibited the negative impact of leverage on firm performance. For

instance, Pham and Nguyen (2020a, 2020b) and Ha et al. (2019) found that debt financing has a significantly adverse impact on firms' performance in Vietnam. Muhammad, Migliore and Mohsni (2021) and Ahmed et al. (2023) reported a negative association between capital structure and Italian as well as Iranian firms' performance respectively, suggesting that firms prioritize their funding sources, starting from internal financing to debt issuance while equity stands as the last resort in meeting their funding needs. Similarly, Alarussi and Alhaderi (2018) revealed a negative and significant relationship between leverage and profitability among Malaysian firms. They stated that a firm generally has a choice to finance its operation either by equity or debt, thus signaling the trade-off between business and financial risk undertaken by the firm. A study by Ronoowah and Seetanah (2023) also showed that capital structure has a negative and significant effect on Mauritian non-financial firm value, supporting the Pecking Order Theory. This suggests that high leverage in the capital structure decision creates unfavorable signals for investors, which consequently refrains them from buying a company's shares and thus leads to a decrease in share prices.

Board Independence and Firm Performance: Board composition is an important corporate governance mechanism that influences the board's ability to fulfill its oversight responsibilities and the effectiveness of firm performance. A common supposition is that a board performs a better monitoring role when its members are adequately independent, particularly in criticizing the management's actions and policies.

Theoretically, there are contradictory views regarding the role of board independence towards firm value and performance. The Agency Theory states that the board of directors should be independent of the executive management to effectively perform their monitoring and control roles (Jensen and Meckling, 1976). It is assumed that independent directors can retain freedom from managerial influence and address the agency's problem by providing oversight on the firm's strategic direction as well as scrutinising the managers' performance. This will consequently enhance the firm's value and performance. On the contrary, the Stewardship Theory suggests that the presence of outside directors will have a negative influence on a firm's performance. The underlying assumption of this theory is that the interests of both shareholders and management are aligned, and hence the management is motivated to make decisions that will increase firm performance and value (Donaldson and Davis, 1991).

Nonetheless, existing empirical studies regarding the impact of outside independent directors on firm performance have been equivocal. For instance, a study by Ferriswara, Sayidah, and Agus Buniarto (2022) found that a board comprising a great number of independent directors will allow for more effective oversight of management, thus leading to enhanced performance. Similar findings were reported by Muhammad et al. (2021) and Kao et al. (2019) where a positive association between the appointment of independent directors and firm performance implies that the monitoring value of independent directors is more significant in markets with weaker corporate governance mechanisms. This is further supported by He, He and Evans (2020) who found that board independence is positively associated with firm long-term success. They posit that firms' resources and internal processes facilitate boards to mobilize those resources in solving complex tasks, which are crucial in attaining the firm's long-term success.

On the other hand, the findings by Nguyen, Evans and Lu (2017) demonstrated a negative significant association between board independence and firm performance in Vietnam. It is argued that one of the major challenges faced by independent directors to participate in a board is the information-asymmetry disadvantage between insiders and outsiders. Likewise, Rashid (2018) provided evidence that board independence and firm economic performance do not positively influence each other. The author asserted that outside directors are less competent in performing their tasks due to the lack of expertise and information, which prevents them from exercising their monitoring roles effectively and ultimately contributes to lower firm performance.

Moderating the Role of Board Independence on the Relationship between Capital Structure and Firm Performance: Despite the ongoing debate, no conclusion has yet been drawn on the direct association between capital structure and firm performance. While empirical evidence to date remains inconclusive, several studies (see for example Jermias, 2008, Pham and Nguyen, 2020a; Abdulkarim and Bahamman, 2021) argued that a moderating factor should be considered to validate such a relationship.

The extant literature review however demonstrates that there are limited studies conducted on examining the moderating impact of independent directors on the relationship between capital structure and firm performance. Ronoowah and Seetanah (2023) proved a significant moderating effect of corporate governance mechanism on capital structure and firm performance of Mauritian non-financial firms. Meanwhile, Pham and Nguyen (2020a) demonstrated that board independence reduces the negative impact of leverage on firms' profitability, implying its moderating impact on the capital structure and firm performance relationship. They further argued that the impact of leverage on profitability is greater across firms with a greater number of independent directors. This shows that independent directors strengthen the impact of leverage on the profitability of Vietnamese firms. In another study, Pham and Nguyen (2020b) highlighted the imperative presence of board independence in firms with high levels of debt financing to assist managers in monitoring the effectiveness of leverage, hence reducing the negative consequence of debt financing on performance. Likewise, Javeed, Yaqub, and Aslam (2017) and Muhammad et al. (2021) provided evidence of the significant positive moderating impact of leverage on performance. They concluded that adding more independent directors to the board will positively influence the relationship between debt and performance. In contrast, Abdulkarim and Bahamman (2021) conducted a study involving Nigerian listed industrial goods firms and found a negative significant effect on the relationship between capital structure and profitability after introducing board independence as a moderator.

3. Data Description and Methodology

Sample and Data Sources: The sample of this study comprised 492 public listed firms in Bursa Malaysia covering the period of 2010 to 2019. Delisted firms and those categorized under the financial sector, such as banks, insurance companies, Real Estate Investment Trusts (REIT), and closed-end funds, were excluded from the sample due to the different nature of their business operation, rules and regulations, and capital structure. The financial data was retrieved mainly from the Data-Stream databases while the corporate governance data was manually gathered from the firms' annual reports.

Measurement of Variables: The dependent variable of this study was firm performance. It was measured using Tobin's Q (TQ), which is a hybrid measure of a firm's performance based on the market perceptions of how the firm has performed and how it is likely to achieve in the future (Muhammad et al., 2021). Meanwhile, the independent variable of this study was capital structure, which was proxied by debt ratio (DR) which is the ratio of total debt to total assets that indicates a firm's sources of funding to finance its assets. Board independence (INDEP), represented by the total number of independent non-executive directors on the board, and was employed as the interaction variable between the capital structure and firm value relationship. It is believed that the effectiveness of debt financing towards firm performance may be moderated by the presence of board independence. This will prompt managers to use debt financing more effectively and prudently (Pham and Nguyen, 2020a).

Meanwhile, several control variables that could influence firm performance related to corporate governance mechanisms were incorporated, including ownership concentration (OC), board size (BSIZE), and CEO duality (DUAL). OC was defined as the total percentage of shares owned by all majority shareholders who owned at least 5% of total shares. This minimum threshold of 5% voting rights is necessary as it is considered a strong control for the controlling shareholders, which may influence firms' performance and value (Basu, Paeglis, & Rahnamaei, 2016). On the other hand, BSIZE was represented by the total number of directors on the board while DUAL occurred when the CEO was also the board chairperson (a binary variable of 1 was assigned in the presence of CEO duality whilst 0 was allocated for the non-existence of CEO duality). Other control variables related to firm-specific characteristics that might affect firm performance were also considered, namely firm growth (GROWTH), which was represented by the annual percentage change in a firm's net sales and firm age (AGE), which was calculated as the total number of years since inception. Table 1 displays the descriptions and measurements of all variables used in this study.

Table 1: Variable Descriptions and Measurements

Variables	Descriptions and Measurements
Tobin's Q (TQ)	Ratio of book value of assets minus book value of equity plus market value of equity to book value of assets
Debt ratio (DR)	Ratio of total debt to total assets
Board Independence (INDEP)	Total number of independent directors on the board
Ownership concentration (OC)	Percentage of shares owned by majority shareholders (holding at least 5% of shares)
Board size (BSIZE)	Total number of directors on the board
CEO duality (DUAL)	Dummies where 1 denotes firms with CEO as board chairperson and 0 otherwise
Firm age (AGE)	Total number of years since inception
Firm growth (GROWTH)	Growth in sales

Model Specifications: Based on the explanation above, the estimation models of this study are stated as follows:

Model 1:
$$TQ_{it} = \alpha + \beta_1 DR_{it} + \beta_2 INDEP_{it} + \beta_3 OC_{it} + \beta_4 BSIZE_{it} + \beta_5 DUAL_{it} + \beta_6 AGE_{it} + \beta_7 GROWTH_{it} + e_{it} \quad (1)$$

Model 2:
$$TQ_{it} = \alpha + \beta_1 DR_{it} + \beta_2 INDEP_{it} + \beta_3 DR * INDEP_{it} + \beta_4 OC_{it} + \beta_5 BSIZE_{it} + \beta_6 DUAL_{it} + \beta_7 AGE_{it} + \beta_8 GROWTH_{it} + e_{it} \quad (2)$$

The baseline model (Model 1) examined the direct impact of capital structure and firm performance while the interaction model (Model 2) explored the moderating effect of board independence on the association between capital structure and firm performance after controlling other corporate governance mechanisms and firm characteristics. These models were analyzed using panel data regression. Among the advantages of panel data include increasing the degree of freedom and providing control over unobserved time-invariant heterogeneity, hence improving the estimators' efficiency (Baltagi, 2008).

This study conducted different panel data pooling techniques, namely Pooled Ordinary Least Square (POLS), Random Effect (RE), and Fixed Effect (FE). Numerous diagnostic tests were done to choose the best estimation model. The Breusch-Pagan Lagrange Multiplier (LM) test was used to select between the POLS and RE models. The rejected null hypothesis showed that RE was better than POLS. The Hausman test was done to choose between the FE and RE models. The rejected null hypothesis showed that FE was the most appropriate model over RE. Next, the existence of multicollinearity issues was determined by examining the correlation coefficients among the variables and the variance inflation factor (VIF). Multicollinearity does not stand as an issue if the correlation coefficients are less than 0.80 and the VIFs are smaller than 10 (Gujarati, 2003). Finally, the Wald and Wooldridge tests were conducted to assess groupwise heteroskedasticity and auto-correlation respectively. Rejecting the null hypotheses of both tests indicated the existence of heteroskedasticity and auto-correlation problems. This was followed by calculating the robust standard errors to enhance the estimators' efficiency.

4. Results

Descriptive Statistics: Table 2 shows the descriptive statistics for all variables used in this study. The Tobin's Q values range from 0.2133 to 16.3353 with a mean value of 1.0265, indicating that the majority of the firms have low performance. Tobin's Q values between 0 to 1 reveal poor firm performance and may imply that the shares are undervalued while higher Tobin's Q values illustrate that a firm is increasing in value (Muhammad et al., 2021). Similar to Ramli et al. (2019), an average debt ratio of 18.75% showed that overall firms tend to use a relatively low proportion of leverage in financing their assets. Our results also showed that the board generally has three independent non-executive directors with a mean value of 3.4374. This met the requirement by the Malaysian Code on Corporate Governance (2021) in which at least half of the board should comprise independent directors.

Meanwhile, the average ownership concentration of 48.4417% was similar to the findings reported by

Mokhtar et al. (2018), representing that approximately 50% of Malaysian public listed firms belong to the majority shareholders. Furthermore, the results demonstrated an average of seven board members (mean value of 7.3541), which corresponds with the recommended optimal number of seven to eight board members for a board to function effectively (Jensen, 1993). A low mean of 0.0880 for CEO duality corroborated with the requirement by the Malaysian Code on Corporate Governance (2021) where the positions of Chairman and CEO should be held by different individuals. With regards to the control variables, the average firm age since inception was 29 years (mean value of 29.0205) while the average annual growth in sales was 13.1935% (mean value of 13.1935).

Table 2: Descriptive Statistics

Variable	Obs	Mean	Std. Dev.	Min	Max
TQ	4911	1.0911	1.0265	0.2133	16.3353
DR	4867	18.7528	15.3433	0	139.17
INDEP	4920	3.4374	1.0525	1	9
OC	4920	48.4417	17.2013	5.08	98.01
BSIZE	4920	7.3541	1.7991	3	17
DUAL	4920	0.0880	0.2833	0	1
AGE	4920	29.0205	17.1201	2	134
GROWTH	4878	13.1935	94.3395	-100	2791.94

Correlation Analysis and VIF: Table 3 exhibits the correlation coefficients and VIF values between the variables. The correlation coefficients were less than 0.80, indicating that the variables were not highly correlated. Besides, the VIF values were less than 10, signifying the inexistence of multicollinearity issues (Gujarati, 2003).

Table 3: Correlation Analysis and VIF

	TQ	DR	INDEP	OC	BSIZE	DUAL	AGE	GROWTH	VIF
TQ	1								
DR	-0.050***	1							1.03
INDEP	0.097***	0.113***	1						1.51
OC	0.086***	-0.073***	-0.026*	1					1.01
BSIZE	0.107***	0.125***	0.568***	0.011	1				1.50
DUAL	-0.047***	-0.066***	-0.075***	0.012	-0.042***	1			1.02
AGE	0.049***	0.043***	0.102***	-0.024*	0.003	-0.104***	1		1.03
GROWTH	-0.013	0.019	-0.006	0.023	-0.007	-0.007	0.009	1	1.00

Notes: ***, **, and * indicate statistical significance at the 1%, 5%, and 10% levels respectively.

Empirical Results and Discussions: Table 4 illustrates the empirical outcomes of the study where Model 1 examined the direct relationship between capital structure and firm performance while Model 2 explored the moderating effect of board independence on the relationship between capital structure and firm performance association. Overall, the results showed that both the Breusch–Pagan LM and Hausman tests were in favor of the fixed effect estimation. Further analyses of the Wald and Wooldridge tests reported the existence of heteroskedasticity and autocorrelation issues. Hence, robust standard errors were calculated to improve the efficiency of estimators.

Table 4: Estimation Results with Robust Standard Error

	Model 1	Model 2
DR	0.00015	0.00623**
	(0.0012)	(0.0031)
INDEP	-0.00723	0.0285
	(0.0185)	(0.0278)
DR*INDEP		-0.00169**
		(0.0008)
OC	-0.0056***	-0.00558***
	(0.0018)	(0.0018)
BSIZE	0.0330*	0.0335**
	(0.0170)	(0.0179)
DUAL	-0.1370	-0.136
	(0.1090)	(0.1091)
AGE	0.0200***	0.0204***
	(0.0049)	(0.0049)
GROWTH	-0.00013**	-0.00013**
	(0.00006)	(0.00006)
Constant	0.5800***	0.438**
	(0.1980)	(0.2179)
Observations	4,820	4,820
Number of FIRM	492	492
R-squared	0.031	0.033
F-Stat	3.74***	3.33***
LM test		13335.44***
Hausman test		58.50***
Heteroskedasticity		2.7e+06***
Serial Correlation		8.336***

Notes: ***, **, and * indicate statistical significance at the 1%, 5%, and 10% levels respectively

The estimation results of Model 1 showed that capital structure has an insignificant impact on firm performance. This contradicts the findings of previous studies (Ha et al., 2019; Muhammad et al., 2021; Alarussi & Alhaderi, 2018) which found that leverage significantly influences firm performance. In line with the assertion of extant empirical works such as Pham and Nguyen (2020a), board independence was introduced to validate its moderating role towards capital structure and firm performance association.

Following the addition of board independence, our results displayed a significant positive correlation between leverage and firm performance as shown in the estimation results of Model 2. This corroborates with the previous empirical works by Abdulkarim and Bahamman (2021) and Ramli et al. (2019), suggesting that higher gearing will enhance firms' profitability. The positive association is probable to the tendency of Malaysian firms to use external financing instead of internal financing to enhance their financial performance. Additionally, the findings validate the predictions of the Trade-Off Theory concerning the benefit of debt, which comes from its tax benefit and cost of debt derived from the bankruptcy costs.

Results showed a significant negative moderating effect of board independence in the capital structure and firm performance relationship. It was observed that adding independent directors to the board has negatively changed the association between debt and firm performance, which is consistent with the empirical work of Abdulkarim and Bahamman (2021). In contrast to Mubaraq, Rahayu, Saifi, and Darmawan (2021), this study implies that increasing the control exercised by independent directors to reduce agency conflicts has an adverse impact on the relationship between debt and performance. This finding recommends that an efficient mix of independent directors to the total number of board members plays a crucial role, particularly in moderating the leverage and profitability association.

Regarding the control variables, a negative significant impact was found between ownership concentration and firm performance. The finding is comparable to other studies such as Dakhlallh, Rashid, Abdullah, and

Dakhlallh (2019) and Nguyen et al. (2017). In line with the entrenchment effect hypothesis, our results signified that controlling shareholders could expropriate wealth and engage them to take actions for their advantage at the expense of the minority shareholders. Similar to Pham and Nguyen (2020b), this study found that board size is positively and significantly related to firm performance. This shows that having a greater number of board of directors can lead to better performance because they bring more experience, skills, and knowledge, particularly in dealing with various business situations. The results also demonstrated an insignificant relationship between CEO duality and firm performance. However, the effect of CEO duality on firm performance tends to be negatively consistent with the Agency Theory (Jensen mean value of Meckling, 1976). Combining both roles (CEO and chairperson of the board) generally indicates the CEO's excessive and dominant power in ruling the firm and enhances their entrenchment, consequently diminishing the firm value (Kao et al., 2019). With regards to firms' specific characteristics, firm age and growth have a positive and negative significant relationship with firm performance respectively. It is argued that older firms are more likely to benefit from experience, reputation, and economies of scale, thus generating higher revenue and profit than younger firms (Ahmed et al., 2023; Alarussi and Alhaderi, 2018). Meanwhile, Ramezani, Soenen, and Jung (2002) stated that an optimal point exists beyond which further growth will adversely affect firm performance and destroy shareholder value.

5. Conclusion

This study aimed to examine the moderating effect of board independence on the relationship between capital structure and firm performance. The empirical results revealed an insignificant relationship regarding the direct impact of capital structure on firm performance. However, further investigation was done by introducing board independence as a moderator; the results showed a positive significant relationship between capital structure and firm performance. It was also observed that board independence has a negative moderating effect on the capital structure and firm performance relationship. Such a finding recommends the imperative need for an efficient mix of independent directors to the total number of board members, particularly in moderating the association between leverage and profitability. This shows that board independence, which is one of the corporate governance mechanisms, stands as a key contingent factor that can influence the capital structure and firm performance relationship.

The findings of this study offer significant implications and better insights for investors, firm managers, and policymakers on the critical role of corporate governance mechanisms in enhancing firm performance, particularly in implementing suitable actions and policies. Nonetheless, this study has certain limitations. First, it did not disintegrate between short- or long-term debts while different types of leverage may influence firm performance in different ways. Second, future research may consider the moderating role of other corporate governance mechanisms such as ownership structure in exploring the association between capital structure and firm performance. Finally, this study was conducted based on the emerging economy of Malaysia. Future studies can undertake further empirical investigation on other emerging economies or conduct a comparison with other developing countries. The findings will contribute to a more robust conclusion to the topic.

Acknowledgment: The authors wish to thank the Faculty of Business and Management, University Teknologi MARA (UiTM) Puncak Alam for their support towards this research: 600-TNCPI 5/3/DDF (FPP) (009/2020).

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