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**THE IMPACT OF CAPITAL STRUCTURE AND BOARD CHARACTERISTICS
ON FIRMS PERFORMANCE: EVIDENCE FROM MALAYSIAN PLANTATION
INDUSTRY**

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Kewangan dan Perbankan**

SCHOOL OF ECONOMICS, FINANCE, AND BANKING

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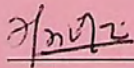
**THE IMPACT OF CAPITAL STRUCTURE AND BOARD CHARACTERISTICS ON FIRMS PERFORMANCE:
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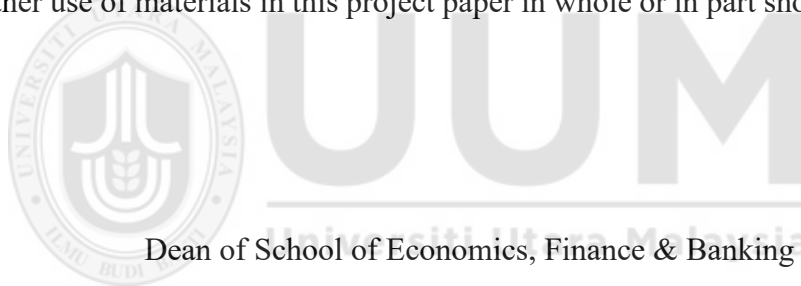
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ABSTRAK

Objektif utama dalam kajian ini adalah untuk mengkaji kesan struktur modal dan mekanisma tadbir urus dalaman iaitu ciri ahli lembaga pengarah ke atas prestasi syarikat di dalam sektor perladangan. Kajian ini juga menekankan teori-teori struktur modal dan latar belakang tadbir urus korporat yang berkaitan untuk menjelaskan prestasi syarikat perladangan di Malaysia. Sampel kajian ini merangkumi data kewangan dan bukan kewangan untuk syarikat yang disenaraikan di pasaran utama Bursa Malaysia dalam tempoh lima tahun kajian. Ia menggunakan pulangan ke atas aset dan pulangan ke atas ekuiti sebagai pemboleh ubah bersandar. Pemboleh ubah bebas adalah hutang jangka pendek, hutang jangka panjang, dan jumlah hutang manakala saiz syarikat dan kadar pertumbuhan syarikat digunakan sebagai pemboleh ubah kawalan. Untuk pemboleh ubah tadbir urus korporat, kajian ini menggunakan komposisi ahli lembaga pengarah, peranan dualiti dan saiz lembaga pengarah. Penemuan kajian mendapati saiz syarikat dan peranan dualiti mempunyai kesan positif yang signifikan ke atas pulangan atas ekuiti (ROE) dan pulangan atas aset. (ROA). Hutang jangka panjang dan jumlah hutang mempunyai hubungan negatif, manakala saiz firma dan peranan dualiti mempunyai hubungan positif terhadap pulangan atas ekuiti. Ini menunjukkan bahawa syarikat perladangan berada pada kedudukan yang lebih baik untuk meningkatkan prestasi sekiranya hutang jangka panjang kurang digunakan. Sebaliknya, mempunyai individu yang berbeza sebagai ketua dan eksekutif terbukti tidak memberikan sumbangan untuk meningkatkan tadbir urus korporat syarikat perladangan, sehingga menyebabkan kemerosotan prestasi mereka. Untuk pulangan atas aset, kajian mendapati bahawa hutang jangka pendek dan jangka panjang masing-masing menunjukkan signifikan positif pada 1% and signifikan negatif pada 5%. Penemuan ini memberikan maklumat yang berguna kepada pelabur untuk memahami bahawa ciri-ciri syarikat tertentu boleh mempengaruhi secara positif pulangan pelaburan dan kecekapan syarikat. Di samping itu, ianya dapat membantu pengurusan syarikat di sektor perladangan untuk menilai pilihan struktur modal dan tadbir urus korporat mereka, sambil membantu perniagaan untuk meningkatkan ekuiti pemegang saham dan keuntungan perniagaan.

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Kata kunci: Struktur modal, Tadbir urus korporat, Firma perladangan, Prestasi firma

ABSTRACT

The primary purpose of the study is to examine the effect of capital structure and internal corporate governance mechanism such as board characteristics on the firm's performance in the plantation sector. This study also highlights the relevant theories of capital structure and related corporate governance background to explain the performance of Malaysian plantation companies. The sample of the study consists of a financial and nonfinancial data of 44 companies listed in Main Market of Bursa Malaysia firms with five years period of study. It uses return on assets and return on equity as the dependent variables. The firm characteristics independent variables are short term debt, long term debt, and total debt while firm size and growth are used as the control variables. For corporate governance variable, this study uses composition of board, role duality and board size. Results shows that firm size and role duality have significant positive effects on both return on asset (ROE) and return on asset (ROA). While long term debt and total debt have negative relationships, firm size and role duality has a positive relationship on ROE. This shows that plantation firms are at better position to increase the performance if less long-term debt is used. On the other hand, having a different individual as chairman and executive is shown not to contribute to enhance the corporate governance of plantation companies, thus deteriorating their performance. For ROA, results show that each short term debt and long-term debt have shown significant positive at 1% and significant negative at 5% respectively. The findings provide valuable information to investor in understanding that certain firms characteristics namely firm size and long-term debt influence positively their returns on investment, and efficiency of companies. Besides, the study may help company management teams in the plantation sector to evaluate their preference of capital structure and corporate governance policies, while helping businesses to optimize the shareholder equity and business profitability.

Keywords: Capital structure, Corporate governance, Plantation firms, Firm performance

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LIST OF ACRONYMS

GDP	GROSS DOMESTIC PRODUCT
MCCG	MALAYSIA CODE OF CORPORATE GOVERNANCE
CEO	CHIEF EXECUTIVE OFFICER
NEDS	NON-EXECUTIVE DIRECTORS
MPOC	MALAYSIAN PALM OIL COUNCIL
ROA	RETURN ON ASSETS
ROE	RETURN ON EQUITY
SME	SMALL TO MEDIUM ENTERPRISE
SD	SHORT TERM DEBT
LTD	LONG TERM DEBT
TD	TOTAL DEBT
VIF	VARIANCE INFLATION FACTOR
BS	BOARD SIZE
COB	COMPOSITION OF THE BOARD
RD	ROLE DUALITY



CHAPTER ONE

INTRODUCTION

1.0 Introduction

In general, companies need funding from business owners or loans from the financial institution or capital market to purchase raw material, property, acquisition of facilities, and equipment. One of the vital financial management decisions that are undertaken by a financial manager is capital structure planning and strategy. The decision on the capital structure shall decide on the combination of the company's strategy for debt and equity to finance the organization. The company can select to finance using debt or equity in another basic principle of capital structure. Since the decision on the corporate capital structure affects firm value directly, the company needs to find the best capital structure. Yet constructing an optimal structure of capital is a dynamic undertaking (Gohar & Shoaib, 2011), as it requires switching between debt and equity choices.

Corporate governance has now become a fundamental pillar for all economic units such as the firm, the household, and the government. Many organizations incorporate the rules and practices of corporate governance to its application in various economic units. The Organization for Economic Cooperation and Development main responsible is to improve and promote corporate governance practice after financial crisis occurring in 1997 primarily affected the Asian countries in which it raised awareness of improving their accountability, and transparency standards (Ho & Wong, 2001). In Malaysia, for example, investor confidence to Malaysia market had begun to decrease due to Malaysian corporate governance standards and financial system transparency efficiency (Noordin, 1999). The strengthening of

the corporate governance control is critical for enhancing the company's overall productivity and performance.

1.1 Background of the Study

The research background initially presents Malaysia's economic prospect and the plantation sector, capital structure decision and board characteristics to the performance of the plantation company.

1.1.1 Malaysian economic growth and plantation industry

Malaysia economic growth can be an indicator to the plantation industries in terms of future prospect of the industry. Good economy outlook or growth means that more resources from the government can be distributed to support the plantation industry such as tax incentive, less reliance on foreign workers, subsidies to small farmers, job opportunities to the market. According to the recent report from the International Monetary fund (IMF, 2018), Malaysia is gradually progressing towards the status of a country with high income by rising productivity. Over seven years of economic growth record, Malaysia's economy is able to show an excellent performance of growth across the sectors including the plantation sector. Growth for the past seven years running above potential, driven by local and global demand, including agriculture product. Malaysia's previous strong GDP growth continue to encourage private consumption. New governance mechanism is significant to build transparency and accountability of government services.

The government works on a comprehensive structural reform agenda and restructure the Mid-Term Review of the 11th Malaysia Plan to help Malaysia to achieve high-income status

throughout different industries. Besides, with the active role of Bank Negara in ensuring the stability of the financial institution, Malaysia is able to cope with global economic shocks. Table of 1.1 indicates that GDP growth is considered high and that momentum expected to continue. All GDP growth was more than 4%, and on average the GDP is 5% over the years with the highest was the in year 2014.

Table 1.1: The GDP growth 2013 -2019.

Year	% growth per year (<i>compared to the previous year</i>)
2013	4.69%
2014	6.01%
2015	5.09%
2016	4.22%
2017	5.90%
2018	4.80%
2019	4.30%

Source: The Statistics Portal, 2018

Before the 1970s, the agriculture sector was the basis of Malaysia's economic growth. As of today, the Plantation Sector in Malaysia still one of the critical industries that contribute to the Malaysia economy that helps the country gross domestic product (GDP) through exports, especially commodities like palm oil, rubber, cocoa, tobacco, and pepper. Plantation commodity is also a significant contributor to the economy.

In 2018, the agriculture sector accounted for 7.3 percent (RM99.5 billion) of national GDP. The oil palm was the largest contributor to the agricultural GDP at 37.9%. The agricultural sector exported RM114,451 million in 2018 compared to RM126,492 million in 2017. In

2018, a total of 1,570,300 workers are employed in agriculture, 77.7% are occupied by men. A total of 492,400 non-citizen workers were employed (Statistics Department, 2019).

The plantation industry's value adds to the country's economy in terms of the workforce. Plantation sectors which contribute to Malaysia's economy will continue to be value-added via manufacturing, trading and branding activities. Malaysia plantation sector plays a significant role in providing food to Malaysia citizens as well as reducing the dependence on imported food from abroad. The plantation industry can have major environmental benefits. The industry is a vital factor in preserving the equilibrium of nature. It has a major environmental impact by rising the effects of global warming. It also contributes to the restoration of environment.

In order to meet the rising world population's food demand, the plantation industry capable of supplying food for saving millions of lives. In the COVID-19 pandemic, several countries and organizations, worried by the possible increase in food insecurity, are making special efforts to ensure that the plantation industry is running safely as the main sector, markets supplied well for inexpensive and nutritious food and customers still have access to and buy food amid movement restrictions and income loss. Therefore, the plantation sector is regarded by millions of people including Malaysia, as an important food supply sector that could save millions of lives, by ensuring the industry 's full operating power to provide sufficient food for its citizens, including the poor.

1.1.2 Capital structure and board characteristics on a firm's performance

The capital structure involved the company's liability and the owner's equity for the company. Proposition 1 of irrelevance theory introduced by Modigliani and Miller in 1958 indicates that the concept is not affected by debt and equity financing. The proposition suggests the leveraged firm and unleveraged firm have the same value assuming the profit margin is constant with the same estimation of future sales. The assumptions of the theory are no tax, no transaction, no bankruptcy cost, the symmetry of information, and no difference in borrowing cost. The theory has been improved in 1963 in which they consider tax shield which suggests that debt financing could reduce the tax payable by the firm.

An optimal capital structure is achievable where an optimum level between the trade-off utilization of equity owners and debt (Siddiqui and Shoaib, 2011). According to the proposition by Jensen and Meckling (1976), leverage can be used as a controlling factor in a firm. The increasing component of the leverage in the company's capital structure would force financial managers to optimize the company's profitability.

In later years, Myers (1984) claimed that the performance of a company has a positive connection with increasing debt amounts. Besides, capital structure decisions directly impact company performance (Toraman, Kihc, & Reis, 2013). Company strategy, managerial decision, and financial decision change when capital structure decisions are made. Thus, it is essential to create an optimum capital structure. Omran and Pointon (2009) highlighted the need for more studies about companies' composition capital structure especially in the developing economy and emerging market.

In Malaysia, there is research that has been published in the sector-by-sector relationship between capital structure and company performance (San & Heng, 2011; Salim & Yadav, 2012; Tan and Hamid, 2016; Hapsah S.Mohammad & Imbarine Bujang, 2019). Jensen and Meckling (1976) demonstrated that the capital structure of the company influences the conflicts between management and shareholders in the business. Manager's strategy decisions changed with the composition of debt level in the capital structure. The same view was given by researcher such as Harris and Raviv (1991). The optimal structure of capital lets managers optimizes the firm value by selecting the best debt and equity combination level in the company.

Modigliani and Miller propositions create a the theoretical fundamental of asset valuation and firm valuation with presence of debt. But with the more than sixty years of studies, it has approved that capital structure affects firm value. researchers has gradually developing a comprehensive and complex capital structure optimization to increase the firm value... However, there is still inconclusive findings that can be reached to increase the firm value.. Hence, this study will provide empirical evidence for a prospective study.

Many scholars have tried to determine the relationship between capital structure theories and a company performance influence factor, such as agency cost theory, exchange theory and pecking order theory. This study is hopefully able to fill the void in the previous studies by improving the previous literature on the relationship between capital structure and performance. In conclusion, this research extends the study of the effect on the company

financial performance of plantation firms of the capital structure and board characteristics in Malaysia.

Good corporate governance can reduce the chances of misconduct and action between executive and management. Law violations such as fraud are the most serious criminal cases. Every company must take precautionary measures to avoid financial reporting fraud that fail or disclose reports that mislead the users of the financial statements. Management fraud is primarily the responsibility of the directors and the board member to prevent and detect fraud. They are also responsible for ensuring an effective system of internal control in the company, reviewing and preparing clean financial statements

Directors and the member of the board are primarily responsible to prevent and detect the fraud in management. They are also responsible to ensure effective internal control system in the company, review and prepare clean financial statements. To achieve independence of the board to perform its responsibilities, the Malaysia Code of Corporate Governance (MCCG) 2012 has recommended the chairman of the company board and the CEO need to be a different person. This means that the chairman is also a non-executive director of the company. When chairman and CEO are assigned to be the same person, there is a risk of managing its duties. CEO with a power of management and execute activities of the operation of the company. Researcher reveals that CEO duality can maximize shareholders' value under stewardship theory which is initiated by Donaldson (Davis, 1997). Under the stewardship theory, role duality does not affect board performance and firm performance.

The CEO duty to maximize shareholder wealth by performing its responsibility. The composition of board also important corporate governance variable that might affect the firm performance. The board of director always from the combination of executive and non-executive directors. Moreover, non-executive directors providing independent oversight, idea and challenge the critical decision to the executive directors. There are specific criteria to be met to be eligible as non-executive director namely such as they are nonmajority shareholders, non family members of the executive director, not involved in daily operation, etc. Non-executive directors are assigned for improving the accountability of executive directors and reducing the agency cost to the company. In general, board composition from the member of board of directors should be balanced in term of a number of executives and non-executive director to ensure better performance For instance, Nowak and McCabe (2008) argue that balancing the number of non-executive directors (NEDs) with the executive director on the board would provide a best power or management relationship. Independent directors are responsible to provide a wide range of independent thinking and challenge the decision making for the executive director. On the contrary, other researcher provided a different result that indicate that there was no linkage between the board's independence and the CEO's duality with performance (Abdullah ,2004).

Other than CEO duality and board composition, board size is also known as corporate governance variable which could also affect firms' performance. The board size of more than ten members created difficulty for the director to perform its job by expressing their opinion and idea. Researcher recommended total number of directors must be limited to seven or eight persons (Lipton & Lorsh, 1992). A small size of board better brings advantages in term of better decision making, which allows the company operation to react to market change

(Mohamad, Rashid, & Shawtari, 2012). Large number of the board does not always help corporate performance, but there is a change to weaken the firm performance. Another researcher also found that Malaysian companies with a bigger size of the board member have a negative relationship to the return of equity (Shukeri, Shin and Shaari, 2012). The ongoing research also helps to fill in the gap and improve from the weaknesses by investigating the influence between capital structure and board characteristics to Malaysian plantation companies' performance.

1.2 Problem Statement

The importance of the plantation sector as a vital part of agricultural science is important to human survival. Our existence and survival in this world depends largely on food consumption which is mainly derived from the plantation sector. Plantation contributes to world economic growth, unemployment rate reduction, food security enhancement, and energy generation improvement (World Bank, 2019). The plantation sector able to bring poverty reduction. The significant reduction of the poverty rate and the improvement of lives in rural areas brings sustainability and development to Malaysia. Food and Agriculture Organization of the United Nations supporting countries to implement evidence-based poverty eradication strategies has been underlined, with 75% of the world's poorest people living in rural areas. This sector therefore has a vital role to play in these countries. Besides that, the plantation sectors are crucial to helping the world to respond to climate change. Agriculture sectors support rural economies in many countries and provide jobs for populations. In addition to providing food also increase the employment opportunities to a massive percentage of the population from the country. For instance, the sector provides job opportunities to 835,974 people with salaries & wages paid total of RM10.4 billion in 2017.

The agriculture sector contributed RM96.0 billion to the Malaysian Gross Domestic Product (GDP) in 2017. Exports and imports of the agriculture sector amounted to RM126million in 2017. Both exports and imports in the plantation sector showed an increased in 2017. (Department of Statistics, 2018). Table 1.2 shows the production of crops remains strong, and momentum expected to continue to increase especially with world population growth. Oil palm, paddy, natural rubber, and pepper remain essential to contribute to the Malaysia economy.

Table 1.2: *Production of crops in 2017*

Production of crops ('000 tonnes)	
Oil Palm	101,741.00
Paddy	2,568.10
Natural rubber	740.10
Pepper	30.40

Sources: (Department of Statistics Malaysia, 2018)

As part of the agriculture sector, the plantation sector always plays an essential role in developing the Malaysian economy. Plantation sectors remain a significant contribution to the Malaysian economy. Plantation sector is important for food contributions to the people in Malaysia, mainly rice and palm oil for home consumption. Besides that, the industry is also improving foreign exchange through agricultural exports. Plantation industries continue to be value-added via manufacturing, trading, and branding activities in Malaysia. According to the Malaysian Palm Oil Council (MPOC), the industry is a pillar of the Malaysian economy and plays an essential role in fulfilling the growing global. For year 2015, Malaysia Palm oils account for 39 % of world palm oil production and 44% of world exports to oversea from

Malaysia (Malaysia Palm Oil Council, 2015). Malaysia is the second most prominent producer and biggest exporters of palm oil products in the world.

Malaysia has an essential responsible in fulfilling the local and global demand for plantation sectors. In the broader picture of the sector, the strong plantation sector not only ensures food security, but also contributes to growing rural incomes by farming entrepreneurship and closing income gaps in the world. As part of our global goal to become a developed country with a per capita income of over US\$ 15,000, the plantation sector is contributing to the development of the country and is an integrated component of Malaysia's overall economy. In fact, oil palm is the top crops that added to the key economic areas that the government is promoting (Statistics Handbook Malaysia 2019)

The future growth direction of the Malaysian plantation industry is highly dependent on the trade relations with existing buyers around the world and new market to explore, such as the European market. The future growth direction of the Malaysian plantation industry is highly dependent on the open trade policy with existing buyers around the world and new market to explore, such as the European market (World Bank, 2019)

The government of Malaysia also maintains a good relationship with any trading partner worldwide and works to promote our plantation product for expanding the market share to overseas. The encouragement and support from the government help to improve all plantation company firm's value. From the capital structure perspective, the decision to finance using debt or equity financing in the plantation sector consider very important to plantation firms to maximize the share value.

From the past histories, the economic crisis that hit Malaysia stock markets including plantation sector, which has a certain extent attributed to weak corporate governance among all the country (Kim, 1998). During financial crisis in 1997, researchers saw high number large corporate failures. Corporate governance also might influence firm performance similar to corporate structure. Corporate governance practices to ensure all investor including minority shareholder that will receive sufficient and fair returns in their investments (Scheifer and Vishny ,1997). Corporate Governance provides entities with a proper guide to their actions and monitor system to the activities for a compelling performance. Malaysian Code of Corporate Governance sets out best practices to strengthen 12ehaviour12ion12 culture focus on accountability and transparency of the company (MCCG, 2000, 2007 and 2012). Practices mainly related to actions, procedures or processes required to achieve a positive outcome that able to increase the firm value to reduce agency problem. Besides that, the emergency of 12ehaviour12ion force corporate governance implementation of corporate practices is required to ensure the company follow procedure to improve firm value. (Crane & Matten,2007).

Although there are many studies and research on the effect of the capital structure and corporate governance on the company's performance, it is obvious that most researchers concentrate on general sectors. However, for the Malaysia case, only a few studies such as Tan & Hamid (2016); Tan & Sing Lin (2013) have been focused on capital structure decision impact on company of the Plantation industry. The results of two studies also show that the capital structure significantly affects the performance of companies in plantation companies in Malaysia.

Previous studies on capital structure appears to have lack of corporate governance variable and focus on either all sectors that able to examines the plantation industry firm performance with the present of debt . Although there are many research and article on the presence of capital structure and corporate governance variable on the performance or financial result of the company, the findings are inconsistent from all the research. Studies fom developed market such as United States show that company debt utilization is significantly positively linked to US company performance. (Amarjit, 2011). On the contrary, in developing markets such as China, Vijayakumaran, (2011) finds that leverage is positively related to firm performance and board.

There are many standard practices and rules that are important to mitigate agency problems in the company that able improve corporate firm performance (Vijayakumaran, 2011). Purag, Abdullah and Bujang (2016) examine the 195 family-owned company listed company listed in Bursa Malaysia that covers three years from 2009 to 2011. The result indicates a major negative association between short-term debt, long-term debt, and the board's composition. Studies showed inconsistent results between the company's gearing ratio and company financial performance. The inconclusive results therefore create gaps which require further studies on this topic. The capital structure decision made by the manager before expanding the business was necessary since the arrangement enables the company to maximize the company market value with the best composition of capital structure in managing the plantation industry related business. The enhancement of corporate governance practices require to take into the consideration that has better operating performance compared to company with poor corporate governance.

1.3 Research Objectives

This study raises objectives related to the capital structure and several board characteristics that influence on firm performance within plantation industry in Malaysian market. The research primarily aims to examine, and the related research objectives are as below:

1. To explore the impact of capital structures on the performance of companies in the company of Malaysian plantation sector.
2. To examine the effect of the size of the board on the performance of companies in the Malaysian plantation sector.
3. To identify the effect of the proportion of non-executive directors on the performance of companies in the Malaysian plantation sector.
4. Identify the role of duality in the performance of companies in the Malaysian plantation sector.

1.4 Research Question

The decision on the capital structure of the manager before the expansion of the business was important, as the plan helps the client to optimize the firm value with the best arrangement of the capital structure. Therefore, the research questions are:

1. What is the main effect of the capital structure on the company's performance among Malaysian plantation firms?
2. Is there any significant effect of the size of the board on the Plantation company's performance in Malaysia?

3. Is there any significant effect of the proportion of non-executive directors on the Plantation company's performance in Malaysia?
4. Is there any significant effect of the role duality on the performance of the plantation company in Malaysia?

1.5 Scope of Research

This research examines the effect of the capital structure decision and corporate governance practices on the performance of the Malaysian plantation firms listed on the Bursa Malaysia. This study covers seven years of the period from 2013 till 2017 with firms that currently listed with Bursa Malaysia. The scope of the survey includes all the plantation firm listed company Malaysia.

1.6 Significance of Research

This study able to contribute to firms, researchers, and investors significantly. Capital structure decision and performance of plantation companies in Malaysia can be examined and reveal and provide the view to firms, researchers, and investors. The firm is to build an adequate capital structure to increase company assets. The company's financial management's key objective to find an appropriate capital structure that will result in the lowest weighted average capital cost (WACC) and improve company financial results.

Awareness and implementation of corporate governance practices can affect the company's goal to maximize shareholder wealth based on the previous study. The principal target of the research is to help the company executive to make a better decision to improve the efficiency of firm operation and generate higher revenue and profits. The study identifies potential

threats and opportunities. It's to explore the possibilities to rectify the issue of company day to day operations that can increase shareholder wealth.

Researchers of the capital structure study able to provide useful information to other future researchers. This study helps other researchers by presenting empirical evidence on the effect on plantation company efficiency of capital structure decision and corporate governance practices. It is of important to the researcher to understand the issues in the context of individual industries, namely plantation industries and its relationship with capital structure. This research is expanding knowledge and understanding of the capital structure and corporate governance to Malaysia plantation company.

Finally, the study provides more in-depth highlight specific opportunities or warning signs to investor. This research facilitates strategic planning for the investor as the research result help in evaluating the risk associated with the corporate governance issue and high debt ratio related to company capital structure. It is able to provide useful information for the portfolio manager to make short and long term investment strategy to include plantation firm in Malaysia.

1.7 Chapter Summary

This chapter provides an introduction, context of the study, problem statements, research goals, research issue, the scope of research, the importance of the study and chapter overview.

This chapter starts with providing an introduction and review of research on capital structure and corporate governance impact on firm efficiency. Discussion of this chapter revolve

mainly for plantation industry in Malaysia. Chapter two deals with the theoretical analysis, the idea of a capital structure, the structure of capital may be a combination of debt and equities. Empirical findings show the structure of capital and board characteristics and their effect on the performance of the company. Chapter three discusses methodology adopted for this study, variables, theoretical framework, and models to complete the capital structure research. Chapter four consist of the result, findings, and analysis of the study. Finally, last chapter consist of summary of research, limitations, and recommendations from the end of the study.



CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This thesis looks at capital structure, board characteristics and organizational efficiency theories. The chapter starts with discussions on conventional theories and concept of capital structure such as Modigliani, Miller Proposition I and II, Pecking Order Theory, Trade-off Theory, Pecking order theory and agency theory. Discussion on theories also covers selected theories in corporate governance such as Stewardship theory and Resource dependency theory. This chapter also discusses the effects of previous research on the capital structure and its effect on corporate success. Section 2.2 discusses related capital structure theories and board characteristics theories. Section 2.3 of the following deals with the relevant literature review and introduces the theoretical context of the study. This section provides an overview of the chapter.

2.2 Theoretical Review

The concept and theories of capital structure is related to how the firm finances the company using debt or equity. The component of capital structure will be a mixture of partial debt and equity. There are several theories regarding the origin of capital structure. The approach gives the researcher concepts to evaluate and explain the relationship between capital structure decision that influence company financial performance. Each principle and theory of research works on its own proposal and assumption. The approach discusses commonly used to describe the behaviour of the company in the decision of capital structure. This study focusses on four capital structure theories

such as Modigliani and Miller Theory (without tax and tax), agency cost theory, pecking order theory, and trade-off theory.

2.2.1 Modigliani and Miller Theory

The Modigliani–Miller theorem is the pioneer capital structure theories with functional implications for large corporations (Braouezec, 2010). The beginning of the Modigliani–Miller theorem states that the firm value is irrelevant concerning changing leverage policy in an arbitrage-free market when there is no bankruptcy cost and no corporate income tax.

Modigliani and Miller developed the theory to another level, which included the taxes effect on the company’s capital structure (Jaros & Bartosova, 2015). The approach is based on the assumptions without incorporated the real conditions. Modigliani and Miller developed the idea in 1963 to included tax and the cost of capital. The growing debt level causes that the borrowing cost decreases under the influence of the interest tax shield, the market value of the firm increases, and they concluded the company should increase debt financing in the capital structure in the company. But it does not mean that the firm needs to maximize the debt without consideration of other costs. The firm should be to choose an acceptable level of capital structure that maximizes the total profit after taxation and minimizes the corporate tax and personal tax not only of companies but of individuals.

Modigliani–Miller’s theory made the theorem’s assumptions to organize the decision about why irrelevance often fails (Villamil, 2008). Taxes, transaction costs or bankruptcy costs, asymmetric access to the credit market, and asymmetric information are the main issue affecting the capital

structure. Modigliani–Miller’s assumptions help the firm to set conditions for arbitrage. Basically, the firm can change company strategy on capital structure decision if the taxes, bankruptcy costs, and imperfect information limit access to loans and not affecting the market (Villamil, 2008). Modigliani–Miller. mention that the Modigliani–Miller theory’s importance and contribute to the modern finance capital structure theory even with a lot of criticizing from other researchers (Ahmeti & Prenaj, 2015).

2.2.2 Trade-off theory

Trade-off theory sets a target on how much debt financing required by the firm to trade-off the tax benefits and the cost of bankruptcy. The trade-off theory created the optimal level of debt and equity combination, which is choosing the right trade-off between interest tax shields and bankruptcy cost (Ju, Parrino, Poteshman, & Weisbach, 2009). Most of the companies are low leverage ratio even with substantial tax benefits with debt financing is exempted from tax. It also shows that the bankruptcy cost is relatively small compare value of tax shield. Corporate taxes and bankruptcy costs are the significant factors affecting firm financing decisions to define the optimum capital structure. The theory able to identify the capital structures differ between difference industries, but it cannot explain the good earning companies within the industry have lower debt usage. Existing trade-off theory help the researcher to 20ehavio the optimal amount of debt, but there are no proper or exact rules on debt structure in a trade-off theory (Hackbarth, Hennessy, & Leland, 2007).

The more debt financing used by the firm, the more value the firm would be created due to the higher tax shield (Stretcher & Johnson, 2011). However, high leverage of debt composition put

the firm to higher chances of financial distress. From the beginning of the investment, the debt would be very profitable and adding the firm value at low levels, since it provides the tax shield. But at certain level of debt usage, the cost of debt will increase dramatically and surpass the tax benefits. As for firms that have an excessive debt burden; they should issue more shares, sell the business assets, or raise additional resources to rebalance the capital structure. In addition, the capital structure trade-off principle must be carefully formulated to take into account the advantages of taxable profits and the dangers of bankruptcy from excessive leverage.

2.2.3 Pecking order theory

The pecking order theory of capital structure is the most valuable theory of corporate leverage bring benefits to company to maximize their firm value. This approach assumes that the firm will prioritize its financing strategy based on internal financing such as cash in hand as the first option, followed by loan from bank and external equity investment from investors. A firm facing several elements of business financing behaviour, such as the first alternative fund will be come from internal cash flow , preferring the company to use debt over equity with the requirements of external funding required (Myers & Majluf, 1984). Undeniably, if the firm needs an external fund, they will prefer debt compare to equity because of lower borrowing costs associated with debt issues compared to equity financing.

The financing deficit requires matched dollar-for-dollar by a change in corporate debt (Frank & Goyal, 2003). The pecking order theory able to influence the facts about how companies use external funding (Fama & French, 2002). With the same order applies to the cost of being internal fund as the cheapest financing and equity as the most expensive types of financing. The financing

cost in the pecking order may change with a large amount of investment. The pecking order also explained that the most profitable firm used less leverage by lesser external debt and used more internal funds.

2.2.4 Agency cost theory

Agency cost is the conflict of interest between shareholders and managers (Harris & Raviv, 1991). The capital structure also profoundly affected by agency costs. According to Jensen and Meckling, (1976), many reasons caused a conflict of interest. The first type of conflict is between managers and shareholders who are not the owner of the firm. As a result, profit from business does not go to manager but to the shareholder. For example, managers utilize the company resources for their own and personal benefits such as corporate jets, luxury renovation, and expensive phones at the expense of shareholders. The manager managing the company but only received small profits. The agency theory describes the manager and shareholder might have their interest and agenda other than maximizing the shareholder wealth.

One of the tools to minimize the agency problem is to increase the gearing ratio from the capital structure of the firm. The agency cost control mechanism helps the manager by acting in the best interest of shareholders as it reduces the free cash flow in hand from the working capital and encourages the monitoring of management by debt providers to firm directly through the monthly loan repayments commitment (Tse & Rodgers, 2014). Increasing debt financing to the investment in the firm increases the manager's initiative to reduce the operating cost from the conflict between the manager and board of directors. Besides that, debt commitment is the fixed payment to pay out

the cash flow every loan maturity, the interest paid reduces the available cash flow to managers to gain personal benefit from the business. (Jensen, 1986).

2.2.5 Theoretical basis of corporate governance: the agency theory

The company executive not always act and work in the best interest of company shareholders when the separation of executive and ownership exists in the company. Agency theory is based on modern firms structure where there is a separation of principal and agent, and this leads to conflict of the interest between the owner and the agent (Jensen & Meckling, 1976; Eisenhardt, 1989). The Agency theory assumes that managers are taking step for self-interest. Agency theory provides a basis for corporate governance fundamental to understanding the theory that can affect company performance with the existence of corporate governance system within the company. Corporate governance practices designed to minimize agency costs, protect shareholder interests and ensure the company growth healthy. Many researchers have used the agency theory to observe the role of boards member and other connection between the governance aspects in impacting firm financial result (King, 2002; Vienot, 1995; Cadbury, 1992).

2.2.6 Stewardship theory

Although Agency theory suggests that the board and company executive have different objectives and that agents are inherently self-serving and self-centered, stewardship theory holds an completely different perspective. The stewardships viewpoint sees board of director and executives as stewards to the business. As executives always looking for maximize shareholder wealth.

Donaldson and Davis (1989) presented the first stewardship theory as a positive complement to the organization theory. Under stewardship theory, the executive officer, far from being an opportunist, simply tries to do a good job and to be a good officer for company properties.

Stewardship theory believes that the manager's decisions are influenced by non-financial reasons such as the need for accomplishment and recognition, intrinsic success fulfillment, respect for authority and work ethics. Daily and others (2003) argue that managers and managers also want to maintain their reputation as experts in decision-making. As a result, the management operates the company in a way that maximizes its financial performance, including shareholder returns, since the performance of the company directly affects its performance. Stewardship theory provided an overview of corporate governance as the superior corporate performance is connected to a majority of internal managers since they naturally work hard to maximize shareholder profit (Gaur et al., 2015)

2.2.7 Resource dependence theory

The resource dependency theory focuses on the role of the board in involving critical resources in the environment. The key role of the board is to be able to link substantial external resources (Korac et al . 2001). As board of director link the organization to the external environment and act to reduce resource dependency uncertainty. Therefore, boards consider the link between the company and the essential resources needed by the company from the external environment to achieve superior performance. The composition of the board can be seen as a response to a company's external challenges based on theory of resource dependence (Hillman et al., 2000). Therefore, the Boards serve as a joint mechanism, by which a firm links to its external environment so that resources are secured and environmental insecurity is protected. Consequently, the resource

dependence theory considers the Board a resource that not only supplements its need for other resources, but also promotes the environment and improves its performance.

2.2.8 Implication of Malaysian Corporate Governance Code (MCCG)

The Malaysian Corporate Governance Code provides businesses with best corporate governance practices. In compliance with paragraph 15.25 of the Bursa Malaysia Listing Requirements Companies shall ensure that the implementation requirements of the MCCG are set out in their Annual Report in a concise statement by their Board of Directors.

The MCCG 2017 undertakes several reforms to improve the accountability and transparency of the business culture in Malaysia and to create the conditions for retaining and enhancing investor trust. The MCCG 2017 will foster accountability and recognition of the role of corporate management in organizations through board members. The MCCG was an effective tool for strengthening Corporate Governance and had a significant influence on corporate governance (MCCG, 2017). Bhatt (2016) found that there has been a substantial increase in the performance of listed companies following Malaysian government introduction of MCCG (2000).

2.3 Review of Empirical Studies

Capital structure is the main measurement considerations impacting organizational results. Many empirical studies have been performed within sixty years from the first theory of capital structure to establish foundation of the relationship and optimal level company debt level and firm performance. The results of the empirical studies are also mixed.

Other studies conducted by Le and Phan (2017) analyse the impact of the capital structure on the performance of non-financial listing companies in Vietnam from year 2007 to 2012. The findings show that the firm performance of all debt ratios is significantly negative. The study provides empirical evidence that capital structure negatively affects company's financial performance. These findings show that ROA, ROE and Tobin Q are negatively significant to both short-term debt and total debt levels. The Vietnamese publicly traded company shows a negative relationship in Vietnamese companies between capital structure and company performance

Jaafar, Muhamat, Ahmad, and Alwi (2018) studied 34 companies listed in Malaysia. The result shows that changes in the profitability of the company do affect the utilization of debt for the company. The results infer a significant relationship between profit and leverage for the plantation companies in Malaysia. However, it shows an insignificance relationship between liquidity and debt. Hence, the results support pecking order theory as the firm prefers internal funding instead of debt financing. Besides that, several observational studies found that their findings are matched with the pecking order theory.

Saputra, Achsani and Anggraeni (2015) evaluate the implications of capital structure on the performance of the Indonesian financial Industry Company from the total sample. The study period from the years 2009 to 2013. The result proved that the capital structure policy shows a different effect on a different sector. Besides that, the capital structure also harms securities companies and funding companies but a positive impact on the banking and insurance sectors. In addition, the findings show that the financial industry uses a high leverage to finance the business growth.

The effects of the capital structure were analysed by Chadha and Charma (2016) on 422 identified Indian manufacturing firms between 2003–2004 to 2012–2013. They find that leverage level and gearing ratio may not have an effect on the company's financial results for the ROA and Tobin's Q metric but has a negative association with ROE. In comparison, other research who have identified a capital structure for Pakistani textile firms' financial performance results suggested the negative relation between debt, size and return on assets (ROA) (Memon, Bhutto, & Abbas, 2012).

They find that leverage amount may not have an effect on the company's financial results for the ROA and Tobin's Q metric but has a negative association with ROE. In comparison, other analysts who have identified a capital framework for Pakistani textile firms' corporate financial results suggest the negative correlation between debt, scale and tangibility and return on assets (ROA) (Memon, Bhutto, & Abbas, 2012).

Goyal (2013) investigates capital structure on performance of public listed banks in India with a size of sample of 105 pharmaceutical companies and 102 textile companies. The findings of the study proved a robust positive dependence of short-term debt on all firm profitability measurements. Long-term debt variable has a negative relationship with asset return (ROA) and equity return (ROE) (Goyal, 2013). Between 2008 and 2013, Tifow and Sayilir (2015) examined the effects on Turkish manufacturing firm's performance. It has shown that the strong negative correlation of short-term debt to the total asset with ROA, EPS and the Tobin Q ratio. Long-term debt, however, has a significantly negative relationship with the ROE, EPS and Tobin Q ratio, but is significantly related to ROA. Muhammad, Shah, and Islam (2014) also conducted a study of 63 listed companies. The results are mixed between the relationship between the capital structure and

63 corporate efficiency. The financial leverage, such as total debt, has a positive impact on company performance.

Short-term debt is considered as cheap financing and the increased short-term debt with relatively low interest rates contributes to a rise in profit levels (Ahmad, 2012). The financial structure and performance of Malaysian publicly traded oil and gas companies is investigated by Foo, Jamal, Karim and Ulum (2015). The findings show that the capital structure is linked negatively to the company's performance and suggest that an improvement in the company's debt level will have a detrimental impact on its performance. This means that the higher the company's gearing ratio, the less efficient the shareholders would be. The researcher also concluded that the decision taken by companies about capital structure is crucial in affecting the success of companies within the industry. The study also highlights the importance of seeking an optimal capital structure by stressing specific capital theories.

Bhattarai (2016) used a sample of eight firms. The capital structure for manufacturing companies listed on the Stock Exchange in Nepal, also has a major negative relationship with manufacturers' performance in Nepal. The statement was backed by other research (Foo, Jamal, Karim, & Ulum, 2015).

Skopljak and Luo (2012) analyse and examines the relationship between company leverage and financial results in the company's financial sectors of Australia. The result was that a low gearing business would increase debt use and improve bank profitability. However, if the company increases its debt at high levels of leverage, it reduces profit and bank performance.

El-Sayed Ebaid (2009) examines the effects of the choice of capital structure on Egyptian capital companies. The results show that the capital structure negatively affects the company's ROA performance. For a capital structure that uses total debt, the company's success calculated by ROE has no major effect. The findings are able to demonstrate that the capital structure has a weak and small impact on the financial performance of listed firms in Egypt (Ahmad, 2012). Sheik and Wang (2013) investigate the effects of the debt utilization of non-financial related sector of firms in Pakistan. The result showed a negative relationship between the company's leverage and its performance, which would lead the company to use its capital structure at higher than adequate levels.

From the corporate governance perspective, the earliest studies on the measuring performance was done by Kamerschen (1968). The study used both accounting performance measurement. According to Hamid (2008), there are changes of measurement for firm performance. The most used accounting performance measurement occurred from 1968 to 1978. However, ten years after, most researchers used market-based and accounting performance evaluation in their studies.

Accounting and market-based method of financial indicator measurements have its strength and advantages in measuring a firm's performance with the presence of corporate governance variable from the research. Accounting performance measurements are widely used to provide a more standardised way of making a good comparison between the period and difference companies from a wide range of industries (Hamid, 2008). Accounting performance measurements helps in assisting companies in understanding the firm performance in its complicated business

environment, thus the company executive team able to managing its plan for the goals of the company (Erhardt, Werbel and Shrader, 2003).

In conclusion, most of the previous studies have provided extensive knowledge related to the topic of the research. However, many studies on the structure of capital have shown the inconsistency results. This study uses ROA and ROE as dependent variables. The independent variable consists of total debt, short term debt, and long-term debt. As control variables, firm size, and growth are used. Board composition, function duality, and board size are used as corporate governance variables. Ultimately, this study identifies the impact of the capital structure on the firm's performance and focuses only on plantation companies listed in Bursa Malaysia. The main findings are summarized below in Table 2.1.



Table 2.1: Panel A- Summary of the previous primary studies on the capital structure and firm performance

NO	Author	Year	Objective	Major Findings
1	Thi Bich Nguyet, Le, Thi Phuong Vy & Phan,	2017	The research focuses on non – financial companies from the Vietnam stock exchange period of 2007 to 2012, Related to Capital structure and company performance.	The result shows that some models, like the robustness test, support a negative link between capital structure and corporate performance
2	Kang Li, Jyrki Niskanen, and Mervi Niskanen	2018	The research focuses on capital structure and business results in European SMEs. Research sample with A total of 124,632 SMEs and 15 countries of the European Union.	The result shows an unclear relationship between capital structure and firm performance.
3	Joseph Ooi	2013	The research focuses on the capital structure for United Kingdom property companies from the country. Total of 100 United Kingdom companies as the total sample.	The evidence shows that firms involved in the property sector borrow more and appear in their capital structure.
4	Mohamad Nizam Jaafara, Amirul Afif Muhammad, Ismail Ahmad, Sharifah Faigah Syed Alwid*	2018	The research focuses on plantation firms in Malaysia. A total sample of 34 companies. The period from the year 2006 to 2016	The result shows any leverage level of the firm does affect plantation companies in Malaysia.
5	Saputra, Tedy Achsani, Noer Azam Anggraeni, Lukytawati	2015	The Effect of Capital Structure on the Indonesian Financial Industry firm Performance. Total of 55 companies from financing industries. banking (24), funding (9), securities (5), insurance (10), and other financial companies (7).The period from the year 2009 to 2013	The results show that the financial sector using high leverage. The result shows capital structure harmed the financial industry.
6	Chadha, Saurabh.Sharma, Anil K.	2016	The research focus on India's company involved a sample size of 422 manufacturing companies for a total sample period of ten years in India.	The result shows that the debt level does not affect the business measure's financial outcome by ROA and Tobin Q parameter. It is negatively related to ROE.

7	Memon, Fozia Bhutto, NA Abbas, Ghulam	2012	The research focuses on the capital structure on firm financial results in Pakistan's textile market. The sample size of 141 textile companies for the period from 2004-2009.	The result shows that leverage, size, and tangibility are the negative relationship with the ROA.
8	S. L. Tan, and N. I. N. A. Hamida	2016	The research emphasizes on Malaysia Plantation Industry. A sample of 41 plantation companies between 2007 and 2011	The results show that the investigation into the gearing ratio and financial outcome of Malaysian plantation companies is significant for the 2007-2011 study period.
9	Goyal, A M	2013	The researchers have assessed the performance from the impact of Capital Structure focus on the public sector banks listed in India from the year 2008 to 2013. One hundred five pharmaceutical companies and 102 sample size clothing companies.	The study results showed that short-term debt was significant for all profitability (ROA, ROE) dependent variables. Capital and total debt have a negative relationship with per-share income, equity returns, and returns on assets. The business scale was positive for the variables such as ROA and EPS but harmful for the ROE.
10	Tifow, Abdulkadir Ali Sayilir, Ozlem	2015	The research focuses on manufacturing turkey firm's performance. A sample size of 130 firms. The period of study from the year 2008 to the year 2013	The analysis has shown that a short-term debt to the asset has a substantial adverse relationship to the ROA, EPS, and Tobin's Tobin's Q. Nevertheless, the long-term debt has significant negative associations with the ROE, EPS, and the Q-ratio of Tobin. Study period from the year 2008 to 2013.
11	Muhammad, Hussain Shah, Bahadar Islam, Ziaul	2014	The research focuses on leverage impact on the performance of firms in Pakistan. A sample size of 63 firms listed on the Karachi bourses. The studies period from 2007 to 2011.	The outcomes of the relationship between the gearing ratio or debt indicator to the company's market performance are inconsistent. The capital structure had a favorable effect on corporate results

				when the returns on assets (ROA) were used as a dependent variable. This has shown that financial leverage, such as short and long term debt affects company performance.
12	Ahmad, Zuraidah	2012	The effect of the capital structure on companies' performance by concentrating on Malaysian businesses on consumers and the industrial manufacturing sector. Between 2005 to 2010, for 58 companies	The analysis indicates that ROE is only substantially linked to short-term debt and overall debt. This suggests that short-term debt is less expensive, and hence a rise in short-term debt at a relatively low rate contributes to the increase in profit rates.
13	Foo, Varian Jamal, Amer Azlan Abdul Karim, Mohd Rahimie Abdul Ulum, Zatul Karamah Ahmad Baharul	2015	The study focuses on the analysis of the capital structure and performance of the oil and gas companies listed publicly in Malaysia. A sample size of 12 companies in Malaysia from the year 2003 to the year 2013.	The result indicates that the structure of capital is negative for the company's performance, and it is recommended and established that a rise in the company's debt will adversely affect its shareholders. That suggests that the more significant the higher the company's long-term debt, the less beneficial it is for shareholders.
14	Yuga Raj Bhattarai	2016	An analysis of the capital structure of manufacturing firms listed and the period of the study between 2004 to 2014.	The findings indicate that the capital structure is significantly negative on Nepalese manufacturing company's performance.
15	Vedran Skopljak	2012	The focus on capital structure and the financial result of the financial company in Australia, involving 7548 samples, and the period between 1990 and 1995..	The outcome showed that with a low leverage level, a debt rise would result in higher income and boost the bank's performance, but that

				the firm's higher leverage debt would lead to decreased income and bank performance.
16	El-Sayed Ebaid, Ibrahim	2009	This study helps analyze the effect on corporate success in Egypt of the option of capital structure involved A sample size of 64 businesses and a period between 1997 to 2005.	The result demonstrates the adverse relation of the capital structure significant company's performance measured by ROA, but it has no major impact measured by ROE.
17	Ahmed Sheikh, Nadeem	2013	The research focuses on the impact of capital structure and business efficiency in Pakistan of non-financial companies involved research period 2004 to 2009 and a total of 240 companies in sample size.	All capital structure indicators negatively correlated with the return on assets.
18	Duasa, Jarita Raihan Syed Mohd Zain, Sharifah Tarek Al-Kayed, Lama	2014	The study focuses on Islamic banks' banks' capital structure and firm performance. The total sample of 85 banks from 2003 to 2008 in 19 countries.	Equity issuances for with low capital ratios are expensive and harm firm performance.
19	Khanam, Farida	2014	The study focusses on the Food Sector of Pakistan Firm firm's Financial. A total sample size of 49 firms. Performance. The study cover for six years from 2007-2012	The study concluded that leverage has a significant negative impact on food sector performance in Pakistan.
20	Lazar	2016	Determinants of Romanian Listed Companies. The study cover for eleven years from 2000-2011.Total of the sample size of 668 firms.	The results showed that debt level, size, and labor intensity negatively affect firm performance, while sales growth added to have a positive impact on firm value.

Table 2.1: Panel B: Summary of previous studies on corporate governance on performance

21	Khan, Nemati & Iftikhar	2011	The study focuses on the Corporate Governance on Firm Performance of Pakistan company.	The result showed that the ownership concentration, CEO duality and Board's Independence positive impact on firm's performance.
22	Guo et al.,	2013	The study focuses on the Corporate Governance for China company.	The research shows that some governance mechanisms that are effective in Western countries have no significant or negative impacts on firm performance in China.
23	Manna, Sahu, & Gupta,	2016	The study focuses on the Corporate Governance variables such as board size (BS), board composition, ownership structure, for National Stock Exchange (NSE)-listed Indian Companies performance.	The research finding showed that Board size and ownership structure have been identified to have a positive impact on more than one corporate performance variable.
24	Lefort & Urzua	2008	The study focuses on Board independence and firm performance 160-company panel data.	The findings are that the proportion of independent directors affects companies'
25	Puni and Anlesinya	2020	The research focuses on Corporate governance mechanisms and firm performance in a developing country. From 38 listed firms in Ghana from 2006 to 2018	The study showed that the presence on the board of directors of both insiders and outsiders improved financial performance. Likewise, the size, frequency of board meetings, and concentration/ownership structure of shareholders generally had a positive impact on financial performance.

26	Ciftci et al	2019	The research focus on internal corporate governance and firm performance of Turkey companies	The result showed that larger boards make for positive performance effects. A higher proportion of family members on boards had no discernable effect on performance.
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2.4 Summary of chapter

Capital structure theories are essential to future study and the previous studies on the capital structure fundamental to this chapter. The empirical findings of different researchers able to provide an overview of this chapter.



CHAPTER THREE

METHODOLOGY

3.0 Introduction

This chapter presents the data to be used, the method of data collection, the method to generate the data, research design, sampling techniques, sample criteria and source of data, hypothesis development, model specification, theoretical framework of the results and expected results of the study. The chapter also discusses the conceptual framework and discusses the hypothesis development of the research work. This chapter also discusses the methodology employed to examine the relationship between capital structure and corporate governance towards plantation firm's performance. Section 3.1 explained the research design. Section 3.2 and section 3.3 discusses the population of the study and sampling technique. Section 3.4 and section 3.5 describes the sample, data collection, and data sources. Section 3.6 explains the variables, such as the dependent variable, independent variable, and control variable. Section 3.7 represents the measurement and Instrumentation of the variables. Section 3.8 provided a summary of the research hypotheses. Section 3.9 and 3.10 explained the data analysis and expected results. Finally, Section 3.11 concludes this chapter.

3.1 Research Design

This study showed an empirical analysis of the relationship between capital structure and corporate governance toward plantation firm performance. This research uses descriptive analysis, correlation analysis, variance inflation factor (VIF), and regression analysis to examine the capital structure and corporate governance variable effect on plantation firm 's performance. Firstly, descriptive analysis provides a summary of the sample data. It is also for central tendency

measurements and data variability measurements of the data. Secondly, the correlation analysis used as a statistical measure used to evaluate the strength of a relationship between the variables. It's also about testing the possible links between variables.

Thirdly, the Variance Inflation Factor (VIF) is a multicollinearity test function in a collection of multiple regression variables. High multicollinearity between variables will cause problems when inputting the variable and interpret the results. It is important to ensure all the variable to be interpret correctly. Finally, the regression analysis used to estimate the relations between a dependent variable and independent variables. Regression analysis aims to focus on the explanation and prediction of the data. All test uses to provide a reliable result for the research.

This study uses capital structure and corporate governance variable to analyze impacts on firm value of plantations based on regression analysis. This research uses secondary data of Plantation companies in Malaysia public listed on the Bursa Malaysia. The result of the study is based on the hypothesis discussed earlier. The evaluation of the firm performance is based on the data gathered from DataStream.

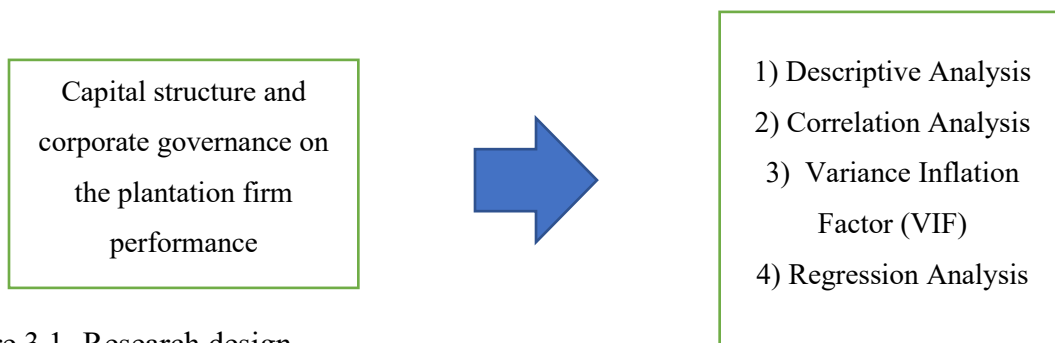


Figure 3.1 -Research design

3.2 Population of the Study

The population of research initially comprises of all 44 companies that are listed publicly on Bursa Malaysia as at 25th March 2019. The companies which belongs to main market under plantation sectors are selected and the total observation over the 5 years period is 220.

3.3 Sampling technique

In researching some topic, it would be best to test the entire population. The convenience sampling will be the sampling technique for the research. Convenience sampling is a non-probability sampling technique that brings convenient accessibility to the researcher.

3.4 Sample criteria and Sources of data

This research covers a total of 5 years of study from the year 2013 till 2017. Data is obtained from secondary sources, that is Thompson Reuters DataStream located in Sultanah Bahiyah library, UUM Sintok campus. A total of 44 public listed firms has been registered as a plantation companies in Bursa Malaysia listed company. After considering the accuracy of the data, incomplete information, this study only uses 44 firms on the Main Market of Bursa Malaysia. In conclusion, this study consists of a financial report data of 44 firms with five years period of study. For the companies, data on governance will be collected from the scrutinization of directors' profile in the respective annual reports.

Theoretical Framework

The Conceptual Framework is shown in Figure 3.1.

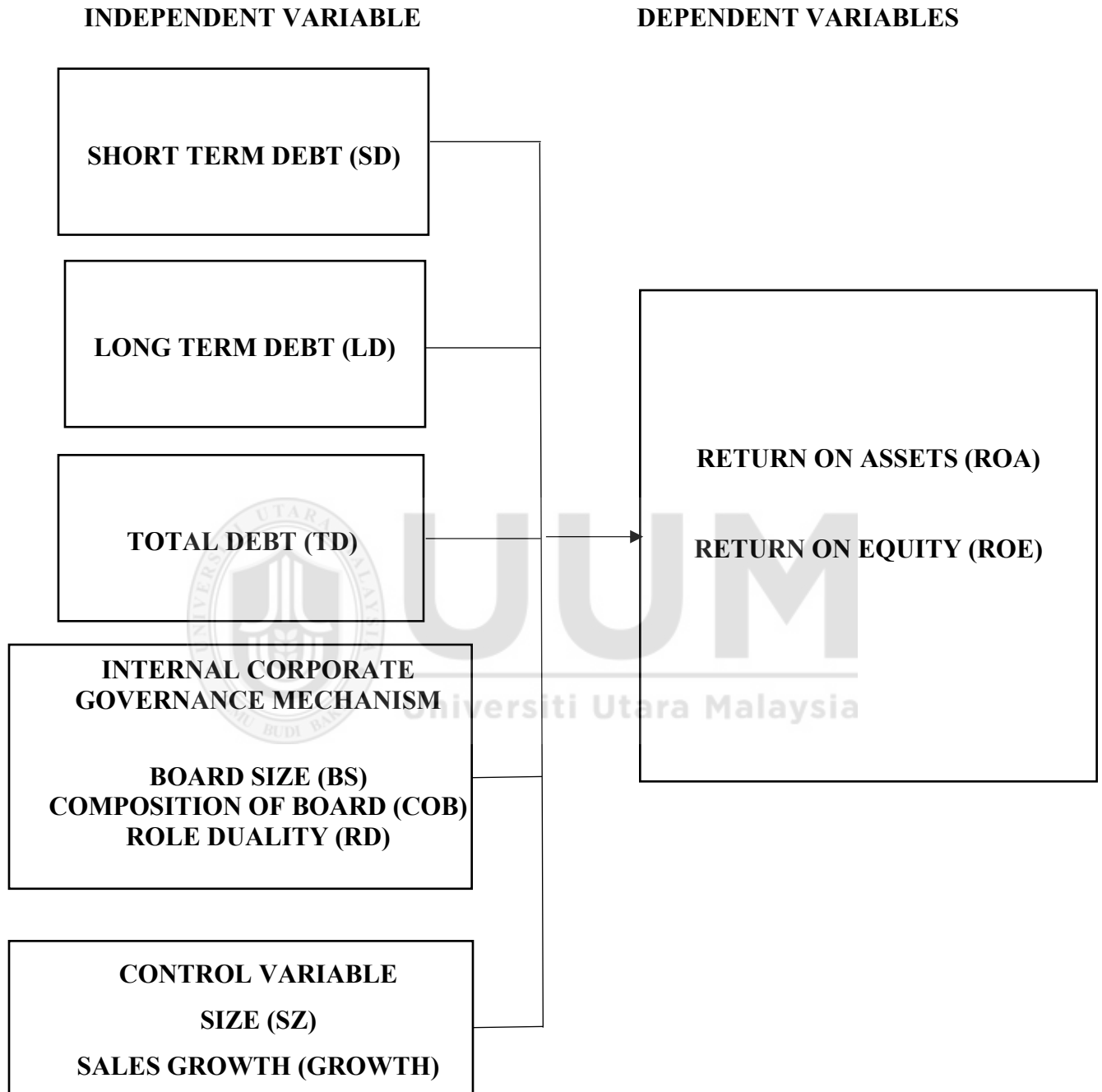


Figure 3.2: Research framework

3.5 Hypotheses Development

Based on the review of empirical studies discussed in section 2.3, nine hypotheses are developed as follows.

3.5.1 Capital structure

Saputra, Achsani, and Anggraeni (2015) examine the impact on the performance of the Indonesian financial industry with the presence of capital structure. The research period began from 2009 to 2013. The result proved that the capital structure policy shows a different effect on a different sector. While capital structure affects negatively to securities and funding companies, it has positive impact on banking and insurance sectors. Le and Phan (2017) have found the relationship between leverage level of the firm and firm performance to be significantly negative. In the same sense, Ahmad (2012) studied the implications of the capital structure and corporate performance of Pakistan's non-financial firms. This shows that the total debt, long-term and short-term relationships in all capital structures are negatively related to asset returns in all regressions. This analysis therefore hypothesized that:

H0: There is a negative relationship between the structure of capital and the performance of plantation companies

3.5.1.1 Short Term Debt (SD)

Goyal (2013) researched focus on capital structure of the company with the impact to performance of public listed banks in India using a size of sample 105 pharmaceutical companies and 102 textile companies. The findings of the study proved a robust positive dependence of short-term debt to the capital on all firm profitability. However, Tifow and Sayilir (2015) pointed out a short-term

debt has a significant negative relationship to firm performance. In addition, short-term debt as a cheaper financing sources and thus increasing the relatively low borrowing cost charged of short-term debt will lead to a rise in profit (Ahmad, 2012). Therefore, this study hypothesized that:

H1: There is a significant relationship between short term debt and the plantation firm's performance

3.5.1.2 Long Term Debt (LD)

The measurement of LD is always similar between many studies (Le & Phan, 2017; Ahmad, 2012; El-Sayed Ebaid, 2009). The equation of the formula as long term debt divided by total assets. Other researcher also reported a negative LD and ROA relationship (Foo et al., 2015). Besides that, El-Sayed Ebaid (2009) concluded a result for a company in Egypt. The empirical tests in ROA measurement indicate that the capital structure negatively impacts the company's performance.

LD is used as one of the variables to capital structure study. LD is expected to affect the plantation firm's performance in Malaysian. The capital structure and company performance of publicly listed companies involved oils and gas in Malaysia is investigated by Foo, Jamal, Karim, & Ulum (2015). The analysis shows that the higher level of the company's long-term debt, the less efficient the return to shareholder would be. This analysis therefore hypothesized that:

H2: There is a significant relationship between long term debt and the plantation firm's performance

3.5.1.3 Total Debt (TD)

Total debt is the leading predictor of the impact of capital structure on business performance in past research studies. Ahmad (2012) has reported a conclusion on capital structure measurement toward company performance. The result found that with good results, the overall debt was negative and significant. The total debt is defined as a total debt of the company divided by the total assets of the company (Khanam, 2014). TD is expected to play a significant impact on Malaysian Plantation firms' performance. This analysis therefore hypothesized that:

H3: There is a significant relationship between total debt and plantation firm's performance.

3.5.2 Internal corporate governance mechanism

3.5.2.1 Board Size

Martin and Herrero (2018) find that larger number of board members are always associated with the opinion of less variable corporate performance. Total number of board member is one of the main factors that control board effectiveness in managing its board responsible. A large board benefited multinational companies in the plantation because difference board member with difference background help to provide guideline and opinion that able to benefit the company from financial and non-financial perspective. The large size of the board comprises directors with a well-diversified background that allows more directors to provide invaluable input or ideas during the board meeting.

H4: There is a significant relationship between the size of the board and the plantation firm's performance.

3.5.2.2 Composition of board

The BOD can be made up of executive directors and non-executive directors. Nonexecutive directors are not involved in the company's day-to-day operations. Nonexecutive directors are outsiders to improve the accountability of executive directors. Besides that, reducing the agency cost that detrimental to the company. Nonexecutive directors will not only mitigate the agency problem but can provide fair and objective judgment for the company. There is a positive effect of non-executive directors on corporate performance.

H5: There is a significant relationship between the number of non-executive directors and the plantation firm's performance.

3.5.2.3 Role duality

Chairman and CEO to be a different person, and the chairman must be a non-executive director. If the chairman and CEO is the same person, there is a risk of insufficient segregation of duties. CEO also required presenting periodic reports of the company to the board from time to time. The review and authorization by the same person who is not substantially independent might result in the inappropriate authorization. Thus, it is expected that having CEO duality in company will decrease the performance of company (Ujunwa, 2012). The Malaysian Corporate Governance Code (MCCG) recommends that the position of President and CEO should be separated to ensure a balance of power and authority so as not to have unrestricted decision-making powers. MCCG 2012 stated as a recommendation practice for the company, But the new MCCG 2017 version made duality of roles as a requirement. Separating the Chairman's and CEO's positions promotes accountability (MCCG 2017).

H6: There is a significant relationship between role duality and the plantation firm's Performance.

3.5.3 Control variables

3.5.3.1 Firm size

The size of the company usually used as a control variable in many types of research ((Memon et al., 2012). Total assets and sales can measure size. Some studies suggest that size affects the firm's performance (Goyal, 2013). Many empirical researchers indicate that a firm's size always impacts firm performance and most of the more massive corporations with better capabilities to enjoy economies of scale, which may improve the company performance (Goyal, 2003; Ebaid 2009). Hence, size predicts that size has an impact on the firm's performance. Therefore, this study hypothesized that:

H7: There is a significant relationship for the firm's size and plantation firm's performance

3.5.3.2 Sales Growth

The firm's average total sales measure growth. Sales growth is measured as the rate of change in sales between the observation year. Dawar (2014) also found the sales growth shows no significant relationship with firm performance. However, Lazar (2016) found that sales growth has a significant positive relationship with the firm's performance. In this study, growth is calculated as sales in the current year minus sales in the last year divided by sales last year. This study expected that sales growth has an impact on firm performance. Therefore, this study hypothesized that:

H8: There is a significant relationship between growth and the plantation firm's performance

3.6 Variables

Variable of the study included dependent variable, independent variables, and control variables.

3.6.1 Dependent Variable

Several different measures used to represent the firm's performance. The firm's performance can be measured using accounting measurement or market measurement. Accounting based measurement is calculated from the firm's financial such as return on assets (ROA), return on equity (ROE), net profit margin (NPM). From Market-based measurement, Tobin's Q and the market-to-book ratio can be used to measure the firm's performance. For this study, ROA and ROE will be the dependent variable.

Return on Assets (ROA)

Return on Assets (ROA) is a tool to measure the rate of return on total assets invested after minus the tax. The high Return on Assets (ROA) indicates an excellent performance for the company. Value Return on Assets (ROA) high would suggest that the company can generate profits relatively high-value assets (Heikal, Khaddafi, & Ummah, 2015). ROA is measured as net income divided by total assets.

$$ROA = \text{Net Income} / \text{Total Assets} \dots\dots\dots [\text{Eq 1}]$$

Return on Equity (ROE)

Return-on-Equity (ROE) is used as indicators by research to evaluate the firm's performance (Samiloglu, Oztop, & Kahraman, 2017).. ROE measures the ability of a firm to generate profits to the shareholders that invest in the company. Return on equity (ROE) is calculated by dividing net income by shareholders' equity.

$$ROE = Net\ Income / Shareholders'\ Equity.....[Eq\ 2]$$

3.6.2 Independent Variables

This study employs three independent variables measured by short term debt to total assets (SD), long term debt to total assets (LD), total debt to total assets (TD), Board size (BS) ,Composition of the board (COB) and Role duality (RD) . All independent variables are presented in ratio except dummy variable to assign role duality.

a) Short Term Debt (SD)

Following Abor (2005), short -term debt is calculated by short term debt divided by total capital. Short term debt is one of the indicators used in the studies to indicate the firm's capital structure. Significant positive relationship is reported for short term debt to firm performance on all profitability measures (ROA, ROE, and EPS) (Goyal, 2013). However, Tifow and Sayilir, 2015 pointed out short term debt to the total asset has a significant negative relationship to firm performance. Short term debt has a significant negative relationship with performance of Pakistani engineering firm as measured by Return on Assets (ROA) during the year 2003-2009 (Khan, 2012).

$$SD = \text{Short term Debt} / \text{Total Asset} \dots\dots\dots [\text{Eq 3}]$$

b) Long Term Debt (LD)

Long term debt is also one of the indicators that commonly used in past empirical studies. Most of the past studies use LD as one of the variables to examine the relationship (Goyal, 2013; Jaafar et al., 2018; Ahmeti & Prenaj, 2015 and El-Sayed Ebaid, 2009). The research expects the LD to influence the plantation firm's performance in Malaysian.

$$LTD = \text{Long term Debt} / \text{total Assets} \dots\dots\dots [\text{Eq 4}]$$

c) Total Debt (TD)

Total debt as the most important variable and essential to the research used in past empirical studies to show the impact of overall capital structure on firm performance. Research on Total debt to total assets (TDTA) shows a significant negative relationship with the firm performance measured by Return on Assets (ROA) (Khan, 2012). TD has negative and significant with firm performance. Total debt is measured as the firm's total debt divided by the firm's total assets (Khanam, 2014). Malaysian Plantation firms' performance is expected to influence by TD as one of the variables.

T

$$D = \text{Total Debt} / \text{Total Assets} \dots\dots\dots [\text{Eq 5}]$$

d). Board size (BS)

Board size is referred to the total number of directors on the board. This will include executive directors and non-executive directors and a Chairman. There is no restriction on the number of board members to be elected by shareholders. A large number of boards of directors may have difficulty communicating with each other in a large size board, which causes difficulty in communication and affect firm performance. Few studies show board size has a negative relationship with firm performance (Yermack, 1996; Singh and Davidson, 2003). Other studies concluded on the influence of board size on company performance has mixed results. The board size is one of the most important features of board functionality. However, board size could have a positive or negative impact on firm performance (Nguyen, 2014).

Board size = The total number of directors sits on the board.[Eq 6]

e). Composition of the board (COB)

Several studies investigate the relationship between board composition and firm performance. Coles and Hesterly (2000) find that board independence becomes a significant negative predictor of organization outcome when there is an interaction between board and leadership. There are optimal board which comprise of a balance of insider and outsider directors. All directors, whether executive or nonexecutive, should be treated equally in terms of their board responsibilities of plantation company being, non-executive, and executive director must ensure that the interests of all shareholders are protected. Independent directors play an essential role in terms of monitoring the management while remaining independent of the firm and its CEO (Daily et al., 1998).

Composition of the board (%) = total number of non-executive directors/total number of directors on the board.....[Eq 7]

f). Role duality (RD)

The separation of the CEO and chairman can improve the independence of the company to enhance firm performance. However, it is still questioned whether board members are able to monitor CEO in the process of increasing the firm's value (Abdullah, 2004). Thus, it still requires research on CEO duality would lead to maximum firm performance. The advocates of the CEO duality also suggest that combining these two roles provide a better focus for the vision of the company and the separation of the CEO and the chairman would create more benefit than cost.

Role duality = Binary variable value of 1 if the Chairman is also the CEO and 0 for otherwise.....[Eq 8]

3.6.3 Control Variables

To increase the accuracy of the study, the study also adopts two control variables that affect the firm's performance. They are as follows.

a) Firm Size

Firm size can be measured by total assets and sales (Memon et al., 2012). Some studies suggest that size affects the firm's performance (Goyal, 2013). Larger firms enjoy better capabilities with

economies of scale, which may improve financial performance. Besides, profitability are positively correlated with firm size (Lee, 2009). This study uses total assets as a proxy for the firm's size. It predicts that size has an impact on the firm's performance.

$$Size = \log (Total Assets) \dots\dots\dots [Eq 9]$$

b) Sales Growth

Level of sales is also documented in literature as contributing factor to firm performance. (Dawar, 2014). In this study, growth is calculated as sales in current year minus sales last year divided by sales last year. This study expected that sales growth has an impact on firm performance.

$$Sales\ growth = (Sales\ current\ year - Sales\ last\ year) / Sales\ last\ year \dots\dots\dots [Eq 10]$$



3.7 Measurement/Instrumentation of the Variables

Table 3.1: Measurement of Variables of the Study

Variable	Measurement	Previous Studies
Dependent Variables:		
Return on Asset (ROA)	Net profit/total assets	Heikal, Khaddafi, & Ummah (2015)
ROE	Net profit/total equity	Samiloglu, Oztop, & Kahraman (2017)
Independent Variables:		
SDTA	Short term debts / total assets.	Goyal (2013)
LDTA	Long term debts / total assets.	Goyal, 2013; Jaafar et al., 2018; Ahmeti & Prenaj, 2015; El-Sayed Ebaid, 2009
TDTA	Total debts / total assets.	Khanam, (2014)
Internal corporate governance mechanism		
BS	The total number of directors sits on the board.	
COB	total number of non-executive directors/total number of directors on the board	Uadiale, (2010)
RD	Binary variable value of 1 if the Chairman is also the CEO and 0 for otherwise	Dogan et al. (2013)
Control Variables		
SIZE	Log of total assets	Memon et al. (2012)
GROWTH	Log of sales	Dawar (2014)

3.8 Summary of Research Hypotheses

H0: There is no relationship between capital structure and firm's performance

H1: There is a significant relationship between short term debt and the firm's performance

H2: There is a significant relationship between long term debt and the firm's performance

H3: There is a significant relationship between total debt and firm's performance.

H4: There is a significant relationship between the size of the board and the firm's performance.

H5: There is a significant relationship between the number of non-executive directors and the firm's performance.

H6: There is a significant relationship between role duality and the firm's Performance.

H7: There is a significant relationship for the firm's size and firm's performance

H8: There is a significant relationship between growth and the firm's performance

3.9 Model Specification

The model of the study is shown in Equation 1 to Equation 4.

3.9.1 Return on asset (ROA)

Equation 1

$$Performance = \beta_0 + \beta_1 SD_{i,t} + \beta_2 BS_{i,t} + \beta_3 COB_{i,t} + \beta_4 RD_{i,t} + \beta_5 SIZE_{i,t} + \beta_6 GROWTH_{i,t} + \varepsilon$$

Equation 2

$$Performance = \beta_0 + \beta_1 LTD_{i,t} + \beta_2 BS_{i,t} + \beta_3 COB_{i,t} + \beta_4 RD_{i,t} + \beta_5 SIZE_{i,t} + \beta_6 GROWTH_{i,t} + \varepsilon$$

Equation 3

$$Performance = \beta_0 + \beta_1 TD_{i,t} + \beta_2 BS_{i,t} + \beta_3 COB_{i,t} + \beta_4 RD_{i,t} + \beta_5 SIZE_{i,t} + \beta_6 GROWTH_{i,t} + \varepsilon$$

3.9.2 Return on equity (ROE)

Equation 4

$$Performance = \beta_0 + \beta_1 SD_{i,t} + \beta_2 BS_{i,t} + \beta_3 COB_{i,t} + \beta_4 RD_{i,t} + \beta_5 SIZE_{i,t} + \beta_6 GROWTH_{i,t} + \varepsilon_{i,t}$$

Equation 5

$$Performance = \beta_0 + \beta_1 LTD_{i,t} + \beta_2 BS_{i,t} + \beta_3 COB_{i,t} + \beta_4 RD_{i,t} + \beta_5 SIZE_{i,t} + \beta_6 GROWTH_{i,t} + \varepsilon_{i,t}$$

Equation 6

$$Performance = \beta_0 + \beta_1 TD_{i,t} + \beta_2 BS_{i,t} + \beta_3 COB_{i,t} + \beta_4 RD_{i,t} + \beta_5 SIZE_{i,t} + \beta_6 GROWTH_{i,t} + \varepsilon_{i,t}$$

From the mathematical models as above, the dependent variables of the research are: (i) Return on asset (ROA) (ii) Return on Equity (ROE). The independent variables are: (i) Long term debt (ii) Short-term debt (iii) Total debt (iv) Board Size (v) Composition of board (vi) Role duality. The control variables are (i) Size of the companies (SIZE) (ii) Growth of the companies (GROWTH). The $\varepsilon_{i,t}$ is The Error term. The β_0 is constant.

3.10 Expected Results

The study is expected to investigate the relationship between capital structure and performance of firms in Malaysian plantation industry. Based on the information above, a theoretical framework is drawn to show the relationship depicted in this study. The study aims to provide insights to researchers due to the reevaluation of capital structure policy particularly on specific sector namely plantation .

Table 3.2 List of variables, proxies, and expected result

Variables	Symbol	Proxy	Expected result
Dependent	ROA	NI/TA	+/-
	ROE	NI/TE	+/-
Independent	SD	SD/TA	+/-
	LD	LD/TA	+/-
	TD	TD/TA	+/-
	SB	TB	+/-
Internal Corporate Governance			
Mechanism	COB	TE/TB	+/-
	BS	TND	+/-
	RD	BV	+/-
Control	SIZE	TA	+/-
	GROWTH	(Sn-Si) /Si	+/-

Where

ROA = Return on assets SD =Short term debt LD =Long term debt

TD= Total debt SIZE= Size GROWTH =Sales growth NI-Net profit

TA= Total assets Sn =Sales current year Si =Sales last year

TB= The total number of directors sits on the board. TND=Total number of directors

TE/TB=total number of non-executive directors/total number of directors on the board

BV=Binary variable value of 1 if the Chairman is also the CEO and 0 for otherwise

3.11 Summary of chapter

In conclusion, this study had used a total sample of 44 samples from 5 years of annual reports from the plantation sector on the listed company in Bursa Malaysia. ROA and ROE as dependent variables are employed in regression models. Independent variables are short-term debts, long-term debts, total debts Board size (BS), Composition of the board (COB) and Role duality (RD) with size and, sales growth as controlling variables to explain the relationship between the independent variables and the dependent variables. This chapter defines and describes the variables of this research.



CHAPTER FOUR

DATA ANALYSIS AND INTERPRETATION

4.1 Introduction

This chapter describes and present the analysis of the data for companies in the plantation industry. It presents detailed explanation on the result of the research based on the 44 sampled plantation companies listed at Bursa Malaysia. The secondary data used for the study ranges from year 2013 to 2017 for Plantation companies in Malaysian public listed on the Bursa Malaysia. The results from the descriptive statistical analysis, correlational analysis and the regression analysis of the research are explained in this chapter.

4.2 Descriptive Analyses

The result analysis begins with descriptive statistics in which values of the variables' mean, maximum value, minimum value and standard deviation are provided. The descriptive statistics for firm performance, measured with return on equity (ROE) and return on asset (ROA) and capital structure measured by short term debt and long-term total debt, sales growth, and size. roles duality, composition of board and board size are stated in Table 4.1. Table 4.1 summarizes the descriptive statistics regarding the dependent and independent variables in for the five years period (2013-2017)

Table 4.1: *Descriptive Statistics*

Variables	N	Min	Max	Mean	Std. Deviation
SD	220	.000	0.497	0.130	0.114
LTD	220	0.454	0.513	0.110	0.112
TD	208	.000	0.497	0.182	0.148
SIZE	220	4.685	7.460	6.122	0.551
Sales growth	209	-100.00	2780.06	39.5145	245.19051
ROA	220	-0.000	1.392	0.329	0.311
ROE	220	-0.219	0.557	0.0448	0.0767
BS	220	4	13	7.71	2.119
COB	220	0.333	1.000	0.732	0.183
RD	220	0	1	0.33	0.472

Table 4.1 provides descriptive statistics on the sample size in general. It summarizes dependent variable and independent variable for minimum value, maximum value, mean and standard deviation. As discussed in Chapter 3, this study chooses ROA and ROE as measurements to financial performance. Table 4.1 shows that range of ROA is between -0.00 to 1.392. The mean of ROA is 0.329 and standard deviation for ROA is 0.311. Meanwhile, ROE show range of -0.0219 to 0.557. the mean of ROE is 0.0488 and standard deviation for ROE is 0.0767.

The range for short term debt is between 0.000 to 0.497. This contributes the mean for short term debt is 0.130 and standard deviation is 0.114. Furthermore, the range for long term debt is between 0.454 to 0.513. This contributes the mean for short term debt is 0.110 and standard deviation is 0.112. For total debt, the min value is 0 and maximum value is 0.497. This shows that the maximum total debt is approximately 50% while there is sample companies that has no total debt at all. This indicates that the 0 per cent minimum consists of short-term debt and not long-term debt. Therefore, the average total debt is 0.182 while the minimum short-term debt amount is 0 the total debt mean is 0.182 and the standard deviation is 0.148.

With regards to firm size, the minimum and maximum value is 4.685 and 7.460 respectively. The mean and standard deviation is 6.122 and 0.551. Furthermore, for sales growth, the minimum and maximum value is -100.00 and 2780.06 while the mean and standard deviation is 39.5145 and 245.19051 respectively. As far as corporate governance variables are concerned, the first variable is board size. Based on market average, the number of directors in the sample companies is approximately 8 directors, with the range of the board size is 4 to 13. The standard deviation is 2.119. Next corporate governance variable is composition of board. The statistic shows that minimum value is 0.33 which is consistent to the Malaysian Code of Corporate Governance that requires at least one third of board of directors are independent. On the other extreme end, the findings show that all directors comprised of independent directors. The average of directors' composition that are independent 0.732 and the standard deviation is 0.183. The final variable is role duality with the mean of 0.33 and standard deviation is 0.472. Minimum value for liquidity is 0 and the maximum value is 1. From the total of 44 companies, only 29 meet the requirements for role duality and 15 do not fulfil role duality.

4.3 Normality Test

Normality analysis work as another type of data screening test used in this study. It's to make sure that the distribution of variable scores is 'normal'. The test uses SPSS to run for details. Normality test is required to ensure the data is normal to run the subsequent test such as regression analysis., All levels of skewness should be $< +3$ or -3 , while Kurtosis = or $< +10$ or -10 in to make sure that the data is normally distributed for all plantation firm (Kline ,1998). Therefore, the data for the study is normally distributed during the periods under study. Results from Table 4.2 shows that all data appeared to be normal based on the data analysis.



Table 4.2 Test of Normality

	SD	LTD	TD	SIZE	Sales growth	ROA	ROE	BS	COB	RD
N Valid	220	220	208	220	209	220	220	220	220	220
N Missing	3,488	3,488	3,500	3,488	3,499	3,488	3,488	3,488	3,488	3,488
Mean	0.131	0.110	0.182	6.122	39.515	0.329	0.045	7.710	0.732	0.330
Median	0.099	0.093	0.186	6.089	5.180	0.221	0.035	7.000	0.714	-
Mode	-	-0.454	-	5.290	-	-	-0.219	7.000	1.000	-
Std. Dev	0.114	0.113	0.148	0.551	245.191	0.311	0.077	2.119	0.183	0.472
Var	0.013	0.013	0.022	0.304	60,118.384	0.097	0.006	4.488	0.033	0.223
Skewness	0.967	-0.177	0.182	0.4342	8.927	1.230	1.565	0.436	-0.109	0.719
Std. Error of Skewness	0.164	0.164	0.169	0.164	0.168	0.164	0.164	0.164	0.164	0.164
Kurtosis	0.512	3.874	-1.219	0.136123	87.429	0.756	11.259	-0.347	-0.795	-1.496
Std. Error of Kurtosis	0.327	0.327	0.336	0.327	0.335	0.327	0.327	0.327	0.327	0.327
Min	-	-0.454	-	4.685	-100	0.00	-0.219	4.000	0.333	-
Max	0.497	0.513	0.497	7.4596	2,780.060	1.393	0.557	13.000	1.000	1.000

4.3.1.1 Histogram.

The histogram shows the distribution of data for each variable.

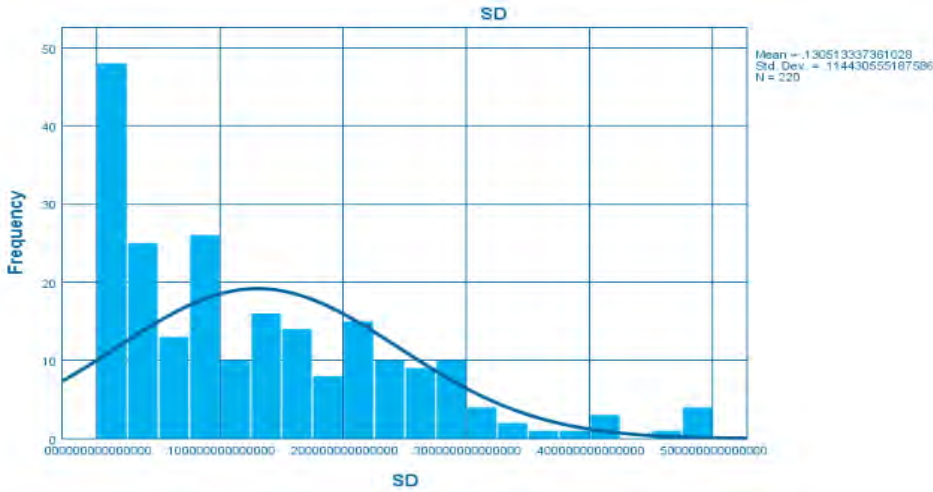


Figure 4.1
Histogram of SD

Figure 4.1 show the histogram of the short-term debt and the distribution curve is normal. Because the data shows the roughly normal distribution, with a peak in the center and relatively symmetrical, the normality of the data was met. It indicates that data meet the assumption of normality. The short-term mean is 0.131, and the standard deviation is 0.114.

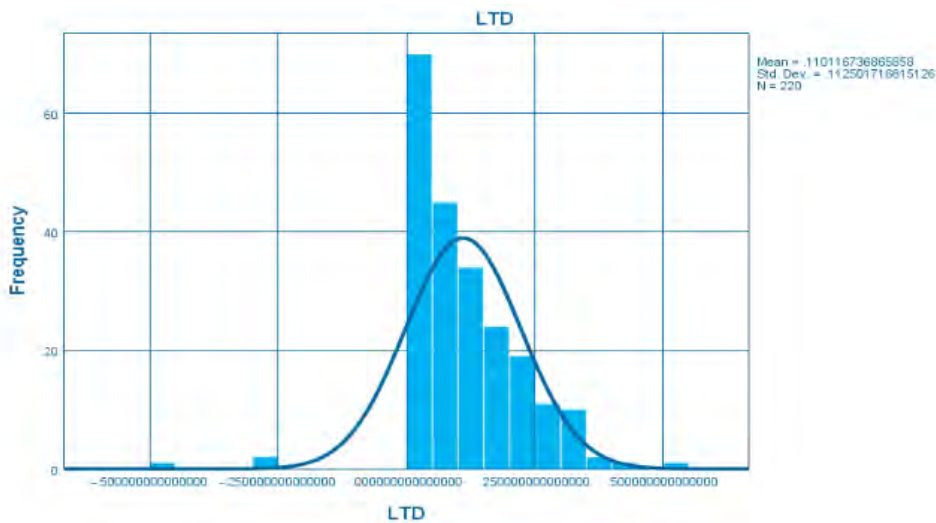


Figure 4.2
Histogram of LTD

Figure 4.2 show the histogram of the long-term debt and the distribution curve is normal. It indicates that data meet the assumption of normality. Because the data shows the roughly normal distribution, with a peak in the center and relatively symmetrical, the normality of the data was met. The long-term mean is 0.11 while the standard deviation is 0.113.

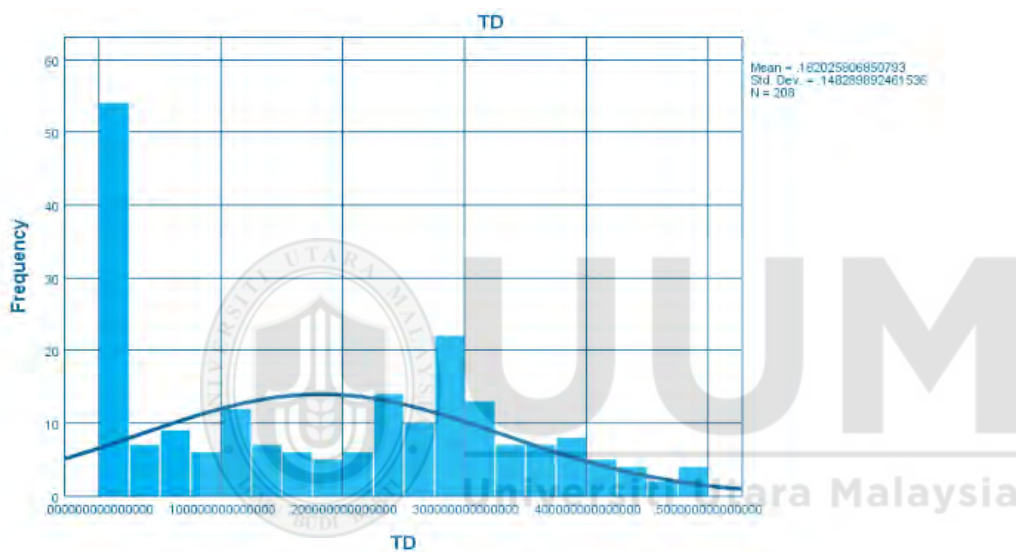


Figure 4.3
Histogram of TD

Figure 4.3 show the histogram of the total debt and the distribution curve is normal. It indicates that data meet the assumption of normality. Because the data shows the roughly normal distribution, with a peak in the center and relatively symmetrical, the normality of the data was met. The mean for total debt is 0.182 and the standard deviation is 0.148.

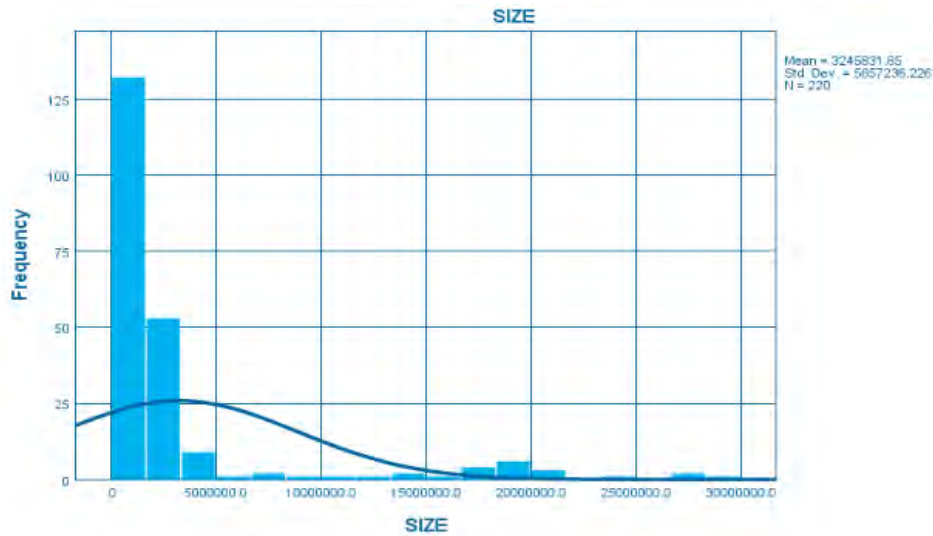


Figure 4.4
Histogram of SIZE

Figure 4.4 show the histogram of the size and the distribution curve is not normal. It indicates that data doesn't meet the assumption of normality. The mean for size is 3245831.85 and the standard deviation is 5657236.

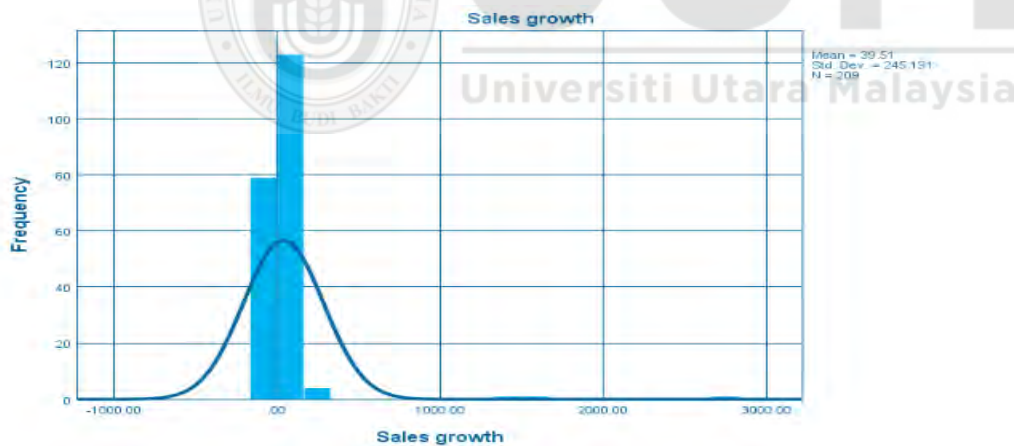


Figure 4.5
Histogram of Sales growth

Figure 4.5 show the histogram of the sales growth and the distribution curve is normal. Because the data shows the roughly normal distribution, with a peak in the center and relatively symmetrical, the normality of the data was met. It indicates that data meet the assumption of normality. The sales growth for leverage is 39.51 and the standard deviation is 245.19.

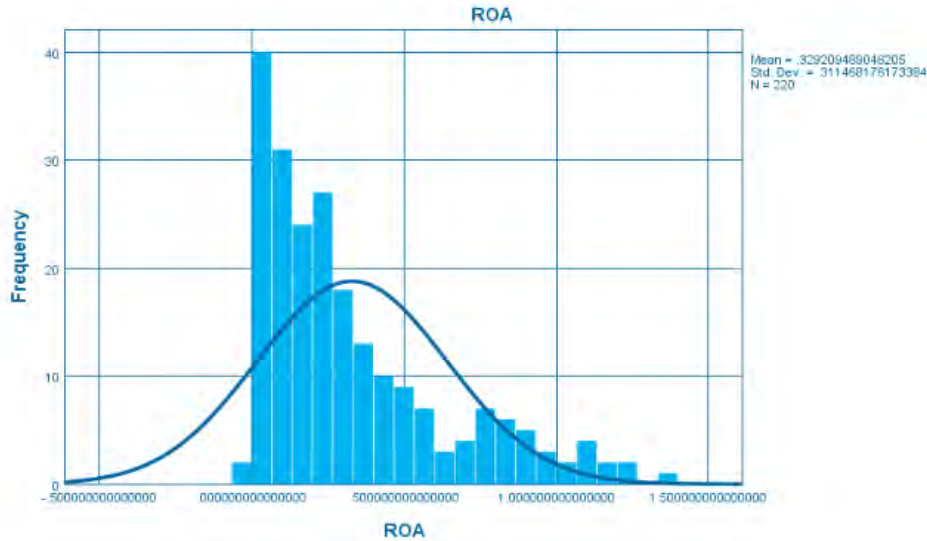


Figure 4.6

Histogram of ROA

Figure 4.6 show the histogram of the ROA and the distribution curve is normal. Because the data shows the roughly normal distribution, with a peak in the center and relatively symmetrical, the normality of the data was met. It indicates that data meet the assumption of normality. The mean for ROA is 0.3292 and the standard deviation is 0.311.

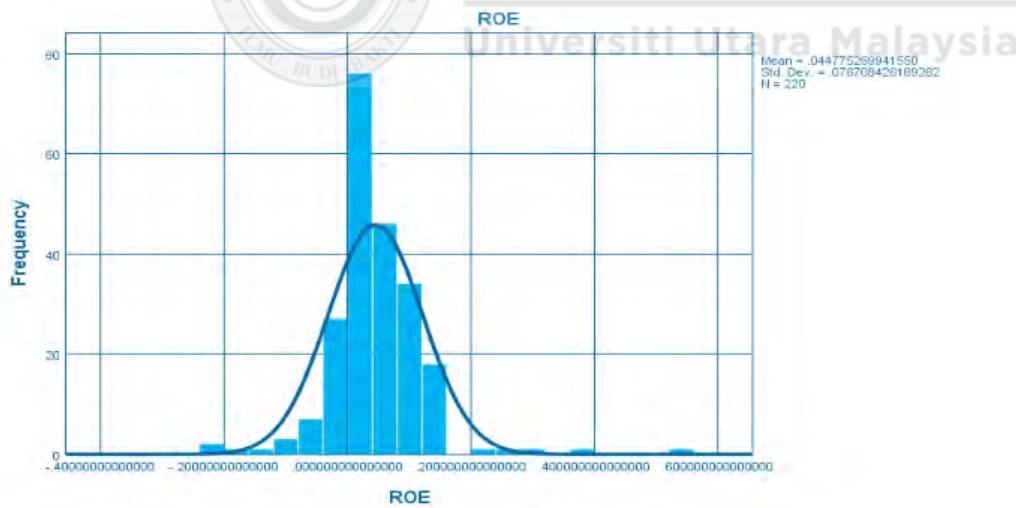


Figure 4.7

Histogram of ROE

Figure 4.7 show the histogram of the ROE and the distribution curve is normal. Because the data shows the roughly normal distribution, with a peak in the center and relatively symmetrical, the

normality of the data was met It indicates that data meet the assumption of normality. The mean for ROE is 0.447 and the standard deviation is 0.077.

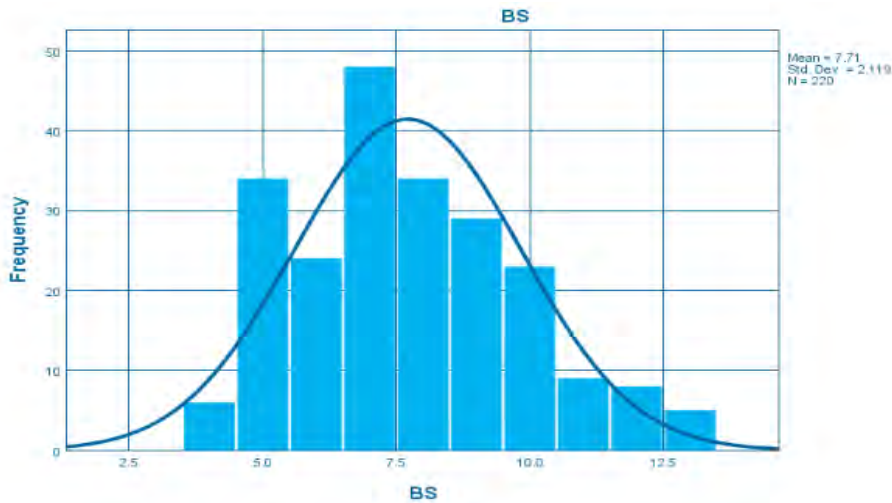


Figure 4.8
Histogram of BS

Figure 4.8 show the histogram of the board size and the distribution curve is normal. Because the data shows the roughly normal distribution, with a peak in the center and relatively symmetrical, the normality of the data was met. It indicates that data meet the assumption of normality. The mean for board size is 7.71 and the standard deviation is 2.119.

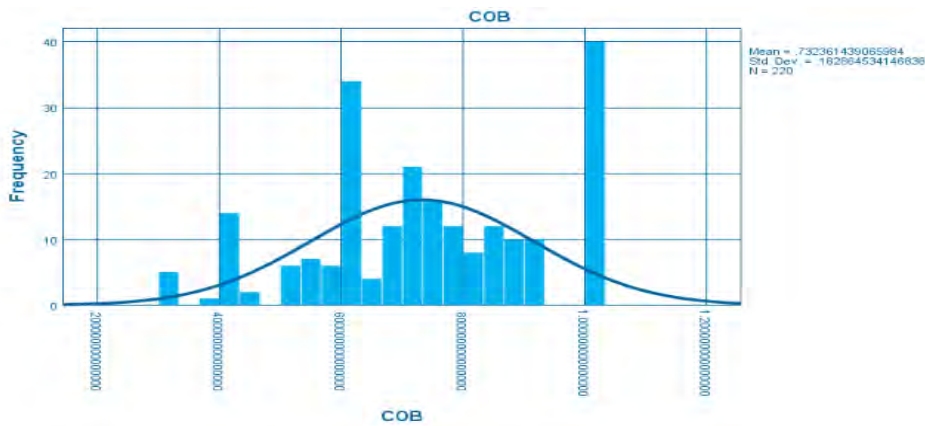


Figure 4.9
Histogram of COB

Figure 4.9 show the histogram of the composition of board and the distribution curve is normal. Because the data shows the roughly normal distribution, with a peak in the center and relatively symmetrical, the normality of the data was met It indicates that data meet the assumption of normality. The mean for composition of board is 0.732 and the standard deviation is 0.183.

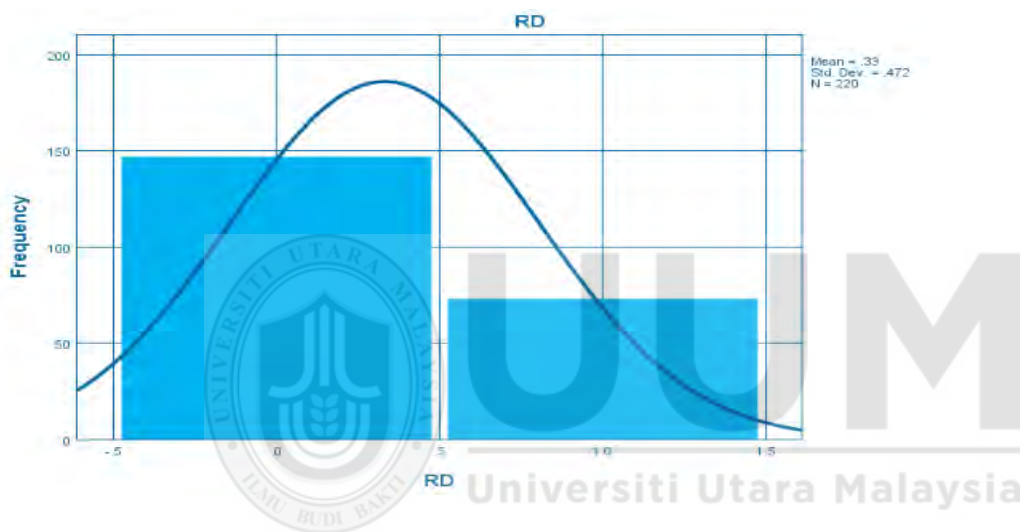


Figure 4.10
Histogram of RD

Figure 4.10 show the histogram of the role duality and the distribution curve is normal. Because the data shows the roughly normal distribution, with a peak in the center and relatively symmetrical, the normality of the data was met It indicates that data meet the assumption of normality. The mean for role duality is 0.33 and the standard deviation is 0.472.

4.4 Correlations Matrices

Correlation matrices are used to ensure that correlation values are not too high between variables to limit the emergence of a multicollinearity problem (Akeem et al., 2014). The analysis showing the correlation coefficients between variables. The analysis adopts to summarize data, as an input into a more advanced analysis.

Table 4.3 Correlation Matrices

		SD	LTD	TD	SIZE	Sales growth	ROA	ROE	BS	COB	RD
SD	Pearson Correlation	1	0.043	.706**	.197	-0.05	.439**	0.053	.145*	0.024	0.022
	Sig. (2-tailed)		0.524	0	.003	0.476	0	0.431	0.032	0.727	0.75
	N	220	220	208	220	209	220	220	220	220	220
LTD	Pearson Correlation	0.043	1	.635**	.518	-0.022	.189**	0.093	0.122	.158*	-0.045
	Sig. (2-tailed)	0.524		0	.000	0.755	0.005	0.168	0.071	0.019	0.503
	N	220	220	208	220	209	220	220	220	220	220
TD	Pearson Correlation	.706**	.635**	1	.398	-0.045	.343**	0.054	0.13	.171*	-0.093
	Sig. (2-tailed)	0	0		.000	0.53	0	0.441	0.062	0.013	0.182
	N	208	208	208	208	198	208	208	208	208	208
SIZE	Pearson Correlation	.228**	.420**	.389**	1	0.07	.456**	.363**	.294**	.225**	-.145*
	Sig. (2-tailed)	0.001	0	0		0.31	0	0	0	0.001	0.032
	N	220	220	208	220	209	220	220	220	220	220
Sales growth	Pearson Correlation	-0.05	-0.022	-0.045	.084	1	0.038	0.034	-0.086	-0.004	-0.023
	Sig. (2-tailed)	0.476	0.755	0.53	.229		0.581	0.625	0.218	0.953	0.74
	N	209	209	198	209	209	209	209	209	209	209
ROA	Pearson Correlation	.439**	.189**	.343**	.530	0.038	1	.356**	.170*	-.157*	.205**
	Sig. (2-tailed)	0	0.005	0	.000	0.581		0	0.012	0.02	0.002
	N	220	220	208	220	209	220	220	220	220	220
ROE	Pearson Correlation	0.053	0.093	0.054	.382	0.034	.356**	1	.271**	-0.013	0.063
	Sig. (2-tailed)	0.431	0.168	0.441	.000	0.625	0		0	0.845	0.352
	N	220	220	208	220	209	220	220	220	220	220
BS	Pearson Correlation	.145*	0.122	0.13	.227	-0.086	.170*	.271**	1	-0.063	0.022
	Sig. (2-tailed)	0.032	0.071	0.062	.001	0.218	0.012	0		0.355	0.741
	N	220	220	208	220	209	220	220	220	220	220

		SD	LTD	TD	SIZE	Sales growth	ROA	ROE	BS	COB	RD
COB	Pearson Correlation	0.024	.158*	.171*	.128	-0.004	-.157*	-0.013	-0.063	1	-.435**
	Sig. (2-tailed)	0.727	0.019	0.013	.058	0.953	0.02	0.845	0.355		0
	N	220	220	208	220	209	220	220	220	220	220
RD	Pearson Correlation	0.022	-0.045	-0.093	-.145	-0.023	.205**	0.063	0.022	-.435**	1
	Sig. (2-tailed)	0.75	0.503	0.182	.031	0.74	0.002	0.352	0.741	0	
	N	220	220	208	220	209	220	220	220	220	220

** Correlation is significant at the 0.01 level (2-tailed).

* Correlation is significant at the 0.05 level (2-tailed).



Table 4.3 also reveals a significant positive correlation of 0.356 between the study's two dependent variables at a p-value of 0.000. From Table 4.3, a significant positive correlation existed between the ROA and SD, LTD, TD, ROE, BS, COB. All correlations were significant at the $p = 0.01$ level 2-tailed. A significant positive correlation existed between the ROE and SIZE, BOARD SIZE. All correlations were significant at the $p = 0.01$ level 2-tailed. SD, LTD and TD are highly correlated to each other. Furthermore, this study employs a diagnostic tool which can be found in the Tolerance and Variance Inflation Test (VIF). VIF greater than 10 while tolerance value less than 0.01 indicates multicollinearity problem. As reported in Table 4.4, VIF tests in indicates that STD, LTD and TD suffers from high multicollinearity problem. Thus, these variables cannot be examined simultaneously in the multiple regressions. In further analysis namely in multiple regression, these factors need to be incorporated to ensure more reliable result.

Table 4.4 Results of Variance Inflation Factor (VIF)

Variables	Collinearity Statistics	
	Tolerance	VIF
STD	0.156	6.399
LTD	0.183	5.452
TD	0.098	10.246
SIZE	0.682	1.467
SALES		
GROWTH	0.971	1.03
BS	0.87	1.15
COB	0.764	1.309
RD	0.782	1.279

4.5 Multiple Regressions

The pooled Ordinary Least Squares or multiple regressions evaluate the relationship between the independent variables and dependent variable. According to Saleem and Rashid (2011), regression analysis is used to verify the hypothesis of the study. The study of regression describes the relation between independent variable and dependent variable. The independent variables consisting of short-term debt (SD), long-term debt (LD), total debt (TD), size, revenue production, board size (BS), board composition (COB) and role duality (RD) are evaluated in this study to determine the effect on ROA and ROE. However, the capital structure variables namely TD, SD and LD are examined separately in model 4A , model 4B and model 4C respectively.

The detailed results from the multiple regressions are presented for ROE in Table 4.5, Table 4.6, Table 4.7 and Table 4.8. ROA will be presented in Table 4.9, Table 4.10, Table 4.11 and Table 4.12.

Table 4.5 ROE model summary using Long term debt

<i>Model</i>	<i>R</i>	<i>R Square</i>	<i>Adjusted R Square</i>	<i>Std. Error of the Estimate</i>	<i>Durbin-Watson</i>
1.000	.467 ^a	0.218	0.195	0.069	1.648

a. Predictors: (Constant), RD, Sales growth, LTD, BS, COB, SIZE

b. Dependent Variable: ROE

Table 4.4 shows 0.218 for the R square. It shows that 21.8% variation in the dependent variable or ROE is described by the independent variables. After adjusted on the errors and the adjusted R square shows that the variation is about 19.50% of ROE. The standard error of the regression is 0.069 which means the average distance of the data points from the fitted line is about 6.9% of ROE.

Table 4.6 ROE model summary using Short term debt

<i>Model</i>	<i>R</i>	<i>R Square</i>	<i>Adjusted R Square</i>	<i>Std. Error of the Estimate</i>	<i>Durbin-Watson</i>
1.000	.459 ^a	0.211	0.187	0.070	1.658

a. Predictors: (Constant), RD, SD, Sales growth, BS, SIZE, COB

b. Dependent Variable: ROE

Table 4.5 shows 0.211 of the R square of. The result shows that 21.1% variation in the dependent variable or ROE is described by the independent variables. After adjusted on the errors, the adjusted R square shows that the variation is about 18.70% of ROE. The standard error of the regression is 0.07 which means the average distance of the data points from the fitted line is about 7% of ROE.

Table 4.7 ROE model summary using Total debt

<i>Model</i>	<i>R</i>	<i>R Square</i>	<i>Adjusted R Square</i>	<i>Std. Error of the Estimate</i>	<i>Durbin-Watson</i>
1.000	.466a	0.217	0.192	0.071	1.653

a. Predictors: (Constant), RD, BS, Sales growth, TD, COB, SIZE

b. Dependent Variable: ROE

Table 4.6 shows 0.217 of the R square. The result shows that 21.7% variation in the dependent variable or ROE is explained by the independent variables. After adjusted on the errors, the adjusted R square shows that the variation is about 19.20% of ROE. The standard error of the regression is 0.071 which means the average distance of the data points from the fitted line is about 7.1 % of ROE.

Table 4.8 : Multiple regressions results

	MODEL 4A		MODEL 4B		MODEL 4C	
	Coefficients	Sig.	Coefficients	Sig.	Coefficients	Sig.
TD	-0.067*	0.072	-	-	-	-
SD	-	-	-0.059	0.184	-	-
LTD	-	-	-	-	-0.097*	0.054
SIZE	0.055 ***	0.000	0.050***	0.000	0.059***	0.000
Sales growth	0.000	0.776	0.000	0.725	0.000	0.787
BS	0.008***	0.001	0.008***	0.001	0.008 ***	0.002
COB	0.001	0.962	0.000	0.992	0.008	0.797
RD	0.020 *	0.093	0.019 *	0.087	0.020 *	0.072
Constant	-0.356	0.000	-0.323	0.000	-0.376	0.000

a. Dependent Variable: ROE

b. ***, **, * significant at 0.01, 0.05 and 0.1 respectively.

A multiple regression was performed to assess all variables to predict the ROE which is presented in Table 4.7. The result shows that total debt, and long-term debt have a significant and negative relationship with ROE, based on Table 4.8., $\beta = -0.067$, $p = 0.072$ and $\beta = -0.059$, $p = 0.184$ respectively. This indicates that an increase in the long-term debt and total debt would decrease equity returns. The plantation company in Malaysia shows lower returns on shareholdings with higher debt to finance the business. This result is in line with Tifow & Sayilir (2015), Bhattarai (2016), Yuga Raj Bhattarai (2016). Similarly, high debt leverage made the company more likely to face financial pressure and higher financing costs for business operations that reduced its return on equities. This is also matched with trade off theory where high risk associated with the business to increase the gearing ratio will bring lower return to shareholder. The usage of debt would be very profitable at the beginning stage of investment and would add firm value. Nevertheless, at a certain degree of debt use, debt expenses would significantly rise and outweigh tax benefits.

Meanwhile, Size has significant positive relationship with ROE. It is shown by the ($B = 0.05$ to 0.059 ; $p = 0.00$). The results show that larger plantation company will produce greater returns to equity. In terms of sales growth, no significant relationship is observed which is in line with Abdul Ghafoor Khan (2012).

For corporate governance variable as in Table 4.8, board size shows a strong significant relationship for all the model as the ($P < 0.01$) across all models. Role duality shows a positive relationship with $P > 0.10$. The outcome indicates a duality of role between CEO and Board

member able to produce a good return on equity. Through separating the positions, a company may effectively separate management from the board and encourage the board member and CEO to perform their respective duties. regardless of whether issues in one position impact the other. This result for variable role duality is consistent with Ahsan Akbar 2014. Thus, the results is inconsistent with agency theory that suggests that CEO duality is bad for performance because it compromises the monitoring and control of the CEO. However, the result is consistent with stewardship theory which argues that CEO duality may be good for performance due to the unity of command it presents.

As a conclusion to this analysis, result of this study provides evidence that not all of the variables tested have significant effect on ROE. While firm size, board size and role duality has a positive relationship, total debt and long-term debt variables, have a significant negative impact on ROE.

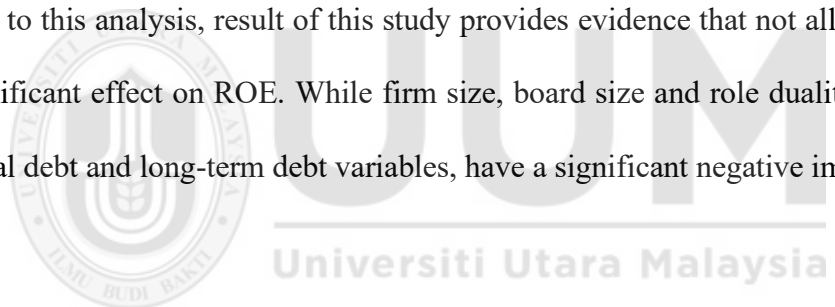


Table 4.9 ROA model summary using long term debt

<i>Model</i>	<i>R</i>	<i>R Square</i>	<i>Adjusted R Square</i>	<i>Std. Error of the Estimate</i>	<i>Durbin-Watson</i>
<i>1.000</i>	<i>.614^a</i>	<i>0.377</i>	<i>0.359</i>	<i>0.251</i>	<i>0.710</i>

a. Predictors: (Constant), RD, Sales growth, LTD, BS, COB, SIZE

b. Dependent Variable: ROA

Table 4.9 shows 0.377 of the R squares. It shows that 37.7% variation from the dependent variable or ROA is described by the independent variables. After adjusted on the errors, the adjusted R square shows that the variation is about 35.90% of ROE. The standard error of the regression is 0.251 which means the average distance of the data points from the fitted line is about 25.1% of ROA.

Table 4.10 ROA model summary using short term debt

Model Summary

<i>Model</i>	<i>R</i>	<i>R Square</i>	<i>Adjusted R Square</i>	<i>Std. Error of the Estimate</i>	<i>Durbin-Watson</i>
<i>1.000</i>	<i>.706a</i>	<i>0.498</i>	<i>0.483</i>	<i>0.226</i>	<i>0.799</i>

a. Predictors: (Constant), RD, SD, Sales growth, BS, SIZE, COB

b. Dependent Variable: ROA

Table 4.9 shows 0.498 of the R square. It shows that 49.8% variation in the dependent variable or ROA is described by the independent variables. After adjusted on the errors, the adjusted R square shows that the variation is about 48.30% of ROE. The standard error of the regression is 0.226 which means the average distance of the data points from the fitted line is about 22.6% of ROA.

Table 4.11 ROA model summary using total debt

<i>Model</i>	<i>R</i>	<i>R Square</i>	<i>Adjusted R Square</i>	<i>Std. Error of the Estimate</i>	<i>Durbin-Watson</i>
1.000	.617 ^a	0.380	0.361	0.252	0.655

a. Predictors: (Constant), RD, BS, Sales growth, TD, COB, SIZE

b. Dependent Variable: ROA

Table 4.8 shows 0.380 of the R square. It shows that 38.0% variation in the dependent variable or ROA is described by the independent variables. After adjusted on the errors, the adjusted R square shows that the variation is about 36.10% of ROE. The standard error of the regression is 0.252 which means the average distance of the data points from the fitted line is about 25.2% of ROA.

Table 4.12 Multiple regressions results

	MODEL 4D		MODEL 4E		MODEL 4F	
	Coefficients	Sig.	Coefficients	Sig.	Coefficients	Sig.
TD	0.395	0.003	-	-	-	-
SD	-	-	1.060***	0.000	-	-
LTD	-	-	-	-	-0.373**	0.041
SIZE	0.294 ***	0.000	0.307 ***	0.000	0.372 ***	0.000
Sales growth	0.000	0.936	0.000	0.816	0.000	0.813
BS	0.002	0.865	0.008	0.291	0.001	0.927
COB	0.267**	0.016	0.241**	0.012	0.189*	0.078
RD	0.146 ***	0.001	0.136 ***	0.000	0.153***	0.000
Constant	-1.375	0.000	-1.489	0.000	-1.827	0.000

a. Dependent Variable: ROA

b.***, **, * significant at 0.01, 0.05 and 0.1 respectively.

A multiple regression was performed to assess all variables to predict the ROA which is presented in Table 4.11. Table 4.11 shows that short-term debt, and long-term debt are statistically significant with relation to ROA ($\beta=1.060$, $p=0$ and $= -0.393$, $p=0.0041$) respectively. The insignificant results of total debt indicate that total debt as a whole, does not affect its book value of asset. These findings are in lined with empirical findings by Makau, and Kosimbei (2014). The results are also corroborating the proposition by Modigliani-Miller irrelevant theory. The irrelevant principle of Modigliani and Miller indicates that the measurement of a asset value is unrelated to a company's capital structure.

Meanwhile, Size has significant relationship with ROA as shown by the $p =0.000$ for size. Company scale affect asset return. Larger company size offers better return on asset. For corporate governance variable, board size shows a insignificant relationship for model 4D to 4F. Nevertheless, composition of board and CEO duality shows significant relationship with 5% to 10% and 1% respectively. It is an indicator that corporate governance practice brings a positive result to ROA. Strong corporate governance for plantation company maintains investors' confidence and that able to bring better return to company asset. This is also consistent with the concept of the stewardships as board of directors and managers working under their own duty. The management therefore manages the company by optimizing company assets. in a way that financial results are maximized, including its shareholder returns, because its success affects its performance directly.

As a conclusion to this analysis, result of this study provides evidence that out of three corporate governance variables tested, only one variable that is the proportion of independent directors on board that lead to better corporate governance which has significant effect on ROA. While variables such as total debt, sales growth, and board size do not have any significant effect on ROA, other variables like short-term debt, long-term debt, firm size, composition of board and role duality have some influences with ROA. With respect to adjusted R-squares, it is shown that the measures for ROA (range from 36.1% to 48.3%) is greater than adjusted R-squares for ROE (range from 18.7% to 19.5%)

4.6 Summary of Findings

The findings were summarized in the Table 4.13

Table 4.13: Summary of findings

Dependent variable	ROE		ROA		Tested theory results
Total debt	Significant negative at 10%		Insignificant relationship		Partially support agency cost
Short term debt	Insignificant relationship		Significant positive at 1%		Partially support agency cost
Long-term debt	Significant negative relationship at 10%		Significant negative relationship at 5%		Support agency cost
Size	Significant positive relationship at 1%		Significant positive relationship at 1%		Support Asymmetric theory
Sales growth	Insignificant relationship		Insignificant relationship		
Board size	Significant positive at 1%		Insignificant relationship		Partially support Resource dependency theory
Composition of board	Insignificant relationship		Significant positive at 5% and 10%		Partially support Resource dependency theory
Role duality	Significant positive relationship at 10%		Significant positive relationship at 1%		Support Stewardship theory Reject Agency cost

4.7 Conclusion

This chapter discusses the findings through analysis performed. It begins with the results of descriptive statistics, followed by normality tests through the histogram and p-p plot, correlation and VIF. There is also multiple regression analysis conducted to provide a clearer picture of the research. The analysis explains how the dependent and independent variables influence the performance of the plantation firm. The following chapter addresses the whole research, conclusions, constraints, and suggestions for future studies.



CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

The primary objective of this research is related to the effect of capital structure and board characteristics on firm's performance which focuses exclusively on plantation companies in Bursa Malaysia. Chapter five presents the summary of the research topic. This chapter discusses summary of the finding, theoretical contribution, practical and policy implication of the study, limitations of the research, suggestions for improvement for future research and conclusion of the study.

5.2 Summary of Findings

The key objectives of the analysis are to analyze whether selected firm and board characteristics affect the performance of plantation firm listed on the Bursa Malaysia. The data collection of the study is obtained from the DataStream and respective companies' financial report. From ROE, the result of this study reports that long term debt and total debt, board size and role duality have an effect on ROE. Meanwhile, sales growth and composition of board has statistically significance relationship with ROE.

For ROA, even though the R^2 in all debt measures are higher than ROE, the result of this study provides evidence that not all of the variables tested have significant effect on ROA. While short term debt and long-term debt have significant effect on ROA board

characteristics such as composition of board and role duality have positive effects on firm's performance measured by ROA. Meanwhile, the variables of sales growth and board size do not have significant effect on ROA. The result of the study concludes that Malaysian plantation industry are affected more towards ROA than ROA. This show that Malaysian companies with the presence of corporate governance practice and capital structure are more significant towards company asset. than shareholders' return. Companies in Malaysian plantation industry show different results regarding the relationship and impact of capital structure and corporate governance prove this study's assumption that different industry and different internal governance mechanism will produce different outcome.

5.3 Theoretical Contribution of the Study

The current study show makes contribution in terms of its findings. This study is amongst the earliest that attempt to look at capital structure effect on a specific industry. After 60 years of the first capital theory, a lot of empirical studies were conducted in order to create the relationship between capital structure and business performance and the optimum point. However, empirical analysis results are mixed. The short-term debt, and long-term debt affect counteractingly with performance measures of ROA and ROE. Besides, as internal corporate governance mechanism applied in different industry will produce different outcome that influence company performance, this study had contributed to the body of knowledge on certain extent.

5.4 Implications of the Study

Performance measurement using ROE has been seen to influence the performance of the, long-term debt and total debt of plantation companies in Malaysia. However, the results are opposite if the performance of companies measured by ROA as short-term debt affect positively and long-term debt affect negatively at 5%. Hence, it is recommended that the adoption of optimum financing strategies by management will help to improve performance. Corporate governance variable also affects plantation firm performance. In this study, the corporate governance variable such as board size, and composition of board shows an opposite result with each other.

For ROA, having a good composition of board as suggested in MCCG is proved to enhance firms' asset efficiency management. Meanwhile, optimal board size is important to increase the shareholders' confidence. Noticeably, the results of having same person as chairman and CEO seems not to be applicable as recommended in MCCG. The results would highlight the weaknesses in the existing practices; thus, this may help the policy makers in amending the existing policy or formulating new policy particularly on CEO duality.

5.5 Limitations of the Research

Among the limitations of the research is that all independent variables including control variables are limited to selected firm characteristics that are widely documented in the literature. Control variables only focus on size and sales growth. Similarly, this study only focuses on board

characteristics, particularly board size, proportion of independent directors and CEO duality. Besides that, there are problems such as missing data in few companies. This problem also applies in manual data collection.

The time period of this study begins from 2013 and ends in 2017. Thus, revision in MCCG in 2007 and 2012 are not fully captured in the study. For example, exemplary practices such as composition of independent directors, tenure of independent directors, and gender of directors are seen to have several changes during this time.

The current study uses all plantation companies as an overall sample regardless of their sizes. Thus, future research also could consider splitting plantation companies into different groups, such as small, medium-sized, and large plantation firms. Thus, the quality of the result will be enhanced by including more categories. This could yield a more interesting finding especially since this study finds that firm size is indeed a crucial factor.

5.6 Suggestions for Further Studies

This study focuses on limited variables which covers a five-year period (2013 to 2017). Hence, it is suggested that future researchers can collect more data for more than five years that might provide a better and accurate explanation to plantation firm performance. The study can employ other variables to create a better result such as government enforcement corruption index, executive compensation package and audit committee member. Other macroeconomic factors that

may have a relationship with capital structure, such as tax rate, corporate income, interest rate, monetary policies could also be the contributing factors that could be considered in the future studies.

Furthermore, future research could consider other dependent variables to examine the effect on company performance. Other accounting base measurements such as Tobins' Q or market based firm performance such as share price performance could be used for alternative measurements. Finally, future research should also examine a comparison study across industries within one market or comparison of the plantation industry with the same type of industry in other markets.

5.7 Conclusion

This research describes the relevance of capital structure decision and corporate governance practices of the business performance, theory, and relations in the Malaysian plantations industry. The capital structure of the company and corporate governance practice to some extent do influence the plantation company's performance. The key findings of the analysis among plantation companies in Malaysia would be strong with incorporation of corporate governance and an effective capital structure. Good judgment on the optimum debt level is important to boost plantation companies' results. Given the inconclusive findings from past studies about the effect of capital structure and corporate governance on company performance., this study attempts to fulfill the gaps by examining a specific sector of interest that is a plantation.

Reference

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