

**THE RELATIONSHIP BETWEEN CORPORATE GOVERNANCE AND
FIRM'S CAPITAL STRUCTURE: MALAYSIAN EVIDENCE**

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(Finance)**

DECLARATION

I hereby declare that this project paper is based on my original work except for the citations and quotations that are used in this study. All of them have been duly acknowledged. I also declare that this project paper has not previously been submitted to any Master's program in Universiti Utara Malaysia and any other institutions.

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ABSTRACT

This study examines the relationships between corporate governance mechanisms (bankers on board, family-owned company, CEO duality, board size, and board composition), including control variables (firm size, firm age and firm's profitability) with capital structure (debt-equity ratio) of listed companies in Malaysia. This study uses data from 60 largest listed companies, based on their market capitalization, from all sectors in Malaysia except financial institution and insurance companies. The time period covered is from 2000 to 2004, that is, after the announcement of the Malaysian Code of Corporate Governance in 2000. This study finds positive relationships between capital structure and bankers on board, family-owned company, board composition, and firm size. The relationships on family-owned company and firm size are significant, with both have strongly influencing the firms' capital structure. Profitability has a negative relationship. Board size and firm age both have negative, but significant relationships with the firms' capital structure. Generally, the existing literature on the relationships between corporate governance and capital structure has supported the findings of this study.

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Sincerely,

Muhammad Ashraf Bin Anuar.

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CHAPTER ONE

BACKGROUND OF THE STUDY

1.1 Introduction

Capital structure is how a corporation finances its assets with a mix of short-term debt, long-term debt, equity, or a mix of securities. In other words, it is how a firm develops a strategy in financing its growth and operation using different sources of financing.

Researchers have placed great concern on capital structure as one of the most important issues in corporate finance (see for example, Hasan & Butt (2009); Huang & Song (2006) and Saad (2010)). This concern arises due to the fact that the mix of financing sources, cost and availability of capital affects the decision making for the companies (Omet & Mashharawe, 2002). While considering investment strategy in the company, a basic understanding about the capital structure is necessary, particularly its level of gearing and a originating point to arrive at a conclusion.

There are a number of theories that have been forwarded to clarify the variation in capital structure for companies. Most of the theories argue that companies choose capital structure because they can verify better the costs and benefits pertaining to financial and equity financing of company, starting with capital structure irrelevance hypothesis as explained by Modigliani and Miller (1958), followed by financial

distress, agency cost and the causes of taxes and asymmetric (see Antoniou & Paudyal, 2002; Bevan & Danbolt, 2002; Rajan & Zingales, 1995). Dobrica (2007) highlights in her study the value of the institutional dimension such as taxation, bankruptcy and corporate governance problem such as agency cost and corporate financing decision problem such as transaction cost.

Corporate governance is the instrument that leads to the progression and formation that ease the creation of shareholder value through the management of corporate affairs in order to ensure the protection of the individual shareholders and collective concern of all the entire stakeholders. To get the trust of lenders and investors, good corporate governance principles form the basis that a companies has to take into consideration. An excellent corporate governance practice may influence the strategic decision of the company.

Corporate governance is commonly related to the existence of agency problem. It can be trace back to parts of the control and ownership of the firm. Agency problem occurs because of the conflict of interest within the firm between shareholders and managers.

Before the Asian financial crisis in 1997-1998, Malaysia did not pay much attention to the importance of having good corporate governance. The Asian financial crisis

reveals that poor management of corporate governance practices in Malaysia as the main cause. These include the lack of independent directors, unbiased audit committees, and corporate misbehaviours by the independent directors (Liew, 2008). Stijn Claessens, Simeon Djankove, (1999) cited lacks of lucidity, financial disclosure and accountability, and legal protection of the marginal investors against expropriation by corporate insiders.

Additionally, the big and significant involvement of major shareholders in Malaysia's companies have allowed some of the shareholders to act on their own interest which led to corporate misbehaviours (Khoo, 2003). This behaviour negatively affected the performance of Malaysian public listed companies (PLCs), resulting in the companies having higher leverage and higher amount of short-term debts (Stijn Claessens, Djankov & Colin, 2000). Apart from that, there were a number of companies such as Renong Berhad, Kentucky Fried Chicken Holding Berhad (KFCHB) and Perwaja Steel Berhad that collapsed, partly because of lack of corporate governance practices and mechanism (Haniffa & Hudaib, 2006). It was concluded that poor corporate governance practices that had led to the financial crisis of Malaysian companies in 1997-1998.

The bitter lesson learnt from the Asian financial crisis occurred had added force to corporate governance improvement in Malaysia. In order to improve corporate governance, the Malaysian government in 2000 developed the main plan by setting

up the Malaysian Code of Corporate Governance (MCCG), which identifies and provides the best framework for companies in order to practice corporate governance.

1.2 Overview of the Malaysian Code on Corporate Governance

On March 2000, Working Group on Best Practices in Corporate Governance (JPK1) was developed and issued a Malaysian Code on Corporate Governance. The Code was set out in the Hampel Report and drawn from the United Kingdom experience. However, the Code does not require companies to strictly comply with the instructions developed because each of the company should have its own strategy in developing corporate governance.

The Finance Committee on corporate governance reported on the Malaysian Code on Corporate Governance that the most important aims of the Code are to encourage disclosure, and the setting up of the principles and best practices in process and structures such as, issues on the composition of boards, procedures for recruiting new directors, functions of board committee including their activities and mandates.

Three broad approaches have been adopted by the Code. Firstly it is the prescriptive approach. This approach sets the standard of attractive practices for disclosure of compliance. Secondly it is the non-prescriptive approach that requires actual

discovery of corporate governance practice because of the different corporate governance needs of each firm. Thirdly, it is the hybrid approach. For this model, the broad principles used are capable to be applied for the varying circumstances of individual companies.

The Code consents to more flexible and practical answers to increase standards in corporate governance because it is documented in black and white and protected by statute and rule. The compliance of the code is voluntary, but companies are required to state the extent and which part that they have complied with the Code. They also need to explain any circumstances justifying the best practice of their corporate governance in the annual report. The Code provides and aims to set out principle and best practices for the companies so that they can use in their operations and process in order to achieve the best governance framework.

1.3 Problem Statement

Most corporate governance literature empirically reveals and mostly examine the impact of corporate governance on capital structure, with the bulk of the studies looking at ownership structure and value of the firm (Stun Claessens & Djankov, 2002). However, the relationship between corporate governance and capital structure has not been fully explored. Most of the studies on the impact of corporate governance on capital structure are mostly investigated in emerging and developed markets (Abor, 2007; Friend & Lang, 1988; Wen, Rwegasira, & Bilderbeek, 2002; Yermack, Ofek, & Berger, 1997). However, there is no study that has been

conducted in Malaysia that investigates the relationship between top 100 firms in corporate governance and capital structure. Most studies examined using big firm's sample data (see example Kajanathan & Lanka, 2012; Rajan & Zingales, 1995; Yusoff & Alhaji, 2012). The previous studied on the large companies because large firm are diversified and less often for bankruptcy (Ang, Chua, & McConnell, 1982). Following the previous studies which examined large companies, therefore, this present study aims to investigate the relationship between corporate governance on firm capital structure decision of Malaysia top 100 listed that are measured by market capitalization.

The present study investigates the effects of selected corporate governance characteristics, namely, bankers on board, family-owned company, CEO duality, board size and board composition because of the importance of the roles of these corporate governance mechanisms with firm's capital structure. Banker-directors are regarded as holding a consultative role, and giving important financial expertise to company's management, thus enabling the companies to bring in lower cost of funds (Cau & Stacchini, 2010). The authors also note that banker-directors are able to reduce monitoring cost and decrease risk. The lenders charged to the borrowers because they directly provide private information. Rosenstein & Wyatt (1990) believe that value of a firm may increase if the directors are the officers of financial companies.

Regarding the family-owned company, Myers & Majluf (1984) argue that companies follow a pecking order theory when they need to issue securities. The concept seems very suitable for family business as many studies (see among others, Romano & Tanewski (2000), Poutziouris (2001), and López-gracia & Sánchez-andújar (2007) have pointed out this concept. Generally, companies try to avoid increasing cost of information asymmetry and financial distress, which is associated with the climbing cost of pecking order theory. However, since the pecking order theory does not predict any special target on capital structure, family firm will be likely to use internal sources of financing, so the company's debt will low. Once the internal capital in the company is exhausted, the family owners will prefer to use debt financing to issue external equity since this can preserve family control and independence. This action will lead to higher leverage.

In terms of CEO duality, Fama & Jensen (1983) argue that the function of management decision and control function of a company should be split. The function of decision management includes the right to set off and implement the new proposal for the payment of resources of the firms whereas decision control function involve the right and action to approve the proposals. The separation of the function of decision is ensured through internal check and internal control. Thus, this will ease the awareness on consumption of the firm's resources.

For that reason, the role of chief decision management (CEO) power should be separated from the function of the chief decision control (chairman) power. The board of directors in an organization is the foremost level seat of decision control mechanism, such that, it must not be controlled by the CEO of the company. The existence of CEO duality represents the nonexistence of partition of management decision and decision control of the company, which will lead to agency problem.

Capable board is important for the achievement of a company. Board of directors is the important decision making body that have right and obligation to grant greater strategic decision making and guidance for the growth of the firm and get more return for shareholders. Adams & Mehran (2003) state that board with a big size can well supervise the action of management together by providing good expertise. On the other hand, Lipton & Lorch (1992) argue that board with a large size are less effective compared to small board because a few of the board may not contribute because of efforts of others. Fama (1980) supported by Ghosh and Sirmans (2005) state that the capability of board might be improved by the addition of outside directors together with the separation between the responsibility of CEO and chairman.

Many of the previous research explored the influence of corporate governance and capital structure in developing countries (Dittmann, Maug, & Schneider, 2009; Friend & Lang, 1988; Guner, Malmendier, and Tate, 2005; Matos, Ferreira, Matos,

& Mergulhao, 2010; Mitchell & Walker, 2008; Shuto, 2010). Furthermore, recent studies by the Booth & Deli, (1999); Brailsford, Oiiver, & Pua, (2002); Drakos and Bekiris, (2010); Kroszner and Strahan, (2002) only examined public listed companies on well developed countries which have many parallel institutional features like developed countries. The authors from these studies have found contradictory and inconclusive results.

1.4 Research Questions

In general, this current study intends to provide additional insights into the relationship between certain selected corporate governance mechanisms and capital structure decision for listed companies in Malaysia. Accordingly, the subsequent research questions in this study are:

1. Is there a positive relationship between bankers on board and capital structure decision of listed companies in Malaysia?
2. Is there a positive relationship between family-owned company and capital structure decision of listed companies in Malaysia?
3. Is there a negative relationship between CEO duality and capital structure of listed companies in Malaysia?
4. Is there a positive relationship between board size and capital structure of listed companies in Malaysia?
5. Is there a negative relationship between board composition and capital structure of listed companies in Malaysia?

6. Is there a positive relationship between firm's size and capital structure of listed companies in Malaysia?
7. Is there a positive relationship between firm's age and capital structure of listed companies in Malaysia?
8. Is there a positive relationship between firm's profitability and capital structure of listed companies in Malaysia?

1.5 Objectives of Study

The objectives of this study are:

1. To establish the relationship between the bankers on board of companies and the capital structure decision of listed companies in Malaysia
2. To examine the relationship between family-owned company of companies and capital structure decision of listed companies in Malaysia
3. To examine the relationship between the CEO duality of companies and capital structure decision of listed companies in Malaysia
4. To examine the relationship between board size of companies and capital structure decision of listed companies in Malaysia
5. To examine the relationship between board composition and capital structure decision of listed companies in Malaysia.
6. To examine the relationship between firm's size and capital structure decision of listed companies in Malaysia.

7. To examine the relationship between firm's age and capital structure decision of listed companies in Malaysia.
8. To examine the relationship between firm's profitability and capital structure decision of listed companies in Malaysia.

1.6 Significance of the study

In the marketplace, either firm is financing decision to use debt or equity is an important issue. Various countries from the huge research body are still looking at this issue. A number of literature concerning the association between corporate governance factor and capital structure have been conducted in the European region (see for example, Booth & Deli, 1999). In contrast, this present study is undertaken with the aim of specifically examining the relationship between corporate governance and capital structure in Malaysia after the introduction of Malaysian Code on Corporate Governance, which took place after the 1997-1998 Asian financial crisis.

Since the global crisis, the government of Malaysia has come out with a series of legislative reform to get back the confidence of investors. The Code of Corporate Governance in Malaysia issued in 2000 systematized a best practice for good governance and provided a comprehensive corporate governance structure and internal process. It is thus crucial to study the trend in corporate governance. The

methodology that is adopted in this current study reflects those applied by Boone, Casares Field, Karpoff, & Raheja, (2007) and Linck, Netter, & Yang, (2008).

A major contribution of this study is the usage of different corporate governance variables in association with capital structure, as compared to other previous studies in Malaysia that have looked at capital structure and corporate governance (see example Amran, 2011; Haniffa & Hudaib, 2006; Ibrahim, 2011; Liew, 2008; Saad, 2010). A comparison on these relationships between Malaysian market (representing a developing market) and the developed markets of the western countries should provide useful additional knowledge on this still complex issue of capital structure.

1.7 Organization of the Thesis

The remaining of this present study is divided into four chapters. Chapter two, the next chapter, provides a review from previous literature on corporate governance mechanisms and capital structure decision, together with hypotheses development. Chapter three outlines research framework and methodology, including research design and measurement of the data. Chapter four discusses the results of the hypotheses tested. Finally, chapter five, the conclusion, looks at the implications of the study, including suggestions and for future research.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter reviews some of the large empirical findings from the past, which have examined the association between corporate governance variables and capital structure of firms. The chapter covers specifically previous research related to the corporate governance variables, which are applied in this current study. These are bankers on board, family-owned company, CEO duality, board size and board composition.

2.2 Dependent Variable

Capital structure is defined by what particular debt and equity instrument that companies use to finance their operation and growth. It is the way with which the firm's assets are financed Capital structure is normally shown by the percentage of each type of capital (debt, common equity and preferred stock) employed by the firm.

Glen, Pinto, Edisis, Griffin, & Marsden (1994) argue that firms face important financial decision in choosing between debt and equity capital. In addition, Abor & Biekpe (2005) argue that capital structure decision is a crucial decision for any business organization because of the importance and the need to maximize return,

and for the growth of the company. Such decision can also affect a firm's ability to deal successfully with its competitive environment.

A firm has to be careful in choosing a proper capital structure portfolio because the decision is highly significant for the objective of sustainability and generation of more wealth. Furthermore, a firm can choose many varieties from many options of capital structure using different levels of debt, either in issuing a large or small sum of debt. From the capital structure options, management can lease financing, issue warrants, issue convertible bonds, sign forward contract or trade in the bond swaps (Abor, 2007).

In addition, the investment of the firms can be financed by choosing using either single sources or a combination of different sources in different forms. The main thing that the firm should consider is the sources or the combination of the financing that can maximize the value to the firm. Hence, the value of the firms is maximized by creating an optimal capital structure which is a combination of debt and equity.

Myers (2001) indicates that the study of capital structure attempts to clarify the combined sources and financing used by corporations in their activities to invest in real assets. Many studies on capital structure focus on the part of debt and equity.

2.3 Theoretical Foundation

According to Myers (2001), for the debt-equity choice, there is no universal theory and also no cause to expect one. Nevertheless, various useful conditional theories are exposed. Modigliani & Miller (1958) on their influential seminal work initiate the theory of capital structure on its effect on firm value. The authors stress that a firm's capital structure is irrelevant on the value firms based on the restrictive assumptions of perfect and complete capital markets with rational investors (MM-theory). Meanwhile, in maximizing firm value, there is no optimal capital structure.

Since then, further research on capital structure theory aims to enhance the field by concentrating on various market imperfections. The MM theory was extended by introducing financial distress and taxes (Modigliani & Miller, 1963a). According to the trade-off-theory, firms are generally financed with some proportion of debt and equity. The theory assumes that the leverage targeted by the firm is driven by bankruptcy, agency conflicts, cost of debt and taxes shield. It also emphasizes that companies can gain tax benefits by using some proportion of debt in financing the company. The benefits are realized for the companies because they are allowed to deduct the interest payment involved with debt in computing their taxable profit, which means that the higher the debt, the higher is the interest payment, but the lower will be the taxes needed to pay by the firm.

On the other hand, the usage of more debt by a firm is associated with financial distress due to the possibility that firms may default in meeting their obligation to pay debt. Therefore, this trade-off theory suggests that management of firms aim to establish an optimal capital structure which is determined by the trade-off between the cost and the benefits of borrowing debt (Ampenberger, Achleitner, & Kaserer, 2011). Other empirical studies also provide supporting evidence on the trade-off theory (Givoly, Hayn, & Ofer, 2001; Trezevant, 1992).

The other major capital structure theories are built based on the dynamic perspective on investment opportunities and information asymmetries (Ampenberger et al., 2011). Myers & Majluf (1984) and Myers (1984) developed the pecking order theory with the basic idea that information asymmetries exist between managers and investors. This theory suggests that firms are likely to use a hierarchy of financing. Firms prefer to use internal fund, and when all these internal funds are not adequate or have been exhausted, then they will tend to use external fund with debt. Thus, it supports the fact that the firms preferred to use debt than equity.

2.4 Related Theories on Capital Structure

In determining the capital structure of firm, agency cost is an essential theory that must looked into. In 1976, capital structure theory was developed by Jensen and Meckling (1976) based on agency cost. According to the authors, conflict of interest between managers and shareholders gives rise to “equity agency cost” or agency

cost. Whereas “debt-agency cost” happen because of the conflict between managers and shareholders.

According to the authors, agency cost is caused by the conflict of interest between shareholders and managers. This is known as “equity agency cost”. Agency cost is also caused by the conflict of interests between shareholders and creditors, creating “debt agency cost”. Furthermore, because of the rise of debt ratio, Jensen and Meckling (1976) argue that the agency cost would increase and equity cost would decrease. Thus, the trade-off association between two costs of corporate and capital structure would be optimal when one of them became minimal. An intermediary, such as the board of directors, is expected to resolve and reduce the conflict of interest between managers and shareholders, therefore reducing the agency cost. Hermalin & Weisbach (2003) state that the board of directors form part of the equilibrium that can find the way out of the contract problem between managers and minority interest shareholders. The authors also indicate that of the some agency problems, which are most of the companies, are facing, the board of directors was the best solution.

Resource dependence theory is another important theory in determining firm’s capital structure. This theory states that firms should find majority of resources outside. Firms do not have to control all the needed resources. The role of the board of directors is particularly effective in obtaining the essential resources for the firm.

There is therefore an essential link between board of directors and external resources/capital needed by firms (Pfeifer 1972, 1973 and Zald, 1969).

2.5 Independent Variables

2.5.1 Bankers on Board

Theoretically, most of the previous studies argue that bankers-directors (directors on the board who are bankers) can influence the capital structure of firms since they can reduce information asymmetries between the firms and the lenders. This, in return, allows the firms to increase their leverage because the bankers-director has the advantage to access the information during the process of credit concession (J. Amaro de Matos & Mergulhao, 2011). According to Dittmann, Maug, & Schneider (2009), through the board membership, the bankers gain important information and with the industry expertise, they use it to increase their lending in the whole industry.

Based on sample firms that are included in S7P index in 1992, Booth & Deli (1999) examined the probability factor that affects the existence of a banker on the board of directors. They also provide a few verifications on the relationship of banker's existence and a firm's capital structure. They specify that firms with banker-directors will have higher debt financing compared to firms without banker directors.

A positive relationship on the existence of bankers directors on company and debt ratios was found to be positive by Ciamarra (2006) when he examined a sample of firms included in S&P Index in 2002.

Based on a sample of publicly traded companies from 1998 to 2001, Burak Güner, Malmendier, & Tate, (2008), in their study indicated that, the size of loan to the corporation increases when there are bankers on corporate board. Additionally, using the sample data of US firms from 2000 to 2006, Matos & Mergulhao (2011) examined the impact of existence of bankers in the board of a corporation on its capital structure. The result showed that the existence of bankers-directors would increase the leverage ratio of the company.

Using the German non-financial companies for the period 1994 to 2005, Dittmann et al. (2009) investigated the role of bankers on the boards. They stated that for the firm in industries where the banks hold more board seats, the banks would sell more debt even for the firms that are not represented on the board. In addition, Mitchell & Walker (2008) found that the bankers on board of the firm will contribute to the increases of leverage, if they have previous lending history and association with the firm.

Conversely, Kroszner & Strahan (2002) examined the factor that can explain the distribution of bankers to boards, using a sample of Forbes companies in 1992. The authors found a negative relationship between the existence of banker-director on the board and debt ratio. Likewise, Byrd & Mizruchi (2005) examined the impact of bankers on board on firm's debt ratio; they also found a negative relationship as reported in their study.

2.5.2 Family-owned Company

Recently, in the economic and finance research, family firms gotten a tremendous attention because many study mentioned most of the firms around the world are directed and managed by the founders or their founder's family root (Burkart & Shleifer, 2002; Faccio & Lang, 2002; Morck et al., 2000). Firm ownership is widely separated even in US (Berle & Means, 1932), founding families own and control most of the large publicly firms. Most of the firms in Standard and Poor's 500 index, prevails at least one third of them are family involvement (Anderson & Reeb, 2003).

According to Fama and Jensen (1983), the relationship between family ownership and firm performance can be diverse for developing countries because of weak legal right and also weak investor protection. Because in such environment there is a good portion of ownership stakes, family ownership have more chance and more power to take actions that can be beneficial to themselves at the expense of minority shareholders.

Family members develop a number of special benefits from controlling over their company. The benefits are the risk because of bankruptcy or financial distress, as these risk are often related to the change in control in the company (McConaughy, 2008). Furthermore, family owners are exposed to financial distress because most of them hold large ownership stake that are not diversified (Andres, 2008). Since higher leverage lead to probability of financial distress, family members will take an action to lower their leverage (see for example Anderson & Reeb (2003); Andres (2008) and McConaughy (2008)) and may stick to financial conservatism (Miller & Breton-Miller, 2006).

On the contrary, Jensen & Meckling (1976) found that debt can mitigate agency problems because it reduces the agency cost of free cash flow. This happens when available cash flow for spending is trim down at the discretion of managers. There is less agency conflict between owners and managers in family businesses due to the greater owner incentive to monitor the managers and also mainly due to large undiversified ownership stakes (Anderson, Mansi, & Reeb, 2004; Andres, 2008; Jensen & Meckling, 1976; Villalonga & Amit, 2006). Family owners who hold large ownership of the firm tend to practice their own interest with most of their action not complying with the interests of other shareholders. In disciplining managers in family firms, debts play a less important device (Ampenberger, Achleitner, & Kaserer, 2011) , but debt can help to discipline the family itself (Setia-Atmaja, Tanewski & Skully, 2009).

Anderson et al. (2004); Mansi & Reeb, (2003) empirically revealed that family firms will have lower cost of debt because of their special inducement structure that reduce the agency conflict between owners and creditors. The family firm shows an adverse situation because of their position and undiversified ownership stake and because of the need to pass the firm and be the inheritor. In addition, they also want to protect their firm and the family's reputation.

In relationship to banking view, a bank can develop a personal and knowledgeable relationship with family members and executives if the families continue a long-term existence in the company. This can facilitate the raising of debt for the family firms because of the lower cost of debt offered by the financial institution.

2.5.3 CEO Duality

In general, CEO has their executive duty requiring them to make out the firm's line of employment, whereas the obligation of the chairman is to oversee the dealings of the board. When the CEO also served as a chairman on the board of directors, the existence of CEO duality in the company exists. Specifically, duality of the CEO offers better track because of one leader together with faster reaction and respond to inside and outside events. In addition, the duality of CEO expand more decision because it provides a range of power and power base (Boyd, 1995).

An agency theory, by breaking up the task of decision for the management and decision control of the company, could trim down the conflict between shareholders and management. Therefore, the main responsibility of the CEO is to manage and implement strategic decision for company while the responsibility of the board is for monitoring and supporting the decision that has been made by the CEO. On the other hand, assigning both tasks for the CEO might reduce control of the board and will negatively affect the firm performance.

The stewardship and resource dependence theory suggest that the dichotomy of the CEO would ease efficient action by the CEO and as a result would contribute to high functioning. Pfeffer (1972) argued that CEO with more power to control would be better and able to manage the company well and implement the strategic decision and they also more likely to overcome inactivity of the organization. Conversely, Brickley et al. (1997) in their study argued that there is no single best leadership formation. This is because every formation have their own cost and benefits. Therefore, the duality will be useful for some firms while a separation of the responsibility will be beneficial to other firm.

Numerous studies have examined the association between the duality of CEO and capital structure. However, the results were mixed. A study conducted by Fosberg (2004) on US corporations found CEO duality is helpful to boost the total debt's of capital structure in an organization. Abor (2007) examining Ghanaian listed firm on

corporate governance and financial decision found a positive and significant relationship between capital structure and corporate governance mechanism such as CEO duality, board size, and board composition. Ghanaian listed firms had larger board size and high debt policy, in addition to having a high percentage of CEO duality and non-executive directors. Using 600 service companies in India as a sample, Gill, Biger, Mand, & Shah (2012) tested the relationship between corporate governance factors and capital structure. Their results showed a positive association between capital structure and the CEO tenure, CEO duality, business development of company and board size.

In another study, a positive and significant relationship was found between CEO duality and capital structure when Wellalage & Locke (2012) conducted a study on 113 Sri Lankan listed companies for the period of 2006 to 2010. In addition, using a sample of 269 listed companies in the Karachi Stock Exchange (KSE), Nazir, (2012) examine the effect of CEO duality on capital structure. The author also found a positive and significant relationship between CEO duality and capital structure.

Conversely, Ganiyu & Abiodun (2012) found a negative association between CEO duality and firm's capital structure. Bodaghi and Ahmadpour (2010), examining the relationship between corporate governance mechanism and firm's capital structure using 50 Iranian listed firms in Tehran Stock Exchange, indicated negative association between debt equity ratio (a proxy for capital structure) and board size.

The authors also found that CEO duality does not influence corporate financing behavior. Bokpin and Arko (2009) examined the effect of ownership structure and corporate governance on capital structure for the period 2002-2007 using 38 firms in the Ghana Stock Exchange. Their results indicate that there is no significant relationship between capital structure and CEO duality. Saad (2010) found an insignificant relationship between CEO duality and firm's capital structure using four different sectors of 126 Malaysian publicly listed companies.

2.5.4 Board Size

Board size refers to the total number of directors that sits on the board of directors of a company (Levrau & Berghe, 2007). Board size has been found to vary from one country to another. For example, the board of directors for three European countries (United Kingdom, Switzerland and Netherlands) tend to have smaller board size (lower than ten members on board) compared to other countries like Germany, France, Italy and Belgium which have a larger board size of between thirteen and nineteen members (Heidrick & Struggles, 2007).

In Australia, the average board size is seven members on board (Ferry, 2007). Cadbury (1992) on his study reported that board structure is important in corporate governance because it helps in improving the organization. Adams & Mehran (2003) stated that, an organization with a larger board size can examine the operations more effectively because of the availability of skills and expertise in the firm. Additionally,

Bokpin & Arko (2009) found significant connection between board size and capital structure.

In contrast, Lawler & Conger (2009) in their study argued that, there is no ideal or magical size for the number of board. The right size should be driven by how effective the board can work as a team. Berger et al. (1997) found a negative relationship between size of board and firm's capital structure. However, Yermack et al. (1997) found that firms which have larger board frequently take lower leverage because they want to keep away additional risk for the investors.

2.5.5 Board Composition

The existence of non- executive directors on a company' board give a good signal to the market and outsiders because the company is being supervised efficiently, so the lenders consider the company as more credit worthy (Kwak & Lee, 2009). Both executive and non-executive directors as well as independent directors should be included in the firm's board. Additionally, both independent and outside directors of major importance because they are able to monitor the actions of executive directors so that the latter are not able to exploit shareholders' rights.

The findings by Weisbach (1988) using 495 publicly held corporations from the year 1977 to 1980 collected from New York Stock Exchange showed that companies

would be more effective in monitoring top of management when the organizations are composed of both independent and outside directors. According to Choi, Park, & Yoo (2009) there is a significant connection between outside directors and firm performance when they studied Korean firms after the Asian financial crisis. A positive relationship on the impact of independent directors was found by Abor (2007) when he studied small and medium sized companies. However, these studies have not been applied to examine larger companies and the findings may not be true for all firm sizes. Pfeffer & Salancik (1979) stated that higher representation of non-executive directors on board leads to higher debt. Jensen, (1986); & Yermack et al., (1997) argued that companies with higher level of debt relatively have more represent non executive directors whereas companies with lower representation on non-executive directors experience lower leverage.

There is also a mixed result on the effect of outside directors on capital structure. A study conducted by Wen (2002), found a negative significant relationship between non-executive directors and firm's capital structure. The author claims that non-executive directors monitor the manager more effectively and efficiently. So that the managers are forced to seek lower capital to achieve superior results. Similarly, higher representation of non-executive directors in the companies are bound to follow low financial leverage, but with higher market value of equity. Additionally, a study from a sample of 60 Chinese listed firms from the years 1996 to 1998 found a negative relationship between capital structure and board composition (Wen et al., 2002). Consistent result was found by Wang & Deng (2006) that showed a larger proportion of outside directors was negatively related with the probability of distress

among the Chinese firms. Lawler & Conger (2009) suggested that the reason behind the negative impact of outside directors and firm performance might be due to the fact that the directors are not able to authorize companies' actions and decisions because they do not have enough information on the companies.

2.6 Control Variables

2.6.1 Firm Size

Generally, a firm's capital structure is affected by the firm size. Most of the empirical literature on corporate governance widely use firm size as control variable (see for example, Brailsford et al., 2002; Mansi & Agca, 2008; Peng, 2001). They argued that firm size does affect capital structure. Larger companies are more diverse compared to small companies. They have lower variance of earnings and are therefore less disposed to bankruptcy leading to lower probability to bankruptcy and less bankruptcy cost. Castanias (1983) argued that small companies have less reason to increase debt due to relatively high cost to resolve information asymmetries with lenders. Furthermore, Cosh and Hughe (2009) stressed that because of operational risk is inversely related to company size, small companies should fairly have less debt. Conversely, Rajan and Zingales (1995) suggest a negative relationship between firm size and leverage of a company. Their finding indicated that the chance of undervaluation of new equity issue is reduced by the decrease in asymmetric information within the larger companies.

The relationship between firm size and leverage having a positive impact has been supported empirically. Several previous studies have found a positive relationship between company size and capital structure. They stated that most of the large companies are more likely to issue debt rather than equity compared to small companies, and that they are more likely to use equity financing (see for example Baral, 2004; Feidakis & Rovolis, 2007; Friend & Lang 1988).

There are a number of ways to measure size of a firm. Haniffa and Hudaib (2006) for example measured size of company based on natural logarithms of sales (LNSA) whereas Peng, Li, Xie, and Su (2009) measured size using the logarithm of book value of firm assets.

2.6.2 Firm Age

Theoretically, in order to determine capital structure, it has been suggested that firm age should play a major role. Younger firms have less opportunity to accumulate retained earnings than older firms and thus less funds are available for the firms to finance their operational growth compared to older firms which have more available funds to finance their company (Gregory, Rutherford, Oswald, & Gardiner, 2005). According to pecking order theory, the fund available in the company will be used first before external capital sources are tapped (Hall, Hutchinson, & Michaelas, 2010). Therefore, older firms are likely to use less external sources as younger firms. The younger firms have to finance their operational activities with external sources

from financial institutions (Berger et al., 1998; Gregory et al., 2005). On the other hand, several previous empirical studies have reported negative relationship between firm age and leverage (example (Ahmed et al., 2010; Gregory et al., 2005).

Moreover, a number of empirical studies which investigated the relationship between corporate governance and capital structure used widely firm age as a control variable (see Ahmed et al., 2010; Amran, 2011; Anderson, Mansi & Reeb, 2004).

2.6.3 Firm profitability

The relationship between firm profitability and capital structure has been widely suggested with two conflicting theoretical viewpoints. The first viewpoint suggests that firm profitability is positively related with the capital structure. Modigliani & Miller (1963) argued that the hypothesis of interest tax shield expects a positive relationship between firm profitability and capital structure. They suggested that companies which earned high profit rates should choose debt to benefit from the tax shield.

Conversely, according to pecking order theory, in order to finance their financing activities, companies have a pecking order where they prefer to use internal source of financing first, followed by debt and finally external equity gained from stock issues (Myers, 1984). In addition, Titman and Wessels (1988) argued that the relationship

between profitability and capital structure is estimated to be negative. They claim that all things equal, companies that are more profitable would use less debt because they are capable to internally generate funds. This viewpoint is supported by the empirical evidence from previous studies. The negative relationship between the firm profitability and capital structure are shown in previous empirical studies (see for example Bevan & Danbolt, 2002; Friend & Lang, 1988; Mazur, 2007; Omet & Mashharawe, 2002).

A number of empirical studies, such as in Arping & Sautner (2010) and Shah & Khan (2007) widely used firm profitability as a control variable to examine the relationship between corporate governance and firm's capital structure.

CHAPTER THREE

HYPHOTHESES DEVELOPMENT AND METHODOLOGY

3.1 Introduction

The previous chapter showed and reviewed prior studies on the relationship between corporate governance and capital structure studied in different countries. This chapter clarifies the framework and formulates the hypotheses. This chapter also explains the research design conducted and how the data was collected. Data are very important in guaranteeing and ensuring the reliability and accuracy of the findings in a study. This chapter also clarifies the method used in analyzing the relationships between corporate governance and capital structure of top 100 listed companies in Malaysia.

3.2 Research Framework

The present study aims at and specifically investigates the relationship between corporate governance variables on the capital structure of 100 top public listed companies on the Kuala Lumpur Stock Exchange (KLSE). Based on the reviewed literature, five main corporate governance factors have been selected to be regressed against the dependent variable, that is, the capital structure of 100 top listed companies in the Kuala Lumpur Stock Exchange. These are bankers on board, family-owned company, CEO duality, board size and board composition.

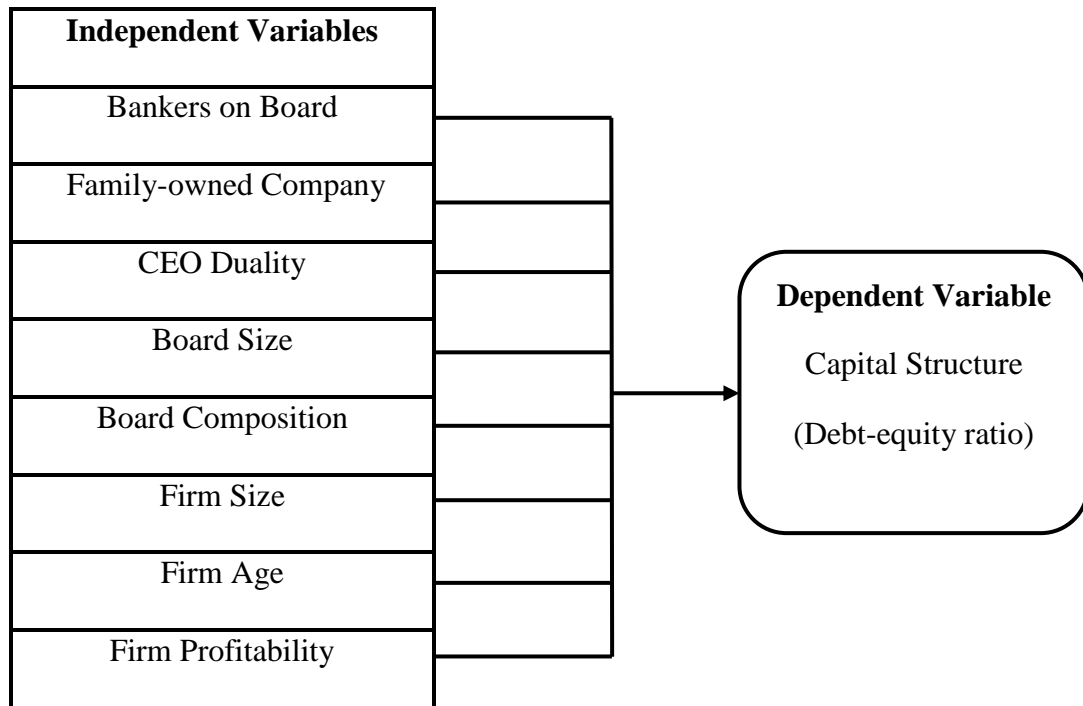


Figure 3.1: Theoretical Representation of the Relationship between Corporate Governance and Capital Structure.

Figure 3.1 shows the research model used in this study, which included five independent variables (bankers on board, family-owned company, CEO duality, board size, board composition) and three control variables (firm size, firm age and firm profitability) to be regressed against the independent variable, capital structure measured by debt-equity ratio.

3.3 Hypotheses Development

A hypotheses can be defined as an assumption and not a proven statement about a factor which a researcher is interested in to study. It is a declarative and can be examined empirically by the study. A hypothesis plays an important role in the research because it suggests the possible variable/s that can be included in the research design. By testing the hypotheses and the relationship with the variables, the answer to a particular problem are expected to be found to correct the problem that occurs (Sykes, 2000)

3.3.1 Bankers on Board

According to Dittmann et al. (2009) banks will give more debt to firms that hold more bankers on the board, and even for firms that the bankers are not present on the board. Matos & Mergulhao (2011) found that the existence of the bankers on board would increase the ratio of leverage of the company. Thus, it is hypothesized that:

H1: There is a positive relationship between bankers on board and firm debt ratio.

3.3.2 Family-owned Company

Andres (2008) argued that family owners are exposed to distress because they hold large ownership and are not diversified, as such they will make an attempt to lower debt. Thus, it is hypothesized that:

H2: There is a positive relationship between family ownership and debt ratio.

3.3.3 CEO Duality

Several studies investigating the relationship between CEO duality and capital structure found a mixed result. According to Fosberg (2004) the duality of the CEO will boost the total debt of the capital structure, whereas Saad (2010) found insignificant relationship between CEO duality and firm's capital structure using four different sectors of listed companies in Malaysia. For the purpose of this present study, it is hypothesized that:

H3: There is a negative relationship between CEO duality and debt ratio

3.3.4 Board Size

Cadbury (1992) reported that board structure is important because it helps in improving the organization. Additionally Adams and Mehran (2003) stated that larger board size in an organization can run the operation more effectively because of

the viability of expertise and skill of the directors in the firm. Accordingly, the fourth hypothesis is:

H4: There is a positive relationship between board size and firm's debt ratio.

3.3.5 Board Composition

Pfeffer & Salancik, (1979) claims that companies, which have more non-executive directors, are leads to have higher levels of debt. Furthermore, Jensen, (1986) and Yermack et al. (1997) found companies with high level of debt are relatively have more non-executive directors. Board compositions are made up from many aspects. Recent studies by Ahmadpour, Samimi, & Golmohammadi (2012) and Bodaghi & Ahmadpour, 2010), they only looked into non-executive directors. Therefore, following the previous studies, it is therefore hypothesized that:

H5: There is a positive relationship between board composition and firm's debt ratio.

3.3.6 Firm Size

Baral (2004), Feidakis & Rovolis (2007) and Friend & Lang (1988) argued that large companies more often prefer to issue debt compared to small companies which more often use equity financing. Hence, it is hypothesized that:

H6: There is a positive relationship between firm size and firm's debt ratio.

3.3.7 Firm Age

The pecking order theory suggests that company will use internal funds that are available first before tapping other external capital sources (Hall, Hutchinson, & Michaelas, 2010). Younger firms need to finance their operational and growth from external financing obtained from financial institutions compared to older firms that are less likely to be financed from external sources. Hence, it is hypothesized that:

H7: There is a positive relationship between firm age and firm's debt ratio.

3.3.8 Firm Profitability

Many studies found a negative relationship between firm profitability and capital structure (see for example, Bevan & Danbolt, 2002; Friend & Lang, 1988; Mazur, 2007; Omet & Mashharawe, 2002). Hence, it is hypothesized that:

H8: There is a negative relationship between firm profitability and firm's debt ratio.

3.4 Research Design

Hypotheses testing are conducted in this study to clarify the nature of the relationships between variables that have been chosen to represent corporate governance characteristics in influencing capital structure of a firm. This present

study selects the hypotheses testing in line to explain the dependent variable and to predict its association with the independent variables used.

This present study uses quantitative data analysis as the data gathered using quantitative data collection. The choice of the quantitative data collection in this study is because it is precise and preferable in explaining the results since quantitative data is most related to performance and all the data is in the numeric form. Numerical data can use to run the analysis

3.4.1 Data Collection

The main aim of this research is to examine the relationship between corporate governance and capital structure of 100 top listed companies in Bursa Malaysia formerly known as Kuala Lumpur Stock Exchange (KLSE).

The sample data were collected from the year 2000 until 2004. This 5-year period allows the researcher to examine the effect of the changes in corporate governance of the companies on their capital structures after the announcement of the Malaysian Code of Corporate Governance in 2000. A total of 934 companies' data were downloaded from the DataStream of the university's Sultanah Bahiyah Library. From the 934 companies, the top 100 companies which had the highest market

capitalizations (already calculated by DataStream) were selected. **(Please refer to Appendix 1 for the top 100 companies in 2000-2004).**

These top 100 companies listed on Bursa Malaysia are included except for those in the financial sector, and insurance companies (due to their special characteristic of financial ratios on these financial sectors (Guest, 2008)). Firms with missing data for these five years were also excluded. The final sample that had complete data used in this study is sixty companies **(please refer Appendix 2)**. Table 3.1 shows how the final sample was derived after applying the filters.

Number of Companies	Filters and Reasons	Authors	Balance of Companies
934 companies were downloaded from Data Streams	Taken only top 100 companies based on the market capitalization.	Gibson & Gibson, (1999); Lins & Warnock, (2004)	100
100	Exclude financial and insurance institution because of the difference on the financial part.	(Guest, 2008)	89
89	Missing data and no complete annual reports		60

Table 3.1: Final Sample After Apply Filters

3.4.1.1 Data Collection Procedures

Corporate governance mechanisms and other relevant data were collected and extracted from the companies' annual report (CAR), which were earlier downloaded from the website of Bursa Malaysia, (www.bursamalaysia.com), formally known Kuala Lumpur Stock Exchange.

Data for the five corporate governance variables (bankers on board, family-owned company, CEO duality, board size and board composition) were collected from the respective companies' annual reports by looking through corporate information, board of directors' profiles, and the statements of corporate governance. The number of directors, executive and non-executive directors are reported in the Board Balance section of the Corporate Governance Statement section in the annual report. "Executive directors" are defined as those involved in the daily operations of the company and are fully employed; they are considered as non-independent directors. On the other hand, non-executive directors do not hold any shares in a company or its subsidiaries, neither do they have any family relationships with any of the directors. They therefore do not have any conflicts of interest with the company (Lipman, 2008)

Then for the debt ratio, total asset, firm age and return on assets (ROA), data were gathered from the DataStream. Whatever data were not available from the

DataStream were then collected from financial statements in the Bursa Malaysia website.

Secondary data was collected and used in this study to ensure the availability and ease of collection to answer the research questions. Previous studies of this nature all used secondary data for analysis. The period of study was from 2000-2004, a five-year study period.

3.4.2 Ordinary Least Square Regression and Model Specification

In this study, the method of ordinary least squares (OLS) regression is used to examine the relationships between the capital structure and bankers on board, family-owned company, CEO duality, board size, board composition, including the three control variables (firm size, firm age and firm profitability).

In analyzing the capital structure relationship with the corporate governance mechanism, OLS is the common method used by the previous studies (Abor, 2007; Burak Güner et al., 2008; Omet & Mashharawe, 2002; Uwuigbe, 2014). The model developed and used in this study represents the most appropriate assumptions derived from previous literature to show the relationships between the dependent variable and the independent variables.

3.4.2.1 Model Specification

The general structural equation used in this study to test and explain the relationship is as follows:

$$\mathbf{DR} = \beta_0 + \beta_1\mathbf{BNKR} + \beta_2\mathbf{FOWN} + \beta_3\mathbf{CEO} + \beta_4\mathbf{BSZE} + \beta_5\mathbf{BCOM} + \beta_6\mathbf{FSZE} + \beta_7\mathbf{FAGE} + \beta_8\mathbf{PROF} + \varepsilon$$

Where:

DR	-	Capital Structure
BNKR	-	Bankers on Board
FOWN	-	Family-owned Company
CEO	-	CEO Duality
BSZE	-	Board Size
BCOM	-	Board Composition
FSZE	-	Firm Size
FAGE	-	Firm Age
PROF	-	Firm Profitability
ε	-	Error Term

3.5 Operational Definition and Measurement of Variables

3.5.1 Dependent Variable

This study uses firm's capital structure as the dependent variable measured by dividing the book value of total debts with equity, resulting in an equation called debt ratio. This method of measurement is consistent with that applied in previous studies (see for example, Brailsford, Oliver, & Pua, 2002; Friend & Lang, 1988; Uwuigbe, 2014)

$$\text{Debt Ratio (DR)} = \frac{\text{Total Debt}}{\text{Equity}}$$

3.5.2 Independent Variables

3.5.2.1 Bankers on Board

Following previous studies (Borokhovich, 2004; Dittmann, Maug, & Schneider, 2009), bankers on board (BNKR) is measured as a dummy variable and assumes a value of "1" if at least one member of the board is a banker, and zero if there is no banker on the board. A Dummy variable or Indicator Variable is an artificial variable created to represent an attribute with two or more distinct categories/levels. Dummy variables assign the numbers '0' and '1' to indicate membership in any mutually exclusive and exhaustive category.

3.5.2.2 Family-owned Company

Firm whose founder or a member of the family by either blood or marriage is an officer, a director, or the owner of at least 5% of the firm's equity individually or as a group (Villalonga & Amit, 2006). Following the previous study by Barth, Gulbrandsen, & Schønea, (2005) and Villalonga & Amit (2006), this variable is measured as a dummy, taking in a value of "1" if there is a family member on the board of directors of the company, and "0" otherwise.

3.5.2.3 CEO Duality

The focus of this study is also to explore the relationship between CEO duality and capital structure. When a person has both responsibility as the CEO and chairman, the possibility of the agency problem is high. The CEO who has greater control may enhance the level of debt. Therefore, significant relationship exists between CEO duality and capital structure. The variable is measured and considered as dummy variable and measured as "1" if a person holds both roles as CEO and chairman, and 0 otherwise (Abor & Fiador, 2013).

3.5.2.4 Board Size

In examining the effect of board size on capital structure, previous studies measured board size by counting the total number of directors on the board of directors of a firm (Adams and Mehran, 2003; Coles, Daniel & Naveen, 2008; Yermack, Ofek, &

Berger, 1997). The present study also uses the number of directors on the board as a measurement for board size.

3.5.2.5 Board Composition

The board composition in this present study is represented by the proportion of non-executive directors on board, and is calculated as the number of non-executive directors on the board divided by the total number of directors (see example Ahmadpour et al., 2012; Bodaghi & Ahmadpour, 2010)

3.5.3 Control Variables

3.5.3.1 Firm Size

In line with previous studies such as by Feidakis and Rovolis (2007); Ghosh and Sirmans (2005); Peng et al., (2009), this current study uses the natural logarithm of book value of total firm assets as the measurement for firm size (FSZE).

3.5.3.2 Firm Age

This study follows the measurement of firm age (FAGE) defined by Amran (2011) and Ibrahim (2011) as the number of years since a company is incorporated.

3.5.3.3 Firm Profitability

In line with Arping & Sautner (2010) and Shah & Khan (2007) used firm profitability as a control variable. The present study thus applies profitability as a control variable. The proxy for profitability is return on assets (ROA) measured by net income divided by total assets.

Table 3.2: Summary of Research Variables and Proxies Used

Variables	Proxies
<i>Dependent Variable</i>	
Debt-Equity Ratio	book value of total debt divided by common equity Brailsford, Oliver, & Pua, 2002; Friend & Lang, 1988; Uwuigbe, 2014)
<i>Independent Variables</i>	
Bankers on Board	Dummy variable. Assumes a value of one (“1”) if there is at least one member of the board is a banker, and zero (“0”) if no banker’s member on the board (Borokhovich, 2004; Dittmann, Maug, & Schneider, 2009)
Family-Owned Company	Measured as dummy “1” if there is a family member on board in the company and “0” otherwise (Barth et al., 2005; Villalonga & Amit, 2006)
CEO Duality	Dummy variable and measured as “1” if a person holds both roles as CEO and chairman and “0” otherwise (Abor & Fiador, 2013).

Board Size	Total number of directors on the board of directors of a firm (Adams & Mehran, 2003; Coles, Daniel, & Naveen, 2008; Yermack, Ofek, & Berger, 1997)
Board Composition	Number of non-executive directors divided by total number of directors on the board of directors in the firm. (Uwuigbe, 2014 and Ahmadpour et al., 2012)
<i>Control Variables</i>	
Firm Size	Natural logarithm of book value of total firm's assets. (Feidakis & Rovolis, 2007; Ghosh & Sirmans, 2005; Peng et al., 2009)
Firm Age	Number of years since the company was incorporated. (Amran, 2011; Ibrahim, 2011)
Firm Profitability	ROA (net income divided by total assets) (Arping & Sautner, 2010; Shah & Khan, 2007)

3.6 Data Analysis

The data collected in this study were analyzed using statistical software SPSS 16.0. The software provides analysis that is needed to answer the research questions through application of descriptive statistic, correlation analysis and regression analysis.

3.6.1 Descriptive Analysis

The descriptive analysis provides and summarizes a given data set which gives the mean, minimum, maximum and the standard deviation for the entire sample. The

given results from the descriptive analysis enable measure central tendency and inconsistency to be measured.

3.6.2 Multicollinearity

Accuracy of independent variables are closely related with each other in a multiple regression. In testing the multicollinearity among the variables used, tolerance and variance inflation factor (VIF) method is applied. Variables with VIF values higher than 10.0 demonstrate the existence of multicollinearity (Horimoto, 2000)

3.6.3 Correlation of Variables

The main objective in this present study is to determine the relationship between capital structure as the dependent variable and corporate governance as the independent variables. In order to examine the correlation of each variable to another, correlation matrix is used. Results from the correlation matrix analysis explain and provide the nature, direction and the significance among variables used in this study.

3.6.4 Regression Analysis

Linear regression analysis is also applied to investigate and examine the relationships between corporate governance characteristics and firm's capital structure.

3.7 Summary of the Chapter

This chapter illustrates the methodology used in this research together with an explanation on how hypotheses are developed. In addition, this chapter also describes the formulation of the theoretical framework and the methodical analysis of the data.

CHAPTER FOUR

FINDINGS AND DISCUSSION

4.1 Introduction

This chapter reports and elaborates the findings on the relationships between a firm's capital structure as the dependent variable and corporate governance mechanisms such as bankers on board, family-owned company, CEO duality, board size, and board composition as the independent variables together with three control variables namely firm size, firm age and firm profitability. Data collected from company's annual reports and the DataStream were run using several analysis, which are descriptive analysis, multicollinearity test, correlation analysis, and linear regression analysis by using Statistical Package for the Social Science version 16.0.

4.2 Descriptive Statistics

Table 4.2 presents a summary of the dependent variable and independent variables using descriptive statistics that comprises data for mean and standard deviation variables.

Table 4.1: Summary of Descriptive Statistics

Descriptive Statistics

	Minimum	Maximum	Mean	Std. Deviation
DR	0	7	.72	.910
BNKR	0	1	.27	.445
FOWN	0	1	.36	.481
CEO	0	1	.74	.438
BSIZE	4	15	9.56	1.764
BCOM	0	1	.42	.1779
FSIZE	12	18	14.48	1.148
FAGE	1	31	12.63	5.946
PROF	-18	47	7.29	7.038

Source: SPSS Result

DR: debt ratio, BNKR: bankers on board, FOWN: family-owned company, CEO: CEO duality, BSIZE: board size, BCOM: board composition, FSIZE: firm size, FAGE: firm age, PROF: profitability

Table 4.1 shows the summary results from the descriptive statistic analysis of the collected data used in this study. The result shows that the mean for DR ratio for all 60 companies is 72% and the minimum and maximum of the debt ratio is 0 and 7. The minimum and maximum of the debt ratio indicates what proportion of equity and debt the company is using to finance its assets. So that, companies in the sample are highly leveraged. The mean for BNKR is about 27% and the standard deviation is 44%. This shows the low ratio for the total number of bankers on board. The

mean for FOWN is 36% and the standard deviation is about 48%, also signifying the lower participation of family members in the sampled companies. The CEO duality showed a mean of 74% indicating that a large proportion of the top 100 companies practiced the duality for CEO responsibility. The mean for board size is 9.56 showing that all the companies in the sample have an optimal number because large companies tend to have more directors (P. M. Guest, 2009). Then, for the BCOM the mean stated is 42% and 18% for standard deviation. For FSIZE (natural log of total assets) the mean is 14 (RM14,000,000). The results indicate that most of the companies have lower total asset because the minimum stated only RM12000000 and the maximum total asset is RM18,000,000. The mean for FAGE is 13, which signifies that the average Malaysian firms' age is moderate because the value for minimum age year is 1 and the maximum value is 31. Since the standard deviation for firm age is 6%, the deviation between the ages is not high.

4.3 Multicollinearity

Multicollinearity is a statistical phenomenon when two or more variables in a regression model are highly correlated. The multicollinearity test is an important analysis because the existence of multicollinearity shows a critical issue on the regression model due to the obstacles that occurred when identifying the consequence between independent variables and dependent variable.

Hair, Tatham & Black (1995) stated that multicollinearity is one of the many ways that can be used to check the abnormal relationships that might exist among the

independent variables tested because most of the variables usually explain the result which variables are affected to be established in the study. In order to detect multicollinearity and to measure the results, the utilization of the Variance Inflation Factor (VIF) becomes an accepted method (Naser, Alkhatib & Karbhari, 2002). In the instances where the Variance Inflation Factor (VIF) is above 10, the independent variables in the study are considered as highly correlated (Silver, 1997). Thus, when running the multiple regression model, the command for multicollinearity diagnostics to include VIF is selected in the analysis. In Table 4.2, results revealed that there is no multicollinearity problem with the independent variables because all the variables show VIF values of below 10.

Table 4.2: Multicollinearity Test Summary

		Coefficient	
		Collinearity Statistics	
Model		Tolerance	VIF
1	BNKR	0.934	1.071
	FOWN	0.800	1.250
	CEO	0.897	1.115
	BSIZE	0.869	1.151
	BCOM	0.851	1.175
	FSIZE	0.758	1.319
	FAGE	0.897	1.115
	PROF	0.827	1.210

Source: SPSS Result

4.4 Correlation Analysis

In order to determine the relationship level of one variable to another, correlation analysis is used as a statistical tool analysis. The step of this analysis is acknowledged in the statistical techniques to examine and find the relationship between the dependent variable and all the independent variables that are tested in this study. Before carrying out the linear regression, and in order to establish the association between the dependent and independent variables, a correlation matrix is developed.

Table 4.3: Correlation Matrix Summary

	DR	BNKR	FOWN	CEO	BSIZE	BCOM	FSIZE	FAGE	PROF
DR	1								
BNKR	0.070	1							
FOWN	0.017	-0.175	1						
CEO	0.001	-0.021	-0.116	1					
BSIZE	-0.073	0.088	-0.010	-0.104	1				
BCOM	0.063	-0.079	-0.018	-0.207	-0.258	1			
FSIZE	0.357	0.073	-0.272	0.071	0.147	-0.048	1		
FAGE	-0.004	-0.047	-0.012	-0.080	-0.070	0.187	0.188	1	
PROF	-0.156	0.000	-0.228	0.092	0.049	-0.006	-0.244	-0.043	1

Source: SPSS Result

DR: debt ratio, BNKR: bankers on board, FOWN: family-owned company, CEO: CEO duality, BSIZE: board size, BCOM: board composition, FSIZE: firm size, FAGE: firm age, PROF: profitability

Table 4.3 reveals the correlation relationships between capital structure (debt equity ratio), corporate governance variables and control variables. From the table, results show that bankers on board, family-owned company, CEO duality, and board composition, have significant relationships with the dependent variable which is the debt ratio. Conversely, a negative relationship for board size, firm age and profitability are shown by the correlation matrix at -0.073, -0.004 and -0.156 respectively. All of these relationships are not significant with the debt ratio.

4.5 Linear Regression Analysis

In the present study, linear regression analysis is used as a statistical method to investigate the relationships that arise between the dependent variable and the five independent variables comprising bankers on board, family-owned company, CEO duality, board size, board composition and the three control variables which are firm size, firm age and profitability for the sixty top listed companies in Malaysia.

Table 4.4: Linear Regression Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	t-value
1	.421 ^a	.177	.154	.837	.662

a) Predictors: (Constant), PROF, BNKR, BCOM, CEO, FAGE, FOWN BSIZE, FSIZE

b) Dependent Variable: DR

Table 4.4 shows the result from the regression model which is presented by the R square (R^2) and adjusted R square that are used as the explanatory model. The R^2 in the table above explains by percentage of how much the influence of the independent variables and the dependent variable. The table display that is 17.7% of the independent variable in this study is explained by the dependent variable. The other remaining 82.3% of dependent variable was explained by other factors.

The 17.7% of the R^2 is acceptable for this kind of research, in corporate governance and in capital structure and corporate governance in particular because previous studies have obtained lower results. (see for example Chen (2014); Chitiavi, Gerald, Ondiek, Douglas, & Christopher (2013); Germain, Galy, & Lee (2014)).

Table 4.5: ANOVA

Model	Sum of Squares	Df	Mean Square	F	Sig.
1 Regression	43.854	8	5.482	7.822	.000
Residual	203.944	291	.701		

a) Predictors: (Constant), PROF, BNKR, BCOM, CEO, FAGE, FOWN BSIZE, FSIZE

b) Dependent Variable: DR

From the ANOVA table, it shows that the value of F statistic is 0.000. The small results (smaller than 0.05) indicates that the independent variables do a excellent job explaining the variation in the dependent variable (Poorzamani & Khademi, 2014).

Table 4.6: Summary of Linear Regression Analysis

Model	Unstandardized Coefficient		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	-3.614	0.759		-4.762	0.000
BNKR	0.135	0.113	0.066	1.196	0.233
FOWN	0.262	0.113	0.138	2.329	0.021**
CEO	-0.036	0.117	-0.017	-0.310	0.757
BSIZE	-0.067	0.029	-0.130	-2.275	0.024**
BCOM	0.372	0.295	0.073	1.262	0.208
FSIZE	0.340	0.048	0.428	7.0163	0.000***
FAGE	-0.015	0.009	-0.098	-1.749	0.081*
PROF	-0.002	0.008	-0.16	-0.267	0.790

BNKR:bankers on board, FOWN: family owned company, CEO: CEO duality, BSIZE board size, BCOM: board composition, FSIZE: firm size, FAGE: firm age, PROF:profitability

*** significant level at 0.01 (1%)

** significant level at 0.05 (5%)

* significant level at 0.10 (10%)

Table 4.5 shows the results of the coefficient linear regression for the present study.

They indicate that if the bankers on board increase by one unit, the debt ratio for the companies is increased by 0.135. For family-owned company, if it is increased by one, the debt ratio is increased by 0.262. For CEO duality, if it is increased by one, the debt ratio is decreased by 0.036, if the firm age is increased by one, the debt ratio will be decreased by -0.015. If board size is increased by one, the debt ratio is decreased by 0.067. The increase of board composition by one will increase the debt

ratio by 0.372. One unit increase of profitability will decrease the debt ratio by 0.002.

4.6 Findings and Discussion

The regression result displayed in Table 4.5 demonstrate the relationship between capital structure (debt-equity ratio) with corporate governance variables (bankers on board, family owned company, CEO duality, board size, board composition) and three control variables (firm size, firm age and profitability).

In the table, bankers on board (BNKR) show a positive relationship with capital structure. The first hypothesis is thus accepted that there is a positive relationship between BNKR and capital structure. The positive result means that if there is banker on board of the company, the debt-equity ratio would be increased and otherwise. This relationship was not significant, this finding is consistent with a previous study by Matos & Mergulhao (2011), where the authors also found that the existence of the banker in the board would raise the leverage of the company. In addition, Dittmann et al. (2009) stated that most banks would approve more debt for the companies that have bankers on the board, even if the banker is not present in the firm. Burak Güner, Malmendier & Tate (2008) also stressed that size of loan in the company would increase if bankers existed in corporate board since the bankers have expertise in the banking industry enabling them to gain important information and increase their lending in the industry (Dittmann, Maug, & Schneider, 2009).

For the family-owned company (FOWN) result from the table shows a positive relationship with capital structure. The result shows a significant relationship with the capital structure. The second hypotheses developed in this study is thus supported and confirms the positive relationship between family-owned company and firm's capital structure. The positive relationship means that the existence of a family on the board of the company would increase debt ratio of the company. This finding was supported by Serrasqueiro, Nunes, & Vidigal (2011) where they found that when internal funds are lacking in family firms the lower information asymmetry with creditors will induce the family firms to have more long term debt. The high positive relation for the family-owned company and capital structure (debt-equity ratio) is due to the fact that most of the family members holds large ownership stake and they are not diversified (Andres, 2008). This will lead to financial distress because of the frequent change in control in the company (Mcconaughey, 2008).

The next variable, CEO duality (CEO), shows a negative relationship with the firm's capital structure. The result also necessitates the third hypothesis that there is a negative relationship between CEO duality and debt ratio to be accepted. The result implies that companies where the CEO is also the chairman, would have more power to decide to take up more debt financing, an action which may not actually benefit to the company. Most companies prefer to separate the responsibility between CEO and chairman. This is because the agency problem in the company might arise in making the company's decision and business (Desender, 2009). This negative result which means that there is no strong relationship between CEO duality and capital structure

is supported by a study by Saad (2010) who found a negative relationship between CEO duality and firm's capital structure when he studied Malaysian listed firm in four different sectors. In addition, Alias, Rahim, Nor, & Yaacob, (2014) stated in their study that CEO cannot focus and manage company effectively if they hold two major responsibilities, as the CEO and the chairperson. This situation will affect company's performance, making it hard to achieve company's target. A study by Chen, Cheung, Stouraitis, & Wong (2005) suggested that the duality of CEO would be suitable for companies that are managed by family members. Chen, Lin, & Yi (2008) pointed out that most companies change the structure of their management from dual role to non dual-role. This practice is on the increase. The authors also stressed that the duality of CEO does not give much advantage to companies except for those controlled by families. Other previous studies also supported this finding as they also found a negative association between CEO duality and capital structure (see for example, Ganiyu and Abiodun, 2012).

Concerning board size (BSZE), the present study finds that board size is significant and negatively related to capital structure, and the relationship is significant. The fourth hypothesis that there is a positive relationship between board size and firm's debt ratio is rejected as our finding shows a negative relationship between these two variables. The negative relationship means that if board size increased, debt ratio would decrease and vice versa. However the relationship is significant at 5% level of confidence. This finding is supported by Berger et al. (1997) where they also found a negative relationship between board size and firm's capital structure. According to

Lawler & Conger (2009), no ideal number of board and right size that could guarantee an effective team.

For board composition (BCOM) the result reveals a positive relationship between board composition and debt ratio. That means the fifth hypothesis which states that there is a positive relationship between board composition and firm's debt ratio is accepted. The result which shows a positive relationship means that boards with more independent directors will show a higher debt-equity ratio. This finding also supported by various studies. Abor (2007) found a positive relationship when the author studies Ghanaian listed firms for small and medium sized companies. Furthermore, Choi, Park, & Yoo (2009) also found positive significant relationship for board composition for Korean firms.

In addition, from the tables it also explains the relationship between three control variables which is firm size, firm age and profitability. For the firm size, the results shows there was a positive relationship between firm size and debt ratio. Thus, it has a significant level at 1%. The positive results mean the larger the firms the debt ratio of the company will be increased. Therefore, the sixth hypothesis developed and tested in this study is accepted and confirmed. This finding is supported by several studies such as Baral (2004); Feidakis& Rovolis (2007) and Friend & Lang (1988). These authors argue that most large companies prefer to issue debt rather than

equity, compared to small companies which prefer to use equity financing for growth and operation of their companies.

Regarding the firm age, the firm age is found to have a significant and negative relationship with debt ratio. So, the seventh hypotheses is rejected in this study. The negative relationship means that the older the firms the lesser the debt ratio is. The relationship between the firm age and capital structure is significant at a level of 1%. This finding was supported by Hall, Hutchinson, and Michaelas (2010) where they argue that older companies use the funds available internally before looking for external finance.. Younger firms more often will have to finance their operational and growth requirements from external sources (Berger et al., 1998; Gregory et al., 2005).

Regarding the profitability of the firm, it is found to have a negative and significant relationship with the debt-equity ratio. The finding confirms and accepts the eighth hypotheses, which states that profitability has a negative impact on capital structure (debt equity ratio). This finding is consistent with Titman and Wessels (1988), who argued that profitable companies would use less debt because they are capable to generate the funds needed internally. The negative result for firm profitability and capital was also found and supported by many other studies (see for example Bevan & Danbolt, 2002; Friend & Lang, 1988; Mazur, 2007; Omet & Mashharawe, 2002).

4.7 Summary

This chapter discusses and explains the results that obtained from the analysis in this study which look at the relationships between the dependent variable and independent variables. All the analysis that are performed in this present study, namely descriptive analysis, multicollinearity test, correlation analysis and regression analysis are the tools to guarantee and to test the alignment of data and with the conjecture of linear regression.

The overall findings show that bankers on board, family-owned company, and board composition have positive relationships with capital structure (debt-equity ratio), with family-owned company having a significant and strong relationship. Besides that, CEO duality and board size have negative relationships with capital structure, with board size showing a significant relationship. Of the control variables, both firm age and profitability negatively affect capital structure, whilst firm size positively impacts capital structure. Firm age relationship with firm's capital structure is found to be significant.

Table 4.7: Summary of Hypotheses Tests Results

Hypothesis	Relationship	Finding	Reject / Accept Hypotheses
H₁	There is a positive relationship between bankers on board and firm's debt ratio.	Positive	Accepted
H₂	There is a positive relationship between family-owned company and firm's debt ratio	Positive	Accepted
H₃	There is a negative relationship between CEO duality and firm's debt ratio.	Negative	Accepted
H₄	There is a positive relationship between board size and firm's debt ratio.	Negative	Rejected
H₅	There is a positive relationship between board composition and firm's debt ratio	Positive	Accepted
H₆	There is a positive relationship between firm size and firm's debt ratio	Positive	Accepted
H₇	There is a positive relationship between firm age and firms debt ratio	Negative	Rejected
H₈	There is a negative relationship between firm profitability and firm's debt ratio	Negative	Accepted

CHAPTER 5

CONCLUSION

5.1 Introduction

This last chapter provides a summary of the analysis that has been carried in this study. Limitations occurred during the progress of this study and suggestions for the future research are also discussed.

5.2 Summary of the study

This present study examines the relationship between capital structure (debt-equity ratio) with five selected corporate governance characteristics (bankers on board, family-owned company, CEO duality, board size, and board composition) and three control variables (firm size, firm age and firm's profitability) for 60 top companies listed in Bursa Malaysia. The data collected in the period was after the announcement of the Malaysian Code on Corporate Governance on 2000. for the sample of years 2000 to 2004. The companies in this study were measured based on their market capitalizations. Eight hypotheses were developed and tested using linear regression to test the relationship of these variables with capital structure.

Finding show that four of the variables tested namely bankers on board, family-owned company, board composition and firm size all have positive relationships with capital structure (debt-equity ratio), whereas the other four variables namely

CEO duality, board size, firm age and firm's profitability are negatively correlated with capital structure. Family-owned company, board size, firm size and firms are found to have significant and strong relationships with the capital structure.

These findings indicate that bankers on board in the company have positively impact the capital structure. Although the relationship is not significant, the mere existence of the bankers in the board of director would surely make it easier for the companies to get more debt from outside (such as from financial institutions) and therefore increase debt ratio of the company. This finding is supported by Ciamarra (2006), who also found a similar positive relationship between bankers on board and capital structure.

The finding for family-owned company shows that there is a positive relationship between family-owned company and capital structure. The results also show a significant relationship. Andres (2008) supports the finding as he argues that for family-owned company, debt-equity ratio will always be higher because most of family members hold large ownership which is not diversified.

In terms of CEO duality, the results reveal a negative relationship between CEO duality and capital structure. The relationship is not significant, implying that that most the separation on the role of the CEO and chairman of the company is not much

of a concern. This finding is supported by Saad (2010) who also found a negative relationship between CEO duality and capital structure for four different sectors of Malaysian companies. Many companies in recent years have been observed however to have changed the structure of their boards by separating the responsibility of the CEO and chairman (Chen, Lin, & Yi, 2008).

The finding for board size indicates that it is negatively and significantly related to capital structure, meaning that when the number of board size decrease, the debt ratio of the companies also will decrease. The relationship is significant This finding is consistent with Berger et al. (1997) where the authors also found a negative result. For board composition, the finding shows a positive relationship with firm's capital structure. Even though the relationship is not significant but having non-executive directors and executive directors will increase the value of the firm's debt ratio. This finding is supported by Choi, Park, & Yoo (2009) where the authors also found a positive relationship in Korean companies.

For the control variables, the findings indicate that only firm size has a positive and significant relationship with firm's capital structure. A positive result is supported by Baral (2004); Feidakis & Rovolis (2007) Friend & Lang (1988). They argue that large firms are prefer to use debt financing compared to small firm which are more likely to use equity financing. For firm age and firm profitability, both finding show negative relationships with firm's capital structure. But only firm age is significantly

correlated with capital structure. The negative finding for firm age is supported by Berger et al., 1998; Gregory et al., 2005, in which they found that older firms prefer to use internal funds, rather than younger firms. Meanwhile, the negative finding for firm's profitability is supported by Bevan & Danbolt (2002); Friend & Lang (1988); Mazur (2007); Omet & Mashharawe (2002).

5.3 Limitations of the Study

This study has some limitations. First it concerns the unavailability of the data in company's annual reports. Some of the data that are not available in the annual reports had to be omitted from this study, thus reducing the sample size. The second limitation concerns time. This present study was completed within four months, impeding a sufficiently detailed and thorough investigation. However, even though time is limited, this research had followed proper procedures and methodology appropriate for a research of an empirical nature

5.4 Recommendations for Future Research

For future research, it is recommended for that longer study periods is used. The long and the latest year sample data is important to get different results. This recent study only covers the five years after the announcement of the Malaysian Code of Corporate Governance. The number of companies should be increased in future research in order to get better results. Besides that, future research can also increase

the number of corporate governance variables since the inclusion of additional variables should provide a more comprehensive model that can give different and latest knowledge on corporate governance in testing its relationship with capital structure.

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