ASSESSING THE INFLUENCE OF OWNERSHIP STRUCTURE AND BOARD DIVERSITY ON CAPITAL STRUCTURE ADJUSTMENT SPEED: EVIDENCE FROM MALAYSIA

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by

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LIST OF ABBREVIATIONS

ACCA	Association of Chartered Certified Accountants
ACE	Access, Certainty, Efficiency
ASEAN	Association of South East Asian Nations
CFA	Chartered Financial Analyst
DI	Diversity Index
EBIT	Earnings Before Interest and Taxes
GDP	Growth Domestic Product
GLC	Government Linked Company
GLIC	Government Linked Investment Company
GMM	Generalized Method of Moments
GRO	Firm Growth
IO	Institutional Ownership
INT	Interest Rates
INDLEV	Industry Median Leverage
KLSE	Kuala Lumpur Stock Exchange
MCCG	Malaysian Codes on Corporate Governance
MICG	Malaysian Institute of Corporate Governance
MM	Modigliani and Miller
OC1	Ownership Concentration of The Largest Shareholder
OC5	Ownership Concentration of Five Largest Shareholders
OLS	Ordinary Least Square
PROF	Firm Profitability
RM	Ringgit Malaysia
SE	Strategic Entities
SIZE	Firm Size
SOA	Speed of Adjustment
TAN	Firm Tangibility
VIF	Variance Inflation Factor

LIST OF SYMBOLS

>	More than
<	Less than
%	Percentage
β	A vector of coefficients estimates
λ_0	Value of coefficient estimates for lagged leverage
ε_{it}	Unobserved components of firm-specific and time-specific effect
δ_{it}	Speed of adjustment
TL*	Target leverage
L_{it}	Actual leverage for firm i, at time t
L_{it-1}	Lagged leverage for firm i
X_{it}	A vector of firm-specific determinants of firm i, at time t.
α_k	Coefficient estimates of the interaction term
Z_{it}	Factor affecting speed of adjustment

LIST OF APPENDICES

MENILAI PENGARUH STRUKTUR PEMILIKAN DAN KEPELBAGAIAN LEMBAGA PENGARAH TERHADAP KELAJUAN PELARASAN STRUKTUR MODAL: BUKTI DARI MALAYSIA

ABSTRAK

Firma yang menyimpang daripada struktur modal sasaran telah dikaitkan dengan pengurangan nilai perniagaan. Namun, pihak pemegang saham lebih mengutamakan nilai perniagaan kerana ia dapat menyumbang kepada ganjaran yang lebih besar kepada pemilik. Sekiranya, situasi di atas benar, firma tidak boleh menyimpang jauh daripada struktur modal sasaran untuk memastikan amanah pemegang saham syarikat sentiasa dilindungi. Berdasarkan model pelarasan separa struktur modal, kajian ini menganggarkan kelajuan pelarasan ke arah struktur modal sasaran terhadap 237 buah syarikat bukan kewangan yang tersenarai di Bursa Malaysia bagi tahun 2012 sehingga 2017. Di samping itu, teori agensi dan teori kepergantungan terhadap sumber daya digunakan untuk mengkaji sama ada struktur pemilikan dan kepelbagaian lembaga pengarah mempengaruhi kelajuan pelarasan struktur modal. Beralih kepada teknik penganggaran, kaedah System Generalized Methods of Moments (GMM) digunakan untuk mengatasi masalah endogeneiti dan korelasi bersiri. Kajian ini mengesahkan kewujudan struktur modal sasaran di dalam syarikat-syarikat di Malaysia seperti yang ditemui oleh kajian-kajian yang lepas. Kajian ini juga mendedahkan bahawa kelajuan pelarasan bagi sampel syarikat adalah berjulat antara 33.6% sehingga 45% setiap tahun, bergantung kepada proksi leveraj yang digunakan. Faktor-faktor yang mempengaruhi kelajuan pelarasan juga didapati bergantung kepada proksi hutang. Secara khususnya, tahap pemilikan pemegang saham didapati mempengaruhi kelajuan pelarasan ke arah sasaran leveraj. Kajian

melaporkan bahawa kelajuan pelarasan struktur modal dipercepatkan dengan kehadiran lima pemegang saham teratas dan ini hanya berlaku apabila proksi hutang diukur berdasarkan jumlah hutang kepada jumlah aset dan jumlah leveraj kepada pasaran kuasi. Sebaliknya, syarikat mengambil tempoh masa yang lebih lama untuk membuat pelarasan struktur modal dengan kehadiran pemegang saham tunggal yang besar dan ini berlaku apabila jumlah leveraj kepada pasaran kuasi digunakan sebagai ukuran leveraj. Seterusnya, pemegang saham institusi dan entiti strategik didapati memberikan impak positif dan menggunakan pengaruh mereka dalam mempercepatkan proses pelarasan struktur modal ke arah leveraj sasaran. Impak positif ini berlaku apabila jumlah leveraj berdasarkan pasaran kuasi digunakan sebagai ukuran hutang. Berkenaan dengan impak kepelbagaian dalam lembaga pengarah terhadap kelajuan pelarasan struktur modal, hasil kajian tidak dapat menyokong hipotesis pemantauan yang diketengahkan oleh teori agensi. Kepelbagaian di dalam lembaga pengarah didapati memberi impak negatif kepada kelajuan pelarasan dan ia boleh mengganggu proses pelarasan struktur modal. Beberapa faktor yang mempengaruhi kelajuan pelarasan telah dikawal di dalam kajian ini seperti saiz syarikat, tangibiliti syarikat, keuntungan syarikat, pertumbuhan syarikat, median leveraj industri, kadar faedah dan pertumbuhan KDNK. Secara kolektifnya, faktor-faktor tadbir urus korporat memberi kesan yang berbeza terhadap kelajuan pelarasan struktur modal. Penemuan kajian ini dapat menonjolkan faktor-faktor penting yang boleh mempengaruhi kelajuan pelarasan. Seterusnya, dapat membantu pengurus untuk melihat strategi yang lepas serta merasionalkan keputusan pada masa hadapan. Berkenaan dengan pemegang saham institusi, bukti menunjukkan bahawa pemegang saham institusi sentiasa memantau struktur modal firma dan memainkan peranan penting dalam memacu semangat aktivisme pemegang saham. Hasil kajian ini juga

menunjukkan bahawa kepelbagaian lembaga pengarah tidak semestinya meningkatkan peranan mereka dalam memantau dan menyelia kerana ia menyumbang kepada kelajuan pelarasan struktur modal yang lebih perlahan. Akibatnya, firma harus mempertimbangkan faedah dan kos kepelbagaian lembaga pengarah terhadap pelarasan struktur modal. Selaras dengan dasar kepelbagaian lembaga pengarah dalam syarikat, indeks kepelbagaian lembaga pengarah juga patut dipertimbangkan sebagai salah satu elemen sokongan terhadap keputusan pelabur.

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ABSTRACT

Firms that deviate from target capital structure have been associated with reduction of firm value. Yet, greater firm value is preferred by shareholders as it will contribute to high prosperity of the owners. If the condition is true, firm may not deviate too far from the target capital structure to ensure the shareholders' wealth is protected. Using partial adjustment model of capital structure, this study estimates the adjustment speed towards target capital structure based on 237 non-financial firms listed on Bursa Malaysia for the period of 2012-2017. Furthermore, agency theory and resource dependency theory are the bedrock of this study and were used to investigate whether ownership structure and diversity of board directors influence speed of adjustment. As for the estimation technique, system generalized methods of moments (GMM) is employed to overcome the endogeneity and serial correlation problems. This study validates the existence of target capital structure in Malaysian firms found in previous studies and revealed that the speed of adjustment for the sample firms ranges between 33.6% to 45% annually, depending on the leverage proxies used. Factors affecting the adjustment speed are also found to be reliance on the proxies of debt. Specifically, the adjustment speed towards the target debt depends on the level of ownership concentration. The results report that greater adjustment speed is observed with the presence of top five shareholders when using book leverage of total debt to assets and quasi market leverage. Contrarywise, firms took longer time in adjusting their leverage with the presence of single large shareholder when using quasi

market leverage. Further, both institutional shareholders and strategic entities exert positive influence on speed of adjustment when using quasi market leverage. With regard to the impact of board diversity on speed of adjustment, the findings in this study do not support the monitoring hypothesis driven by the agency theory. The adjustment speed is found to be negatively influenced by board diversity as heterogenous board could disrupt the capital structure adjustment process. Several factors affecting speed of adjustment are controlled in this study and these include firm size, firm tangibility, firm profitability, firm growth, industry median leverage, interest rates and GDP growth. Collectively, corporate governance attributes have a distinct effect on capital structure adjustment speed. Notably, the findings of this study highlight significant factors that could influence adjustment speed which further assist managers to reflect their past strategies and to rationalise future decision. With regards to institutional shareholders, the evidence implies that institutional shareholders monitor firm capital structure and uphold the spirit of shareholders' activism. The result of this study also implies that board diversity may not necessarily improve monitoring and advising roles as it contributes to slower adjustment speed. As a result, firm should outweigh the benefits and costs of board diversity towards capital structure adjustment decision. In line with the mandatory disclosure of board diversity policy, the information of board diversity index is also worth considering as part of supporting elements towards investor's decisions.

CHAPTER 1

INTRODUCTION

1.1 Background of Study

Capital structure is a major area of interest within the field of corporate finance. It is defined as the total mix of external funds used by the firm to finance business operation (Myers, 2013). The most basic components of capital structure are debt and equity. Both differ in terms of their cash flow and control rights. According to Welch (2017), debt has the primary rights towards cash flow distribution and it can lead to bankruptcy if firm fails to meet their payment obligation. Whereas, equity received the balance after debt obligation has been met and hold a certain control of the firm unless firm is in financial distress. The information of the capital structure is often important for shareholders and potential investors since it signals the financial state of a firm. Nevertheless, an ideal firm capital structure decision remains one of the unresolved topics in the finance literature.

The trade-off theory is fundamental to optimise capital structure, a means where firm value can be maximised. Kraus and Litzenberger (1973) proposed an optimal capital structure can be reached through the trade-off between the tax advantage of debt and the costs of bankruptcy. Such static model of trade-off theory also suggests that any deviation from the target should be removed instantly as it reduces the firm value (Frank & Goyal, 2007). However, in an imperfect capital market, owners of a firm should not only consider the bankruptcy cost, as other factors such as managerial moral hazards and transaction cost may inhibit the firm from being at the target (Welch, 2017).

Later studies that recognising the dynamic nature of capital structure motivate researchers to understand further on capital structure adjustment. The role of capital structure adjustment is to reduce the gap between the actual and the target leverage as large leverage deviation would decrease the firm value (Chang et al., 2014). The consequence of suboptimal leverage may also reduce firm performance. A study by Amjed and Shah (2016) found a positive relationship between speed of adjustment and firm performance. The result highlights an increase in one unit of adjustment speed may increase firm performance by 28.36%. In other words, firms that have large deviation between actual and target leverage perform worse and vice versa. Hence, it is important for firms to pursue towards the target leverage for improved firm performance.

In practice, survey evidence have shown that firms around the world set a specific target debt and adjust towards it in the long-term. Based on European and US sample firms, Brounen et al., (2004) reveal firms in Netherlands and Germany have among the highest percentages that have target debt ratio with 75% and 71.2% respectively. Their survey also highlights 83.2% of the US firms have a target debt ratio, which corroborate the findings of Graham and Harvey (2001). Meanwhile, Bancel and Mittoo (2004) reveal that almost three fourth of European sample firms have a target leverage and 54% of managers found maintaining a specific target is considered an important capital structure decision. Likewise, in Malaysia, Mat Nor et al. (2012) found 64% of the sample firms have somewhat tight and strict target debt ratio.

A growing body of literature has shown capital structure is estimated to reach at certain average speed of adjustment, however there is no consensus agreed on

specific magnitude of adjustment rate (Faulkender et al., 2010; Flannery & Rangan, 2006; Memon et al., 2020). In the case of Malaysia, Haron, Ibrahim, Mat Nor & Ibrahim (2013) reveal the adjustment rate of nonfinancial firm during 2000-2009 is 57% per year, while a later study who used a similar sample year but using system GMM method finds that the adjustment rate is 38.6% per year (Matemilola et al., 2015). Later study by Abdeljawad & Mat Nor (2017) found Malaysian firms on average adjustment a slow rate of 12.7% per year. The heterogeneity in speed of adjustment in previous studies is also found to be sensitive to econometric methods (Frank & Goyal, 2007; Getzmann et al., 2010).

Likewise, the focus is also shifted in exploring factors affecting adjustment speed (Haron, Ibrahim, Mat Nor, & Ibrahim, 2013; Memon, Shah Syed, Ghumro, & Rus, 2020; Supra, Narender, Jadiyappa, & Girish, 2016). Researchers argue it would take sometimes for firms to adjust their leverage towards the target as this often driven by adjustment costs (Frank & Goyal, 2007). In most of studies setup, the adjustment costs may appear in terms of refinancing cost (Liao, Mukherjee, & Wang, 2015), transaction cost (Faulkender, Flannery, Hankins, & Smith, 2012), macroeconomic conditions and business cycle effects (Baum, Caglayan, & Rashid, 2016; Cook & Tang, 2010; Drobetz et al., 2015; Mai et al., 2017), legal and financial traditions (Öztekin & Flannery, 2012), cash flow realization (Faulkender et al., 2012) as well as bankruptcy cost (Elsas & Florysiak, 2011). The speed of adjustment towards the target debt is also influenced by firm characteristics including firm size, profitability, and leverage deviation from the target (Drobetz & Wanzenried, 2006; Haron et al., 2013; Mai et al., 2017). Collectively, the speed of adjustment is varied in different states of firms, industries, and countries.

A growing attention has been paid to the impact of corporate governance factors on capital structure adjustment, yet these studies only limit to certain governance features. For instance, Chang et al, (2014) revealed the speed of adjustment is varied due to corporate governance effect. In particular, firms with weak governance quality as defined by G-index of the shareholder's protection strength tend to adjust slowly towards optimal debt ratio. Another study by Liao et al., (2015) also found better corporate governance quality is associated with high leverage and faster speed of adjustment. The governance quality in their study is defined by more independent board members, greater representation of outside directors and greater presence of large institutional shareholders. Later study which compares firms' adjustment speeds in Sri Lanka and India discover CEO duality and family ownership significantly affected the speed of adjustment in both countries (Buvanendra et al., 2017). Recent study by Ezeani et al. (2022) found the speed of adjustment is improved by 3% when corporate governance mechanisms like board characteristics are included in the regression. The authors incorporate board size, board independence, board meeting and gender diversity as proxies for board characteristics. Drawing by these evidence, corporate governance has a distinct effect on adjustment speed.

In a later study by Chang et al. (2014), the authors highlight that "adjustment costs are directly related to the severity of agency conflicts" (p. 3). Majority studies of developed countries who have a dispersed ownership like United States and United Kingdom indicate the issue of managerial moral hazards including 'milking property', over or underinvestment can heighten the potential agency cost between shareholders and managers or known as principal-agent conflicts (Hillier et al, 2013; La Porta et al., 2000; Liao et al., 2015). However, researchers increasingly recognise that ownership structure across the globe does not necessarily to be dispersed. This is referring to the

case of emerging economies particularly, South East Asian countries with high ownership concentration and less protection of minority shareholders (La Porta et al., 2000; Tricker, 2015; Young et al., 2008).

The Malaysian corporate sector is known for its concentrated ownership (Chee et al., 2016; Claessens & Yurtoglu, 2013; Lean et al., 2015). The higher the concentration of ownership, the more power controlling shareholders have to influence a firm's decision as compared to minority shareholders. High ownership concentration may result in the expropriation of minority shareholders' wealth (Lean et al., 2015) where it can be in many forms, including the acquisition of more corporate assets or profits for private benefits (La Porta et al., 2000), and the hiring of less qualified family members and cronies on board (Lean et al., 2015). There is abundance of studies related to ownership concentration and corporate leverage (Abdul Razak et al., 2013; Bany Ariffin et al, 2010; Lean et al., 2015; Shahar et al., 2016), however, limited studies are conducted in the context of capital structure adjustment.

Ownership identity is another important feature of ownership structure since large shareholders differ in terms of their wealth, cost of capital, knowledge, and business affiliation (Lopez-Iturriaga & Tejerina-Gaite, 2014). Due to those characteristics, it affects the way these shareholders exercise their rights, which later provide significant consequences towards firm decision-making. There is growing research on ownership identity and capital structure adjustment, yet it has been conducted in many different contexts. In particular, the focus of previous research is mainly on family ownership (Kayo, 2018), state ownership (He & Kyaw, 2018; Nguyen, Bai, Hou, & Vu, 2020a), and institutional ownership (Liao et al., 2015). Stimulated by the paucity of studies, this study aims to explore two ownership

identities which are institutional ownership and strategic entities ownership in Malaysian context.

This study chose to discover institutional shareholders based on several reasons. First, institutional shareholders commonly involve an organisation that invests on behalf of its members (Abd Mutalib et al., 2016). Mostly, it can be either pension funds, insurance companies, mutual funds, and other financial institutions that make buy or sell decisions based on financial consideration. Although there are many different types of institutional organisation, these institutional investors do share a common objective which is to be responsible in managing funds collected from their beneficiaries (Baderi, 2014). In other words, the aim of this type of shareholder is mainly to look at the security benefits. Second, institutional shareholders have more incentive to monitor firm strategic decisions (Gillan & Starks, 2000; Grier & Zychowicz, 1994). Lastly, institutional shareholders have better access to information than individual investors (Abdul Jalil & Abdul Rahman, 2010). As such, they have more resources to evaluate firm financial performance and influence firm financing decision when it is needed to do so.

On the other hand, strategic entities ownership is selected as part of this study due to its interesting nature. Strategic entities may include nonfinancial corporations, individual investors, government/state companies, and other insider investors like families (Lopez-Iturriaga & Rodriguez-Sanz, 2012; Rapp & Trinchera, 2017). More importantly, this type of shareholders holds a substantial stake of ownership in a firm not only with an expectation of earning more returns but also looking for control and strategic purposes like firm diversification (Anderson et al., 2019; Noe, 2002). Plus, strategic entities tend to be long-term investors with abundance of resources that might

facilitate their future investment (Standard & Poor's, 2014). To a large extent, two studies have shown consistent evidence that the presence of strategic entities ownership induces a greater entrenchment effect on minority shareholders' wealth (Lopez-Iturriaga & Rodriguez-Sanz, 2012; Rapp & Trinchera, 2017). Yet, Noe (2002) exemplifies strategic entities have the capacity to undergo costly monitoring activities on firm management to prevent managerial resource diversion. The mixed evidence somehow means that strategic entities can also exert their influence on capital structure adjustment decision, yet there is less solid evidence by far that can support such inference.

Nevertheless, Buvanendra et al. (2017) argue that it is ineffective to rely solely on external governance mechanisms like ownership structure as emerging markets are commonly known for its market uncertainties and high corruption level. The need to include internal mechanism of corporate governance such as board of directors may provide a better understanding of how corporate governance impacts the adjustment process. The board members are expected to assist management with advising on strategic decision-making and monitors management to eradicate agency problem (Garner et al., 2017). However, although directors are accustomed to those two functions, they may not be the best monitors for shareholders' wealth when organisational problems are recognized (Hermalin & Weisbach, 2001). Other research also pointed out that homogeneity preferences and motives among directors would result in less scrutiny in the boardroom which worsen the agency conflicts (Bernile et al., 2018). Motivated by these scenarios, the term board diversity may act as a panacea to improve board monitoring function, enhance problem solving, and provide better understanding of the market.

Malaysia has gone through a major development in developing policy related to board diversity. Starting from introducing a target of 30% women representation in top decision-making level, the Security Commission Malaysia has formalised the diversity policy in Malaysian Code on Corporate Governance (MCCG) 2012. The listed companies are also recommended to disclose their measures taken to achieve the target. Subsequent MCCG (2017) highlights that board should be diverse in terms of skills, expertise, age, cultural background and gender. The guidelines for board diversity are further enhanced in MCCG 2021 where listed companies are required to lay out the action plan to achieve the 30% target within a timeframe of 3 years and below. To date, the Government still needs to extend the deadline on 30% women on board target due to its unsatisfactory progress. Recent figures have shown women only make up 17.7% of directors across all public listed companies as at end of 2021 as compared to previous year with 17.5% (Security Commision Malaysia, 2021). Overall, the results imply Malaysian board is under pressure to evolve albeit with incremental progress.

Recent bibliometric analysis reveals that existing studies on board diversity and capital structure have been less investigated (Khatib, Abdullah, & Elamer, 2021). The relationship between board diversity and capital structure can be explained based on two perspectives. First, based on agency theory, board diversity is expected to improve monitoring activities and control management misbehaviours (Ararat, Aksu, & Tansel Cetin, 2012). Byoun et al. (2016) found that a diverse board could help to mitigate the free cash flow problem through management monitoring for the benefit of shareholders. Second, based on resource dependency theory, board diversity would have access to information and resources that could form high-quality decisions

(Harrison & Klein, 2007). As such, when deciding suitable strategy and financial instrument to rebalance capital structure, a diverse board may be better option for firm.

Empirical evidence on the effect of board diversity and capital structure is still vague. Using both agency and resource dependency theories, Nisiyama and Nakamura (2018) report board diversity improves monitoring performance and is positively associated to firm leverage. Whereas, recent paper by Ezeani et al. (2022) utilised both theories yet, limits their study to board gender diversity. The authors found increase women on board in European firms may restraint management to increase more debt. Nevertheless, both studies only restricted to dynamic capital structure model which are still not to the extent of capital structure adjustment speed model. Thus, among the contributions of this study is to explore whether board diversity can be another factor that determine the speed of adjustment towards firm target leverage.

To date, growing studies have employed diversity indices to quantify board diversity in a firm yet, the indices are based on different attributes and context of the study. Among primary studies that adopted board diversity index are Anderson et al., (2011), Menozzi (2013), Bernille et al., (2018) and Munir et al., (2020) but, these studies respectively examine the impact of board diversity on firm performance, firm risk and firm innovation. Given this little knowledge in the context of dynamic capital structure, this study is motivated to explore the impact of board diversity on capital structure adjustment speed based on a comprehensive diversity index constructed by six elements namely, gender, age which proxied by generation, nationality, tenure of services, education level and professional expertise.

1.2 Problem Statement

Although debt financing brings benefit in terms of tax shield, there are limitations of using financial leverage. Debt may put pressure on a firm in the form of interest and principal payments obligations. When those obligations are not met, the risk of bankruptcy will be escalated. In Malaysia, ongoing cases of debt-laden companies has stirred concern over financial distress. For example, Malaysia Airlines, which despite receiving RM 6 billion capital injection in 2014 from the government through Khazanah Nasional Berhad, still needs to undertake debt restructuring plan as there is a substantial rise in debt ratio for the following years (Mohamad, Jory, Nahar, & Ajay, 2021). The airline company made a huge loss of RM2.35 billion between 2015 and 2017. As Malaysia Airlines situation would suggests, high financial leverage would increase the risk of financial distress. Even worse, the risk of too much leverage is bankruptcy. Hillier et al. (2013) emphasize that when a firm is filing for bankruptcy, there would be a transfer of ownership from shareholders to the bondholders. This is because the bondholders are legally entitled to the interest and principal payments.

Motivated by the consequences attached to the excessive use of debt financing, an area of particular concern related to trade-off theory is the suboptimal level of corporate debt (Faulkender et al., 2010; Getzmann et al., 2014). Theoretically, the value of a firm increases when optimal debt is reached (Drobetz & Wanzenried, 2006). Trade-off theory predicts that a firm will achieve its target leverage after weighing the benefits and costs of debt (Etudaiye-Muhtar & Ahmad, 2015; Hovakimian & Li, 2011; Kayo, 2018). In practice, a survey study in Malaysia found that almost 64% of nonfinancial listed firms use target debt ratio as part of their capital structure policy (Mat Nor et al., 2012). When taking into account the dynamic features of capital structure, empirical evidence show that Malaysian firms partially adjust their leverage

towards the target level in the long run (Chua et al., 2021; Haron & Ibrahim, 2012; Matemilola et al., 2015).

Researchers have documented companies are restricted to rebalance their debt ratio at the target level due to adjustment costs (Drobetz et al., 2015; Faulkender et al., 2010). Chang et al. (2014) assert that the identification of potential factors that hinder the adjustment process is important, as it may reflect the financing strategies of managers. The subject of corporate governance as one of the factors affecting speed of adjustment has received a growing attention. This is due to the ongoing cases of corporate scandals, fraud, poor conduct by companies, as well as controversial decisions made by board members (Nisiyama & Nakamura, 2018). Factors like legal and tradition (Öztekin & Flannery, 2012), agency problems between managers and shareholders (Morellec et al., 2012), corporate governance quality (Chang et al., 2014), ownership concentration (Kayo, 2018), state ownership (Nguyen et al., 2020a) and CEO education (Chua et al., 2020) are found to be significantly associated with capital structure adjustment speed. As a basis of this study, there are prevailing evidence gap related to corporate governance mechanisms in capital structure studies. Specific issues can be identified as follows.

The first concern related to the evidence gap above is the nature of concentrated ownership structure in Malaysian corporate sector. Recent evidence by Karim et al. (2022) reveals on average ownership concentration of Malaysian listed firms is 60.23%. High ownership concentration is one of the root causes of agency problems between controlling and minority shareholders (Claessens & Yurtoglu, 2013; Young et al., 2008). Ideally, large shareholders do not have rights to attend company management accounts or lead direction of the company (Tricker, 2015). However,

concerns have been reported about the power of certain large shareholders in Malaysian listed companies. Substantial shareholders influence managers to issue more debt financing to retain the control rights of controlling owners in Malaysian firms (Bany Ariffin et al., 2010; Paramanantham et al., 2018), thereby, exposing firm to risky financial condition. Hence, ownership concentration plays an important role in financing decision, making this relevant factor appeared to be worthy of further investigation in the context of capital structure adjustment.

The next specific issue relates to some misbehaviour driven by institutional shareholders. Theoretically, institutional shareholders play a crucial role in monitoring corporation and alleviating agency conflicts (Ni et al., 2020). Supporting the monitoring hypothesis, several empirical evidence have shown that institutional shareholders are negatively influenced firm's optimal leverage (Choi et al., 2020; Michaely & Vincent, 2012). However, scholars have documented some contrast behaviour related to institutional shareholders. For example, Burns et al. (2010) found the likelihood of financial misreporting is greater with the presence of institutional ownership. Distracted institutional investors also has been found to induce insufficient monitoring on management (Garel et al., 2021).

However, a recent interview-based study has documented institutional shareholders face some issues in processing company information, thus making them depend on third-party research houses rather than monitoring all investee firms by themselves (Annuar, 2020). The author also reveals that the involvement of institutional shareholders in the company strategy is restricted due to lack of expertise and knowledge, as well as regulations that limit their ownership stakes. As such, institutional shareholders may not necessarily be able to exert their rights as suggested

by the theory since institutional shareholders could subject to engagement constraints. Drawing by previous evidence, present study seeks to understand further on the influence of institutional shareholders on capital structure adjustment decision.

Another nature of large shareholders that requires attention is the strategic entities. Strategic entities have been documented as effective monitors (Noe, 2002), the catalyst that promotes changes in companies (Janowicz et al., 2004) and the resource providers (Espenlaub et al., 2016). These characteristics are expected as strategic entities hold a stable number of shareholdings in a firm (Lopez-Iturriaga & Rodriguez-Sanz, 2012). However, several empirical evidence have exposed the opportunistic behaviour of strategic entities. Janowicz et al., (2004) found this type of shareholders may limit their shared-resources with the firm prior gaining significant control over the company. Consistently, Lopez-Itturiaga et al., (2012) revealed that the entrenchment effect is greater when the nature of large shareholders involves strategic entities. Their study also found positive relationship between strategic entities and market leverage of companies. Besides, Rapp and Trinchera (2017) found limited presence of strategic entities reassures minority shareholders in gaining security returns from their investment. Taken together, this study attempts to broaden the understanding of the impact of strategic entities on capital structure adjustment speed in Malaysian context.

Watson and Ezzamel (2005) argue that in practice, legally contractual agreement does not guarantee full protection to all potential losses of shareholders. In respond to this matter, firms are expected to generate trust and confidence amongst shareholders through effective board of directors. With business globalisation and advancement in technologies, boards require directors of a diverse background

(Greene et al., 2017). The lack of relevant information may end up with insufficient advice to management. Even worse, failure in the boardroom can contribute to fraud cases, financial disasters, and expropriation of minority shareholders (Shan et al., 2013). As such, board diversity should be one of the ways to increase shareholders' trust, as shareholders expose to corporate risk yet are being excluded from decision-making.

Studies on board diversity and capital structure are still limited (Khatib et al., 2021). Using separate diversity components, Gygax et al. (2017) find that age and gender are not significant determinants of capital structure. Several other studies have scrutinised the importance of other dimensions such as ethnicity, nationality (Emoni et al., 2017) and gender (Ezeani et al. 2022). By far, less research on board diversity and capital structure adjustment speed has been reported. Current works are conducted based on limited diversity components and ignore the importance of board diversity as an organisational unit. For instance, Nguyen et al., (2020) only use gender as board diversity proxy and find more women on board enable a faster adjustment speed towards the target. Likewise, Chua et al. (2020) find CEO education effect positively on speed of adjustment. Stimulated by the scarcity of evidence, this study attempts to renew the perspective of board diversity and capital structure adjustment speed by leveraging board diversity index in the context of Malaysian firms.

1.3 Research Question

Following the above discussion of problem statements, this study attempts to assess the impact of ownership structure and board diversity on capital structure adjustment speed by answering the following research questions.

1. What is the adjustment speed of Malaysian firms towards their target capital structure?
2. To what extent does ownership structure (ownership concentration, institutional investors, and strategic entities) affect speed of adjustment towards target capital structure?
3. To what extent does board diversity (age, gender, tenure, experience, education background and nationality) influence speed of adjustment towards target capital structure?

1.4 Research Objectives

Based on the research questions mentioned before, the aim of this study is to examine how ownership structure and board diversity as corporate governance mechanisms influence the capital structure adjustment speed in Malaysian listed firms. This broad aim is recognised through obtaining specific objectives as shown below.

1. To determine the adjustment speed of Malaysian firms towards their target capital structure.
2. To investigate the effect of ownership structure on speed of adjustment towards target capital structure.
3. To examine the influence of board diversity (diversity index formulated based on age, gender, tenure, experience, education background and nationality) on speed of adjustment towards target capital structure.

1.5 Scope of the Study

This study aims to examine the impact of corporate governance mechanisms on the adjustment behaviour of capital structure in Malaysian listed firms. Specifically, this study investigates the relationship between ownership concentration, ownership identity and the influence of board diversity towards capital structure adjustment speed. Unlike other studies that measure board diversity as a single indicator, this study employs board diversity index to capture all the elements of diversity. Meanwhile, the are two assumptions hold in this study. First, consistent with Bernile et al., (2018), present study assumes a diverse board is an indicator for more variation of background within a team, which leads to high quality decision-making, and functioning as arbitrator when firm faces high risk. Since the agency conflicts are inherently emerged from divergence of ownership and control (Fama & Jensen, 1983), this study assumes the agency cost in Malaysian listed firms already exists, and thus, it would not be examined thoroughly in this study. The governance mechanisms proposed in this study, including ownership structure and diverse board, are meant to mitigate agency conflicts, as suggested by Ararat et al. (2012) and Liao et al. (2015). In other words, if the mechanism able to enhance the adjustment speed, the mechanism indirectly acts effectively in reducing agency cost. However, if the mechanism is found to have less significant effect on speed of adjustment, the governance mechanism probably does not able to reduce the agency cost on its own.

This study is limited to companies listed on the main market in Bursa Malaysia during the period 2012 to 2017. This study excludes financial listed companies because these companies are subjected to different regulations (Heng et al., 2012; Kamardin et al., 2014). The data used in this study are derived from secondary data. The financial data, the ownership structure and directors' profiles can be retrieved from Datastream

and Thomson Reuters Eikon database. Any missing data can be obtained from the annual reports.

1.6 Significance & Contributions of Study

1.6.1 Significance of Study

This study is significant for the area of research in capital structure adjustment, as it provides a novel examination of factors that affect the speed of adjustment. Specifically, the factors of corporate governance mechanisms explored in this study are ownership concentration, institutional shareholders, strategic entities, and board diversity index.

This study offers some important insights about the effect of external corporate governance mechanism like ownership structure (Watson & Ezzamel, 2005) and internal mechanism like board diversity on the capital structure adjustment. This combination of corporate governance elements could provide better information to directors of Malaysian listed companies to identify which corporate governance factors matter during the capital structure adjustment process. Not only that, by exploring ownership structure in Malaysia, this study provides valuable insight for policymakers like Securities Commission Malaysia (SC), local exchange, Bursa Malaysia, Bank Negara Malaysia, and Malaysian Institute of Corporate Governance (MICG) to assess current corporate governance framework. The results of this study will shed some light on inputs to monitor agency conflicts, as well as highlight the importance of implementing shareholder rights and minority protection in the Malaysian corporate sector.

Besides, existing shareholders and potential investors would have a better way to weigh the costs and benefits of board diversity. The multi-dimensional diversity index used in this study may provide better information to determine whether firm has a balanced board rather than looking at individual directors. This information is even more important to shareholders since the board diversity index can signal whether companies comply with the recommendations related to board composition as stated in the Malaysian Codes of Corporate Governance (MCCG). Finally, the findings of this study provide important input for future studies specifically, to academic researchers who are motivated to extend the analysis which is close to this topic. Present study extends the existing literature on ownership structure and board diversity in emerging economies. This study provides additional perspective to the study of capital structure adjustment speed by considering the unique of Malaysian institutional settings.

1.6.2 Contributions of Study

The expected contributions of the study are categorized into three aspects which are the theoretical, methodological, and practical contributions.

1.6.2(a) Theoretical Contributions

This study intends to discover the issue of large shareholders' entrenchment behaviour in high ownership concentration firms based on agency theory. The empirical evidence of the misuse of power among large shareholders is largely relates as determinants of target debt. However, studies on the entrenchment effect of high ownership concentration and capital structure adjustment speed are still lacking in Malaysia. Hence, this study attempts to validate previous literature and fills the gap in Malaysian based literature.

In addition, this study adds a new perspective to the literature by exploring the role of strategic entities in the capital structure adjustment decision. Strategic entities have been reported as a pool of large investors that focus on business synergy with the expectation of earning more returns and control purposes (Cheng et al. 2020). Their role as a monitor is known to curtail managerial moral hazards (Noe, 2002). Due to their stable stake of ownership and monitoring capacity, Anderson and Liao (2019) found the presence of strategic entities helps to mitigate excessive borrowings which can prevent suboptimal capital structure. However, several research has shown the presence of strategies entities is associated with weak shareholders' protection firm (Anderson et al., 2019; Rapp & Trinchera, 2017). Hence, the result of this study may guide future researchers to explore further the mixed evidence of strategic entities behaviour in firms, particularly, in the context of capital structure decision.

Lastly, this study extends current literature by incorporating agency theory and resource dependency theory as a mean to scrutinise the relationship between board diversity and capital structure adjustment. Through agency theory, a diverse board is expected to provide better monitoring, which can limit suboptimal financing policy and contribute to faster speed of adjustment. Meanwhile, the resource dependency theory explains the variety of information sources attached to a diverse board which then is expected to increase the quality of financing decision-making. Hence, utilising both theories, board diversity is believed to provide positive influence towards capital structure adjustment speed.

1.6.2(b) Methodological Contributions

Unlike most studies on board diversity, this study treats board diversity as a single entity by converting its elements into an index. The board diversity index would give a better view of the heterogeneity of board directors, which also plays an

important role in the way boards function. Six diversity elements are used in the board diversity index compared to previous studies that incorporate several demographic elements such as gender and nationality in their index (Miller & Triana, 2009; Zhang, 2012; Yap et al. 2017, Jebran et al. 2020). Yet, other studies that use the Blau's index of diversity typically assume that the maximum values of each diversity element rely on the number of categories which ranges from 0 to $(k-1)/k$ where k is the number of categories for each diversity element. This study contributes to the Malaysian literature using the standardized Blau Index to measure board diversity. The standardized Blau's Index of diversity has been reported to be one of the ideal measures for board diversity as the maximum index score ranges from 0 to 1. The rationalisation of using standardized Blau's Index of diversity is because it is easier to interpret and to tackle the issue with the increase of the upper limit of the Blau index when a greater number of categories is included. The standardized Blau index also allows researchers to make comparisons between diversity elements.

Furthermore, this study provides a more comprehensive approach towards the proxy for board diversity. Theoretically, board diversity refers to the variety of board members composition which involve various age, gender, nationality, education background and professional experience (Ferreira, 2010; Kang et al. 2007). However, most of the study setup is more likely to focus on specific attributes of diversity rather than consider board diversity as a single unit. A growing study has been explored the impact of board diversity on financing decision, yet the findings and the significancy are still inconsistent. In response, this study reconceptualizes board diversity variable by including six attributes which are gender, generation, nationality, tenure of service, education background, and professional expertise. The focus of this study is to analyse

the impact of board diversity as a single unit on capital structure adjustment process rather than dissecting the impact attached to each diversity attribute.

Besides, this study extends previous literature by using generation as an alternative proxy for age diversity. Typically, age diversity is measured using several subgroups of ages, for example, under 40 years old, 40 to 59 years old, or 60 to 69 years old. However, this study uses four generation cohorts as suggested by Twenge et al. (2010) and Treuren and Anderson (2010) which are silent generation, baby boomers, generation X and generation Y. The relevancy of using generation as proxy for age diversity is mainly due to the interesting combination of values, attitudes, and expectations towards the workplace environment. It is expected that with generational value diversity, boards are more diverse in knowledge and judgement, which can enhance firm decision-making.

1.6.2(c) Practical Contributions

The findings of this study may reveal some insights for regulators, investors, and corporate managers in Malaysia. The outcomes are expected to identify which corporate governance mechanism that matter during the capital structure adjustment process. Thus, it may provide some valuable information for corporate managers to outweigh the costs and benefits of adjusting leverage towards firm target debt. On the other hand, the issue of power abuse exerted by large shareholders can be validated by this study and may raise awareness that investors need to be more active in shareholder engagement. Besides, regulators can draw a more comprehensive board diversity policy rather than merely focus on setting the target of gender diversity in the boardroom. The methods of using board diversity index in this study is proposed as alternative measure to encourage firm in constructing a balance and diverse board.

1.7 Operational Definition of Key Terms

The following is a list of the key terms used in this study and their operational definition.

Capital structure adjustment speed refers to the average speed for firms to close the gap of leverage deviation between actual and target debt (Leary and Roberts, 2005). The rebalancing process of capital structure is carried out under the assumption that firms attempt to achieve its target debt ratio (Mukherjee and Mahakud, 2010).

Target capital structure is assumed to exist when there is an optimal balance between the tax benefits of debt against the costs of bankruptcy (Kraus & Litzenberger, 1973).

Debt financing is an external source of finance where it involves borrowing funds from outsiders such as financial institutions and the debt market (Nadaraja, 2008). Debt financing may also involve a short-term period where the maturity is commonly less than one year and long-term period with debt maturity more than one year (Hillier et al., 2013).

Ownership structure is described as the financial contracts established between firm and capital provider which later determine who controls the company (Watson and Ezzamel, 2005). The authors also state the contracts somehow reflects how it affects the shareholders and bondholders when the company fails to meet its financial commitment. Demsetz (1983) refers ownership structure as the level of shareholders' influence through trading shares on the market.

Board diversity refers to different characteristics of board member (Ferreira, 2010). In general, diversity in director backgrounds can help to understand the impact of group composition has on performance (Estélyi & Nisar, 2016). It also can be categorized into two types which are observable diversity elements such as gender,

nationality, age, race and non-observable elements like professional experience, skills, education (Milliken & Martins, 1996). Harjoto et al. (2019) contend that board diversity should go beyond focusing on gender. Based on management research perspective, Harrison and Klein (2007) introduced three distinctive types of board diversity which are diversity as variety, separation and disparity. This study adopts the definition by Kang et al. (2007) and Harrison and Klein (2007) of board diversity as variety, since it is a more inclusive approach.

1.8 Organization of Study

This thesis consists of five chapters. Chapter one discusses the rationale of the study, problem statement, significance and contributions and some definition of operational key terms. Chapter two reviews discussion on the underlying theories of capital structure and corporate governance, overview of capital structure in Malaysia, the development of corporate governance in Malaysia, and empirical evidence related to ownership structure and board diversity on capital structure adjustment speed. The second chapter also covers the hypothesis development and research framework that would be the basis of this study. Further, chapter three presents the research design, sampling framework, measurement of the variables, model specification and estimators of capital structure dynamics. Meanwhile, the fourth chapter reveals the results and a detailed discussion. Lastly, chapter five provides the recapitulation of the study, summary of the research findings, some implications drawn by the results, limitations, and recommendation for future study.

CHAPTER 2

LITERATURE REVIEW

This chapter presents the underpinning theories of capital structure and corporate governance used in this study. In addition, it exemplifies the background of capital structure and corporate governance in Malaysia. A broad review of capital structure adjustment is presented in the next section. The following sub-topics of ownership structure and board diversity are discussed based on previous literature. Further, control variables that involve determinants of capital structure and capital structure adjustment speed are briefly discussed. Drawing on the underlying theories and past empirical evidence, hypotheses development is developed in the next section. The research framework is tabulated in Figure 2.3 to capture the overall framework of this study.

2.1 Underpinning Theories

Following are detailed discussions in relation to the underpinning theories employed in this study which are the trade-off theory, the agency theory, and the resource dependency theory.

2.1.1 Theory of Capital Structure

The past sixty years have seen rapid advances in understanding the capital structure decision. The seminal works of Modigliani and Miller (1958, 1963) have led to path-breaking studies related to theoretical advancement and empirical studies. In a perfect market condition, Modigliani and Miller (1958) propounded that the value of a firm is independent of its capital structure. However, in the real world, the presence of corporate taxes has violated earlier perfect-market assumptions, and firm should have appropriate mix of debt and equity due to the tax advantage of debt (Modigliani