# **BOARD GOVERNANCE CHARACTERISTICS, CAPITAL STRUCTURE DECISIONS AND COMPANY PERFORMANCE IN MALAYSIA**

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DOCTOR OF PHILOSOPHY UNIVERSITI UTARA MALAYSIA May 2013

# **BOARD GOVERNANCE CHARACTERISTICS, CAPITAL STRUCTURE DECISIONS AND COMPANY PERFORMANCE IN MALAYSIA**

By

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Thesis Submitted to the Othman Yeop Abdullah Graduate School of Business, Universiti Utara Malaysia, in Fulfillment of the Requirement for the Degree of Doctor of Philosophy

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### ABSTRACT

The separation of ownership and control in public listed companies limits the involvement of shareholders in management decision making, including capital structure decisions. In the capital structure decision-making process, managers always get to push through their preferences, which focus on debt instead of equity. Shareholders rely on the board of directors to evaluate and challenge management decisions. This study examines the effect of board governance on company leverage that focus on how directors discharge their duties, referred to as the board process. Four variables of board process are analysed: performance of independent directors, board's risk oversight, Chief Executive Officer (CEO) performance evaluation, and directors' accessibility to information. Besides, the interaction between the manager's ownership and the board process on company leverage is examined. This study also investigates the mediation effect of capital structure decisions on the relationship between board process and company performance. The study uses two types of data which are questionnaire survey of Malaysian directors and the companies' annual reports. Based on returned questionnaires representing 175 companies, results of the regression analysis indicate that directors with lower risk appetite and a more effective board are more likely to make less risky capital structure decisions. Moreover, owner-managers with large ownership influence the board's capital structure decisions. The results also show that effective independent directors and boards who monitor company risks vigorously are more likely to monitor management from adopting excessive leverage, which results in positive company performance. The findings provide several implications for policymakers in terms of assessing existing guidelines, particularly related to board effectiveness.

**Keywords:** Corporate Governance, Board Process, Capital Structure Decisions, Company Performance

### ABSTRAK

Pengasingan di antara pemilikan dan penguasaan dalam syarikat penyenaraian awam menghadkan pembabitan pemegang saham dalam proses pembuatan keputusan termasuklah keputusan berkenaan struktur modal syarikat. Dalam proses pembuatan keputusan struktur modal syarikat, pengurus kebiasaannya berkeupayaan untuk memenuhi kecenderungan mereka iaitu fokusnya adalah kepada hutang berbanding ekuiti. Pemegang saham bergantung kepada ahli lembaga pengarah bagi menilai dan mencabar keputusan pihak pengurusan. Kajian ini mengkaji kesan daripada tadbir urus ahli lembaga terhadap hutang syarikat yang menfokuskan terhadap pelaksanaan tugas oleh pengarah dan ia merujuk kepada proses ahli lembaga. Empat pembolehubah yang dikaji di bawah proses ahli lembaga adalah prestasi pengarah bebas, pengawasan risiko oleh ahli lembaga, penilaian prestasi ketua eksekutif dan kebolehcapaian maklumat oleh pengarah. Selain itu, interaksi di antara pemilikan oleh pengurus dan proses ahli lembaga terhadap hutang syarikat turut dikaji. Kajian ini turut mengkaji akan kesan hutang syarikat sebagai pembolehubah penengah terhadap hubungan di antara proses ahli lembaga dan prestasi syarikat. Kajian ini menggunakan dua jenis data iaitu soal-selidik kepada pengarah di Malaysia dan laporan tahunan syarikat. Berdasarkan kaji selidik yang diterima yang mewakili 175 hasil analisis regresi mendapati pengarah yang mempunyai buah syarikat, kecenderungan terhadap risiko yang rendah dan lembaga pengarah yang lebih efektif akan lebih cenderung untuk membuat keputusan berkenaan struktur modal yang kurang berisiko. Kajian ini turut mendapati bahawa pemilik-pengurus yang mempunyai pemilikan yang besar dalam syarikat mempengaruhi keberkesanan ahli lembaga dalam membuat keputusan struktur modal syarikat. Hasil kajian turut menunjukkan pengarah bebas yang efektif dan ahli lembaga yang mengawasi risiko syarikat dengan teliti akan lebih mengawasi pihak pengurusan daripada mengambil hutang yang berlebihan dan ini memberi kesan positif terhadap prestasi syarikat. Hasil kajian menyumbang kepada beberapa implikasi terhadap penggubal polisi dalam menilai garis panduan sedia ada khususnya terhadap keberkesanan lembaga pengarah.

Kata kunci: Tadbir Urus Korporat, Proses Ahli Lembaga, Keputusan Struktur Modal, Prestasi Syarikat

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# LIST OF ABBREVIATIONS

AOB	Audit Oversight Board
AGM	Annual General Meeting
CACG	Commonwealth Association for Corporate Governance
CBI	Confederation of British Industry
CCM	Companies Commission of Malaysia
CDO	1
	Collateralized debt obligation Chief Executive Officer
CEO CMP	
COB	Capital Market Master Plan
	College of Business
DBR	Disclosure Based Regulation
EPF	Employee Pension Fund
EPS	Earnings per Share
ERM	Enterprise Risk Management
EVA	Economic Value Added
FCCG	Finance Committee on Corporate Governance
FOB	Faculty of Business
FPLC	Federation of Public Listed Companies
ICGN	The International Corporate Governance Network
KMO	Kaiser-Meyer-Olkin
KLSE	Kuala Lumpur Stock Exchange
KPI	Key Performance Indicator
KPMG	Klynveld Peat Marwick Goerdeler
MACD	Malaysian Alliance of Corporate Directors
MAICSA	Malaysian Institute of Chartered Secretaries and Administrators
MBS	Mortgage Backed Securities
MCCG	Malaysian Code on Corporate Governance
MIA	Malaysian Institute of Accountants
MICG	Malaysian Institute of Corporate Governance
MICPA	Malaysian Association of Certified Public Accountants
MID	Malaysian Institute of Director
MIDA	Malaysian Investment Development Authority
MSWG	Minority Shareholder Watchdog Group
MVA	Market Value Added
NYSE	New York Stock Exchange
OECD	Organization for Economic Development an Co-operation
OLS	Ordinary Least Squares
PLUS	Projek Lebuhraya Utara Selatan
PN17	Practice Note No. 17
REIT	Real Estate Investment Trust
ROA	Return on Asset
ROE	Return on Equity
ROI	Return on Investment
SPSS	Social Package for Social Sciences
UEM	United Engineers Malaysia
UK	United Kingdom
UNISEL	Universiti Selangor
US	United States
UUM	Universiti Utara Malaysia

VIF	Variance Inflation Factor
*ZRESID	Standardized residuals
*ZPRED	Standardized predicted

## CHAPTER ONE

## **INTRODUCTION**

## **1.1 Background of the Study**

This study examines the relationship between board characteristics and capital structure decisions in Malaysia. Capital structure decisions are influenced by managers' self-interests; thus, it is expected that their decisions might increase a company's risks (Brailsford, Oliver, & Pua, 2002), which could also affect a company's performance. Ownership structure also influences capital structure decisions (Arshad & Safdar, 2009; Lundstrum, 2009, Lin, Ma, Malatesta, & Xuan, 2011). In light of such influences, it would be interesting to examine boards function and ownership structures as monitoring mechanisms for management decisions and actions, particularly in terms of influencing capital structure decisions. Capital structure decisions refer to decisions made about financing sources in which company leverage is represented. Four main attributes of board governance are identified as being associated with capital structure: board structure, composition, characteristic and process. Four elements that relate to board process are the performance of independent directors, the board's risk oversight, the chief executive officer (CEO) performance evaluation, and the directors' accessibility to information.

The high leveraging of companies became particularly acute in 1997 and 1998, when it served as one of the factors resulting in the Asian financial crisis (Thomas, 2002; Driffield, Mahambare, & Pal, 2007). The crisis caused severe damage for Thailand, Indonesia, South Korea, and Malaysia. In the context of Malaysia, many companies were highly dependent on debt financing with banking institutions before the crisis (Suto, 2003), including loans in foreign currency—especially the United States (US) dollar, which provided a relatively lower interest rate at the time. However, when the Malaysian ringgit depreciated significantly against the US dollar, companies' debt swelled. In addition, according to Fong (2008), many Malaysian companies have maturity mismatched in funding as their long-term projects are being financed using short-term debts instead of long-term debts. As the crisis struck, banks' risk aversion heightened and companies suffered from the liquidity crunch and were unable to roll over their loans from banks. The companies' condition was further deteriorated by corporate failures attributed to weak corporate governance.

One of the best efforts in dealing with the corporate failures during the Asian financial crisis was perhaps the strategy put forward by the Finance Committee on Corporate Governance (FCCG), which published the Malaysian Code on Corporate Governance (MCCG) in March 2000. The code aims to set out principles and best practices for companies to use in their operations in order to achieve an optimal governance framework. These include issues such as board compositions, procedures for the appointment of new directors, remuneration of directors, and the establishment of board committees. In general, the code provides guidelines for directors in executing their roles. The directors' main role is to monitor management so as to ensure that shareholders' wealth increases over time. Among the important elements that need to be monitored are capital structure decisions and the return of shareholders' investments (Noriza, 2010).

Nevertheless, about a decade after the Asian financial crisis, the US subprime crisis unfolded. One of the root causes of the US subprime mortgage crisis was the prolonged US low interest rates and compromised quality of bank loans. The excessive mortgage and debt creation (leverage) were further fuelled by the securitization of mortgages and debts into various financial agreements, such as mortgage-backed securities (MBS) and collateralized debt obligations (CDO). When the US property bubble came to a halt, the price of housing properties started to decline. Subprime mortgages backed by securities were badly affected as borrowers began defaulting on their loans. Major global financial institutions that had borrowed and invested heavily in MBS, such as Lehman Brothers, reported big losses. Even worse, experts argued that the board function in financial institutions had been loosened (Murphy & Brown, 2009).

The crisis worsened in the second half of 2008 and moved to other countries in the world, including Malaysia. US banks became increasingly cautious about lending, and consumer spending followed suit, which contributed to a sharp decline in external demand and corrections in commodity prices. In Malaysia, the impact was felt in economic sectors with high trade exposure, subsequently affecting the domestic demand. As a result, gross domestic demand moderated to 4.7% in the second half of the year, bringing the overall growth in aggregate domestic demand to 6.9% in 2008 compared to 9.8% in 2007 (Bank Negara Malaysia, 2008).

This situation demonstrates that rather than being too dependent on leverage or rookie investments, a solid and solvent foundation of capital structure, including a low level of leverage and equity-based financing, is essential. Excessive leverage exposes the company to the risk of not being able to pay back the debts as the market condition is not predictable. The uncertain economy provides thousands of possibilities to the company business. The worst case is that companies are not able to sell off their products or services due to poor demand in the market, which in turn affects the overall company performance. As capital structure decisions are influenced by managers who prefer to have debt rather than equity financing (Myers, 2001), the board of directors serves as an important mechanism for monitoring management decisions (Shamsher & Zulkarnain, 2011). The board's primary function is to protect the shareholders' interests. In order to measure the effectiveness of the board, the focus is directed to board process (Leblanc, 2004). Board process refers to the approach taken by the directors in discharging their duties (Macus, 2008) and the reflection of board's decision making activities (Korac-Kakabadse, Kakabadse, & Kouzmin, 2001). As the board structure alone does not reflect the quality of the board, research exploring the board process is highly warranted.

The issues of boards of directors have been studied from various perspectives, such as finance, management, and law (see, for example, Kula, 2005; Abor, 2007; Ong & Wan, 2008; Rohana, Halimi, & Erlane, 2009; Lundstrum, 2009). Previous studies have focused on board structure, board composition, and board characteristics, yet few studies have included the board process attributes (Nicholson & Kiel, 2007). The current study investigates such factors, focusing in particular on the Malaysian environment. Thus, this study seeks to answer the essential question of whether capital structure decisions and company performance are associated with the board process. The remainder of this chapter discusses the problem statement, research questions, objectives of the study, significance and scope of the study, and the organization of the study.

## **1.2 Problem Statement**

The Asian financial crisis in 1997 and 1998 provided evidence that a number of corporations failed in Malaysia partly due to poor governance and risky financial structure, as in the case of Renong and Malaysian Airline Systems (Fong, 2008). In order to solve such financial woes, the Malaysian government extended monetary assistance to companies in trouble. However, some Malaysian companies are suffering from the effect of the 1997–1998 crisis. For instance, Lion Corporation and Pan Malaysian Industries are ranked as the first and fourth, respectively, of the top 50 companies with the highest leverage as of third quarter 2008. The two companies are struggling with debt problems carried over from the crisis (Fong, 2008).

Nevertheless, most Malaysian companies still choose debt financing as the most favourable source for raising funds (Bank Negara Malaysia, 2008). On average, the business sector used 41% of loan financing in 2007, which increased to 42% in 2008 (Bank Negara Malaysia, 2008). In 2009, the amount of loan financing rose to 47% (Bank Negara Malaysia, 2009). To a certain extent, such financing exposes the companies to risk, particularly companies that do not manage their capital structure effectively. Any economic contraction would reduce the market demand for company goods or services that would further worsen the company debts servicing capability. This evidence seems to suggest that poor capital structure can bring disastrous results to a company. For example, Axis Incorporation Berhad, a garment manufacturer, was classified as a Practice Note No. 17 (PN17) company by Bursa Malaysia<sup>1</sup> after defaulting on its loans of RM100 million (Loong, 2010).

<sup>&</sup>lt;sup>1</sup> Previously known as Kuala Lumpur Stock Exchange (KLSE), it was renamed Bursa Malaysia in April 2004 due to a demutulization exercise.

The separation of ownership and control in modern public listed companies limits shareholders' involvement in management decision making, including capital structure decisions. In the decision making process for capital structure, managers always get to push through their preferences, which focus on debt instead of equity because the cost of debts is lower than equity as companies do not have to share a large amount of its profits as the dividend disbursement to the shareholders (Myers, 2001). Therefore, shareholders have to rely on the board of directors to challenge management decisions and actions. However, shareholders are disadvantaged if the decisions turn out to be inefficient and very risky due to poor monitoring by the directors (King & Wen, 2011), which further reinforces the need to assess board governance characteristics, particularly the board process in influencing capital structure decisions.

The board effectiveness is also questioned during any financial scandal (Lees, 2010; Koh, 2010), which raises concern about directors' ability to discharge their responsibilities effectively. In Malaysia, the appointment of independent nonexecutive directors who seem to agree with executive directors' decisions raised skepticism toward the independence of such directors (Haniffa & Cooke, 2002). This is further evidenced by the significant losses suffered by Sime Darby as a result of a failed board monitoring process (Shanmugam, 2008). The evidence thus far has suggested that company performance is influenced by the way that company is being managed. Therefore, assessing the effect of board effectiveness particularly the performance of independent directors on company performance would also enhance the board governance literature. A company capital structure decisions are also influenced by the ownership structure (Brailsford *et al.*, 2002; Lin *et al.*, 2011). The ownership of most Malaysian companies is concentrated in a few individuals and families (Shim, 2006). A company is normally run by the owners, who serve as the company managers in order to maintain their control and interests in the company. The owners can influence the board's decision making (Busija, 2006), and the decisions made affect other shareholders. The possibility exists for owners-managers make decisions to fulfill their own interests. Yet minority shareholders become increasingly frustrated if decisions do not provide any value to their investments (Haniffa & Hudaib, 2006). Thus, it is essential to examine the interaction effect between ownership structure and board process on capital structure decisions. Research on this issue is still lacking as previous studies have emphasized the interaction between ownership structure and board characteristics in financial reporting (Chobpichien, Hasnah, & Daing Nasir, 2007; 2008) and company performance (Boeker & Goodstein, 1993; Cho & Kim, 2007).

Motivated by the urgent need to explore this issue, this study aims to contribute to the debate on the effects of board structure, board characteristics, board composition, board process, and managerial ownership on company leverage and performance.

## **1.3** Research Questions

The following question is addressed to identify the possible governance reasons for capital structure:

1. Do board structure, composition, characteristics, and process influence company leverage?

The influence of managerial ownership on the relationship between board attributes and company leverage leads to the next question:

2. Does the interaction between managerial ownership and board process influence company leverage?

The dearth of research on the board process with company performance in the Malaysian environment leads to the following question:

3. Is there any relationship between board process and company performance?

Then, the association between company leverage and company performance is investigated. The next research question is as follows:

4. Does company leverage affect company performance?

The novel part is to address the mediation effect of capital structure on the relationship between board process attributes and company performance. In analyzing whether leverage mediates the relationship between board process and company performance, the study takes three conditions into consideration (Baron & Kenny, 1986). First, board process should be significant to leverage. This question is addressed in research question (1). Second, board process should be associated with

company performance, which led to research question (3). Finally, the following question is addressed to understand the influence of board process on company performance with the presence of leverage:

5. Do capital structure decisions mediate the relationship between board process and company performance?

## **1.4** Objectives of the Study

The specific objectives of the study are as follows:

- 1. To examine the relationship between board governance characteristics and company leverage.
- 2. To identify the moderating effect of managerial ownership on the relationship between board process variables and company leverage.
- 3. To investigate the effect of board process on company performance.
- 4. To examine the relationship between company leverage and company performance.
- 5. To determine the mediating effect of capital structure decisions on the relationship between board process and company performance.

## 1.5 Significance and Contributions of the Study

The expected contributions of the study are categorized into three areas: the body of knowledge, theoretical aspects, and practical aspects.

## 1.5.1 Body of Knowledge

This study extends the capital structure and corporate governance research. Prior studies have focused on the impact of board structure, board composition, and board

characteristics on capital structure (see, for example, Friend & Lang, 1988; Berger, Ofek, & Yermack, 1997; Yu, Rwegasira, & Bilderbeek, 2002; Abor, 2007). Meanwhile, study on board process is limited, "possibly due to the difficulty of gaining access to boards" (Wan & Ong, 2005, p. 287). Thus, the current study fills an important gap in board governance studies (Finkelstein & Mooney, 2003) as many areas in such studies have not been explored and the difficulty in collecting data from directors is not an excuse. Furthermore, Leblanc (2003) stresses that studying the board process provides a better understanding of board members' duties and practices and their impact on company performance. Therefore, the novelty of this research is when it combines the element of board process, it provides greater understanding of the performance of independent directors, the board's risk oversight, the CEO performance evaluation, and directors' accessibility to information.

Nicholson and Kiel (2007, p. 604) propose that "understanding the intervening variables that influence the board of directors—firm performance relationship is critical to developing a more integrative approach." Hence, this study is designed to go beyond the earlier studies by incorporating the mediating variable, which is represented by leverage. The purpose of using leverage as the mediating variable is to explain the effectiveness of directors that influence company performance through the decision on capital structure. This approach follows La Rocca's (2007) recommendation that a model incorporating corporate governance variables, capital structure, and company value is needed for future research.

Furthermore, research in the area of board's risk oversight is still limited. As the directors' role in risk management has become pertinent nowadays, this study offers a clearer picture of boards' role in risk oversight. In addition, this study hopes to identify whether board's risk oversight have any significant influence on company leverage.

The influence of Malaysian independent directors' performance on company leverage is also investigated. The gist of the role of independent directors is the ability to provide constructive questions and comments during deliberations in order to protect the shareholders and company. Their role is slightly different from nonindependent directors. For instance, non-independent directors who represent the majority shareholders are more likely to protect their respective interests in the company, and this group of directors has a greater possibility of influencing management decisions as they have the authority to appoint or terminate existing management.

Previous studies assume that the composition of independent directors is associated with the level of monitoring over management (Rashidah, Fazilah, Aza Azlina, & Noor Nasyikin, 2005; Abor, 2007; Kin & Hian, 2007; Ngui, Voon, Ee, & Edith, 2008; Hsu-Huei, Paochung, Haider, & Yun-Lin, 2008). Very few studies have specifically focused on the performance of independent directors (Pye & Pettigrew, 2005). Tan Sri Navaratnam, the former president of Transparency International Malaysia, put forth a pertinent question: "Do all the independent directors have the skillsets and experience to make a thorough assessment? ... All these questions still remained unanswered" (Yeap, 2009, p. 60). Thus, a further contribution of the

current study is to determine the competency and capability of Malaysian independent directors and the resulting affect on company leverage and performance.

## **1.5.2 Theoretical Aspects**

From the theoretical perspectives, this study extends the application of agency theory within the context of board process. In previous Malaysian studies, the application of agency theory has been focused on board structures, board composition, and board characteristics (see, for example, Rashidah *et al.*, 2005; Halimi, Rohana, & Zubaidah; 2008). However, the effectiveness of directors is very much important in today's research. As companies face various challenges due to uncertain economic conditions, the way directors run the boards does matter particularly in evaluating the CEO performance, accessing company information, and monitoring the company risks. Thus, it is very much appropriate to look at the applicability of this theory to board process.

#### **1.5.3 Practical Aspects**

The findings of this study can assist regulatory bodies, such as Bursa Malaysia and Securities Commission in determining whether existing requirements for corporate governance imposed upon all companies are adequate. In addition, the findings on board process can particularly assist board members in maximizing their contributions and improving their roles during board deliberations. As the board process is the key component in board attributes, it is expected that the existence of an effective board can lead to better decision making and thus improve company performance (Leblanc, 2004).

Moreover, the findings on the performance of independent directors can provide insights for policymakers on the performance of independent directors who run Malaysian companies. They can also provide insights for shareholders and directors on the main criteria of independent directors that add value to their companies. With regard to shareholders, this study enhances their understanding of how the board process influences company leverage and performance.

#### **1.6 Scope of the Study**

This study is limited to Malaysian public companies listed under the category of the main market in Bursa Malaysia. This study aims to examine the effect of board attributes on company leverage as well as the influence of board process on company performance. Two types of data are used: secondary data from a three-year period (2007 to 2009) and questionnaire survey data on Malaysian directors. Due to the difficulty involved in getting responses from directors, a minimum response of one director is considered sufficient to represent the company.

Throughout this study, the agency theory is widely used in explaining the relationship between board attributes and company leverage as well as the link between board process and company performance. Nevertheless, the resource dependency theory is also used to describe the importance of independent directors in advising board members during company decision making.

## **1.7 Organization of the Study**

The thesis is divided into seven chapters as illustrated in Figure 1.1. The remainder of this study is organized into six chapters.



Figure 1.1 Organization of the Thesis

The literature review is divided into two chapters (Chapter 2 and 3). The first part of Chapter 2 presents the introduction of corporate governance and its development in other countries, including Malaysia. This is followed by a discussion on theories related to the board of directors. Chapter 2 then highlights the importance of internal control mechanisms (i.e., the board of directors). The types and functions of directors as well as board attributes in previous studies are discussed in this chapter. Previous studies that link board attributes and company performance are also reviewed.

The second part of the literature review, presented in Chapter 3, covers the discussion on capital structure. The chapter begins with a definition of capital structure followed by the development of capital structure in Malaysia. Then, theories on capital structure are discussed. As capital structure decisions are seen to be influenced by managers, the agency theory and its relation with capital structure is discussed in detail. The chapter proceeds with reviews of previous studies on the link between board attributes and capital structure, which the current study extends by incorporating board attributes, capital structure, and company performance. The final part highlights the literature on capital structure and company performance.

Based on the discussions in Chapters 2 and 3, Chapter 4 establishes the research framework and the development of 18 specific hypotheses. Theories such as agency theory and resource dependency theory assist in providing the underlying reasons of the relationship between board attributes and capital structure decisions as well as the relationship between board process and company performance.

Chapter 5 starts with an explanation of the research design, followed by types of data used in this study. As this study incorporates both primary and secondary data, a description of both data is presented. The most important part is the development of the questionnaire used to collect the data on board practices. The measurement of variables and the process of data collection are also presented. The chapter concludes with a brief discussion of the data analysis. Chapter 6 documents the results of the quantitative analysis in relation to the effect of board attributes on capital structure decisions. In addition, the results of the interaction effect between ownership structure and board process on company leverage are presented, followed by the results of the analysis of the association between board process and company performance. Finally, the findings on the mediation effect of capital structure decisions on the relationship between board process and company performance are discussed.

Chapter 7 presents the discussion on the findings in this study. The chapter also includes the contributions and limitations of this study as well as suggestions for future research.

## **CHAPTER TWO**

## **CORPORATE GOVERNANCE**

## **2.1 Introduction**

This chapter presents discussions on the definition of corporate governance (Section 2.2), development of corporate governance (Section 2.3), and development of corporate governance in Malaysia (Section 2.4). These discussions are followed by the discussion on the separation of ownership and control that leads to the emergence of agency theory (Section 2.5) and various theoretical perspectives on board of directors (Section 2.6). The discussion on board of directors is presented in Section 2.7. Finally, Section 2.8 summarizes the chapter.

#### **2.2 Definition of Corporate Governance**

According to Section 16(5) of the Companies Act 1965, a corporation or company exists as a legal person that can sue and be sued in court and has an unlimited life. Although a company exists as a legal person, the real individuals are required to act on behalf of the company. The managers are appointed as the agents of a company in managing the business (Jensen & Meckling, 1976). Upon the establishment of a company, shareholders contribute capital and elect a board of directors to run the company. The board then appoints managers to handle the daily operations. The boards of directors and shareholders have some powers to govern the company.

Previous researchers have restricted their study of corporate governance to public companies, which are managed by managers who prone to act opportunistically in order to fulfill their interests (Jensen & Meckling, 1976; Turnbull, 1997). There are

several definitions of the term corporate governance. Shleifer and Vishny (1997) see corporate governance as the approaches taken by the capital provider in assuring that they get returns from their investments. They stress that, apart from shareholders, banks also act as the active capital providers to companies. Turnbull (1997, p. 181) explains that "corporate governance describes all the influences affecting the institutional processes including those for appointing the controllers and/or regulators involved in the production and sale of goods and services." Compared to Shleifer and Vishny (1997), Turnbull (1997) considers broader stakeholders that involve internal or external factors that influence the public or private company. Internal factors are employees, directors, and advisers whereas external factors are suppliers, media, customers, shareholders, and regulatory bodies. The internal and external groups contribute to the company and aim to benefit from company decisions. Corporate governance also focuses on the responsibilities of the people who manage the company, which can be seen from the rules and procedures used in the decision making process (Syed Musa, Sharifah Khadijah, & Mahfudzah, 2003).

In addition to individuals and researchers who contribute to defining the phrase of corporate governance, the regulatory and non-regulatory bodies have made significant contributions in issuing guidelines and recommendations on the practices of good corporate governance. The earliest report in the United Kingdom (UK) was the Cadbury Report, which defines corporate governance as "a system by which companies are directed and controlled" (Cadbury Committee Report, 1992, para 2.5). The Cadbury Report (1992) expresses the view that the board of directors is accountable to the shareholders and company. The Hampel Report (1998) concurs with the recommendation of having an effective board, but it also focuses attention
on shareholders and encourages the shareholders to engage in more dialogues and communication with the management to ensure that the company is managed properly. Meanwhile, the Turnbull Report (1999) highlights the idea that a sound system of internal control contributes to safeguarding the shareholders' investments and company assets. Strategies for sound internal controls include maintaining proper accounting records and ensuring that the financial information is reliable. The Turnbull Report (1999) also recognizes the function of the board of directors in managing the company risks. The international Organization for Economic Cooperation and Development (OECD, 1999) also includes in its guidelines the reviewing of companies' risks policies as one of the board's key duties in strengthening the company's risk management.

In Malaysia, the FCCG (1999) defines corporate governance as "the process and structure used to direct and manage the business prosperity and corporate accountability with the ultimate objective of realizing long-term shareholder value, while taking into account the interests of other stakeholders" (p. 10). The phrase "realizing long term shareholder value" indicates that the sustainability of a company is essential for providing a consistent profit to shareholders. Company sustainability is a result of sound corporate governance practices (Yeap, 2009; Aza Azlina, Zuaini, & Nor Aziah, 2012). In addition, the good practices of corporate governance also influence financial market stability (OECD, 2004).

In general, the Cadbury, Hampel, Turnbull, and FCCG reports highlight the responsibility of board of directors to monitor the managers and the company. Directors need to ensure that checks and balances are in place so that the board's

decisions may represent the best for the company as a whole (Barnhart, Marr, & Rosenstein, 1994; Leblanc, 2003; Aza Azlina *et al.*, 2012). An ineffective board leads to a poor monitoring level. It becomes too easy for the management or the board itself to engage in self-dealing. Thus, corporate governance is about managing the risk of that temptation and mitigating any individuals from maximizing his or her own interests (Monks & Minow, 2008).

#### 2.3 Background of Corporate Governance

The impetus for the development of corporate governance has come largely from the relationship between the investors and management of the company. The concern on the separation of ownership and control between the two groups (investors and management) was first identified by Smith (1838), who argues that the managers' behaviors and attitudes in monitoring other people's money are not the same as when the money belongs to them. As companies grew and ownership became more diversified in the mid-19<sup>th</sup> century, the writing of Berle and Means (1932) provide more fundamental explanations on the relationships between the investors and management of a company. According to Berle and Means (1932), when ownership and controls are separated, managers are prone to maximize their own interests. Therefore, the establishment of a modern corporation with sound governance mechanisms is needed to monitor the company management (Berle & Means, 1932). Mechanisms that act as an essential device include having effective monitoring activities on the managers in order to mitigate them from conducting any opportunistic behaviors (Jensen & Meckling, 1976; Fama & Jensen, 1983).

In the UK, corporate governance principles have been established as far back as the 1980s. The first intention to introduce the principle was to improve the quality and reliability of financial reporting in the banking sector so as to boost investors' confidence. Thus, the first guideline on corporate governance, known as the Cadbury Report, was introduced in 1992. Then, with the initiative of the Confederation of British Industry (CBI), which set up the Study Group on Directors' Remuneration, the second guidelines; Greenbury Report (1995) was issued. The report extensively discussed the remuneration of directors. Three years later, the Hampel Report was published in order to support the recommendations of previous codes. The directors' effectiveness and remuneration were among the principles emphasized in the Hampel Report (1998). In 1998, a draft combining the Cadbury, Greenbury, and Hampel reports was established; it is referred to as the Combined Code. The Combined Code (1998) is divided into two parts. The first part covers four sections: directors, directors' remuneration, shareholders' relations, and audits; the second part involves the institutional shareholders' practices. In 1999, the Turnbull Report was published, stressing the importance of internal control and risk management.

Throughout the years, the Combined Code has issued updated versions. The revised Combined Code was published in 2003. Among the substantive changes were the clarification of senior independent directors' role and execution of the formal evaluation process toward the individual directors, committees on the board, and the whole board (Combined Code, 2003). The Combined Code was reviewed again in 2008. Most of the recommendations of the Cadbury Report and other UK reports are embodied in the Combined Code (2008). The name was eventually changed to the UK Corporate Governance Code.

In the US, the collapse of Enron, Worldcom, and Global Crossing caused the US government to introduce the Sarbanes-Oxley Act in 2002. The act requires the inclusion of independent directors in audit committees. The definition of independence has been extended to include directors who do not have any relationship directly or indirectly with the company (Sarbanes-Oxley Act, 2002). In addition to directors' duties and audit quality, the act gives guidance on financial reporting and accounting services. In November 2003, the New York Stock Exchange (NYSE) Corporate Governance Rules was issued to strengthen the corporate governance standards for public listed companies. The new rules also require companies to establish nomination, remuneration, and audit committees comprised entirely of independent directors (NYSE Corporate Governance Rules, 2003). The new rules indicate the importance of independent directors in the boardroom.

In addition to the reports developed in these two countries, many countries in the world have produced their own codes in corporate governance (Mallin, 2010), including the Code of Good Corporate Governance in Indonesia, the Code of Corporate Governance in Singapore, the Corporate Governance Codes and Principles in the Philippines, and the Malaysian Code of Corporate Governance in Malaysia. A number of international agencies have also published their own principles and codes. Although every code specifically caters to each organization's needs, in principle, the purpose is to protect shareholders' rights from any violations (Tricker, 2009). Table 2.1 summarizes a selection of corporate governance codes of practice recently published by international agencies.

Tittle	Organization	Year
OECD Principles of Corporate	Organization for Economic	1999, 2004
Governance	Development an Co-operation (OECD)	(revised)
ICGN Statement	The International Corporate Governance Network (ICGN)	1999, 2005
CACG Guidelines: Principles for	Commonwealth Association for	1999
Corporate Governance in the Commonwealth	Corporate Governance (CACG)	
Good Governance Standard for	Independent Commission for Good	2005
Public Service	Governance in Public Services	
Sources: Solomon (2007); Tr	ricker (2009); Mallin (2010)	

Table 2.1Corporate Governance Codes by International Agencies

### 2.4 Background of Corporate Governance in Malaysia

The discussion of the background of corporate governance in Malaysia is divided into two parts: the period before the Asian financial crisis and the period after the financial crisis.

# 2.4.1 Period before the 1997 Asian Financial Crisis

The governance of corporations in Malaysia started with the Companies Enactment in 1897 and was followed by the Companies Act 1965. The Companies Act is regulated by the Companies Commission of Malaysia (CCM) and covers matters involving corporate structures, disclosure, and reporting requirements as well as duties and responsibilities of company directors and officers. In creating an effective board, CCM issued the Code of Ethics for Directors in 1996 to establish a standard of ethics for directors' behavior in ensuring that the company is governed by trustworthy and responsible persons. All public listed companies in Malaysia are regulated under the Kuala Lumpur Stock Exchange (KLSE) Listing Requirements of the KLSE. The first edition of the Listing Requirements covers the period from 1993 to 2000. The purpose of the Listing Requirements is to make certain that the market for public listed companies' securities is transparent so as to protect the public interests (Susela Devi, Hoper, & Davey, 2006). In 1994, the KLSE Listing Requirements made it mandatory for every Malaysian listed company to set up an audit committee, comprising a majority of independent directors in order to have a better standard of corporate disclosure (Zulkarnain & Yusuf, 2006). In addition to CCM and KLSE, the establishment of Securities Commission under the Securities Commission Act 1993 has further promoted a healthy securities market to maintain investors' confidence in Malaysia. Among the requirements, the listed companies on the KLSE are required to submit their annual reports to the Securities Commission within six months of the financial report date. The companies are required to maintain a high standard of financial disclosure in providing the public with useful and reliable information (Susela Devi et al., 2006).

Although the governance issue became prominent after the Asian financial crisis, Malaysian listed companies were found to have more non-executive directors on the board and practice non-duality leadership structure before the crisis (Shamsul Nahar, 2004), indicating that most of public listed companies had already adopted the governance practices before the issuance of the MCCG. However, the effectiveness of the board remains questionable.

### 2.4.2 Period after the 1997 Asian Financial Crisis

In Malaysia, corporate governance is being seriously considered in light of the economic crisis and business failures since 1997–1998 (Pik, 2007). As per the discussion in Chapter 1, the Asian financial crisis in 1997–1998 affected the growth of the Malaysian economy. The economic crisis seriously affected investors' confidence in the Malaysian capital market, and it is believed that corporate governance may contribute to maintaining shareholders' confidence in the capital market. Therefore, the Malaysian government has taken steps to review and strengthen corporate governance in Malaysia. One of the strategies is by strengthening and upgrading the regulatory framework by Malaysian regulatory bodies (Susela Devi *et al.*, 2006).

In January 2000, the KLSE released the Revamped Listing Requirements. In general, the objectives of the Revamped Listing Requirements are to increase the transparency in monitoring companies, encourage a favourable environment for the capital market, and strengthen the protection of shareholders' interests. The Listing Requirements was then renamed as Bursa Malaysia Listing Requirements to mark the conversion of KLSE to the Bursa Malaysia Berhad in April 2004. One of the purposes of the demutualization exercise was to enhance the Bursa Malaysia Berhad's position internationally. Corporate governance is briefly discussed in Chapter 15 of the Bursa Malaysia Listing Requirements, focusing on the board of directors and audit committees.

In addition to Bursa Malaysia regulations, the Securities Commission also plays a role in regulating the capital market development and maintaining investors'

confidences, particularly after the crisis. In 2001, the Securities Commission launched the Capital Market Master Plan (CMP) to chart the direction of the Malaysian capital market for the next 10 years. Consistent with the CMP, the Securities Commission shifted from merit-based regulation to disclosure-based regulation (DBR). DBR focuses primarily on three major components: disclosure, due diligence, and corporate governance. The objectives are to promote better standards and quality of disclosure as well as managing business among public listed companies (Pik, 2007).

In creating a framework for corporate governance, the High Level of FCCG was established via a partnership effort between the Malaysian government and the private sector on March 24, 1998 (Cheah & Lee, 2009). The committee established the Malaysian Institute of Corporate Governance (MICG) as a non-profit organization limited by guarantee. The objectives of its establishment are to increase awareness and practices of good corporate governance in Malaysia. The founding members consisted of the Federation of Public Listed Companies (FPLC), the Malaysian Institute of Accountants (MIA), the Malaysian Association of Certified Public Accountants (MICPA), the Malaysian Institute of Chartered Secretaries and Administrator (MAICSA), and the Malaysian Institute of Directors (MID).

In March 2000, the MCCG was published. The code is consistent with the unitary Anglo American approach, although it is similar in nature to the Combined Code on Corporate Governance (UK). The reason for the similarity between the MCCG and Combined Code is because Malaysia was a British colony before its independence. Therefore, the regulations and laws are influenced by the UK (Syed Musa *et al.*,

2003). The code, which is divided into three parts, essentially aims to set out principles and best practices that companies may implement in their operations toward achieving the optimal governance framework. These include issues such as the compositions of the board, procedures for recruiting new directors, remuneration of directors, and the use of board committees. Some of the recommendations by the MCCG have already been adapted into the Bursa Malaysia Listing Requirements. Among others, the MCCG also aims to foster independence of the board of directors of public listed companies, promote transparency in business procedures so as to further improve investors' confidence, and maintain accountability and integrity.

According to the PriceWaterhouseCoopers Survey (2002), a majority (over 80%) of all the respondent groups agree that Malaysian companies' corporate governance practices have improved since the issuance of the MCCG. The survey also reveals that nearly two thirds (66%) of the investors' group respondents indicate that the current standard of corporate governance in Malaysia is an incentive for investment. Board quality (with respect to the qualification and experience of board members) and board independence (separation of the role of chairman and CEO or managing directors) are among the influencing factors in investors' group decisions. However, a study of 87 listed companies by Nazli Anum (2010) argues that companies that follow the MCCG recommendation on board structure are not guaranteed to have good performance. Perhaps it is too early to evaluate the impact of the code toward company performance as the sample chosen was limited to the year 2001.

Table 2.2 highlights the similarities and differences between corporate governance guidelines in Malaysia, the UK, and the US as well as international guidelines.

Table 2.2

		Recommendation			
Country	Guideline/Report	Size of board	CEO duality	Outside directors	Independent directors
Malaysia	Code on Corporate Governance (Finance Committee on Corporate Governance)	Board to determine	The two roles should be separated	One third	One third
UK	The Combined Code on Corporate Governance (Financial Reporting Council)	N/A	The two roles should be separated	Minimum of 3	Majority
US	Sarbanes-Oxley Act 2002	Board to determine	The two roles should be separated	N/A	Substantial majority
International	OECD Principles of Corporate Governance (OECD, 1999)	N/A	N/A	Sufficient number	N/A

Similarities and Differences between Corporate Governance in Malaysia, the UK, the US, and International Guidelines

Sources: Kiel and Nicholson (2003)

In August 2007, the Companies Act 1965 was amended with 23 separate amendments and named the Companies (Amendment) Act 2007. The purpose of the amendment is to enhance Malaysian corporate governance framework. The functions and powers of the board of directors are highlighted in the amendments. For instance, Section 132 was amended to enhance the duties of the board of directors in order to ensure that companies are properly managed. The previous Section 132 states that directors need to execute their responsibilities with reasonable care, skill, and diligence. The extension of Section 132 mentions that directors need to perform their duties based on their actual skills, knowledge, and experiences. In addition, the revised act also introduces Section 167A in which the directors must ensure that a proper internal control is in place in order to mitigate any misuse of company assets that might bring significant losses to the company itself (Azmi & Associates, 2008).

The revised code on corporate governance was issued by the Securities Commission on October 1, 2007. The main objective of the MCCG (Revised 2007) is to enhance Part 2 of Best Practices in Corporate Governance (Cheah & Lee, 2009). Having an effective board is still the priority of the code. Under the appointments of the board of directors, the revised code recommends that a company needs to prepare a list of recommendations on the criteria of a new candidate to be considered by the nomination committee before the candidate is recommended to the board. In addition, the nomination committee's assessment of all directors must be properly documented. Under the board structures and procedures, there are also suggestions for documenting issues upon achieving the final decisions as well as the decisions made by the board.

With regard to the audit committee, a significant change has occurred in the composition of the committee, whereby the revised code recommends that the committee members should be exclusively non-executive directors. The revised code also stresses that audit committee members should have the ability to comprehend the financial statements. The chairman of the audit committee is strongly encouraged to liaise closely with senior management and the company's external auditor in order to highlight in the audit committee meetings any matters that affect the company. This shows that the audit function of internal and external audits is being strengthened in the revised code.

In the second half of 2008, the Malaysian economy was affected by the financial turmoil in the US and Europe. The export-oriented industries in Malaysia were severely affected as the global demand decelerated sharply. Nevertheless, the effect

of the Asian financial crisis toward the Malaysian economy was worse than the 2008 financial crisis due to the strengthened financial system after the Asian financial crisis (Bank Negara Malaysia, 2008). The global financial crisis did not stop Malaysian regulatory bodies from strengthening the corporate governance framework. In June 2009, the Bursa Malaysia launched "A Corporate Governance Guide Towards Boardroom Excellence" to assist boards in discharging their corporate governance obligations effectively. It also incorporates the principles and best practices of MCCG, Bursa Malaysia Listing Requirements, and statutory legislation.

In addition, the Securities Commission established the Audit Oversight Board (AOB) in 2010 to oversee the auditors of listed companies and maintain the quality of audited financial statements. The Securities Commission has consistently focused on strategies and actions to improve board quality. According to Tan Sri Zarinah Anwar, chairman of the Securities Commission, the improvement of board quality became one of the main agendas in 2010 (Sidhu, 2010). In light of corporate scandals such as Linear Corporation Berhad and Axis Incorporation Berhad in 2009 and Kenmark Industrial Co. (M) Berhad in 2010, the Securities Commission announced a new five-year blueprint outlining an action plan to boost Malaysian corporate governance standards (Azlan, 2010). The action plans have been further supported and warranted as the latest evidence from the US and the Dubai financial crisis indicate that poor corporate governance is detrimental to the stability of a company and the country itself. In July 2011, the Securities Commission formally launched the Corporate Governance Blueprint in which six chapters cover the role of boards, institutional investors and gatekeepers, shareholder rights, disclosure and

transparency as well as public and private enforcement (Corporate Governance Blueprint, 2011). This was followed by the issuance of the MCCG 2012, which superseded the MCCG (Revised 2007).

Consistent with the Corporate Governance Blueprint (2011), the focus of MCCG (2012) is to enhance board effectiveness. The MCCG (2012) sets out nine broad principles together with the recommendations for every single principle. The nine principles cover the establishment of clear board roles and responsibilities, strengthen the composition of nomination and remuneration committees, reinforce directors' independency, foster the commitment of directors, uphold the audit committee integrity in financial reporting, recognize and manage risks, provide timely and quality disclosure, and strengthen the relationship between the company and shareholders (MCCG 2012).

Noriza (2010) investigates the corporate governance practices in three different periods: the pre-implementation of corporate governance (1998 to 2000), midimplementation (2001 to 2003), and post-implementation (2004 to 2006). By using 126 Malaysian companies, the result shows that the practice of non-dual leadership structure is increasing. Furthermore, the study finds that 99% of companies disclosed the number of board meetings in the post-implementation period (2004 to 2006) compared to 43.7% in the pre-implementation period (1998 to 2000). In terms of structure, the study highlights that most companies have fulfilled the MCCG requirements. To recap, a sound foundation of corporate governance should be upheld by every Malaysian company in order to have a high level of transparency and accountability in an effective business environment.

# 2.5 Corporate Governance in Public Companies: Separation of Ownership and Control

The separation of ownership and management issue started to draw attention during the Industrial Revolution in the early 19<sup>th</sup> century in the UK. During this period, most of the companies were involved in steel furnaces for railways and required a large amount of capital to start up (Susela Devi *et al.*, 2006). Therefore, the capital was provided by a large number of shareholders. However, due to the dispersed ownership, a majority of the shareholders were not able to supervise the companies' daily operations, which resulted in the separation between managers who manage the company and the owner as the capital provider. This is the earliest stage of companies' modern structure as pointed out by Berle and Means (1932).

### 2.5.1 Agency Theory

By extending the work of Berle and Means (1932), Jensen and Meckling (1976) point out that the separation of ownership and management leads to conflicts whereby the interest of the owners (principal) are not aligned with those who manage the company (agent). The agent should act in the best interests of the company performance; nevertheless, they are more likely to maximize their own interests (Jensen & Meckling, 1976). Tricker (1994) agrees that managers cannot be trusted to act in the best interests of the public and shareholders in particular.

In the same vein as Jensen and Meckling (1976), agency conflict has been extended by Fama and Jensen (1983), who point out that conflict arises due to the separation between decision making and responsibility in risk bearing. The managers (agent) run the company and are automatically involved in company decision making whereas shareholders (principal) have to face all the consequences of managers' decisions.

The divergence of interests between managers and shareholders results in agency costs, which are borne by either the owner or managers. The costs can be divided into monitoring, bonding, and residual costs (Jensen & Meckling, 1976). Monitoring costs are incurred by shareholders in monitoring managers' actions. The costs include external auditors' fees, budget restrictions, and compensation schemes. Bonding costs are incurred to give assurances to the shareholders that their interests are safe guarded and that these costs are under managers' responsibility. One example is the costs incurred in preparing quarterly financial reports. Through quarterly reports, principals are given the latest update on company performance and discharging the managers' responsibilities toward being accountable for their actions. Finally, residual costs are incurred due to the divergence between the agent's decision and those decisions that would maximize the welfare of shareholders.

Safari, Mirshekary, and Wise (2011) categorize the agency cost into two components: gross cost and loss. Monitoring and bonding costs represent the gross cost while residual loss signifies the losses. The purpose for incurring the gross cost is to reduce the agency problem. On the other hand, the agency problem gets

aggravated if there is an increased residual loss. The illustration of agency cost components by Safari *et al.* (2011) is presented in Figure 2.1.



Figure 2.1 Components of Agency Cost

Thus, a monitoring mechanism toward the management is needed to ensure that they act in the best interests of shareholders (Tricker, 1994; Latham, 1999). One of the governance mechanisms in monitoring the management behaviors and actions is by appointing the directors (Mueller, 1974).

## **2.6** Theoretical Perspectives on the Board of Directors

Previous studies have discussed the board's role as a mechanism to control management behavior. Hart (1995) highlights the importance of the board of directors in mitigating agency problems. Directors who have been appointed by the shareholders should monitor the management behavior and actions so that the managers' and shareholders' interests are aligned. In this section, the theoretical perspectives of the board of directors' roles are discussed.

The underpinning theories that can explain the board's roles are drawn from various disciplines, including finance, economics, law, management, accounting, and organizational behavior (Mallin, 2010). Zahra and Pearce (1989) highlight four

theoretical aspects of boards' roles namely, agency theory, resource dependency, legalistic, and class hegemony. In addition, Stiles (1997) discusses a few other theoretical perspectives on boards' roles, including stewardship, stakeholder and managerial hegemony. All the theories are summarized in Table 2.3.

Theoretical Perspective	Summary	Theoretical Origin
Agency theory	The primary role of boards is to monitor actions of agents (executives) to ensure their efficiency and to protect principals' interests.	Economics and Finance
Legalistic	<ol> <li>Representing and protecting shareholders' interests</li> <li>Managing the corporation without interfering in day-to-day operations.</li> </ol>	Corporate Law
Resource Dependence	<ol> <li>Boards are a co-optative mechanism to extract resources vital to company performance</li> <li>Boards serve a boundary spanning role</li> <li>Boards enhance organizational legitimacy.</li> </ol>	Organizational Theory and Sociology
Class Hegemony	Boards perpetuate the power and control of the ruling capitalist elite over social and economic institutions.	Marxist Sociology
Stewardship Theory	Boards ensure the stewardship of corporate assets.	Organization Theory
Stakeholder	Boards pursue stakeholder interests.	Politics, Law and Management Theory
Managerial Hegemony	Boards are "a legal fiction."	Organization Theory

Table 2.3Theoretical Perspectives on Board of Directors

Sources: Zahra and Pearce (1989), Stiles (1997)

Agency theory argues that the most important aspect of directors' job is how they execute their jobs and supervise management (Zahra & Pearce, 1989). Due to the development of capital market and dispersed ownership, a company is run by a management team. As the power to make decisions falls in the hands of managers, they tend to be involved in opportunistic behavior, particularly maximizing their own interests. Therefore, their behaviors need to be monitored by the directors (Hart, 1995). The details on agency theory were discussed earlier (see Section 2.5.1).

The resource dependence approach developed by Pfeffer (1973) and Pfeffer and Salancik (1978) emphasizes the function of external directors (non-executive directors). Non-executive directors enhance the ability of a company to have more choices on resources, protect itself against the external environment, and reduce market uncertainty. Thus, non-executive directors are able to increase the company's ability to raise funds or enhance the company's status and recognition. According to Johnson, Daily, and Ellstrand (1996), directors are chosen due to their intangible resources (reputation, knowledge, and networking) as it is expected that the company will benefit from such resources. Furthermore, they could garner their experience and skills from other companies into the company where they serve as the director (Muth & Donaldson, 1998).

The direct application of resource dependence theory to the board of directors occurs through board interlocking. Several studies have provided much attention on board interlocks with financial institutions in which such linkages facilitate the companies in accessing more capital (see Mizruchi & Stearns, 1988; Pearce & Zahra, 1992; Stearns & Mizruchi, 1993). According to Mizruchi and Stearns (1988), the appointment of representatives from financial institutions depends on company performance (profits as the indicator and level of solvency) and economic conditions. A company with more representatives from financial institutions on the board is associated with higher access to bank loans.

From the legalistic perspective, the board's ultimate responsibility is to protect the shareholders' interests and monitor management without interfering in the company's daily operations. The board has to fulfill its responsibilities under the law. Therefore, it needs to fulfill it control and service roles by reviewing and approving

management decisions (Zahra & Pearce, 1989). Specifically, the control roles include appointing a company's CEO and reviewing management decisions (Chaganti, Mahajan, & Sharma, 1985) whereas service roles involve providing advice to management, creating a sound network with people in the industries, and improving the image of the company (Carpenter, 1988).

Class hegemony states that directors view themselves as an elite group in a company. The appointment of any new directors must take into consideration whether the directors could fit into their group (Mallin, 2010). In this theory, company strategies are developed by the CEO as the "CEOs are representatives of the capitalist elite" (Zahra & Pearce, 1989, p. 300); the directors need to review the strategies. The board is viewed as a mechanism to ensure that the CEO's decision is aligned with the owners. Meanwhile, the theory of managerial hegemony contradicts class hegemony theory as the former views management as more influential than the board. Management has more access to information, knowledge of company operations, and power to make decisions (Mallin, 2010). Thus, in this instance, the board is viewed as having a lesser role in the boardroom.

Stewardship theory introduced by Donaldson and Davis (1991) goes against the agency theory concept. The stewardship theory assumes that "managers are not motivated by individual goals, but rather principals" (Davis, Schoorman, & Donaldson, 1997, p. 21). Managers are motivated by achievement, and they contribute to the best of the company and people that they serve (Donaldson & Davis, 1991). Therefore, from the board's perspective, stewardship theory asserts that directors are more likely to act in the best interest of the shareholders as they have been appointed by such group (Tricker, 2009). The theory further argues that

the greater the number of executive directors on the board, the higher the shareholders' returns will be. It is believed that insiders (executives) have more knowledge about the company operation, which can impact company performance (Donaldson, 1990).

Stakeholder theory takes into account a divergent group that covers shareholders, employees, credit providers, suppliers, customers, the government, and the public. Therefore, the board has to protect the interest of these groups and not only focus on shareholders' interests, as in agency theory.



Figure 2.2 Theories on Board of Directors

Although several theories can explain the board of directors functions, as highlighted in Figure 2.2, this study upholds to agency theory primarily because the difference between managers' and shareholders' interests is not explained in other theories. According to agency theory, when a company's equity is not solely owned by the manager, the shareholders are exposed to the opportunistic behavior of the managers, thereby increasing agency costs. In the context of public listed companies, the company shares are issued to the public. Therefore, shareholders who are not running the company have to bear the risks of managers' actions and decisions. The managers' actions are influenced by their self-interests and level of risk taking. The difference in interests and level of risks between managers and shareholders leads to agency problems.

In addition, the minority shareholders' interests need to be protected in companies that are managed by the owners. The possibility exists that owner-managers will expropriate minority shareholders' money in order to maximize their own wealth (Haniffa & Hudaib, 2006). In addition, previous studies on boards of directors have identified the application of agency theory in the structure, composition, and characteristics of boards (Rashidah *et al.*, 2005; Nicholson & Kiel, 2007; Halimi *et al.*, 2008). Therefore, this study further extends the application of the theory in the context of board process.

# 2.7 Board of Directors

This section discusses the board of directors in depth, specifically focusing on the definition of the board of directors, types of directors, boards' roles, and board attributes.

### 2.7.1 Definition of Board of Directors

Who is a director? According to Section 4(1) of the Companies Act 1965, a director includes any person occupying the position of company director and includes a person who is instructed to act as an alternate or substitute director (Chan, Koh & Ling, 2006). In other words, directors are persons appointed or elected according to the law, who are authorized to manage and direct the affairs of a corporation or company. A director "is responsible for the profitability and continued viability of a

company" (Mueller, 1974, p. 25). The whole of the directors collectively forms the board of directors.

Boards of directors are a crucial part in an organization. They are the intermediary between the people who provide capital (shareholders) and the people who utilize the capital to create value (the managers). Thus, boards' positions overlap between the small, powerful group that manages the company and a huge, disperse, and relatively powerless group that simply wishes to see the company being run properly (Monks & Minow, 2008).

#### 2.7.2 Types of Directors

It is very pertinent to understand the two common categories of directors who sit on the board namely, inside directors (executive directors) and outside directors (nonexecutive director) and their association with the issue of independence.

An executive director is anyone involved in managing the company's operation. These directors work for the company on a full-time basis, possibly under a contract of service. According to Baysinger and Butler (1985), executive directors are corporate officers who are appointed to sit on the board at the same time. Most CEOs together with a few executive directors act to provide information and assessments to other board members. In particular, an executive director other than the CEO needs to be able to express views to the board that are different from those of the CEO. Boards should only appoint the executives directors whom they judge to be able to act accordingly.

Outside directors or non-executive directors play a similar role. In the US, the term outside directors is common while in the UK the term non-executive directors is more preferable. Non-executive directors have generally been defined as non-management members of the board (Baysinger & Butler, 1985; Daily & Dalton, 1992; 1993). They do not work for a company in a full-time capacity. Although they do not participate in managing the company, they are still the company directors in the eyes of the law. From other point of view, the non-executive directors are stricter in discharging their duties as they are not involved in company management (Weisbach, 1988).

As for Malaysia, MCCG has recommended that one third of the board members must be independent. The term *independent* in the Malaysian context refers to nonexecutive directors and covers two crucial aspects: independent from the management and not being a significant shareholder.

The PriceWaterhouseCoopers Survey (2002) indicates that Malaysian companies have a reasonable proportionate mix of independent non-executive directors, averaging 2.6 persons, which constitutes about one third of the board. With regard to executive directors, the average number is two persons.

### 2.7.3 The Function of Directors

The function of directors has been discussed widely by researchers (see Johnson *et al.*, 1996; Leblanc, 2004; Ong & Wan, 2008; Aza Azlina *et al.*, 2012). In Malaysia, MCCG has outlined six recommendations to facilitate the board's good corporate governance:

- Review and adopt a strategic plan for the company;
- Oversee the conduct of the company business so as to evaluate whether the business is being properly managed;
- Identify principal risks and ensure that the implementations of the risk management system are appropriate;
- Engage in succession planning, including appointing, training, fixing the compensation of and, where appropriate, replacing senior management;
- Develop and implement an investor relations program or shareholder communications policy for the company; and
- Review the adequacy and integrity of the company's internal control systems and management information systems, including systems for compliance with applicable laws, regulations, rules, directives, and guidelines.

In the next section, the roles of directors are further discussed. In general, there are three main important roles of directors: monitoring, servicing, and providing resources (see Johnson *et al.*, 1996).

### 2.7.3.1 Monitoring Role

The monitoring role entails directors performing the fiduciary responsibilities of monitoring the managers' behavior to ensure that shareholders' interests are being protected. Other monitoring functions include replacing CEOs, operating during crises, determining the appropriate compensation schemes for company executives, ensuring that risk management is in place, and reviewing managerial decisions and performance. From the theoretical perspectives, the board monitoring function is very important; it is derived from agency theory (Jensen & Meckling, 1976). As decision making falls to top management, the board should vigorously monitor the decision making process and company performance as a whole (Jensen & Meckling, 1976). This section also discusses two aspects of monitoring roles: directors' duties and proxy mechanism (Johnson *et al.*, 1996).

Legally, most jurisdictions describe the directors as having two duties: 1) the duty of loyalty and good faith and 2) the duty of care, diligence, and skill. Under the duty of loyalty and good faith, or fiduciary duty, the law highlights that directors are allowed to make decisions in good faith that are unbiased and in the best interest of the company.<sup>2</sup> This duty prohibits any self-interest activities and self-consumption of companies' opportunities (Johnson *et al.*, 1996). Thus, if a director sits on the boards of two companies with conflicting interests, he or she should resign from one of the boards as the possibility would exist that the director could not demonstrate full loyalty to shareholders of both companies.

However, directors are always subjected to conflicts of interests. An example of a common conflict of interest occurs during hostile takeover cases (Manning, 1984). In the United States, the takeover issue received much attention in the 1980s, leading boards of directors and management to work together to protect their companies from the threat of hostile raids. Ironically, directors are trying to avoid takeover bids. Without takeover activities, directors' positions will not be jeopardized even though the takeover bid is beneficial to the shareholders as a whole (Manning, 1984; Monks & Minow, 2008). In relation to this, there are questions that need to be asked of the directors: Should a board let a company be either destroyed or taken over by

<sup>&</sup>lt;sup>2</sup> Section 132(1B), Companies Act 1965

someone else? Should a board uphold their rights and avoid a hostile bid without offering shareholders any alternative transactions? It has been predicted that, if the boards uphold their fiduciary duty, they tend to work for the best interests of the shareholders, not for themselves.

The separation of ownership and control in the modern corporation has resulted in the development of a proxy mechanism, which addresses the issue of shareholders. Most shareholders are not able to attend annual meetings due to the distance involved, insufficient time, or a lack of a sense of belonging in the company. Therefore, they end up signing a proxy card and granting the power to vote to the management. Thus, management is able to dominate in every decision that is being discussed at the meeting, such as directors' elections (Johnson *et al.*, 1996). Yet can directors function effectively in monitoring the performance of management if they feel obliged to management for their positions? There is a possibility that the directors' role of giving unbiased views or decisions to the management may be compromised in such a situation.

The second important role under the law is the duty of care, diligence, and skill, which emphasizes that directors must exercise due diligence in making decisions. Directors should exercise the same degree of care as any other ordinary person would react when facing similar situations in the capacity of a director.<sup>3</sup> The directors must show that they have as much information as possible and that they have considered all alternatives before final decisions are made (Monks & Minow, 2008).

<sup>&</sup>lt;sup>3</sup> Section 132(1A), Companies Act 1965

In relation to boards' roles, Westphal (1999) finds that boards that have a close relationship with the CEO execute fewer monitoring functions. Findings also indicate that CEOs with high ownership or long-term incentive plans (moderator variables) reduce the negative association between CEO–board friendship and board monitoring. This implies that CEO incentives and ownership further align the management and shareholders' interest. Hasnah and Hasnah (2009) also find that boards that perform their monitoring role effectively toward the management influence company performance.

## 2.7.3.2 Service Role

The second function that relates to the responsibility of directors is the service role, which is associated with directors who provide advice and opinions to top management. It is also associated with strategic decision and policy planning, whereby the board provides input for decision making on the strategic direction based on their expertise, wisdom, and information (O'Higgins, 2002; Shamsul Nahar, 2004). MCCG outlines various functions of directors under the service role, including making a positive contribution to the development of the company strategy and providing a balanced and independent view to the board. The service role is always related to non-executive directors. It can be said that non-executive directors act as the knowledge provider to complement the knowledge of other executive directors (Fama & Jensen, 1983; Kesner & Johnson, 1990).

According to Ong and Wan (2008, p. 318), the essential responsibilities of directors under this role include the following:

- Setting and actively reviewing the corporate definition the "what business are we in" question.
- The gate-keeping function actively assessing and reviewing strategic proposals.
- Confidence building encouraging managers with good track records in their strategic aims.
- The selection of directors the outcomes of which send strong signals to the rest of the organization concerning the type of person who succeeds and the standards others have to attain.

Roberts, McNulty, and Stiles (2005) argue that, without the element of board effectiveness, it is not going to inspire a strong sense of accountability within the board. This attitude is vital in ensuring that a company is applying the right strategies to achieve excellent performance. The board effectiveness is dependent on the commitment and cohesiveness from all members on the board. In explaining the role of the board and its performance, Judge and Zeithaml (1992) find that board involvement in strategic decisions is positively related to financial performance. However, directors' awareness of major strategic issues is negatively related to risk management (Judge & Dobbins, 1995). Thus, if directors emphasize strategic issues in the company, the risk management gets less attention. With the challenging business environment nowadays, board members must ensure that the optimal actions toward strategic planning and risk management are implemented.

Regarding the influence of the service role on company performance, Westpshal (1999) argues that, by having a good relationship between the CEO and members of

the board, non-executive directors are able to provide more advice and consultation to the CEO, specifically on strategic issues, which positively impacts company performance.

#### 2.7.3.3 Resource Provision Role

The resource provision role is a role whereby a director is required to facilitate a company in acquiring various resources. The directors especially non-executive directors, normally have links to other organizations. The directors tend to use their networking skills to bring in resources—namely, important stakeholders (Pfeffer, 1973) and higher reputation (Johnson *et al.*, 1996). According to Ernst and Young/Institute of Director (1999), non-executive directors also contribute specialized skills and knowledge that bring additional value to the company.

In most cases, the management is seen to be dependent on non-executive directors or uses them as a tool to facilitate access to more capital (Mizruchi & Stearns, 1988). Moreover, the appointment of non-executive directors is associated with outside linkages (Chaganti *et al.*, 1985; Daily & Dalton, 1993; Dalton & Daily, 1999) that facilitate the firms in accessing reputation, facing challenges from the external environment, and reducing uncertainty (Pfeffer, 1973; Pfeffer & Salancik, 1978). Several other studies have also supported the role of non-executive directors as resource providers (see Zahra & Pearce, 1989; Scott, 1991). In relation to boards' role, Kula (2005) finds that the resource dependency role is positively related to company performance. The study states that the focus of Turkish non-public companies is to gain more access to the exports market. Thus, the company is

encouraged to elect more pertinent people to the board to be able to link the company with the outside environment.

## 2.7.4 Board Attributes

This section examines four board attributes in corporate governance identified by Zahra and Pearce (1989): board composition, structure, characteristics, and process.

#### 2.7.4.1 Board Composition

Zahra and Pearce (1989) refer to board composition as board size and directors' type. Directors' type, as discussed in 2.5.2, is categorized into non-executive directors and executive directors. Previous studies have focused on the ratio of non-executive directors to total members of the board (Dalton & Kesner, 1987; Yermack, 1996; Dulewicz & Herbert, 2004; Hsu-Huei *et al.*, 2008). However, this is not a good measurement considering the high ratio of non-executive directors with high independence (Norman, Takiah, & Mohd Mohid, 2005) when such a group has significant shareholdings or a close relationship with management. Therefore, the present study includes only one variable, board size, as the proxy of board composition.

## **Board Size**

The number of directors is an important factor in determining the effectiveness of the board. To date, there are conflicting ideas about the appropriate or optimal size of a board of directors in a company. When a board is too big, individual directors may feel constrained about actively participating in board decisions and have little sense of personal accountability. When a board is too small, the directors may not be able to make effective decisions and may face some degree of difficulty in functioning within time constraints. The PricewaterhouseCoopers survey (2002) finds that the average board size is eight persons. Jensen (1993) suggests that the limit of board size is around eight directors, as any greater number is more likely to interfere with group dynamics and inhibit board performance.

Most researchers find that larger firms tend to have more directors. This can be explained by the need of these larger organizations to maintain more contacts with the external environment, which is similar to the resource dependence theory's perspective (Pfeffer, 1972). A larger board brings greater opportunity for more networking and access to resources (Kiel & Nicholson, 2003) as more outside directors are appointed. Eisenberg, Sundgren and Wells (1998) put forward an argument that outside directors are more likely to foster careful and unbiased decisions during decision making processes. Van Ees, Postma, and Sterken (2003) argue that larger boards would increase directors' monitoring function. As board monitoring increases, this enhances the quality of management decisions (Shamsher & Zulkarnain, 2011).

In addition, larger firms tend to have a greater administrative burden, thus the need of more members is crucial. Today, larger firms are mostly complex organizations. As organizations become larger and more complex, it is impossible for every director to become more aware of every significant aspect of company operations. Hence, the board members are broken down into committees that monitor specific aspects of a company such as audit, remuneration, nomination, and risk management. Therefore, boards need to appoint more members in order to be able to accommodate the establishment of such committees (Cochran & Wartick, 1988).

The MCCG has not specified the number of directors in a company. The code recommended that the size should reflect the board effectiveness. As long as the board allows every member to participate actively and provide effective decisions, the number of members is not relevant in measuring the effectiveness of the board. Finkelstein and Mooney (2003) state that the quality and ability of individual who sits on the board are important for ensuring an effective board.

Numerous studies have been conducted to determine the association between board size and company performance. Chaganti *et al.* (1985) posit a positive relationship between board size and company performance. Using 21 companies as their sample, they indicate that non-failed manufacturing companies are more likely to have larger boards compared to those that failed. Meanwhile, Eisenberg *et al.* (1998) discuss the effect of board size on company's maturity, whereby the result shows that as a company matures, the size of the board tends to be larger. Based on Malaysian listed companies' data from 2002 to 2004, Halimi *et al.* (2008) and Rohana *et al.* (2009) provide evidence that larger boards enhance the monitoring function of management and lead to sound financial performance.

On the other hand, Yermack (1996) indicates an inverse correlation between board size and company value. He examines 452 US companies from 1984 to 1991 and finds that the value of Tobin's Q declines as board size increases. Similarly, Eisenberg *et al.* (1998) conclude that the number of directors on the board has a

negative relationship with company performance. They argue that companies might appoint more directors on the board in order to improve their poor profitability. Noor Afza and Ayoib (2009) indicate that smaller boards contribute to effectiveness in decision making as every director is able to participate effectively.

Based on their meta-analysis of 131 samples, Dalton, Daily, Johnson, and Ellstrand (1999) claim that there is no relationship exists between board size and company performance. The method of analysis that they used shows evidence of the true population of the data describing the relationship between board size and company performance. Dalton *et al.*'s (1999) results are consistent with those of Van Ees *et al.* (2003), Dulewicz and Herbert (2004), and Nazli Anum (2010).

### 2.7.4.2 Board Structure

Board structures are concerned with "types of committee, committee membership, the flow of information among these committees, board leadership, and patterns of committee membership" (Zahra & Pearce, 1989, p. 307). The current study focuses on leadership structure. The type of board leadership determines the level of checks and balances on the head of the management team by the chairman of the board.

#### **Leadership Structure**

Zahra and Pearce (1989) point out that there are two types of board leadership structure: unitary and dual board leadership. Unitary board leadership refers to companies where two different persons fill the CEO and chairman roles. Meanwhile, dual board leadership refers to companies where the CEO and chairman posts are filled by the same person. The corporate governance issue that has attracted the attention is role duality, where the top management officer of the corporation simultaneously serves as chairperson of the board, who is responsible for monitoring and evaluating the top management. This dual role would seem to suggest the possibility of a conflict of interest as it allows the CEO to make decisions in his or her own self-interest and at the expense of the shareholders. Therefore, it is important to understand the responsibilities of the chairman and CEO.

According to the MCCG, a chairman is primarily responsible for the following:

- the working of the board;
- the balance of membership, subject to board and shareholder approval;
- ensuring that all relevant issues are on the agenda;
- ensuring that all directors, executive and non-executive alike, are enabled and encouraged to play their full part in its activities. This includes making sure that the directors, especially non-executive directors receive timely, relevant information tailored to their needs and that they are properly briefed on issues arising at board meetings; and
- ensuring that executive directors look beyond their executive function and accept their full share of responsibilities on governance issues.

The Cadbury Committee Report (1992) also argues that a chairman has the power to lead the board in the decision making process. Meanwhile, the CEO is responsible for running the business and implementing the policies and strategies adopted by the board. MCCG's best practices recommend that there must be a balance in power and authority between the chairman and the CEO so that no individual has unfettered decision making powers. If the roles are combined, there should be a strong independent element on the board, and the decision to do so should be publicly explained.

Previous researchers such as Finkelstein and D'Aveni (1994) and Wan and Ong (2005) also assert that the CEO position and chairman of the company should be separated. Without the separation, CEOs would tend to be motivated by self-interest, reflecting the interest of top management rather than that of stakeholders (Tricker, 1994; Jensen & Meckling, 1976). This is supported by agency theory, which predicts that, when the CEO holds the chairman position, such action reduces the effectiveness of the board monitoring function (Finkelstein & D'Aveni, 1994). Fama and Jensen (1983), Chitayat (1985) and Wan and Ong (2005) also suggest that the separation between CEO and chairman position can act as a checks and balances system over management's performance.

On the other hand, stewardship theories contend that, if the same person holds the CEO and chairman roles simultaneously, the person can work better as he has greater internal and external knowledge about his company (Donaldson, 1990). Using 120 Malaysian companies, Chang (2005) finds that dual board leadership leads to better company performance as pertinent strategic decisions can be made immediately because the company is being controlled by the founders. In addition, companies with duality role tend to have better decision making processes as there is not much interference from other directors. Therefore, this creates a stable company (Haslindar & Fazilah, 2011). This result contradicts Kula's (2005) findings. Kula (2005) discovers that if the same person holds both positions (CEO and chairman) it leads to

poor company performance. As the power is in the hands of one person, he or she might make decisions that favor the management interests.

However, Dalton, Daily, Ellstrand, and Johnson (1998) find no relationship between board leadership structure and company performance in their meta-analysis. They review 31 empirical studies and find that the two variables do not support the agency and stewardship theory, even though these variables have been used in previous research. In a similar vein, Dulewicz and Herbert (2004), Mohd Hassan, Rashidah, and Sakhti (2008), and Nazli Anum (2010) find insignificant relationships between a company financial performance and leadership structure.

#### **2.7.4.3 Board Characteristics**

Two variables under board characteristics are included in this study: directors' tenure and risk appetite. Klynveld Peat Marwick Goerdeler (KPMG) (2009) finds that fortyeight percent of Malaysian boards are filled with non-executive directors who served the board for six years or more. This scenario gives rise to a question about the influence of directors' tenure on company performance. In relation to directors' risk appetite, the age of directors is treated as the proxy. The majority of Malaysian directors who sit on the board are 50 years and older (KPMG, 2009). The assumption is that older directors are more likely to have various experiences, which can be tapped into the company. The literature on these two variables is discussed below.

### **Directors' Tenure**

Directors' tenure is referred to as the length of time in which the director is holding a position in one particular company (Rashidah *et al.*, 2005). Directors are held
responsible by the shareholders for all the decisions made by the board and the management team. The decisions made reflect the overall performance of a company (Abor, 2007). It is predicted that the directors' control over internal monitoring mechanisms increases as the tenure lengthens. However, the Higgs Report (2003) recommends that non-executive directors be reappointed every three years, and it is highly recommended that these directors serve the company for only two terms (eight years) or less. In Nigeria, non-executive directors are not allowed to sit on a board for more than 12 years (Uadiale, 2010). There is a possibility that directors might be too complacent and exposed to conflicts of interests due to a long period of directorship in a company.

Nevertheless, Bantel and Jackson (1989) report that boards with higher average tenure tend to have better social cohesiveness. From the point of view of the world's richest investor, Warren Buffett, retirement from directorship does not exist in Berkshire, where he is the company chairman. He believes that the reason for being a director is due to the passion for the job, which leads to a longer tenure of directorship (Izma, 2009). In addition, directors with a long tenure are able to have better experience and knowledge about the company so as to provide excellent services to the shareholders. Directors' level of understanding of company business also increases as their tenure increases (KPMG, 2009).

In Malaysia, the analysis of 300 public listed companies ranked by their market capitalization shows that 48% of non-executive directors have served the board for more than 6 years. One of the reasons of the long tenure is that boards are comfortable with the existing non-executive directors (KPMG, 2009). In addition,

companies prefer to appoint directors with social titles (e.g., Tun, Tan Sri, Datuk Seri, Datuk). Such directors have the ability to bring in more business connections and enhance the board's reputation. The titles however can be annulled in cases where the persons are involved in serious unethical behavior. The withdrawal of two Datukships (Dato' Tan Hock Low and Dato' Robert Chan Wai Ing) by Sultan Selangor provides evidence that the social titles of persons involved in improper conduct can be stripped away (Azura, 2002). Therefore, those who receive the titles, including the directors, are supposed to show to the society that their behavior is in accordance with the title bestowed upon them. With regard to the directors, they are more likely to perform well on the board as they would like to maintain their reputation and their level of demand in the directors' labor market. This enables them to remain on the board for a long period of time.

Using data from 1992 to 1994, Muth and Donaldson (1998) find no association between board tenure and company performance. They also find no supporting theory, either agency or stewardship theory, with regard to board tenure due to the insignificant result.

### **Directors' Risk Appetite**

In most research, risk appetite is always associated with managers' age (Hambrick & Mason, 1984). Older directors have vast experience and knowledge (Yeap, 2009). Therefore, based on previous experience they tend to take fewer risks as they are cautious of the effects of their decisions (Busija, 2006). Such characteristics enhance their decision making quality. In Malaysia, the age limit for directors in public or subsidiary companies is 70 years old (Section 129, Companies Act 1965). However,

for those directors who are more than 70 years old, their appointment must be renewed every year. The resolution must be passed by a majority vote of not less than three fourths.

In the UK, starting from April 6, 2007, the 70-year-old age limit for directors in public companies was abolished (http://www.shepwedd.co.uk/knowledge). Age is not a matter. The experience, knowledge, and networking that one holds are more important. In addition, experience increases in tandem with age, and these are the people that companies are looking for (Blau & Boal, 1987). Their valuable experience and knowledge in various industries can benefit the company where they serve as directors. This situation is best explained by resource dependency theory (see Pfeffer, 1973; Pfeffer & Slancik, 1978), where directors are appointed as members of the board in order to bring their reputation, networking, and knowledge into the company (Johnson *et al.*, 1996).

A review of the top 30 Malaysian public listed companies indicates that 8% of the companies have independent directors that are 50 years old and below, 42% are between 61 and 70, and 23% are above 70, as illustrated in Table 2.4. Datuk Yahya Ismail, who serves the board of YTL Corporation Berhad and YTL Power International Berhad, and Royal Professor Ungku Abdul Aziz Ungku Abdul Hamid, who sits on Projek Lebuhraya Utara Selatan (PLUS) Expressways Berhad board, are 80 and 87 years old, respectively (Yeap, 2009). The facts discussed above reflect that 91.9% of Malaysian boardrooms are filled with independent directors who are 51 years old or older. Tan Sri Ramon Navaratnam addresses the issue of directors' age when he argues that more young people should be appointed as directors for

succession planning as effective succession planning enhances company value (Yeap, 2009).

Age Group	Number of board seats filled by	Percentage (%)	
	independent directors		
Below 40	0	-	
41-50	10	8.1	
51-60	34	27.4	
61-70	52	41.9	
71-79	25	20.2	
80 and above	3	2.4	

 Table 2.4

 Age Profile of Malaysia's Top 30 Public Listed Companies

Source: Yeap (2009)

Similarly, a study conducted by KPMG (2009) finds that 79% of 1,804 nonexecutive directors representing 300 Malaysian public listed companies are between 51 and 70 years old. This reflects that the demand for older directors to sit on the board is higher than the younger ones. Furthermore, Rita Benon Bushon, the CEO of Minority Shareholders Watchdog Group, expresses her concern that the ideal age for independent directors is 40 because at such an age, the level of directors' knowledge, skills in making decisions, and questioning of the management's actions are more likely to be sufficient (Gomes, 2009).

## 2.7.4.4 Board Process

Previous researchers have argued that the board process should be included in studies of boards of directors in order to determine the effectiveness of the board (Finkelstein & Mooney, 2003; Leblanc, 2003; Wan & Ong, 2005; Nicholson & Kiel, 2007). Board process refers to the way in which directors discharge their duties in steering the board (Leblanc, 2004; Macus, 2008) and reflects the decision making activities, style of board, quality of meetings, and evaluation of directors' performance (Korac-Kakabadse *et al.*, 2001). Board process also includes the "clarification of board and management responsibilities, board composition and organization, planning and managing board meetings, and the effectiveness of the board as a working group" (Dulewicz & Herbert, 1999, p. 178). In a simple meaning, board process is the approach taken by directors in executing their roles, particularly in making decisions (Zahra & Pearce, 1989).

Kula (2005) outlines four factors that can explain board process: effectiveness and access to information, fiduciary responsibility and internal consistency, miscellaneous directors' attributes, and performance evaluation. Wan and Ong (2005) classify board process into three dimensions: effort norms, conflict, and usage of various skills. This shows that the ultimate objective in focusing on the board process is to ensure that the board runs effectively. The general attributes of board process are summarized in Table 2.5.

	Attributes of Board Process	Measurement	Sources
1.	Style of Board	Teamwork	Finkelstein and Mooney (2003);
		Board organization	Dulewicz and Herbert (1999)
		Clarification of board roles	Dulewicz and Herbert (1999); Kula (2005)
		Evaluation of CEO	Dulewicz and Herbert (1999); Raber (2003); Finkelstein and Mooney (2003)
		Evaluation of directors	Korac-Kakabadse <i>et al.</i> , (2001); Finkelstein and Mooney (2003); Leblanc (2004); Kula (2005)
2.	Decision Making Activities a. Competency	Directors' competency	Leblanc (2004)
		Performance of non- executive directors	Roberts, McNulty and Stiles (2005); Ingley and Van der Walt (2005)
		Presence and use of knowledge and skills	Raber (2003); Wan and Ong (2005); Wan Fauziah and Amrstrong (2012)
	b. Risk Oversight	Set risk appetite	Hasnah and Hasnah (2009), Aza Azlina, Zuaini and Nor Aziah (2012)
		Identification of risk	Raber (2003); Stautberg (2003); Ingley and Van der Walt (2008)
	c. Accessibility to Information	Provide questions to management	Raber (2003); Finkelstein and Mooney (2003); Wan and Ong (2005)
		Access company records	Sang-Woo and Il (2004)
		Receive materials prior meetings	Park (1995); Finkelstein and Mooney (2003)

Table 2.5Board Process Attributes

Previous literature has concentrated more on the structure, composition, and characteristics of boards and less on board process (Pettigrew, 1992). The lack of research on board process and the importance of this dimension have also been pointed out by Pye and Pettigrew (2005, p. 28):

A lack of theoretical framework often undermines the impact of process studies, so we also advocate the need to develop stronger theoretical focus and explication about theorizing, encouraging clarity of epistemological assumptions underpinning the research process as well as perhaps also the use of well establishing framing devices or concepts...Together with more micro-process focus through studies of, for example, trusting, influencing and problem solving, we argue these are important steps that would help strengthen and add depth and detail to process studies of board behavior.

In the same vein, Weir and Lang (2001) indicate that more focus should be placed on board process in order to improve company performance. Wan and Ong (2005) noted that the substance (process) is relatively more important than the form (structure) in governing a company.

According to Finkelstein and Mooney (2003), the concern for this issue has become important since many well-known companies have collapsed, including Enron, WorldComm, Global Crossing, Qwest Communications, and Tyco International. A year before these companies collapsed, they found out that their board structures were structured in a well manner (see Table 2.6), thus the board members' effectiveness is questionable. Roberts *et al.* (2005) believe that, in order to ensure an effective board, the directors need to be accountable to their shareholders. Thus, the elements of "challenging, questioning, probing, discussing, testing, informing, debating, exploring and encouraging" (Robert *et al.*, 2005, p. 6) need to be inculcated among board members. Finkelstein and Mooney (2003) list five goals for achieving an effective board: directors' ability to challenge management ideas, accept other members' ideas, work as a team, understand what the management is doing, and make value decisions.

Company	% Outsiders	% Directors with shareholdings	Board Size	CEO Duality
Enron	86%	100%	14	No
WorldCom	75%	100%	12	No
Global Crossing	73%	91%	11	No
Qwest Communications	64%	92%	14	No
Tyco International	73%	100%	11	Yes

Table 2.6The "Usual Suspects" in Selected Poor Performing Boards

Sources: Finkelstein and Mooney (2003)

From the perspective of agency theory, process variables are pertinent in explaining how boards exercise their services and monitoring role. This study utilizes four process variables (fiduciary responsibility and internal consistency, performance evaluation, miscellaneous directors' attributes, and effectiveness and access to information) adapted by Kula (2005). Most of Kula's variables fulfill the needs of current practices. However, the variables have been modified so as to accommodate the current study, particularly those practices that are stressed in the MCCG (2007) and Corporate Governance Guide (Bursa Malaysia Berhad, 2009) namely the board's duty in managing company risks and evaluating the top management performance. Therefore, this study concentrates on four characteristics under board process: performance of independent directors, board's risk oversight, CEO performance evaluation, and directors' accessibility to information.

#### • Performance of Independent Directors

Over the last decade, there has been a dramatic shift from boards dominated by executive directors to boards dominated by non-executive directors. The principle reason for this phenomenon is the growing concern that executive directors tend to be self-serving (Cochran & Wartick, 1988). Similarly, agency theory argues that management (agents) tends to act in an opportunistic manner to increase their personal wealth at the expense of the shareholders. The agency perspectives support the view that a greater proportion of outside directors is essential for effective monitoring of management performance and any self-interest action by managers, hence, minimizes the agency cost (Fama & Jensen, 1983). This consensus has been reflected in corporate governance recommendations and regulations in the US, the UK, Canada, and Australia, which specifically call for boards to comprise a majority of independent directors (Clifford & Evans, 1997). From the perspective of resource dependency theory, Pfeffer (1972) argues that board size and composition are influenced by the accessibility of outside directors on external resources. In addition, the growth of shareholder activism has led to a greater need for independent directors (Roberts et al., 2005).

Dalton and Kesner (1987) compare board compositions across industrial companies in Japan, the UK, and the US as shown in Table 2.7. The board composition refers to the total number of outside directors (non-executive directors) against the total number of directors on the board. The board composition in Japan (51%) is less compared to those in the UK (63%) and the US (69%). The reason for such a situation in Japan is because there is a close relationship between large financial institutions (i.e., capital providers) and top management. Large financial institutions normally become the majority shareholders in Japanese companies. They influence the company operations and management appointment. Therefore, there is no need to have high number of non-executive directors in the company. Due to this scenario, their financial reporting tends to be secretive (Choi & Mueller, 1992). However, companies in UK and US faced strong pressures to modify their board composition so as to reflect more independence from management by changing to more outside board representatives (Dalton & Kesner, 1987). As the ownership of UK and US companies are derived from large shareholders, it is crucial to have more non-executive directors to protect their interests in a company, particularly independent directors.

Table 2.7Board Composition: Japan, the UK, and the US

	Japan	UK	US
Number of inside directors	10.87	4.00	3.94
Number of outside directors	10.17	7.44	9.02
Number of total directors	21.04	11.44	12.96
Board composition	51.1%	63.6%	69.7%
Sources: Dalton and Kesner (1987)			

However, the issue of independence is still being debated. The independence of directors is a circumstance where a director should have reached the same decision if there were no management influence. Directors' independence also refers to the extent to which procedures and structures are in place to minimize potential conflicts of interest that could arise (Cheah & Lee, 2009). In other words, directors can be

considered independent when they do not have any significant interests and relationships in the company and they are expected to express their honest and professional opinion effectively in the best interests of the company without management's influence<sup>4</sup> (Johnson at al., 1996; Monks & Minow, 2008). Leblanc (2004, p. 439) has different perspectives on independence. He noted that "a director maybe conflicted and yet independent and not conflicted and not independent, within the boardroom." The statement demonstrates that independence is how the directors express their mind objectively even though they are connected to the management or are representing large shareholders (Leblanc, 2004). The utmost concern is to maximize the wealth of shareholders and ensure the sustainability of the company.

Keasy and Wright (1993) argue that, without independent and qualified directors, board effectiveness is questionable. A common complaint about non-executive directors is that they do not have a sufficient understanding of the business (Roberts *et al.*, 2005; Leblanc, 2004). The existence of information asymmetries between the CEO and non-executive directors has caused them to have less understanding of the business activities as they are not involved in the operations (Finkelstein & Mooney, 2003). Leblanc (2004) argues that companies are facing difficulties in searching for real independent directors to fulfill the regulators' requirement and end up having someone who has little knowledge about the company business and who is unable to provide ideas to management, particularly from strategic perspectives.

In the Malaysian context, at least one third of the board members must be independent.<sup>5</sup> Datuk Jaffar Indot, president of Malaysian Alliance of Corporate

<sup>&</sup>lt;sup>4</sup> Paragraph 1.01 of the Listing Requirements of Bursa Malaysia

<sup>&</sup>lt;sup>5</sup> Paragraph 15.02 of the Listing Requirements of Bursa Malaysia

Directors (MACD) argues that there are public listed companies that choose nonexecutive directors for the sake of fulfilling the regulatory quota instead of choosing people who are capable of contributing to the board (Aznita & Teoh, 2010). In the same vein, Datuk Yusli Mohamed Yusoff, the CEO of Bursa Malaysia, voices his concern that many directors who sit on the board of public listed companies are not the right person. He believes that directors who do not understand the company business and show no interest in how the company is performing influence the company performance (Jessy & Toyad, 2010). Nevertheless, the success of companies such as Axiata Group Berhad proves that, by appointing good independent directors, the company can expand business abroad. The skills and experience of these directors are important for contributing to company performance (Yeap, 2009). This indicates that successful companies are normally concern on the appointment of independent directors as the quality of the directors is essential rather than just complying with the regulation.

In order to be effective, the non-executive directors should have an appropriate level of knowledge about the company. They need to have an informal connection with the executives. Roberts *et al.* (2005, p. 13) refer to this relationship as "engaged but non-executive" in order to match their knowledge with executive directors. According to Finkelstein and Mooney (2003), based on interviews they conducted in the US, most non-executive directors prefer to communicate and ask questions of people directly involved in the decision making, such as the CEO, suppliers, investment bankers, lawyers, or even customers. With frequent questions to the CEO particularly, directors tend to have a better understanding of the company business activities. As a result of this constant communication, directors are updated on any major events that

have detrimental effects to the company, such as bankruptcy, mergers, or changes in regulations (Finkelstein & Mooney, 2003). However, it is really important for the non-executive directors to ask questions in a constructive manner so that the CEO and other executives feel that the questions are genuinely helpful and supportive (McCabe & Nowak, 2008). They should also be able to contribute practical ideas based on their own professional experiences during board deliberations (Mueller, 1974). In Malaysia, Tan Sri Ramon Navaratnam recommends that companies have quality independent directors as he believes that all independent directors should have the appropriate skills and experience so as to provide comprehensive judgment and views in board deliberations (Yeap, 2009).

The cases of Enron, Satyam, and Lehman Brothers revealed very important lessons. For example, independent directors must have knowledge and understanding of the financial instruments that the company trades (Yeap, 2009). By understanding the financial statements, they are able to analyze, interpret, provide constructive ideas, and give independent feedback on the company financial performance (Wan Fauziah & Amrstrong, 2012). In New Zealand, a study for determining the effectiveness of non-executive directors was conducted by Ingley and Van der Walt (2005). They find that most non-executive directors have a high ability to understand strategic issues and are capable of providing positive contributions to the decision making process. In Singapore, Wan and Ong (2005) indicate that an effective strategic role relates to the usage of strategic and analytical thinking. The role implies that it is important to have directors with "strategically relevant experience" whereby they are able to provide input from various perspectives and backgrounds in the meeting (Finkelstein & Mooney, 2003, p. 106). The most pertinent aspect is that the

independent directors must use all the skills that they have, particularly the management and communication skills, in order to fulfill the monitoring and service roles (Wan & Ong, 2005).

Westphal (1999) examines 243 CEOs and 564 non-executive directors in the US and finds that non-executive directors who have a close relationship with the CEO are able to provide more advice on strategic issues. The study contributed significantly to corporate governance literature as many studies have voiced concern about CEO– board ties, claiming that such a relationship reduces the effectiveness of non-executive directors in influencing management decisions (Johnson, Hoskisson, & Hitt, 1993).

#### • Board's Risk Oversight

A business risk relates to the inability of a company to predict the future performance in an uncertain environment (Sobel & Reding, 2004). Therefore, the board roles in risk management are very important so as to ensure that the company will survive in uncertain economic conditions. What is risk management? Raber (2003, p.11) defines risk management as "the systematic process of handling an organization's risk exposure to achieve its objectives in a manner consistent with public interest, human safety, environmental factors and the law." According to Nik Mohd Hasyudeen (2009), risk management should be incorporated into company strategic decision making, particularly for creating value and competing with their competitors.

Risk management has become a prominent issue, especially after the collapse of Enron in 2001, and remained significant in 2008 due to the financial crisis. Khushroo Dastur, a managing director of the Singapore-based risk management consulting firm Sirrus Advisory, states that maintaining the survivability of a company is very difficult during the economic crisis if these companies manage risk improperly (Lee, 2009).

Is there any difference between risk management and risk oversight? Risk oversight refers to the director's fiduciary duty in monitoring and challenging the management decisions related to risks (Raber, 2003). The function of boards on risk oversight has widely being discussed among practitioners from financial institutions, industries, researchers, and the public. The Cadbury Committee Report (1992) asserts that directors must be responsible for protecting shareholders' investment against unnecessary risks. Bostrom (2003) also emphasizes the importance of the board in monitoring a company's risks, particularly in decision making activities. The MCCG provides some of the actions that can be taken by boards in monitoring the risks. For instance, boards are encouraged to identify the company's principal risks and ensure the implementation of appropriate systems to manage these risks. Hence, it can be concluded that risk oversight is one of the elements under risk management.

Sobel and Reding (2004) establish an enterprise risk management (ERM) and governance framework, as depicted in 2.3.



Figure 2.3 An Enterprise Risk Management and Governance Framework

The governance framework has four imperative components: stakeholders, board, risk management, and assurance. Sobel and Reding (2004) argue that senior management and risk owners are fully responsible for company risk management. Boards, on the other hand, do not hold direct responsibility for risk management, although they are responsible for risk oversight. The board is responsible for monitoring management decisions, being actively involved in strategic planning processes, and ensuring that issues related to risks are brought up to them by the management (Raber, 2003; Sobel & Reding, 2004). The responsibility stems from the fact that their ultimate role is to serve the stakeholders. The summary of responsibilities of each group in this framework is delineated in Table 2.8.

Table 2.8Who Should be Responsible for What?

	Risk Management Responsibilities?	Primary Roles in Corporate Governance
Board of Directors	No	Provides risk management direction, authority, and oversight to senior management.
Senior Management	Yes	Has primary responsibility for ERM. Delegates risk management authority and specifies risk tolerance thresholds to risk owners. Reports ERM plans and performance results to the board of directors.
Risk Owners	Yes	Assign specific risk management authority and risk tolerance thresholds to other personnel. Report ERM plans and performance results to senior management.
Internal and External Auditors	No	Provide independent, objective assurance to senior management and the board of directors about the effectiveness of risk management, control, and governance processes.

Source: Sobel and Reding (2004, p. 31)

Therefore, board members should equip themselves with sufficient knowledge in finance (Sonnenfeld, 2004) as well as the company risk profile (Raber, 2003). In addition, most companies should encourage the directors to update their skills and knowledge in relation to risk management by regularly attending training programs, seminars, or workshops<sup>6</sup> (Cheah & Lee, 2009; Wyman, 2009).

Furthermore, boards should regularly question management about the possible risks that a company may be facing (Raber, 2003). Sobel and Reding (2004) argue that boards must be actively involved in risk management processes by providing expertise and judgment to the strategic process. In addition, the board is responsible for determining the company's risk tolerance so as to guide senior management in

<sup>&</sup>lt;sup>6</sup> Paragraph 15.09 of the Listing Requirements of Bursa Malaysia stipulates that a listed company must ensure that its directors have continuous training in order for them to discharge their duties effectively

making decisions. However, the senior management should be given the autonomy to manage the risks within the accepted risk tolerance by the board. Apparently, the director's ability in analytical thinking skills and strategic perceptions are important in influencing company performance (Kula and Tatoglu, 2006), particularly in managing company risks.

Similarly, Nik Mohd Hasyudeen (2009) suggests that boards should focus on four areas in order to have an effective risk management system: Boards should understand the company risk philosophy and reflect it through the company risk appetite, ensure that the management has established an effective risk management, review every risk management report, and directors should be assessed via risk against the company future performance.

Bostrom (2003) states that it is fairly acceptable to conclude that the corporate governance role and risk management function are inadequate in many companies. Why does the function of risk management fail? Here, failure refers to both internal risk management and boards' ability to proactively act as shareholder watchdogs. Directors are not equipped with the information to understand the nature, quality, and type of assets and liabilities. Furthermore, they cannot grasp the detrimental effects to the company balance sheet if a company were overleveraged or incorrectly valued. To understand this scenario, it is better to review the board's behavior in two failed giant financial institutions. In the case of Lehman Brothers for example, the board did not stop the practice of borrowing short via commercial papers and lending long via big concentrations in illiquid mortgages and real estates. Meanwhile, at Bear Stearns, the board did not question either the firm's large commitment to the mortgage market or management's failure to address the liquidity concerns that ultimately tarnished the firm's reputation (Murphy & Brown, 2009). Although these two examples are from the financial industry, according to Hull (2007), the role of risk management is universal and applies to other industries as well. Without proper risk management, companies are more likely to expose themselves to bankruptcy.

A study by Ingley and Van der Walt (2008) explore the perception of New Zealand directors on the importance of board tasks. The researchers discover that the determination of risk exposure ranks sixth after a board's tasks on involvement in strategy, evaluating the CEO's performance, ensuring corporate survival, monitoring the company strategy, and growing shareholders' wealth. Dulewicz and Herbert (2004) investigate 117 indicators of good practices on 16 directors' tasks in a study conducted in the UK. One of the findings indicates that boards that evaluate current and future internal and external risks of a company bring positive impact on company performance.

Khushroo Dastur, managing director of a Singapore-based risk management consulting company, finds that companies in Malaysia have a relatively low level of awareness in risk management compared to those in Singapore and Hong Kong (Lee, 2009). In relation to the risk management issue, the ultimate responsibility of risk oversight belongs to the board. Thus, the question of how competent the Malaysian board is on risk oversight remains unanswered.

### **CEO Performance Evaluation**

Performance evaluation is the process of managing performance by incorporating regular evaluation, feedback, and counseling (Gomez, 2010). The purpose of the

evaluation process is to enhance individual and business performance. The tools of measuring performance can be in the form of key performance indicators (KPI).<sup>7</sup>

Agency theory supports the idea that management as well as the CEO's actions and decisions should be monitored and evaluated by the board (Jensen & Meckling, 1976). The evaluation of the CEO's actions and decisions should be conducted frequently, at least once a year, by the board (Petra, 2005). The process is crucial as it influences the decisions that relate to promotions, transfers, or terminations of the CEO. In addition, the evaluation identifies the areas that the CEO needs to improve, such as further training or development. Furthermore, the evaluation provides feedback to the CEO on how the company views his or her performance (Dulewicz & Herbert, 1999; 2004; Robbins & Judge, 2009). The evaluation can serve as the basis for rewards allocations, such as bonuses and salary increments (Zahra & Pearce, 1989; Robbins & Judge, 2009).

In relation to reward systems, many banks have been urged to use risk-adjusted financial performance measures and incentives (Wyman, 2009), implying that the CEO's compensation should be staggered. The compensation should be linked to current and future results. For example, if in the future the return from the investment turns sour, the CEO's compensation should be reduced as well. Although initially the proposal is to cater to banking institutions only, the idea is appropriate for every sector. As long as the entities are involved with business activities, they are exposed to various risks. The pertinent idea is that the compensation of senior management should be tied to the company future results (Wyman, 2009). Thus, all decisions,

<sup>&</sup>lt;sup>7</sup> As suggested by Bursa Malaysia (2009) via its Corporate Governance Guide: Towards Boardroom Excellence

especially for determining capital structures, should be considered wisely by the management as the consequences of such decisions determine their future compensation.

In order to measure CEO performance, the board should have access to clear performance indicators (Finkelstein & Mooney, 2003). In the early stages, the board should clearly communicate the criteria and measurement aspects being used in the assessment of the CEO (Taylor, Tracy, Renard, Harrison, & Carroll, 1995; Sobel & Reding, 2004; Epstein & Roy, 2005). This action is considered to be a top-down approach. Such communication enhances the CEO's understanding of the board's expectation and vice versa. At the same time, CEOs have the chance to explain to the board the possibilities and challenges that a company might face, which in turn affects his or her performance evaluation (Epstein & Roy, 2005).

The result of the evaluation must be communicated to the CEO so as to get his or her feedback or comments for possible corrective actions (Robbins & Judge, 2009; Dulewicz & Herbert, 1999; 2004). The CEO should also be permitted to challenge and discuss the performance appraisal (Lipton & Lorsch, 1992; Taylor *et al.*, 1995). However, in a company where the CEO simultaneously holds the position of the chairman, the board faces difficulty in assessing the CEO's performance (Zahra & Pearce, 1989). Moreover, the board members appointed by the CEO are more likely to evaluate the CEO's performance in their favor (Epstein & Roy, 2005). It is reasonable to expect that such a relationship leads to biased evaluations toward the CEO.

In relation to company performance, Kula (2005) and Kula and Tatoglu (2006) point out that formal procedures in assessing the board and managers' performance are positively associated with company performance. This implies that performance evaluation can be used by the board as an indicator to assess the underperforming CEO.

### **Directors' Accessibility to Information**

Directors must have sufficient access to information<sup>8</sup> in order for the board to function effectively. Thus, management should provide the materials which will be used and discussed in the meeting, particularly meeting agendas. In addition, directors can interact with other people, such as the senior management, to obtain company information and get feedback (Macus, 2008) regardless of whether such interaction is in the boardroom or outside the meeting (McCabe & Nowak, 2008). Directors should be allowed to have access to company records and accounting books (Sang-Woo & II, 2004). The Cadbury Committee Report (1992) also states that directors are allowed to engage any experts to advise them on issues in which they have less knowledge. In addition, MCCG requires the board to obtain information from the company secretaries.

Directors must ensure that they receive adequate and meaningful materials prior to the board meetings so as to have adequate preparation (Park, 1995; Finkelstein & Mooney, 2003). Otherwise, the directors will not have sufficient time to understand the issues, which will lead them to agree with the decisions of the CEO without voicing out any arguments (Finkelstein & Mooney, 2003), even when company

<sup>&</sup>lt;sup>8</sup> Paragraph 15.04 of the Listing Requirements of Bursa Malaysia

decisions are against shareholders' interests namely, adopting excessive leverage. According to Zahra and Pearce (1989, p. 295) "directors are not in a position to challenge CEO analyses or recommendations in the absence of reliable data." Sufficient information and preparation lead to better communication between directors and CEO or senior management. As a result, the CEO is more likely to make decisions cautiously and put more attention and efforts into decisions as he or she is aware that directors are monitoring all actions closely.

Kula and Tatoglu (2006, p. 629) draw attention to the significance of directors' collective and individual attributes. They present that exchanging ideas at board meetings, including "effective of information gathering" and "board gathering enough outside information," are related to company performance. Macus (2008) proposes that board interaction is associated with problem solving activities that lead to positive company performance. The result implies that, with more interaction with senior management and other board members, directors may have better understanding of the business operations and any issues that arise can be solved collectively.

## 2.8 Chapter Summary

In summary, the board of directors is one of the pertinent governance mechanisms that have been studied by various researchers. As discussed in this chapter, corporate governance variables such as board size, leadership structure, directors' risk appetite, directors' tenure, board's risk oversight, performance of independent directors, CEO performance evaluation, and directors' accessibility to information are all important for aligning the principles' and agents' interests. Agency theory supports the

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importance of these variables. Previous studies have put forth various results with regard to the association between corporate governance attributes and company performance. They have focused more on the relationship between the structure, composition, and characteristics of the board and company performance, but less on the board process–company performance relationship. In the next chapter, the current study proceeds with a review of the literature on capital structure.

# **CHAPTER THREE**

# **CAPITAL STRUCTURE**

## 3.1 Introduction

This chapter reviews research undertaken on board governance characteristics, ownership structure, and capital structure decisions. This chapter is divided into nine sections. Section 3.2 reviews the definition of capital structure. This is followed by a discussion of capital structure in Malaysia in Section 3.3, implications of excessive leverage in Section 3.4, and the theoretical underpinning of capital structure in Section 3.5. Section 3.6 reviews the effects of board governance characteristics on capital structure decisions, followed by a discussion of the relationship between ownership structure and capital structure decisions in Section 3.7. This study incorporates company performance because it is expected to be influenced by board effectiveness. Consistent with this assumption, Section 3.8 presents a discussion of the measurement of company performance and its association with capital structure. Section 3.9 concludes the chapter.

### **3.2 Definition of Capital Structure**

Capital structure is the mix of long-term sources of funds used by a firm, namely non-current liabilities and equity. In general, bonds (debt securities) and long-term loans are categorized under non-current liabilities while equity is represented by preferred and common shares (Keown, Martin, Petty, & Scott, 2008). A company can choose any type of capital structure. If a company issues more bonds, the debt-equity ratio will increase. Alternatively, a company that issues more shares reduces its debt-to-equity ratio (Ross, Westerfield, & Jordan, 1999).

According to Pandey (2002), the definition of capital structure should be based on the economic level of a particular country. In the US, most companies treat capital structure as a long-term debt ratio, while in developing countries, companies tend to use short- and long-term debt to finance their assets. Consistent with Pandey (2002), capital structure in this study refers to the combination of short- and long-term debts.

The major influence on the maturity structure of financing plans is the nature of assets owned by the company. Companies that invest in a current assets portfolio should finance those investments through permanent or temporary sources (noncurrent or current liabilities). Companies that make long-term investments should finance their assets with long-term financing. For example, in 2009, United Engineers Malaysia (UEM) Land, a company owned by UEM Group Berhad, undertook an appropriate financial strategy in which it issued RM550 million bonds to finance its long-term project in Bandar Nusajaya in Iskandar Malaysia (Shanmugam, 2009). Nevertheless, a problem in capital structure arose with a maturity mismatch between investments and funding in which long-term investment was being funded by short-term borrowings (Fong, 2008). The situation worsened when the company had to roll over its financing at higher costs due to a reduction in Malaysian ringgit and higher interest rates. This type of situation presents a problem for companies that must knock on banks' doors every time they roll over their financing. The process of rollover can even be detrimental to a company if its application is rejected by the banks.

Myers (2001) suggests that financing structure is determined by managers or people who have interests in the company. The selection of either debt or equity is best explained by the pecking order theory (see Section 3.5.1).

#### **3.3** Capital Structure in Malaysia

In Malaysia, the domestic debt securities market was introduced in 1987. However, companies generally prefer the issuance of private placements over public offerings (Suto, 2003). It is worth mentioning that companies prefer their bonds to be subscribed by large securities investors, such as Employee Pension Fund (EPF), unit trusts, or banks, rather than small investors. Suto (2003) argues that companies that have a close relationship with bankers can easily issue debt securities, and this leads to a reduction in demand in bond markets.

Therefore, borrowing is the main source of funding for Malaysian companies. Statistical data show a significant increase in loans to the private sector; such loans surged from 98.5% in 1990 to 148.4% in 1998 (Fong, 2008). Loans at that point of time were collateralized against company shares and properties. Thus, banks were exposed to a potential decline in asset prices. In relation to borrowings, some companies even borrow in foreign currency to increase their internal funds. When Malaysia was hit by the Asian financial crisis, companies that had foreign borrowings suffered tremendously; their interest expenses surged when the Malaysian ringgit depreciated against the US dollar to RM3.80 from RM2.60 in June 1997 (Fong, 2008). The massive defaults of corporate borrowers resulted in severe shock to the banking sector.

Nevertheless, Bank Negara Malaysia (2007a) indicates that after the financial crisis the sentiment changed and companies began to prefer corporate debt securities over loans, as illustrated in Figure 3.1. The Asian financial crisis serves as a reminder that the banking system is the lifeblood of the economic system. Bank failures will seriously compromise the economy. Since that crisis, the Malaysian government has actively developed its debt securities market so that companies can raise funds rather than depend solely on banks for loans.



Figure 3.1 Size of Corporate Debt Securities Market and Corporate Loans

Meanwhile, various sources other than corporate debt securities and loans can be chosen as a source of funds. These include equities, foreign direct investment, external debts, and other domestic financial intermediaries. Bank Negara Malaysia (2008) indicates that in 2008 the banking system remained the largest provider of financing, where bank loans comprised 42% of total source of financing, followed by foreign direct investment and public debt securities at 18% and 15%, respectively, as illustrated in Figure 3.2.



Figure 3.2 Sources of Financing for the Private Sector in 2008

## **3.4** Implications of Excessive Leverage

During the Asia, US, and Middle East crises, everyone looked at debt as a risky instrument (Fong, 2008; 2009). The Asian financial crisis and the US subprime crisis have been discussed previously in Section 1.1. Similarly, the scenario of having high leverage can be seen in Dubai; however, this time around the government had borrowed heavily to finance its mega infrastructures. As the properties market in Dubai is open to foreign investors, including the US, its market was exposed to the US crisis like a domino effect (Fong, 2009). Thus, excessive leverage can affect the whole economic system, even in a developed country or city such as US and Dubai, respectively.

With regards to business entity, there is no doubt that leverage is a source of tax shielding (Myers, 2001) and that the owner of the company uses it as a strategy to control the decision making process since the company does not have any public shareholding (Baumol, 1965). However, Stone (2000) claims that financial crisis is

always associated with corporate debt based on his studies of the implications of financial crisis for company output. Ross *et al.* (1999) and Fong (2008) further argue that the potential of a company experiencing financial distress is high when the company is over-leveraged. Norita and Shamsul Nahar (2004) argue that the debt ratio for financially distressed firms is higher than in healthy companies. Their study concentrates on non-performing companies (PN4) listed in Bursa Malaysia from 2000 to 2001.

To sustain a healthy financial structure, managers must choose a mixture of equity and debt so as to lower the weighted average cost of capital. By minimizing the cost of capital, the company value can be maximized, thereby providing greater return to shareholders and stakeholders (Keown *et al.*, 2008). However, occasionally the cost of capital increases as the amount of debt increases. This becomes critical when the cost of capital increases and the value of the firm decreases as the amount of debt goes up. Under this circumstance, the benefit of debt financing is offset by the costs of financial distress, and this leads to the greater problem of bankruptcy (Ross *et al.*, 1999).

#### **3.5** Theories of Capital Structure

According to Myers (2001), no specific theory can explain the nature of capital structure. However, three important theories are used to explain the role of debt in capital structure decisions involving an interaction with human behavior: pecking order, trade-off, and agency theory. The pecking order and trade-off theories are discussed further in the following section. Even though agency theory has been

discussed earlier in Chapter 2 under Section 2.5.1, the association between agency theory and capital structure is discussed in depth in this chapter.

### 3.5.1 Pecking Order Theory

Myers (1984) and Myers and Majluf (1984) introduced the pecking order theory, which states that companies prioritize their sources from internal financing to equity financing. In other words, a company's preferred source of financing is internal funds. Debt falls under the second preference, and if it is not sensible to issue more debt, equity is used as the last alternative. This theory argues that businesses adhere to a hierarchy of financing sources in which debt is preferable to equity when external financing is required.

Why do companies prefer to have more debt than equity? The argument is that the cost of equity is relatively higher than debt. Companies need to pay dividends to shareholders and, furthermore, the dividend amount is not fixed (Myers, 2001). The amount of the dividend is based on company performance and payment ability. If the company earns less profit, then it may have a smaller dividend rate. A reduction in dividend payments affects investors' confidence in the company and the worst impact is that investors pull out their investments.

On the other hand, Myers (2001) further argues that debts are the safest security in funding capital investments. If the return from investments produces more cash flow, the company may prefer to pay the debts with a fixed interest rather than to repurchase its own shares. Share prices are volatile and the price depends on economic performance and the company's core business (Shanmugam, 2009). If the

current price for repurchasing shares is higher than the issue price, the company may experience negative value on its shares at that point in time (Myers & Majluf, 1984). In the case where demand for debt for capital investments is increasing, the company is more likely to change its appetite to riskier securities (e.g., preferred shares, common shares) (Myers, 2001).

#### 3.5.2 Trade-Off Theory

As predicted by trade-off theory, the major motivation for using debt is to reduce payment of corporate tax (Modigliani & Miller, 1963; Miller, 1977; DeAngelo & Masulis, 1980; Deesomsak, Paudyal, & Pescetto, 2004). It is important to note that interest on debts is tax deductible, while dividends payments, which are associated with equity, are not. When total debt increases, more tax expenses can be deducted.

However, Myers (1984), Rajan and Zingales (1995), and Chen and Steiner (1999) argue that company profit and leverage are negatively related. Rajan and Zingales (1995) conduct a study among companies in Canada, Japan, and the United States and find that profitable companies tend to avoid debt as a source of financing. Companies are afraid of the bankruptcy risks that come from excessive leverage. However, according to Myers (2001), profitable companies should maximize their tax shield on debts by using more debt as these companies have less potential to go into financial distress.

According to the trade-off theory, the capital structure of a company can also be explained via tax benefits and bankruptcy costs associated with the use of debt, an idea developed by Kraus and Litzenberger (1973). Myers (2001, p. 88) postulates that "the firm will borrow up to the point where the marginal value of tax shields on additional debt is just offset by the increase in the present value of possible costs of financial distress." Hence, choosing debts for financing is preferred as long as the value of tax deductions is greater than the potential cost of financial distress (Kyereboah-Coleman, 2007). However, Miller (1977) challenges this theory by arguing that tax benefits and bankruptcy costs should not be used as an equal comparison because the amount of tax benefits is certain while the cost of bankruptcy is uncertain.

### 3.5.3 Agency Theory

The sources of finance that determine the capital structure of a company have been one of the predominant reasons for the mounting interest in corporate governance (Tricker, 1994). Capital structure is being determined by managers or people who have interests in the company. Managers who determine the company capital structure have their own preferences, as explained in pecking order theory (Myers, 2001). According to pecking order theory, managers prefer to use company internal funds. With regards to external financing, debt is preferred over equity. In addition, managers' preferences towards financing are influenced by the information asymmetry between the agent (managers) and principal (shareholders). Managers have more access to company information regarding the tasks they must handle and the consequences of their behavior than outside investors (Ross, 1973). Thus, the decisions that managers make are reflections of their interests and not those of shareholders as a whole. This is similar to the agency theory assumption in which managers prefer to fulfill their own interests in making decisions (Jensen & Meckling, 1976).

#### **3.5.3.1 Agency Problems in Capital Structure Decisions**

Various arguments pertain to debt's role and its association with agency problems. The company might face two general problems, namely managers' opportunistic behavior (moral hazard problem) and ineffective managers, or the adverse selection problem (Jensen & Meckling, 1976). Berger *et al.* (1997) claim that managers whose financial incentives are closely tied to stockholder wealth are more likely to pursue high leverage so as to increase company value. This is similar to the moral hazard in which management decides to employ excessive leverage to secure sufficient cash to fund a project that can provide an immediate outstanding figure of net profit. Higher profit figures translate into bigger bonuses and salary increases for the managers. However, the managers do not consider company survival when using excessive leverage as their financing instrument.

In addition, some managers resign even after receiving high bonus without taking responsibility for their action of adopting an excessive leverage strategy. To overcome this problem, managers' compensation is frequently staggered and tied to the company's future performance (Wyman, 2009). This may force managers to be more prudent in their decision making.

Another agency problem is adverse selection, where managers' incompetence has led to inaccurate decisions regarding the level of company leverage. This is caused by managers' insufficient knowledge and skills in understanding the financial statement or company risks. Also, managers' poor attitude toward their responsibility can also bring harm to the company if they disregard working for the best interest of the company. As managers are involved directly in the decision making process, shareholders and bondholders expose themselves to the risk associated with management decisions (Jensen & Meckling, 1976).

In addition, in attracting investors' confidence, managers may choose to employ more leverage. The higher the total debt, the more tax expenses can be deducted (Modigliani & Miller, 1963, Miller, 1977, DeAngelo & Masulis, 1980; Deesomsak, Paudyal, & Pescetto, 2004) and the difference in tax shield may flow back to the shareholders in terms of dividend. The dividend to shareholders reflects management performance, especially in the case of a newly hired management team. It is important to gain the trust and confidence of the investors, especially in the early period of new management. Declaring a high dividend convinces investors that the new management is capable of running the company. Nevertheless, this leads to another agency problem in which managers create a risky capital structure. A company may fall into a greater disaster if its business ventures are unsuccessful because the ability to service loans is halved. Companies in which debt dominates the capital structure still need to bear the fixed loan interest even though the business remains unprofitable (Jensen & Meckling, 1976).

The main disadvantage of debt is the association of bankruptcy with high leverage in the case of the company running into financial distress (Jensen & Meckling, 1976; Ross *et al.*, 1999; Norita & Shamsul Nahar, 2004; Fong, 2008). When the company cannot pay its debts, the possibility of bankruptcy is very high (Ong, Yap, & Khong, 2011). Bankruptcy costs can be divided into two categories: direct and indirect. An example of direct bankruptcy costs is the cost of losing the potential to earn profit because stakeholders are no longer interested in investing capital. Legal and

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administrative costs in the bankruptcy process are examples that fall under indirect bankruptcy costs (Abor, 2008). Similarly, Modigliani and Miller (1963) agree that increasing debts may increase the possibility of a firm going into bankruptcy. The discussions above reveal the problem in the agent-principal relationship and the costs that must be considered when the decision making function is in the hands of managers.

### 3.5.4 The Affiliation between Board of Directors and Capital Structure Theories

Vast literature discusses the board's role in reducing agency costs, particularly in the strategic management literature (Zahra & Pearce, 1989; Johnson *et al.*, 1996; Leblanc, 2003). Such literature stresses that the board of directors can play a monitoring role in protecting shareholder interests. With regard to capital structure decisions, the board can influence the management team to closely scrutinize risks associated with such decisions. Therefore, in this study, the main theory is agency theory as it can explain the association between board functions and capital structure decisions. As discussed in Section 2.6 (Chapter 2) and Section 3.5 (Chapter 3), Figure 3.3 illustrates the theories on board of directors and capital structure.


Figure 3.3 Theories on Board of Directors and Capital Structure

Even though the capital structure decision is very important, the role and influence of directors on such decision making processes has not been extensively being covered in previous literature. Thus, in this study, the corporate governance function, particularly the role of the board, is further deliberated.

# **3.6** The Effects of Board Attributes on Capital Structure

The following discussion is on board attributes and the board's association with capital structure decisions.

# **3.6.1 Board Composition**

# **Board Size**

Several studies have focused on the association between board size and capital structure (Berger *et al.*, 1997; Yu *et al.*, 2002; Abor, 2007). Yu *et al.* (2002) use 60 Chinese listed firms between 1996 and 1998. The result indicates that the relationship between board size and capital structure decision is insignificant. However, Abor (2007) finds that firms with higher leverage have a larger board. The possible reason in explaining this result is that larger boards are normally associated with board entrenchment and vigorous monitoring. Thus, the board tends to use debt as a bonding mechanism where management has to commit to pay the borrowings and avoid using company profits or cash unnecessarily (Hart, 1995). Furthermore, larger boards tend to have more members that can bring in more expertise that leads to better decision making (Noriza, 2010).

In contrast, Berger *et al.* (1997), Rashidah *et al.* (2005), Arshad and Safdar Ali (2009), and Teh, Shabnam, and Ong (2012) indicate that the level of leverage is lower when boards of directors are larger. These studies assume that larger board size resulted in strong pressure on managers to pursue lower leverage to achieve good performance. From an agency perspective, a larger board is more likely to be vigilant regarding agency problems simply because a greater number of people will be reviewing management actions.

#### 3.6.2 Board Structure

#### Leadership Structure

Several studies have focused on the association between role duality and capital structure (Fosberg, 2004; Rashidah *et al.*, 2005; Kyereboah-Coleman, 2007; Kin & Hian, 2007; Abor, 2007). A study in Malaysia conducted by Rashidah *et al.* (2005) argue that even though the position of CEO and chairman of the board may be combined, the person who holds such position prefers to adopt low leverage if he or she employs strong elements of independence and professionalism.

On the other hand, Rashidah *et al.*'s (2005) finding was contradicted by studies conducted by Abor (2007), Kin and Hian (2007), and Noriza (2010). Abor (2007) uses 22 firms listed in the Ghana Stock Exchange for six years from 1998 through 2003 in his analysis. He finds that when CEOs hold the position of chairman at the same time, they tend to employ a high proportion of debt, especially when such person holds a majority of the shares in the company. The reason is that the CEO cum board chairman has more power in decision making and prefers to make decisions with little or no involvement from other parties (shareholders). Therefore, such persons are afraid of having less power in decision making when their stake is diluted through the issuance of additional equity to raise funds.

In addition, Kin and Hian (2007) find that in companies with a non-dual leadership structure, CEOs prefer to avoid the pressure of having excessive leverage due to vigorous monitoring by other board members. The study covered eight East Asian countries, which included Malaysia, Singapore, Thailand, Indonesia, Hong Kong, Japan, the Philippines, and South Korea. Furthermore, with independent roles, the chairman can monitor the decisions of the CEO and influence management to employ less debt financing (Noriza, 2010). Fosberg (2004), on the other hand finds insignificant results on the relationship between leadership structure and company leverage.

## **3.6.3 Board Characteristics**

#### **Directors'** Tenure

Directors' current job performance affects their future job opportunities. Those who are competent and provide value to the company may survive. Therefore, directors with longer tenure tend to have a better understanding of company business and to make decisions wisely (Vafeas, 2003).

In Malaysia, directors of public listed companies are required to relinquish their positions with the company at least once every three years. However, they are entitled to be reelected at annual general meetings (AGMs). The idea is to mitigate company directors with long tenure from having close relationships with management. Westphal (1999) finds that boards that have close relationships with the CEO perform fewer monitoring functions. Under such circumstances, it is easy for management to influence the board to agree with a management-centric agenda in decision making processes, including capital structure decisions. However, Kruger (2010) indicates that when the board consists of highly tenured directors, negative events occur less often. The finding shows that expertise and experience increase with tenure, which ultimately affects the quality of directors' decision making. The finding contradicts the view that longer director tenure results in close relationships with management.

Studies on the association between directors' tenure and company leverage are scarce. Previous studies have paid more attention to the relationship between CEO's tenure and company leverage (Berger *et al.*, 1997; Kin & Hian, 2007). Berger *et al.*'s (1997) study indicates that entrenched CEOs prefer to adopt a low leverage strategy to reduce the pressure on company performance normally associated with high debt. In addition, CEOs with long tenure are more likely to possess more knowledge of the business and be able to make prudent decisions that are associated with high risk (Kin & Hian, 2007).

# Directors' Risk Appetite

With regards to financing decisions, Busija (2006, p. 27) conceptualized "risk taking behavior as decisions concerning capital structure." Vroom and Pahl (1971) study the relationship between age and risk-taking behavior. They conduct a study of 1,484 managers from 200 companies and find that managers' age is inversely associated with risk-taking appetite. Similarly, Hambrick and Mason (1984) and Wiersema and Bantel (1992) further argue that older managers are more risk averse than younger managers. The experience and valuable knowledge that they have gained over time have molded them to be prudent and take fewer risks in making decisions. Therefore, the study suggests that directors' age is an appropriate variable to reflect their level of risk appetite in capital structure decisions.

Busija (2006) conducts a study on the relationship between CEO's age and level of debt in family-owned businesses. He finds a negative association between the two variables. This shows that younger CEOs are more likely to engage in high risk taking on debts than older CEOs.

#### **3.6.4 Board Process**

The board process perspective is very much related to the quality of tasks and directors' characteristics. Jiraporn, Jang-Chul, Young, and Kitsabunnarat (2008) conduct a study on the quality of governance and its influence on capital structure decisions. The study consists of 7,557 companies extracted from the Institutional Shareholder Service (ISS) for the period of 2001 to 2004. The study reveals that companies with poor corporate governance quality normally have high leverage. Jiraporn *et al.*'s (2008) study is supported by Mande, Park, and Son (2012). Effective corporate governance mechanisms including board functions can mitigate the company from taking excessive leverage (Mande *et al.*, 2012). Boards of directors who are competent in managing company risks and evaluating the CEO's performance effectively can easily influence management to be more alert in their decision making, including capital structure decisions (Zuaini, Nor Aziah, & Aza Azlina, 2011).

During the US financial crisis, most financial institution board members were questioned regarding their responsibility to manage risks and their competency in protecting shareholders. Some directors do not even bother to understand the financial statements. As a result, incorrect decisions can be made with respect to the company financial structure (Murphy & Brown, 2009). The study of board process and its association with capital structure is still rare, but it has developed this researcher's interest in exploring these variables in depth.

#### **3.7** Ownership Structure

In referring to ownership structure, there are two types of company: widely held and ultimate owned. A widely held company structure refers to an organization in which the distribution of shares is not blocked by certain shareholders. In such companies there is no "owner with significant control" (Claessens, Djankov, & Lang, 1999, p. 8). On the other hand, an ownership structure where a majority of the shares is held by a certain group is referred to as concentrated ownership. In such ownership, ultimate ownership can be traced to an institution, family, individual, state, or company (Claessens *et al.*, 1999; Zuaini & Napier, 2006).

Based on the year 1996 and a sample of 286 Malaysian public listed companies, Claessens *et al.* (1999) demonstrate that 67.2% of the companies are family-owned companies. As most companies are owned by certain individuals, the interests of minority shareholders may be marginalized. In addition, in Malaysia there is no specific law that can protect such group's interests (La Porta, Lopez-de-Silanes, Shleifer, & Vishny, 1998). Haniffa and Hudaib (2006) also find that company shares in Malaysia are mostly held by five largest shareholders. On average, the five largest shareholders represent 61% of total company shareholdings. The study proves that most Malaysian companies are considered as having concentrated ownership.

Decisions regarding company capital structure are also influenced by ownership structure (Lin *et al.*, 2011; Brailsford *et al.*, 2002). The ownership of financial institutions (King & Wen, 2011); family members' interests (Lin *et al.*, 2011), directors' interests (Fosberg, 2004; Lundstrum, 2009), institutional investors' interests (Mehran, 1992), and foreign investors' interests (Suto, 2003) are associated

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with company capital structure. In this study, managerial ownership is used as a proxy for ownership structure. Managerial ownership represents the amount of shares that are held by executive directors. Normally, if the directors hold shares in the company, the shareholders' interests are more likely to be protected. Directors will tend to act in the best interests of the company since their own money is at stake. Therefore, having such a situation reduces the agency problem (Jensen & Meckling, 1976; Norhani, Tower, & Taylor, 2011).

# Managerial Ownership

Previous studies have reviewed the function of managerial ownership in corporate governance literature (Rashidah *et al.*, 2005; Lundstrum, 2009; Mazlina & Ayoib, 2011). The effect of managerial ownership can be either positive or negative (Haniffa & Hudaib, 2006). Companies with a high level of managerial ownership are assumed to have less agency conflict since the owners-managers are actively involved in the decision making process. Thus, the shareholders benefit when board members or managers have interests in the company (Harris & Raviv, 2008). This notion is also supported by Jensen and Meckling (1976), who argue that when managerial ownership increases, managers have higher motivation to bring more profits into the company.

However, companies with high managerial ownership allow managers to fulfill their own interests and involve the company in unprofitable activities since monitoring by the directors and shareholders is weaker (Chobpichien *et al.*, 2007). Furthermore, the impact worsens when managers use minority shareholders' money to make investments that benefit themselves. Therefore, the interests of minority shareholders are exposed to risk (Haniffa & Hudaib, 2006).

The literature also supports a low level of managerial ownership as an effective governance mechanism (Brailsford *et al.*, 2002; Chobpichien *et al.*, 2007). Minimal ownership by managers helps them manage the company effectively. The reason is that controlling shareholders who are not involved in company operations tend to monitor managers' behavior and decisions vigorously (Chobpichien *et al.*, 2007). In such a company, the role of non-executive directors is significant. Nevertheless, Jensen and Meckling (1976) and Morck and Yeung (2004) assume that a low level of managerial ownership provides more agency problems. The interests between managers and shareholders are difficult to align when managers hold a small portion of company shares. The problem faced by Linear Corporation Berhad serves as a reminder that directors' ownership can reduce agency conflicts. The involvement of two company directors in unviable projects resulted in a massive loss to the company (Loong, 2010). Both directors have no stake in the company, and the losses that the company faced do not affect their wealth.

In Malaysia, half of the listed companies are family-owned (Claessens, Djankov, & Lang, 2000; Zuaini & Napier, 2006). The studies by Claessens *et al.* (2000) and Zuaini and Napier (2006) use a 20% cutoff point to define control in their samples. The results indicate that in family-owned companies, the owners hold a large amount of shares. In addition, the boards in such companies are dominated by family members (Noor Afza & Ayoib, 2009). Therefore, the CEO or managers are

appointed among themselves (Mazlina & Ayoib, 2011). When owners sit on the board, they can influence the company decision making.

In explaining the relationship between managerial ownership and capital structure decisions, Jensen and Meckling (1976), Agrawal and Mandelker (1987), Stulz (1988), and Mehran (1992) document a positive relationship between the two variables. Agrawal and Mandelker (1987) indicate that companies with more executive director shareholdings have higher debt ratios than those companies with less executive shareholdings. With more shares held by the executive directors, the interests of shareholders are more likely to align with those of managers (Jensen & Meckling, 1976; Agrawal & Mandelker, 1987; Mehran, 1992; Mazlina & Ayoib, 2011). Therefore, agency problems can be reduced.

This is supported by Mehran (1992), who asserts that managers with more shareholdings are more likely to search for more alternatives when making investment plans and that debt financing is preferred to fund such investments. Even though the owner-managers are exposing themselves to risk when choosing debt financing, Stulz (1988) argues that increases in leverage with fixed portfolio investments reduce the possibility of the company going into financial distress. Furthermore, managers with a high percentage of ownership may prefer a high debt level because increases of share ownership by other shareholders could dilute the managers' interests. This situation also reduces the controlling ability of the managers in the company (Driffield *et al.*, 2007). In addition, employing more debt as a source of financing is another common way to avoid takeover attempts. Amihud, Lev, and Travlos (1990) point out that under corporate acquisition exercise,

management that has a high level of ownership in the acquiring firm is more likely to use cash or debt financing than to issue new stock. Their study extracted 209 acquisitions from 165 US companies between 1982 and 1983.

On the other hand, Friend and Lang (1988) conduct a study to examine whether capital structure decisions and managerial self-interest are related. Their samples consist of 984 companies listed in the New York Stock Exchange and the data cover the five-year period from 1979 to 1983. They report a negative relationship between managerial (officer and/or directors) shareholdings and leverage. By employing more debt to finance the company investment, managers are exposing themselves to more risk. If the managers hold a majority stake in the company, the selection exposes the managers to loss of their investment. Hence, such managers prefer to adopt a low level of leverage. This is consistent with Nam, Ottoo, and Thornton (2003), Fosberg (2004), and Arshad and Safdar Ali (2009), who find similar results with regards to leverage and managerial ownership. They assert that managers who have high ownership believe that the company will likely to go into bankruptcy if the company employs high leverage.

However, Brailsford *et al.* (2002) indicate a non-linear inverted U-shape between managements' ownership and leverage. At a low level of ownership, leverage increases in tandem with directors' ownership. The low leverage indicates an aligning of interests between management and owner. However, when the ownership reaches 49%, directors are more likely to become entrenched and prefer to carry low risk. As a result, high directors' ownership correlates with a low debt ratio. Lundstrum (2009) finds no relationship between the choice of debt or equity and managerial share

ownership. This result is consistent with Rashidah *et al.*'s (2005) results. Moreover, Rashidah *et al.* (2005) suggest that the ownership of non-executive directors and executive directors should be differentiated in future research to explore further ownership's influence on financing decisions.

## **3.7.1 Studies Using Managerial Ownership as the Moderating Variable**

Managerial ownership acts as the indicator in explaining whether the board can effectively control managers' decisions or whether the ownership reduces the functions of the board. Chobpichien *et al.* (2007) examine the effect of CEO's and families' ownership and characteristics of board of directors on voluntary disclosure among Thailand listed companies. The interaction between ownership structures and board quality index is conducted individually. The study reveals that companies with a high concentration of insider ownership have difficulties with the board in monitoring the controlling ownerships' behavior, and this creates negative effects on the level of voluntary disclosure. In a different study, Chobpichien *et al.* (2008) reveal that the influence of boards in companies' voluntary disclosure is weaker when there is high executive director ownership.

In Korea, Cho and Kim (2007) document that managerial ownership does not correlate with company performance as the ownership relates to large shareholders. Therefore, the large shareholders normally control board meetings and influence other directors. Meanwhile, Boeker and Goodstein (1993) discover that the association between successor choices and company performance is not influenced by managerial ownership. The result shows that when managerial ownership is more dispersed, owner-managers are more likely to face difficulty in influencing the decisions of the successor.

In another study that relates to company capital structure, insider ownership, and company performance, Kongmanila and Kimbara (2007) find that owner-managers' companies play a significant role in strengthening the positive relationship between internal financing (debt and retained earnings) and company profitability. This situation indicates that internal financing is preferred by owner-managers when company profit is increasing. Their finding is consistent with the pecking order theory, which assumes that managers prefer to choose debt and retained earnings over equity. However, studies that examine the effect of managerial ownership on the association between board process and capital structure are still lacking.

# **3.8** The Measurement of Company Performance

Various company performance measurements are linked to corporate governance variables. For instance, Rohana *et al.* (2009) use earning per share and return on investment in their study, while Driffield *et al.* (2007) employ Tobin's Q as the proxy for company performance. The measurements play an essential role in that they act as positive indicators or warning signs to the board, management, employees, shareholders, stakeholders, the public, and the government.

Company performance can be measured by using the accounting and market value perspectives. From the accounting perspective, financial statements are used to understand the company financial position (Keown *et al.*, 2008). Data from the financial statement provide an extensive set of indicators for evaluating company

profitability and the most popular measurements are financial ratios (Barry, Ellinger, Hopkin, & Baker, 2000). One of the advantages of ratio analysis is that results provide the researcher with an opportunity to identify trends by examining the ratios for several periods of time and comparing the ratios with those of other companies. In addition, ratio analysis can be used to plan for the company's future. Furthermore, ratios can quantify essential financial interrelationships that incorporate items such as liabilities, assets, expenses, and sales (Ross *et al.*, 1999).

Previous studies in the area of corporate governance have incorporated various ratios, including return on assets (ROA), return on equity (ROE), earnings per share (EPS), Tobin's Q, sales, return on investment (ROI), return on profit, and market value-to-book value of common stock as the proxy for company performance. Some of these studies are presented in Table 3.1.

<u>Studies Associa</u>	ROA	ROE	EPS	Tobin's Q	Sales	ROI	Return on profit	Market value to book value of common stock
Rohana, Halimi and Erlane (2009)			•			•		
Halimi, Rohana and Zubaidah (2008)	•	•				•		
Hsu-Huei, Paochung, Haider and Yun-Lin, (2008)		•	•					
Driffield, Mahambare and Pal (2007)				•				
Shamsul Nahar (2004)	•	•	•				•	
Chang (2004)		•						
Sang Woo and Il (2004)	•							
Dulewicz and Herbert (2004)					•			
Kiel and Nicholson (2003)	•			•				
Van Ees, Postman and Sterken (2003)	•	•		•		•		•
Barnhart, Marr, Rosenstein (1994)								•
Hermalin and Weisbach (1991)				•				
Yermack (1996)	•			•				
Fosberg (1989)		•						

Table 3.1Studies Associated with Company Performance

From the market value perspective, the measure seeming to capture the most attention is economic value added (EVA); this technique can be used to assess whether management is generating shareholder value or not (Keown *et al.*, 2008). This approach was developed by Stern Stewart & Co. (Baliga, Moyer, & Rao, 1996). EVA sometimes is referred to as market value added (MVA). Baliga *et al.* (1996, p. 48) define MVA "as the market value of debt, preferred equity and common equity capitalization less the book value of a firm's entire capitalization, adjusted for past write offs of capital."

With regards to company performance measurement, Shamsul Nahar (2004) examines the association between board independence and CEO duality via the performance of companies listed on the KLSE Main Board from 1994 to 1996. With regards to accounting ratios, ROA, ROE, and EPS represent company performance. The study finds that the number of non-executive directors and CEO duality are not related to company performance. The study argues that long-term measurement might be better than financial ratios. In another study conducted by Baliga *et al.* (1996), the researchers use a long-term measurement to determine the impact of CEO duality on company performance. However, the result show weak evidence of the variables' influence and indicates that long-term measurement cannot guarantee that the researcher will obtain better results.

Kula (2005) however, uses five-point scales ranging from 1 = unsatisfactory to 5 = satisfactory to measure company performance via eight performance variables: growth in dividends, profits, sales volume, market share, company performance as compared to competitor, ability to face competitors' forces, level of product

acceptance, and company performance as a whole. The samples that Kula (2005) selected were not from public listed companies; thus, he could not measure company performance based on market data. The results show that board effectiveness in accessibility of information and performance evaluation relates to company performance.

#### **3.8.1** Research Streams on Capital Structure and Company Performance

Based on La Rocca (2007), there are six evolutions of capital structure and its association with company value (see Figure 3.4). The evolution begins with Modigliani and Miller (1958), the earliest authors, who discuss capital structure and company value (Keown *et al.*, 2008). Modigliani and Miller (1958) argue that there is no relationship between capital structure and firm value, as illustrated in Figure 3.4(a). In other words, debt policy choice is not associated with company value. Apparently, the study does not include the effect of taxes and bankruptcy costs in the original argument. Five years later, Modigliani and Miller (1963) claim that their previous work has not taken corporate tax into consideration. They further argue that debt financing increases company value after considering corporate tax (see Figure 3.4(b)).

Later, Kraus and Litzenberger (1973) make a valuable contribution in explaining capital structure decisions that are closely associated with tax benefits and bankruptcy costs. The crucial point in the capital structure is when the cost of capital increases while the company value decreases as the amount of debt increases. The result shows that the benefit of debt financing is offset by financial distress costs and that increasing debts lead to the greater problem of bankruptcy (Ross *et al.*, 1999).

Nevertheless, Jensen and Meckling (1976) disagree with Kraus and Litzenberger (1973)'s theory, claiming that bankruptcy cost is not "the major determinant of corporate capital structures" (p. 341).

Figure 3.4(c) illustrates that L' is the optimal capital structure because it results in the highest company value. Surpassing the L' point, the company is exposed to financial distress even though tax benefits keep increasing. Capital structure management is also related to agency costs (Keown *et al.*, 2008) and influences the costs of financial distress (see Figure 3.4(d)). For example, with the implementation of a monitoring mechanism for management behavior, the mechanism is expected to reduce the cost of financial distress. Later, Myers (1984) and Myers and Majluf (1984) introduce the concept of managers' preference in financing decisions and claim that managers' first priority is internal funds (retained earnings), followed by debt and, finally, equity. They label the concept as pecking order theory. On the other hand, La Rocca (2007) further explains that financing preference depends on managers' risk appetite. He also claims that the level of debt financing "will be determined by the tangent between the firm value function and the curve of manager indifference" (La Rocca, 2007, p. 313), as illustrated in Figure 3.4(e).



Figure 3.4 Evolution in the Studies of the Relationship between Capital Structure and Value

Obviously, various studies have been conducted to determine the relationship between leverage and company performance. Kyereboah-Coleman and Biekpe (2006) point out that those companies with more debt financing perform better than other companies. This suggests that debt is the main source of financing for profitable companies. In the same view as Modigliani and Miller (1963), Graham (2000) stresses that corporate tax leads to a reduction in debt financing costs and further provides a positive impact on companies' return. In addition, Kongmanila and Kimbara (2007) indicate that family-controlled companies that employ more debt contribute to higher profitability than non-family-controlled companies in a short-term period. However, in a long-term period, as these companies must pay the borrowings and interest, company profitability is affected. Mohd Hassan *et al.*  (2008) also assert that companies with a high level of debt financing are more likely to have sound financial performance with the presence of effective debt management

In contrast to the above findings, some studies have shown a negative relationship between company leverage and profitability (Chang, 2004; Tam & Tan, 2007). The negative relationship contradicts the agency theory which expects company leverage to act as a monitoring mechanism in disciplining the managers (Baliga *et al.*, 1996). Fu, Ke, and Huang (2002) find that small companies with high dependency on debt financing are more likely to have lower profits. The reason is that commercial banks tend to charge them a higher interest rate because the possibility of defaulting on borrowings is higher. Furthermore, Robert P. Miles who conducted a study on Warren Buffet, the richest investor in the world, reveals 15 principles that Buffet practices in Berkshire Hathaway, where he is the chairman. One of the factors that led to the company's success is "not taking on debt" (Izma, 2009, p. 20). Buffet's principle implies that in the long run, high leverage would bring disaster to the company.

In a study that involves 77 public listed companies in Malaysia, Chang (2004) suggests that companies with high leverage are unable to invest in more risky and profitable projects; thus, such a situation affects company performance. In a similar vein, Tam and Tan (2007, p.20) find that Malaysian companies operate in an "immature financial market." Companies that have close relationships with banks may have easy accesses to capital. However, this situation exposes the companies to more liquidity risk (Haniffa & Hudaib, 2006). Thus, it is difficult to conclude that debt financing is an effective mechanism to improve company performance (Haniffa & Hudaib, 2006; Tam & Tan, 2007).

# **3.9 Chapter Summary**

This chapter presents the definition and an overview of the development of capital structure in Malaysia. Previous literature on possible determinants of capital structure that are linked to corporate governance variables have also been presented. These variables are essential in aligning the interests of owners and managers as suggested by agency theory, particularly in capital structure decisions. This study adopts agency theory to explain the board mechanism as the board holds the oversight role. Furthermore, these mechanisms have led to efficient capital structure decisions. Literature on company performance measurements is also presented. This is followed by reviews of empirical studies related to capital structure and company performance. Based on the literature in Chapters 2 and 3, the hypotheses are developed in the following chapter.

# **CHAPTER FOUR**

# HYPOTHESES DEVELOPMENT

# 4.1 Introduction

This chapter discusses the research perspectives along with research assumptions (section 4.2). In the section that follows, the research framework is presented (section 4.3). The hypotheses are then developed to search for answers that address the objectives of the study, and discussion of the hypotheses is presented in section 4.4. Section 4.5 summarizes the chapter.

#### 4.2 Research Perspectives

There have been extensive discussions about the appropriateness of the approaches that can be adopted in social sciences research (Creswell, 2007; Susela Devi *et al.*, 2006; Parker, 1999). Four assumptions that are always applied in social science research are ontology (nature of phenomena that are assumed to exist), epistemology (nature or theory of knowledge about the phenomena), human nature (concern about the relationship between humans and their environment), and methodology (methods used to study the phenomena) (Belkaoui, 2004). There are two alternative perspectives on research, the positivism perspective and the interpretative perspective. Positivism suggests that research is associated with the relationship between observable events. In general, it begins with a hypothesis supported by extant knowledge, followed by a data collection process, and finally an assessment of whether the data support the hypothesis via various research methodologies and statistical tools (Susela Devi *et al.*, 2006). Positivism is a well-known theory that is

used widely in accounting research (Chua, 1986), possibly because this perspective fulfills the four assumptions mentioned above so clearly.

Nevertheless, some views disagree with the positivism perspective. First, positivism is more concerned with discovery and less with explanation of the phenomena (Hughes, 1990). Second, the perspective makes it difficult to substantiate the result with accuracy even though statistical tools are used to determine the result (Parker, 1999).

Meanwhile, the opposite of the positivism perspective is the interpretative perspective. Interpretative emphasizes depth of understanding of individual actions. Thus, through communication and observation, the reasons that support individual action can be discovered (Susela Devi *et al.*, 2006). The important point is that a real experience from real respondents can be obtained by using the interpretative approach (Creswell, 2007). However, the main criticism of the interpretative perspective involves the issue of validity since the explanations are derived from the researcher's own interpretation. Therefore, the researcher should incorporate the respondents' different views to enhance the reliability of the study (Andrade, 2009).

Dijjerences beiween Fosilivisi una mierpretative Research								
Criteria	Positivist	Interpretative						
Objective of research	Explain cause and effect of the subject	Document and explain the subject in depth						
Analysis method	Uses mathematical or statistical tools	Does not use mathematical or statistical tools						
Establishment of model	Establishes model that involves more than one variable	Does not establish model						

Table 4.1Differences between Positivist and Interpretative Research

In this study, the researcher adopts positivism perspective in which several hypotheses are established based on prior studies to examine the effects of board attributes on company leverage and performance. The agency theory is used to support the hypotheses. Two types of data are used: data from the annual report and data from a questionnaire survey of Malaysian directors. Data from the annual report and questionnaires are analyzed to confirm the hypotheses.

## 4.3 Research Framework

A company is a legal entity or a legal person. As a legal entity, a corporation has most of the rights and privileges of a person. The entity can enter into business transactions, own assets, incur liabilities, sue, and be sued. In raising its funds, a number of investors or shareholders buy company shares and other investments. However, the shareholders' liabilities are limited to the total amount of their investment in the company. This condition allows shareholders to hold shares in more than one company and, hence, minimizing their risks in investment (Byrd, Parrino, & Pritsch, 1998).

The establishment of a company with disperses ownership leads to the issue of separation of ownership and control. This issue has been brought up by Berle and Means (1932). As shareholders are not involved in day-to-day company operations, management has the power to make decisions on behalf of the company. The dilemma arises when management or agents act opportunistically (Jensen & Meckling, 1976; Dalton & Kesner, 1987).

Jensen and Meckling (1976) find that the principal could resolve agency problems in two ways: by monitoring the agents' behavior or by providing incentives. With regards to monitoring mechanisms, the board of directors has become the center of attention in the governance literature as well as in practical approaches (Baysinger & Butler, 1985; Chaganti *et al.*, 1985; Daily & Dalton, 1993; Barnhart *et al.*, 1994). They are appointed by shareholders to protect shareholder interests and closely monitor management behavior. Dulewicz and Herbert (2004) put forward the argument that agency theory provides further understanding of the board's functions in governing the company.

Previous literature has associated the board's function in reducing agency costs, especially in the strategic management literature (Johnson *et al.*, 1996; Leblanc, 2003). The most important part of strategy implementation is determining the capital structure decisions (David, 2008). However, Myers (2001) points out that the determination of financing decisions is based on managers' preferences. They are more likely to employ debt than equity when it comes to external financing.

One of the factors that encourage managers to adopt more leverage is the desire to increase company value when their financial incentives are closely tied to stockholder wealth (Berger *et al.*, 1997). In funding new projects, managers prefer to obtain cash through borrowing because the mechanism is easy, and the success of the project can be reflected in their compensation. In addition, managers are motivated to use more leverage so as to qualify for higher tax deductions (Modigliani & Miller, 1963; Miller, 1977; DeAngelo & Masulis, 1980; Deesomsak *et al.*, 2004). The difference in tax shield will flow back to shareholders as dividend return. However, the company exposes itself to financial distress when leverage is excessive and it is unable to pay its debts (Ross *et al.*, 1999; Norita & Shamsul Nahar, 2004; Fong,

2008). The shareholders will suffer the consequences of the financial difficulties. In cases such as Enron, Satyam, Renong, and Perwaja, their risky capital structure proves that excessive leverage leads to poor company performance. Therefore, the board is expected to provide a monitoring mechanism for management decisions on capital structure.

Previous researchers have identified various factors that are critical in determining company leverage (Yu et al., 2002; Rashidah et al., 2005; Abor, 2007). These variables come from various disciplines, including finance, corporate governance, strategic management, and organizational behavior. For corporate governance variables, Yu et al. (2002) use board size, board composition, CEO tenure, and CEO compensation in determining the variables that can affect company leverage. The interesting findings of Yu et al. (2002) motivate Rashidah et al. (2005) to conduct a similar study on the association between corporate governance characteristics and leverage in the Malaysian context. With the addition of CEO duality to Yu et al.'s (2002) framework, Abor (2007) executes his study in Ghana. In addition, Fauzias and Bany (2005) conduct a study to determine the impact of the separation of cash flow and control rights on capital structure decisions in 100 distressed Malaysian However, the studies conducted by Yu et al. (2002), Rashidah et al. companies. (2005), Fauzias and Bany (2005), and Abor (2007) do not consider board process and its influence on leverage. Board process represents the effectiveness of directors in monitoring management. Hence, an active board mitigates the company's chances of adopting risky decisions.

Several researchers have indicated a need to pay attention to the board process instead of focusing mainly on board structure (Zahra & Pearce, 1989; Pettigrew, 1992; Dulewicz & Herbert, 1999; Weir & Lang, 2001; Finkelstein & Mooney, 2003; Leblanc, 2004; Wan & Ong, 2005; Pye & Pettigrew, 2005). Finkelstein and Mooey (2003) find out that Enron, WorldComm, Global Crossing, Qwest Communications, and Tyco International in the US have a well-run board structure a year before they collapsed. Thus, research focused solely on board structure may not reflect how the company is actually being governed by the board.

Taking a cue from Stiles and Taylor (2001), board structure is a pertinent variable on which to focus; however, the real contribution is in studying the credibility of directors and their work performed. Referring to the first part of the research framework in Figure 4.1, this study examines the effect of board structure, composition, characteristics, and process on the company capital structure. The hypotheses are denoted as  $H_1 - H_9$ .





In the second part, the study focuses on the effect of ownership structure, as illustrated in Figure 4.2. The owners who hold large numbers of shares in a company have the power to control company assets and make decisions that are prone to protect their own interests (Shleifer & Vishny, 1997). In addition, they possess the right to influence board decisions and company policies (Hasnah & Hasnah, 2008). The study assumes that companies with an effective board will influence management to adopt less leverage. However, the existence of managerial ownership reduces the board's effectiveness (Chobpichien *et al.*, 2007; 2008). Therefore, it is interesting to look at the interaction of board effectiveness and managerial ownership on company capital structure decisions. In this study, managerial ownership is represented by executive directors' ownership. Thus, these facts have encouraged the

researcher to examine the effect of managerial ownership on the relationship between board effectiveness and company leverage (H<sub>9</sub>).



Figure 4.2 Research Framework for Moderating Effect of Managerial Ownership

In the third part, the study examines the effect of company leverage on the relationship between board process and company performance. Previously, Zahra and Pearce (1989), Kula (2005), and Hasnah and Hasnah (2008) develop a theoretical framework that integrates the board's roles, structure, and process in company performance without taking capital structure as the intervening factor. Johnson *et al.* (1996) point out that board process influences company performance through strategic decisions. Decisions on financing structure are an integral part of strategies implementation (David, 2008). Therefore, as proposed by Johnson *et al.* (1996) and David (2008), this study incorporates leverage as a mediating variable. The proposal is also similar to the recommendation of La Rocca (2007) that board

effectiveness, capital structure, and company value should be incorporated into research studies.

In running the mediation analysis, predictions on the board process-company performance relationship are also discussed in hypothesis 10 ( $H_{10}$ ) to hypothesis 13 ( $H_{13}$ ). However, this study does not determine the relationships among board structure, composition, and characteristics and company performance. Several previous studies have reported less evidence or no consensus on the relationships between these variables (see Dalton *et al.*, 1998; Dalton *et al.*, 1999; Leblanc, 2004; Mohd Hassan *et al.*, 2008; Halimi *et al.*, 2008; Rohana *et al.*, 2009; Nazli Anum, 2010). Then, hypothesis 14 ( $H_{14}$ ) examines the relationship between leverage and company performance. Finally, four special hypotheses are devoted to mediating variable which is represented by company leverage, to determine whether leverage mediates the relationship between board process attributes and company performance ( $H_{15a}$ - $H_{15d}$ ). The mediation effect is illustrated via the dotted line in Figure 4.3. The figure represents the research framework that incorporates the mediating effect on company leverage.





Research Framework for Mediating Effect of Capital Structure on the Relationship between Board Process and Company Performance

Overall, based on Zahra and Pearce (1989), Yu *et al.* (2002), Kula (2005), Rashidah *et al.* (2005), Fauzias and Bany (2005), Abor (2007), and Hasnah and Hasnah (2008), modifications and extensions have been made to this study to suit the Malaysian context. The overall framework is presented in Figure 4.4.



#### Figure 4.4

Research Framework for Board Governance Characteristics, Capital Structure Decisions and Company Performance in Malaysia

The separation of ownership and control raises a concern about the agent-principal relationship in which the board is expected "to counsel, evaluate and control company management" (Dalton & Kesner, 1987, p. 34). The "agency theory offers a comprehensive definition of board attributes of composition, characteristics, decision

process and structure...Agency theorists have shown more attention to board decision making processes" (Zahra & Pearce, 1989, p. 301). Due to this line of reasoning, this study applies agency theory to support the development of hypotheses.

# 4.4 Hypothesis Development

The hypothesis development is discussed in the following sections.

## 4.4.1 Hypothesis Development - Determinants of Company Leverage

This study examines the influence of board structure, composition, characteristics, and process on company leverage.

#### 4.4.4.1 Board Composition

According to Zahra and Pearce (1989), board composition can be referred to the size of board.

## a. Board Size

Board size refers to the number of directors in the company. Board size has been identified as an important determinant of corporate governance effectiveness in theoretical articles (Pfeffer & Slancik, 1978; Lipton & Lorsch, 1992; Jensen, 1993). Even though the Best Practice of Malaysian Code of Corporate Governance does not mention the optimal board size, the most important point is to determine the effectiveness of the board.

In relation to capital structure, Yu *et al.* (2002) find insignificant result on the relationship between board size and company leverage. The result shows that the size

of the board does not influence company leverage. Nevertheless, Jensen (1986) and Abor (2007) assert that firms with higher leverage have a larger board size. The study suggests that large boards are less effective than small boards. More problems can arise, such as free-riding directors in board meetings, slow decision making, and ineffective discussion.

In contrast, Berger *et al.* (1997), Rashidah *et al.* (2005), Arshad and Safdar Ali (2009), and Teh *et al.* (2012) indicate that the level of leverage is lower when boards of directors are larger. These studies assert that larger board size could exert strong pressure on managers not to take on excessive leverage. Larger board size leads to better and more careful decision making since various opinions are gathered during board deliberation (Eisenberg *et al.*, 1998). In addition, with more members on the board, the company can use the directors' knowledge from various backgrounds. This leads to a better chance of company survival (Chaganti *et al.*, 1985). Furthermore, lenders are more likely to charge a low interest rate for debt to companies with larger boards because they assume that the companies are monitored by experts (Anderson, Mansi, & Reeb, 2004). From a theoretical perspective, agency theory suggests that management must be monitored to ensure that managers make decisions prudently and act in the best interests of the company and the shareholders. The above arguments support the notion that board size can exert influence on capital structure decisions. For that reason, this study proposes that:

Hypothesis 1 (H<sub>1</sub>): The number of directors on the board is negatively related to company leverage.

#### 4.4.4.2 Board Structure

#### a. Leadership Structure

This study also considers the leadership structure as a characteristic of corporate governance mechanism. The researcher believes that these two roles influence company decision making. Several studies find that dual board leadership is associated with high leverage (Kyereboah-Coleman, 2007; Kin and Hian, 2007; Noriza, 2010). Companies where the CEO and chairman positions are held by the same person have fewer monitoring mechanisms to check their work as "the same person will be marking his own examination papers" (Wan & Ong, 2005, p. 278). This is similar to agency theory propositions suggesting that the duality role reduces the function of board monitoring (Finkelstein & D'Aveni, 1994). As a result, decision making tends to favor management rather than shareholders' interests (Jensen & Meckling, 1976; Tricker, 1994).

In the Malaysian context, most companies have separate people holding the CEO and chairman positions (Ayoib, Zuaini, & Nor Aziah, 2003; Shamsul Nahar, 2004; Tam & Tan, 2007). As suggested by Best Practice AAIII of the Malaysian Code of Corporate Governance, companies are encouraged to separate the two roles to ensure proper checks and balances in the top corporate leadership unless there is an explanation of why the roles are combined. In addition, separation enhances the availability of the chairman in advising the CEO and reduces the issue of CEO entrenchment (Westphal, 1999).

Furthermore, separating the two positions encourages top management to make wise decisions in all respects, including capital structure decisions, since their performance is being monitored by the chairman and other board members. Hence,

the CEOs are more likely to employ less leverage to avoid the performance pressures that result from excessive leverage. Based on the above arguments, this study proposes that:

# Hypothesis 2 (H<sub>2</sub>): The non-dual leadership structure is negatively related to company leverage.

# 4.4.4.3 Board Characteristics

## a. Directors' Tenure

This study also includes a variable that measures the employment period of the directors. As directors' tenure lengthens, their loyalty, passion, and self-belonging on the board that they serve also increases (Izma, 2009). In addition, such directors have greater expertise and experience to monitor the company effectively as such qualities have developed over time (Liu & Sun, 2010). Furthermore, directors with long tenure have invested their time and resources in understanding the company business and this apparently leads to value-adding contributions during board discussions (KPMG, 2009; Kruger, 2010). In Malaysia, directors with social titles (Tun, Tan Sri, Datuk Seri, Datuk) have esteemed reputations in the director labor market. These groups of directors have the ability to bring more business opportunities and resources into the company. Nevertheless, if the company is facing crisis, the directors' reputation will be affected, particularly in the director labor market, as they will be seen as incapable of monitoring company management and activities. Thus, directors with social titles are more likely to become efficient in executing their directors' roles to retain their positive reputation. With such criteria, these directors would potentially remain on the board for a longer period.

Therefore, the longer period of directors' tenure affects the quality of corporate governance and decision making. One can assume that longer directors' tenure translates into vigorous monitoring from the directors, which in turn influences management to use lower levels of leverage. This study proposes that:

# Hypothesis 3 (H<sub>3</sub>): Directors' tenure is negatively related to company leverage.

# b. Directors' Risk Appetite

With regards to financing decisions, Busija (2006, p. 27) has conceptualized the "risk taking behavior as decisions concerning capital structure," and the behavior is connected to the person's appetite for risk. Vroom and Pahl (1971) study the association between age and risk-taking behavior. The result demonstrates that increases in managers' ages are associated with low risk-taking appetite. In a similar vein, Hambrick and Mason (1984) and Wiersema and Bantel (1992) also find that older managers are more risk averse than younger managers. Older managers are more likely to have better judgment. They gather more information and, hence, need more time before making decisions (Daboub, Rasheed, Priem, & Gray, 1995). Thus, in this study, age acts as a surrogate measurement for directors' risk appetite. Risk appetite is more likely to influence directors in pursuing either high or low risk financing decisions.

It is assumed that directors with high risk appetite prefer to make high-risk decisions. Thus, such a group of directors tends to opt for excessive leverage for quick gain that could be detrimental in the long run if economic conditions do not favor the company. Perhaps, this can explain why 80 of 124 Malaysian directors who sit on
top-30 public listed companies are age 61 and older (Yeap, 2009). Also, directors with low risk appetite, particularly non-executive directors, are more likely to have valuable experience and knowledge in various industries that can benefit the company. This situation is similar to resource dependency theory (see Pfeffer, 1973; Pfeffer & Slancik, 1978) where directors are appointed as members of the board to bring their reputation, networking skills, and knowledge (Johnson *et al.*, 1996) into the company. Those experienced directors are able to persuade management to invest in a less risky capital structure. In this study, risk appetite is represented by age. There is an inverse relationship between risk appetite and age. With the above arguments, this study proposes that:

Hypothesis 4 (H<sub>4</sub>): Directors' risk appetite is positively related to company leverage.

#### 4.4.4 Board Process

Board process is the activity involving how directors make decisions for the company. Cornforth (2001) defines board process as "the extent to which the board and management share a common vision, clarity of the board's role, ability to handle conflict constructively, meeting practices, and board review procedures" (p. 217-218). Thus, the development of hypotheses associated with board process and its influence on company leverage is discussed in the following sections.

#### a. Performance of Independent Directors

The first variable under board process is performance of independent directors. The main functions of independent directors are to provide unbiased judgment for the best interests of shareholders and the company (Leblanc, 2004; Yeap, 2009) and to

monitor decision making activities (Fama & Jensen, 1983). By having sufficient skills and experience, independent directors can provide thorough assessments during the decision making process (Finkelstein & Mooney, 2003). In addition, frequently raising constructive questions to the CEO and senior management encourages managers to be more prudent in their decision making. From the agency perspective, independent directors are expected to monitor independently management work and decisions.

The Best Practice AAIII of the Malaysian Code of Corporate Governance and Paragraph 1.01 of the Bursa Malaysia Listing Requirements emphasize the importance of independent directors. In relation to board effectiveness, the board must consist of at least one-third independent non-executive directors to ensure that these directors can provide independent judgment. Prior to their appointment, a few characteristics need to be evaluated: their skills, knowledge, professionalism, experience, integrity, and expertise. To recap, effective and competent independent directors can dissuade management from excessive risk taking to protect the shareholders and the company. Hence, this study proposes that:

# Hypothesis 5 (H<sub>5</sub>): The performance of independent directors is negatively related to company leverage.

#### b. Board's Risk Oversight

The board's influence on risk management is an important aspect of board process, particularly in decision making activities (Bostrom, 2003). Murphy and Brown (2009) argue that boards that provide less emphasis on risk management can lead to company failure. Thus, the board's challenge is to manage risk effectively (Cheah &

Lee, 2009). Even though the ultimate responsibility of risk management is not on the board's shoulders, an effective board should provide "direction, authority and oversight to management" (Sobel & Reding, 2004, p. 31). The process will be effective with frequent questions to management regarding the risks to which the company is exposed. In addition, the boards need to endorse and communicate the company risk tolerance to provide guidance to senior management in decision making. These practices in turn enhance the risk culture among the board members.

The Best Practice AA of the Malaysian Code of Corporate Governance has outlined six specific board responsibilities, and these include managing company risk. The latest requirements issued by stock exchange and reporting standards bodies have also stressed enhancing the directors' role so that board members have a continuous process of evaluating, measuring, and managing company risk (Puan, 2010). The board's ability in risk oversight influences management to take on non-excessive leverage. This is supported by agency theory, which suggests that management needs to be monitored (Jensen & Meckling, 1976) and risk oversight is one of the mechanisms for monitoring managerial actions and decisions. Therefore, based on the above argument, the researcher hypothesizes that:

# Hypothesis 6 ( $H_6$ ): The board's risk oversight is negatively related to company leverage.

#### c. CEO Performance Evaluation

CEO performance evaluation refers to the measurement and procedures that are established by the board to evaluate the CEO. This measurement is one of the mechanisms that can influence CEO behavior (Dulewicz & Herbert, 1999; 2004; Robbins & Judge, 2009). Therefore, by ensuring an effective key performance indicator to assess the CEO, the indicator prevents the CEO from adopting excessive short-term risk-taking decisions. In addition, the rewards system should be tied to the CEO's performance (Zahra & Pearce, 1989) and, specifically, the system should be the function of short- and long-term performance. An effective evaluation system is able to reward the CEO fairly. From the agency perspective, the board is one of the governance mechanisms that is able to monitor management actions and the evaluation process is an instrument to keep track of the CEO's performance.

The Malaysian Code of Corporate Governance recommends that the effectiveness and contribution of every director on the board, including the CEO, need to be assessed. Therefore, the CEOs need to pay extra attention to the decision making process as their performance will be accessed based on the outcomes of their decisions. A reflection of CEO performance can be seen in company profitability and the structure of capital. It is expected that CEOs do not prefer excessive leverage in that they can avoid the company risk of bankruptcy. The failure of the company will affect their reputation and job security.

Hence, based on the above arguments, the next hypothesis is:

Hypothesis 7 (H<sub>7</sub>): The CEO performance evaluation is negatively related to company leverage.

#### d. Directors' Accessibility to Information

In this study, it is presumed that by having sufficient access to company information, directors are able to make better quality decisions. Directors, particularly the "independent directors must be able to meet freely for discussions with the company's managers and workers, have access to business records and books of account, receive detailed information about board meeting agendas and obtain necessary outside professional services at the company's expense" (Sang-Woo & II, 2004, p. 63). Adequate information enhances directors' knowledge and understanding of the company's business activities, financial performance, strategies, and various parties such as bankers, creditors, and customers that have interests in the company. Therefore, directors can scrutinize the ideas of CEO and senior management decision making (Zahra & Pearce, 1989; Finkelstein & Mooney, 2003). In addition, such information prevents management and the controlling owner from manipulating other board members.

The Malaysian Code of Corporate Governance emphasizes the importance of directors having access to company information. In addition, directors are allowed to seek professional advice, and the cost is borne by the company, to enhance their knowledge of certain aspects. Thus, the following hypothesis is offered:

Hypothesis 8 (H<sub>8</sub>): The directors' accessibility to information is negatively related to company leverage.

#### 4.4.2 Hypothesis Development – Moderating Effect of Managerial Ownership

This study also considers managerial ownership as one of the corporate governance variables. Managers with more ownership in the company can help to align their interests with those of other shareholders as their investment is at stake (Jensen & Meckling, 1976; Harris & Raviv, 2008). Literature that discusses ownership structure suggests that managerial ownership affects financing decisions. This has been documented by Jensen and Meckling (1976), Agrawal and Mandelker (1987), Stulz (1988), and Mehran (1992).

In the Malaysian scenario, insider shareholding is common (Haniffa & Hudaib, 2006) and these shareholders frequently hold a position on the board or management team (Limpaphayom, 2000; Mazlina & Ayoib, 2011). They also have power to influence the board and decision making (Chobpichien *et al.*, 2007), including the level of company leverage (Driffield *et al.*, 2007). Managers with more shareholdings are more likely to choose debt financing to enhance corporate investments (Mehran, 1992) and avoid dilution of ownership (Agrawal & Mandelker, 1987; Amihud *et al.*, 1990). In addition, managers are able to attract investors by presenting better company profit in a short period of time since the interest on borrowings is tax deductible (Keown *et al.*, 2008).

Therefore, this study assumes that companies with more managerial shareholdings reduce the board's influence on making less risky capital structure decisions. The preceding argument leads to the following hypothesis:

Hypothesis 9 (H<sub>9</sub>): The effect of board governance on company leverage is influenced by managerial ownership, such that the higher the percentage of managerial shareholding, the weaker the effect of board governance on capital structure decisions.

## 4.4.3 Hypothesis Development – The Relationship between Board Process Variables and Company Performance

Research on board process and company performance is needed (Macus, 2008). In Malaysia, research of the two variables is still limited (Hasnah & Hasnah, 2008). Hasnah and Hasnah (2008) identify the association of Malaysian directors' role and company performance. A few studies have focused on the relationship between board process and company performance (see Ingley & Van der Walt, 2005; Kula, 2005; Kula & Tatoglu, 2006). Thus, this study hopes to reveal further the relationship between board process and company performance.

#### a. Performance of Independent Directors

In Malaysia, the Securities Commission urges independent directors to be effective and responsible in performing their roles. Effective independent directors have more capacity to monitor management decisions (Baysinger & Butler, 1985; Shamsher & Zulkarnain, 2011). Furthermore, effective independent directors with broad skill sets and experience are capable of providing checks and balance in boardroom deliberations. In addition, these directors can understand the company business better, which in turn improves company value and sustainability (Yeap, 2009). Hasnah and Hasnah (2009) provide evidence that those independent directors who are able to provide unbiased views contribute to positive company performance. Thus, the following hypothesis in this study is: Hypothesis 10 ( $H_{10}$ ): The performance of independent directors is positively related to company performance.

#### b. Board's Risk Oversight

In the company risk management framework, the role of monitoring is the main responsibility of the board (Sobel & Reding, 2004). Furthermore, by having effective risk oversight, the decision making process will always be monitored. Poor risk oversight among board members can create huge losses to companies, and supporting evidence from the case of Sime Darby in Malaysia is significant (Shanmugam, 2008). In addition, Dulewicz and Herbert (2004) discover that a board that evaluates current and future internal and external corporate risks has a positive impact on company performance. Therefore, this study proposes that:

# Hypothesis 11 ( $H_{11}$ ): The board's risk oversight is positively related to company performance.

#### c. CEO Performance Evaluation

An evaluation process enables the board to keep track and provide suggestions about a CEO performance. This has positive consequences for companies as the CEOs become aware that they are being closely monitored and assessed by the board (Dulewicz & Herbert, 1999; 2004; Robbins & Judge, 2009). In a similar vein, Kula and Tatoglu (2006) and Kula (2005) find that an effective performance evaluation contributes to positive company performance. This leads to the following hypothesis:

## Hypothesis 12 ( $H_{12}$ ): The CEO performance evaluation is positively related to company performance.

#### d. Directors' Accessibility to Information

Having more access to information allows directors to improve their problem solving ability during board deliberations (Macus, 2008) and establish sound strategies. In addition, directors with sufficient information are able to enhance their accountability towards shareholders (Kula, 2005), provide constructive arguments to top management (Zahra & Pearce, 1989), and prepare for board meetings (Finkelstein & Mooney, 2003). Hasnah and Hasnah (2009) find the evidence on the relationship between the board's role in acquiring company information and performance. They report a positive association between the two variables. Also, Kula and Tatoglu (2006) assert that directors' accessibility to information is the key component in improving company performance. Based on these arguments, the next hypothesis is:

Hypothesis 13 ( $H_{13}$ ): The directors' accessibility to information is positively related to company performance.

## 4.4.4 Hypothesis Development – The Relationship between Capital Structure Decision (Leverage) and Company Performance

Previous literature reports that company performance is lower when companies use more debt financing (Agrawal & Knoeber, 1996; Fu *et al.*, 2002; Chang, 2004; Sang-Woo & II, 2004; Tam & Tan, 2007; Izma, 2009). Companies with high leverage are highly dependent on their investments to generate positive revenue streams so as to be able to pay back their borrowings. Reductions in demand lead to a lesser amount of revenue, especially in uncertain economic conditions. Many other factors can also lead to reductions in sales, for instance, changes in customers' purchasing patterns, stiff competition, natural disaster, and technology changes. The company's net profit is affected not only because of the decline in sales but also by the amount of loan interest that need to be paid. Thus, these factors influence the ability of the company to pay back its borrowings.

Unprofitable companies suffer if the company capital structure is optimized by debt. The equity is unable to absorb the losses and is thus eroded. This leads to a reduction in shareholders' return. Therefore, companies should not adopt excessive leverage to avoid high risk. Lessons from Enron in the US, Satyam in India, and Renong and Perwaja in Malaysia serve as reminders that high leveraging can bring disaster to companies. For that reason, this study proposes the following hypothesis with a focus on company performance:

Hypothesis 14 (H<sub>14</sub>): Company leverage is negatively related to company performance.

## 4.4.5 Hypothesis Development – Mediation Effect of Company Leverage on the Relationship between Board Process and Company Performance

Board process is expected to improve company performance through its effect on company leverage. The 1997/1998 crisis shows that excessive leverage leads to company failure (Fong, 2008). In addition, Datuk Megat Najmuddin Khas voices his frustration with Malaysian public companies' directors (Thomas, 2002). According to him, directors are not carrying out their duties diligently, especially non-executive directors before the crisis. The evidence seems to suggest that if the board does not mitigate the risks of having excessive leverage, the company is more likely to suffer (Murphy & Brown, 2009). Increases in leverage, in turn, lead to lower returns to shareholders. Companies with high dependency on debt financing have to pay fixed borrowing costs even if the business condition is not in their favor (Keown et al,

2008). In addition, commercial banks tend to charge those companies a higher interest rate because the possibility of defaulting on borrowings is higher. The situation reduces the company's earning significantly and affects company performance as a whole. This helps in understanding that company performance suffers by having ineffective board members (Johnson *et al.*, 1996) who are not able to encourage less risky capital structure decisions.

Thus, when directors perform their roles effectively, particularly their monitoring and services roles, they are expected to influence management to invest in a less risky capital structure (Mande *et al.*, 2012). The effectiveness of the board in influencing the capital structure decision will influence company performance. The study suggests that it is crucial to empirically examine leverage as a potential mediator. The mediating variables help to explain the relationship between board process and company performance. Hence, the following hypotheses are proposed:

Hypothesis 15a ( $H_{15a}$ ): Company leverage mediates the relationship between performance of independent directors and company performance.

Hypothesis 15b  $(H_{15b})$ : Company leverage mediates the relationship between board's risk oversight and company performance.

Hypothesis 15c ( $H_{15c}$ ): Company leverage mediates the relationship between CEO performance evaluation and company performance.

# Hypothesis 15d $(H_{15d})$ : Company leverage mediates the relationship between directors' accessibility to information and company performance.

#### 4.5 Chapter Summary

Several corporate governance attributes have been widely discussed and tested in previous studies. This chapter develops eight hypotheses to examine the influence of board variables on company leverage. Furthermore, a hypothesis regarding the moderating effect of managerial ownership on the relationship between board process and company leverage is developed. The study also develops four hypotheses to determine the effects of board process on company performance. In addition, four other hypotheses are established to examine the effect of capital structure as the mediating variable on the relationship between board process and company performance. A brief explanation of data collection and measurement of variables is provided in the following chapter.

#### **CHAPTER FIVE**

#### DATA COLLECTION AND MEASUREMENT OF VARIABLES

#### 5.1 Introduction

This chapter discusses the data collection procedures and measurement of variables used in this study. This chapter is organized as follows. Section 5.2 discusses the research design and is followed by Section 5.3, which presents the population and sample of the study. Discussion of data sources is presented in Section 5.4, while Section 5.5 presents an overview of the data collection process. Section 5.6 presents the development of the questionnaire. In Section 5.7, discussion of the data collection process is presented in detail. Meanwhile, the measurement of variables is presented in Section 5.8, followed by a discussion of non-response bias and multiple respondents in Section 5.9 and Section 5.10, respectively. Section 5.11 presents the techniques used in the data analysis. Finally, Section 5.12 summarizes the chapter.

#### 5.2 Research Design

The research design is the master plan specifying the methods and procedures for collecting and analysing the needed information (Zikmund, Babin, Carr, & Griffin, 2009). It is a framework that facilitates planning the actions involved in the research project. The quantitative approach was used in this study to determine the association between board attributes and leverage. An extension to the framework was also undertaken to determine the effects of board process on company performance while incorporating leverage as the mediating variable.

Data used in this study were obtained from annual reports and a questionnaire survey. Data for board structure, composition, characteristics, and company financial performance were obtained from companies' annual reports. Meanwhile, the effectiveness of directors in influencing decision making during board meetings was assessed through a questionnaire survey. With regards to data analysis, this study employed various statistical analyses to obtain meaningful information. Statistical Package for the Social Sciences (SPSS) Version 15.0 was used to analyze the data.

This research can be categorized into descriptive and causal research. Descriptive research analyses the characteristics of a population (Zikmund *et al.*, 2009). Thus, to describe board size and effectiveness, leadership structure, directors' risk appetite, tenure, and ownership, company leverage, and financial return, descriptive research is most appropriate.

On the other hand, causal research is conducted to identify the cause and effect of relationships among the variables when the research problem has already been defined. The intention of this study is to determine the effect of board attributes on company leverage and performance, thus, causal research was also employed.

#### **5.3** Population/Sample of the Study

The study investigates Malaysian public listed companies. The population and the sampling method adopted in this study are discussed in the following paragraphs.

#### 5.3.1 **Population and Sample Size**

The study was conducted on companies listed on the Bursa Malaysia main market<sup>9</sup> as at 31 December 2009. The year 2009 was chosen as it was the most recent financial year for which published annual reports were available at the time data collection started. In total, 803 companies as at 31 December 2009 were selected.

In relation to the data from annual reports, Zikmund *et al.* (2009) argue that data that extend over a number of years provide researchers with the reasons for and responses to any changes in the data. In a related study, Wan and Ong (2005) also use three years of data from Singapore public listed companies. They study the relationship between board effectiveness and company performance. In a similar approach, Hasnah and Hasnah (2008) gather three years of financial data that covers the period of 2004 to 2006) in order to examine the link between Malaysian boards' role and company performance. Therefore, it is appropriate for this study to use the data of annual reports that cover a three-year period; 2007 to 2009.

All companies listed on the main board were selected in the initial stage. Financerelated companies were excluded from the study due to differences in business activities and regulations. Leverage is the core business of financial institutions. Meanwhile, real estate investment trusts (REITs) and the close-end fund sectors do not leverage at all because these companies issue shares to fund their assets or projects. Thus, financial companies, REITs, and the close-end fund sectors were excluded.

<sup>&</sup>lt;sup>9</sup> Effective on 3 August 2009, all companies listed on the main board and secondary board were merged and there is only a single board known as the main market. The objective is to enhance the competitiveness of Malaysian companies in raising funds.

Initially, 803 companies qualified for the study; the number declined after the exclusion of companies that were newly listed in 2007, 2008, and 2009. Companies newly listed in that three-year period did not have complete data as this study used continuous data from 2007 to 2009. In addition, companies that were classified under PN17 and Amended PN17,<sup>10</sup> as well as companies that participated during the pilot test, were also excluded from the population. This resulted in a final population of 686 companies, as illustrated in Table 5.1.

### Table 5.1Sampling Frame

	Number of companies
Total non-financial public listed companies listed on Bursa Malaysia as at 31 December 2009	803
Number of new non-financial companies listed in 2007	(19)
Number of new non-financial companies listed in 2008	(21)
Number of new non-financial companies listed in 2009	(13)
PN17 and Amended PN17 companies as at 31 December 2009, 2008, and 2007	(34)
Number of companies involved during pilot test	(30)
Sampling frame	686

#### 5.4 Data Sources

This study incorporated two types of data: primary data and secondary data. By combining both time series and cross-sectional data for secondary and primary data, desirable variation in data collection can be accomplished (Gujarati, 2006).

<sup>&</sup>lt;sup>10</sup> PN17 and Ammended PN17 refer to financially distressed companies. Some of criteria under these categories are shareholders' equity is equal to or less than 25% of the total issued and paid-up capital (excluding treasury shares); or the company has suspended or ceased all or a major part of its operations; or auditors have expressed an adverse or disclaimer opinion on the latest company financial statement; or default in payment and no solvency declaration; or winding up of a subsidiary or associate company that makes up at least 50% of company total assets on a consolidated basis (Bursa Malaysia Listing Requirement).

#### 5.4.1 Primary Data

In relation to board process, previous studies have used the survey questionnaire to measure the effectiveness of directors (Dulewicz & Herbert, 1999; 2004; Sang-Woo & II, 2004; Wan & Ong, 2005; Ingley & Van der Walt, 2005; Kula, 2005; Kula & Tatoglu, 2006). Thus, this study adopted the same approach because the researcher believes that its use is appropriate to determine board effectiveness. The questionnaires were disseminated to directors of Malaysian public listed companies. In order to have a balanced perspective, independent and non-independent directors' views were solicited.

In developing the questionnaire, two risk specialists and an executive chairman of a committee from regulatory bodies and three directors of public listed companies were interviewed to secure their meaningful insights. The interviews were essential as the interviewees understand in depth the industry practices and the loopholes in these practices, which enhanced the validity of the questionnaire. The interviews were conducted at respondents' offices and via email. The questionnaire development is discussed further in Section 5.6.

#### 5.4.2 Secondary Data

In this study, secondary data which include board and company data were obtained from companies' annual reports and websites. Most of the annual reports were acquired from the website of Bursa Malaysia. Nevertheless, a few companies' annual reports were not on the website or could not be downloaded. In these cases, the researcher called the company secretary to send a copy of the annual report. The researcher also searched companies' annual reports at the university's library. Board and company data were found in various reports, sections in annual reports, and other sources, as illustrated in Table 5.2.

Table 5.2Sources of Data Collection		
Information collected	Reports/section in annual Other source reports	
Name, age, date of appointment, positions on the board (chairman either independent or non- independent), board size, leadership structure	Profile of directors, management	
Age of the company	History	Company website
Directors' shareholding	Notes to the financial statements	
Financial performance (total assets, total liabilities, net income after tax, return on equity, debt ratio)	Balance sheet, income statements, notes to the financial statements	

As explained in Section 5.3.1, the secondary data were collected for the three-year period covering 2007 to 2009. The approach was similar to Hasnah and Hasnah (2008) and Wan and Ong (2005). In addition, the three-year period was chosen because it illustrates significant changes in Malaysian domestic demand. The growth in domestic demand shows the level of consumer spending which in turn reflects company production (Bank Negara Malaysia, 2007b).

Most Malaysian companies performed well in 2007 as domestic demand grew strongly by 10.5% (Bank Negara Malaysia, 2007b), but performance declined to 6.8% in 2008 (Bank Negara Malaysia, 2008) and 6.4% in 2009 (Bank Negara Malaysia, 2009). This pattern in Malaysian domestic demand reflects the Malaysian economy. The scenario shows that the Malaysian economy was rosy in 2007 and it was affected by the US subprime mortgage crisis in 2008. According to the Bank Negara's annual report, In the early part of the year, household spending was affected by high retrenchments and a decline in real wages that had begun towards the end of 2008. Weak consumer spending was reflected in major consumption indicators such as the sales of new passenger cars, loan disbursements to households and imports of consumption goods....As a result private consumption declined by 0.7% in the first quarter (Bank Negara Malaysia, 2009, p. 16).

In 2009, the Malaysian economy experienced slow growth in domestic demand similar to 2008. The three-year period provides a better reflection of those companies that have a risky capital structure. In favourable economic conditions, companies with excessive leverage have higher returns as the rate of return is relatively higher than the rate of borrowing. However, in an unfavourable economy, such companies' rate of return drops significantly because they must pay fixed borrowing costs even though their sales revenue is significantly deteriorated (Keown *et al.*, 2008). Therefore, the study considers the average values of company financial performance over the three-year period.

#### 5.5 Overview of the Data Collection Process

In this study, data collection procedures involved four stages, as illustrated in Figure 5.1. In the first stage, the questionnaire was developed based on previous literature and interview sessions. A pilot test was conducted to thrash out errors in the instruments and questions used in the questionnaire. A comprehensive questionnaire was developed after amending the initial questionnaire based on feedback from the pilot test.

In the second stage, questionnaires were distributed to directors of Malaysian public listed companies. Once responses from the questionnaire were obtained, they were matched against secondary data for the particular company; this was the third stage of the process. Data analysis was conducted in the fourth stage using SPSS as the statistical software.



Figure 5.1 Data Collection Process

#### **5.6 Questionnaire Development**

As mentioned in Section 5.4.1, the appropriate approach to obtain answers on how directors run the board is through questionnaires. A draft of the questionnaire was developed based on previous literature (see Table 5.3). In addition, input from three representatives of two regulatory bodies and three directors of public listed companies enhanced the questionnaire content. Several references, such as Oppenheim (1986), Webb (2000), Sekaran (2003), and Zikmund *et al.* (2009), were also used in developing the questionnaire.

The three representatives from a regulatory body included two specialists who are attached to the risk management department and frequently deal with CEOs and board members. They provided valuable input on how directors should monitor their management, particularly with respect to risk management. In addition, an executive chairman of a committee from a different regulatory body provided a range of perspectives on the role of directors. He emphasized the importance of the board and senior management in managing risks. Information provided by the three directors from three different well-known companies provided a better picture of board practices. Separate meetings were arranged at their offices before the researcher prepared the initial draft of the questionnaire. The meetings were conducted between November 2009 and December 2009.

Instrument/variables	Literature Support	Variables Number
Board's risk oversight	Finkelstein & Mooney (2003); Raber (2003); Sobel & Reding (2004); Carey, Patsalox-Fox & Useem (2009); Murphy & Brown (2009); Wyman (2009).	R1 –R8
CEO performance evaluation	Taylor, Tracy, Renard, Harrison, & Carroll (1995); Dulewicz & Herbert (1999; 2004); Finkelstein & Mooney (2003); Epstein & Roy (2005); Kula (2005); Wyman (2009).	C1 – C8
Independent directors' performance	Ingley & Van der Walt (2005).	P1 – P10
Directors' accessibility to information	MCCG; Sang-Woo & Il (2004); Ingley & Van der Walt (2005).	A1 – A5

Table 5.3Literature Support for Board Process

This study utilizes four process variables (fiduciary responsibility and internal consistency, performance evaluation, miscellaneous directors' attributes, and effectiveness and access to information) adapted by Kula (2005). Kula (2005) includes "board watches well for the interests of minority shareholders," "board is sufficiently briefed by top management," "board reaches decisions unanimously," "diverging views in meetings are tolerated," and "board does not take decisions against shareholders' interests" in representing the board's fiduciary responsibility and internal consistency. Kula (2005) only outlines the general fiduciary duty of directors. The researcher believes that the focus should be given to the essential role of directors in managing risks. Since the 1997–1998 financial crisis, the directors' duty in monitoring company risk has been emphasized. The MCCG issued in 2000 provides guidelines on boards' roles in managing risks. The lessons learned from the US financial crisis in 2008 enforces the importance of strengthening this role. Furthermore, the Corporate Governance Guide (Bursa Malaysia, 2009) explains in detail the boards' roles and functions in risk management. Thus, it is appropriate to

stress the process of risk oversight by board members in this study as it is one of directors' prominent fiduciary duties.

Due to the lack of prior research on board's risk oversight, the questions were selfdeveloped based on interview comments and previous literature. In relation to board's risk oversight, "board communicates on risk tolerance to senior management" (R1) was taken from Sobel and Reding (2004). As suggested by Raber (2003), three statements were included: "board raises concerns about risk management" (R2), "board receives updates from senior management on risk management matters" (R3), and "board requires senior management to deliberate on emerging risks that the senior management perceives the company will face" (R4). Meanwhile, "members of board encourage senior management to use scenario analysis in identifying potential vulnerabilities" (R5) was taken from Finkelstein and Mooney (2003). In addition, "board has necessary financial knowledge to analyze financial statements" (R6) was adopted from Murphy and Brown (2009) and "board reviews its strategy during crisis" (R7) was taken from Carey, Patsalox-Fox, and Useem (2009). Furthermore, as suggested by Wyman (2009), the statement "board attends relevant risk management training" (R8) was included.

The next variable used in this study is CEO performance evaluation. The revised version of the MCCG elucidates further on the process of evaluating board members, including the CEO. This latest version represents the importance of the evaluation process on the CEO's performance. However, questionnaires that solely focus on the process of CEO performance evaluation are lacking. Therefore, the statements for CEO performance evaluation were developed based on previous literature and interview feedback. One statement was adopted from Kula (2005): "board evaluates

CEO by using key performance indicator (KPI)" (C1). "Board accepts feedback from CEO during the process of setting KPI" (C2) and "board provides avenue for CEO to explain the state of CEO's performance" (C4) were taken from Taylor *et al.* (1995). A statement from Epstein and Roy (2005) was also included: "board communicates their expectations clearly to the CEO" (C3). Furthermore, one statement was adopted from Wyman (2009), "board implements a reward system based on long-term performance" (C5). Meanwhile, "board establishes an exit mechanism tied to CEO's performance" (C6) was taken from Finkelstein and Mooney (2003). Two other statements were adopted from Dulewicz and Herbert (1999; 2004): "board communicates to the CEO on his/her success based on the evaluation result" (C7) and "board communicates to the CEO on his/her failures based on the evaluation result" (C8).

Kula (2005) also includes several miscellaneous attributes as his board process variable. The examples of statements under the variable are "board decisions are not taken to the court by shareholders" and "there is useful exchange of ideas at board meetings." Such statements are replaced by miscellaneous attributes of independent directors in measuring such group performance by Ingley and Van der Walt (2005) as the effectiveness of independent directors has always been questioned. It is said that this group does not act as the stewards for company investors. They are lacking in providing independent advice and fail to question management (Sidhu, 2010). Indeed, the MCCG's latest requirement for all public listed companies points out that a majority of the members of audit committee must be independent and must be able to understand the company's financial statements. The requirement reflects the importance of independent directors' skills and knowledge. Therefore, this study

incorporates the performance of independent directors in determining the group effectiveness.

Ten statements were adopted from Ingley and Van der Walt (2005): "independent directors' understanding of company business" (P1), "independent directors' relationship with the CEO" (P2), "independent directors' relationship with senior management" (P3), "independent directors' ability to provide strategic vision" (P4), "independent directors' record of constructively challenging and debating issues during board meetings" (P5), "independent directors' ability to apply industry experience" (P6), "effectiveness of independent directors in representing the interests of shareholders" (P7), "effectiveness of independent directors in representing the interests of stakeholders" (P8), "level of interactive communication of independent directors' contribution in board committees" (P10).

This study also includes the accessibility of information by the directors as one of the board process variables. The MCCG emphasizes that directors must have adequate access to company information in order to perform their role effectively (MCCG, Revised 2007). Regarding accessibility of information by the directors, four statements were adapted from Sang-Woo and II (2004) and MCCG: "directors have access to information via management" (A1), "when directors need to refer to company business records and books of accounts, their access is denied" (A2), "when outside professional services are needed, the expenses will be borne by the company" (A3), and "directors receive sufficient materials/information before board

meetings" (A5). Meanwhile, the statement "directors discuss issues thoroughly with management" (A4) was adapted from Ingley and Van der Walt (2005).

In the initial stage, a preliminary study was conducted to clarify and ensure the relevance of the items. The preliminary stage also provides notification of matters that arise during the completion of the questionnaire. For the purposes of the preliminary study, four directors and three senior academicians who have vast experience in survey studies were involved. The directors were introduced by the researcher's immediate family. Meanwhile, the senior academicians were approached based on their experience in conducting survey research. They have also been teaching research methodology for a number of years. Many drafts were prepared in consultation with the reviewers. The main comments involved ambiguity and double-barreled statements. Therefore, ambiguous questions were amended to be more specific. Meanwhile, the questions that were double-barreled were corrected so as to avoid difficulty in interpretation. Overall, the questionnaire was corrected and amended based on reviewer comments.

The most essential aspect of developing a question is the content. The content should provide answers to the research questions and objectives. The researcher used simple, short sentences to make the questionnaires easy to read, which encouraged respondents to complete the questionnaire. Every statement had fewer than 20 words (Oppenheim, 1986). This was also a strategy to prevent respondents from getting bored.

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All questions were close-end questions in which the directors could make quick decisions on several alternatives; this also made the information easy to code for analysis purposes. In addition, the statements under the board process construct also included negatively worded questions (Sekaran, 2003), for instance, "at time where directors need to refer to company business records and books of accounts, their access is denied." The reason was to avoid the respondents providing answers that pointed only to one end of the scales. Every question was provided with easy-to-read instructions so that the directors could easily understand the requirements of the question and complete the whole questionnaire (Davis & Cosenza, 1995).

With respect to the language, the questionnaire was prepared in English after obtaining feedback from company secretaries that directors prefer to communicate in English. The questionnaire was checked further by someone who was competent in English.

A pilot study was conducted in early February 2010 with a small sub-sample to ensure that the data collection plan was appropriate. According to Webb (2000), a pilot study provides an advance opportunity for the researcher to uncover any problems with regards to the questionnaire. In order to enhance the quality of the questionnaire, especially the statements on board's risk oversight and CEO performance evaluation, a pilot test was conducted. The questionnaires were distributed to 30 directors via postal mail. A cover letter explaining the objective of the pilot study and a stamped return envelope were included with the questionnaire. The directors were asked to mark any item that they found to be unclear. According to Zikmund *et al.*, (2009), the size of the pilot study depends on researcher's judgment. Wan and Ong (2005) use 17 boards from among 424 companies in Singapore, while Ingley and Van der Walt (2005) use eight senior directors and two senior executives from among 3,000 directors from the Institute of Directors in New Zealand during their pre-testing process. As a whole, this study uses 30 boards out of  $716^{11}$  public listed companies in Malaysia; 30 directors from different companies participated. Thus, this figure is comparable to Wan and Ong (2005) and Ingley and Van der Walt (2005).

All 30 directors returned the questionnaire even though the researcher had to wait for about two months. With respect to the questionnaire during the pilot test, all participants agreed that the questionnaire was easy to read and understandable. Other feedback received related to the words used in the cover letter and questionnaire. The researcher also received a suggestion from a participant to include a column where directors can provide comments or views. Next, the questionnaire was amended to ensure that it was relevant to the study, was easily understood by respondents, and did not contain ambiguous or biased questions. The final number of statements for every construct is shown in Table 5.4.

Table 5.4
Number of Items

Proxies for board process	Total items
Performance of independent directors	10
Board's risk oversight	8
CEO performance evaluation	8
Accessibility of information by the directors	5

<sup>&</sup>lt;sup>11</sup> Seven hundred seventeen (717) companies were selected as the final population after excluding financial companies, new companies that listed in the year 2007 to 2009, and distressed companies - PN17 and Amended PN17, as at 31 December 2007 to 2009.

#### 5.6.1 Layout of Questionnaire

Table 5.5

The questions for board process are presented in Part A of the questionnaire (see

Appendix A) and shown in Table 5.5.

Items of Board Process Question no. Item Variable Panel 1: Board's risk oversight (8 items) 1 Board communicates on risk tolerance to senior management R1 2 Board raises concerns about risk management **R**2 3 Board receives updates from senior management on risk management R3 matters 4 Board requires senior management to deliberate on emerging risks that R4 the senior management perceives the company will face 5 Members of board encourage senior management to use scenario **R**5 analysis in identifying potential vulnerabilities 6 Board has necessary financial knowledge to analyze financial R6 statements 7 Board reviews its strategy during crisis **R**7 8 Board attends relevant risk management training **R**8 Panel 2: Directors' accessibility to information (5 items) Directors have access to information via management A1 1 2 When directors need to refer to company business records and books A2 of accounts, their access is denied 3 When outside professional services are needed, the expenses will be A3 borne by the company 4 Directors discuss issues thoroughly with management A4 5 Directors receive sufficient materials/information before board A5 meetings Panel 3: CEO performance evaluation (8 items) Board evaluates CEO by using key performance indicator (KPI) C1 1 2 Board accepts feedback from CEO during the process of setting KPI C2 3 Board communicates their expectations clearly to the CEO C3 4 Board provides avenue for CEO to explain the state of CEO's C4 performance C5 5 Board implements a reward system based on long-term performance 6 Board establishes an exit mechanism tied to CEO's performance C6 7 Board communicates to the CEO on his/her success based on the C7 evaluation result 8 Board communicates to the CEO on his/her failures based on the C8 evaluation result Panel 4: Performance of independent directors (10 items) Independent directors' understanding of company business **P1** 1 Independent directors' relationship with the CEO 2 P2 3 Independent directors' relationship with senior management P3 4 Independent directors' ability to provide strategic vision P4 5 Independent directors' record of constructively challenging and P5 debating issues during board meetings 6 Independent directors' ability to apply industry experience P6 7 Effectiveness of independent directors in representing the interests of P7 shareholders 8 Effectiveness of independent directors in representing the interests of **P**8 stakeholders 9 P9 Level of interactive communication of independent directors with other board members Quality of independent directors' contribution in board committees 10 P10

Five questions were included in Part B of the questionnaire (see Appendix A). The purpose of this part was to further enhance the understanding of board practices in Part A. Four questions (Q1-Q4) in Part B were developed based on the instrument used by Ingley and Van der Walt (2005). The questions related to the frequency of board in the review of CEO performance, the execution of performance evaluations, board involvement in developing strategies, and the board's main role in strategic management. Question 5 was a self-developed question. For Q5 the directors were asked how they communicate when urgent issues arise. Factual questions were used for five board practices, as shown in Table 5.6.

Table 5.6

Doura I rachee	s (i dendel guestions)	
Question no.		Variable
1	Not at all since my appointment (1); Only if required (2); Every year (3); Every 2 to 3 years (4); 4 years or more (5); Unsure (6).	Review_CEO1
2	Conducted formally (1); Conducted informally (0).	Review_CEO2
3	Management alone develops strategy (1); Management and board share strategy development (2); Board alone develops strategy (3); Management develops strategy and obtains board approval (4); Strategy is mostly developed by the board (5).	Strategy1
4	Ratify (1); Discuss (2); Monitor (3); Review (4); Risk management (5); Decision making (6); Guide (7); Approve (8); Help formulate (9); Define strategic framework (10).	Strategy2
5	Wait for next meeting (1); Teleconferencing (2); Call for urgent board meeting (3); Via email (4); Via informal meeting/discussion (5).	Urg_issue

**Board Practices (Factual Ouestions)** 

The final part of the questionnaire was designed to obtain information about the respondents' demographics: director's position on the board, tenure as a director for the company, education, age, and race. In addition, the respondents were given the option to write down their company's name in the final part of the questionnaire. These types of questions were asked in the latter part of the questionnaire to avoid the possibility of scaring away the directors before they answered the rest of the questions (Davis & Cosenza, 1995). Factual questions were used for demographic variables, as shown in Table 5.7.

Table 5.7Demographic Variables of Directors

Question no.	ž – – – – – – – – – – – – – – – – – – –	Variable
1	Independent Director (1); Non-Independent Director (2).	Position
2	Chairman (1); CEO (2); Non-executive director – Other than Chairman (3); Executive Director – Other than Chairman or CEO/Managing Director (4); Other (5).	
3	Less than 3 years (1); 3 to 6 years (2); 7 to 10 years; 11 years and above (4).	Tenure
4	Diploma (1); Bachelor's Degree (2); Master's/PhD (3); Other (4).	Education
5	Below 40 (1); 41 to 50 (2); 51 to 60 (3); 61 to 70 (4); 71 to 79 (5); 80 and above (6).	Age
6	Chinese (1); Indian (2); Malay (3); Other (4).	Race

Furthermore, a statement to directors to ensure that they had answered all the questions was also included. The sample questionnaire is shown in Appendix A.

#### 5.7 Process of Data Collection

Figure 5.1 provides an overview of the data collection process of this study. In the first stage, the questionnaire was developed based on previous literature and interview sessions with three industry experts who represented two different regulatory bodies and three directors from public listed companies. Then, the preliminary study was conducted with four directors and three senior academicians who have vast experience in survey studies.

This was followed by a pilot test conducted to find any errors in the instruments or questions used in the questionnaire. Overall, 30 directors were involved in the pilot study. The duration to obtain respondents' answers in the pilot test was two months, beginning in March 2010 and lasting through April 2010. The long period proved that dealing with company directors is a demanding task.

During pilot testing, the researcher felt that it was appropriate to have a strategy to reduce the non-response rate (e.g., including a cover letter from a related regulatory body or professional institute). Thus, the researcher sent an email to the Malaysian Institute of Chartered Secretaries and Administrators (MAICSA) and the Malaysian Institute of Corporate Governance (MICG). The purpose of the study and the researcher's intention to obtain their support was explained in the email. In two weeks, the researcher received positive feedback from both institutions. MAICSA sent a support letter via email and regular mail on its official letterhead (as shown in Appendix B). Meanwhile, MICG extended its support through an email (Appendix C). The focus of board risk oversight in this study appeared interesting to MICG and it was one of the reasons the institution was willing to extend its support.

At the same time, the sampling frame was determined. Studies that involve top executives always receive a low response rate, usually less than 25% (Westphal, 1999). In Malaysia, the response rate for survey studies ranges from 10% to 20% (Hasnah & Hasnah, 2009). Therefore, the researcher believed that every public listed company should be included to increase the number of responses. This approach was similar to Wan and Ong (2005) that included the whole population of Singapore

public listed companies as the sample. Wan and Ong's (2005) study is intended to assess the link between board effectiveness and company performance.

Once the pilot test had been completed, the questionnaire was amended and a comprehensive questionnaire was then developed. The second stage involving the full survey was conducted in June 2010. Before sending the questionnaires to directors, complete company addresses are needed. Regarding company address, the initial step was to finalize the list of 686 companies. Changes in company names were corrected. These changes were obtained from the Bursa Malaysia website. Between January 2010 and May 2010, six companies changed their names.<sup>12</sup>

In Malaysia, all companies that comply with the Companies Act 1965 need to register with the Companies Commission of Malaysia (CCM). Therefore, all information, including company addresses, can be obtained from CCM. After the list of companies was confirmed, the list and data required were sent to the CCM branch in Shah Alam. Nevertheless, CCM staff asked the researcher to obtain the company code for every company as the system needs the code to capture information. The codes were available on the CCM website. The process of extracting the code was tedious and time consuming since the researcher had to search and copy down 686 company codes. The researcher took a week to complete the task and all the codes were then e-mailed to CCM. Examples of the company name and codes sent to CCM are shown in Appendix D. Within 10 working days, CCM sent the full

<sup>&</sup>lt;sup>12</sup> Companies affected are Theta Edge Berhad (Lityan Holdings Berhad), Yen Global Berhad (Sequoia Holdings Berhad), D&O Green Technologies (D&O Ventures Berhad), Sinotop Holdings Berhad (John Master Industries Berhad), Hing Yiap Group Berhad (Hing Yiap Knitting Industries Berhad), and Golden Land Berhad (Tanah Emas Corporation Berhad). Name in parentheses is the company's previous name.

addresses of the companies to the researcher. However, the addresses were tagged with the company code. Examples of data e-mailed by CCM are in Appendix E. Again, the researcher had to reconcile each code with the company name, and this process took another week to complete.

Regarding the questionnaire, the researcher prepared two different cover letters for the company secretary (Appendix F) and directors (Appendix G) with the Universiti Utara Malaysia logo at the top of the page. The cover letter provided a brief explanation of the research purpose (Zikmund *et al.*, 2009) and the company secretary was asked to disseminate the questionnaire to the directors. In addition, the company secretary and directors were informed about the importance of completing the questionnaire.

The supporting letter from MAICSA was also included with the questionnaires. The letter was expected to assist the researcher in securing participation from the company secretaries. MICG support was also mentioned in the cover letter. Meanwhile, a cover letter to directors was included as the first page of the questionnaire. Every questionnaire for directors was placed in an envelope with the company name and type of directorship (chairman, independent director, non-independent non-executive director, executive director) written on it. Particular directors were asked to answer the questionnaire based on the name of company written on the envelope. Additionally, the company secretary could easily distribute the questionnaire.

The researcher made an effort to write down a code to represent the company on the back of the address sticker on returned envelopes. This step was necessary because the responses via questionnaire were matched with the company data collected from annual reports and company websites. Nevertheless, directors could state the company name in the last part of the questionnaire if they wished to do so. As expected, only a small number of respondents (nine directors) wrote the name of the company they represented. Surprisingly, even when the company name was disclosed, some respondents provided poor scores for their governance practices. This indicates a change in the level of openness of some Malaysian directors; the directors were willing to disclose their governance practices.

Directors were assured of the confidentiality of their responses. The researcher also mentioned that data gathered would be used only for this study. The cover letter, questionnaire, and self-addressed, stamped-return envelope were placed in every envelope. Then, the questionnaires were sent through mail to Malaysian directors via the company secretary. The questionnaires were distributed to four directors in each company so as to obtain responses with balanced perspectives. In addition, survey studies always have a low response rate (Westphal, 1999). Giving out more than one questionnaire to a company provides a better chance for a good response.

Four directors (the company chairman, independent director, executive director, and non-independent non-executive director) became the main focus in the survey. Chairmen are assumed to understand their board practices. As chairmen, they are responsible for leading the board of directors in decision and policy making (Cheah & Lee, 2009). Independent and non-independent directors were chosen to provide a

balanced view of board practices. Independent directors are assumed not to have any interests in the company and their roles are essential in providing professional views during decision making (Leblanc, 2004). Meanwhile, non-independent non-executive directors might contribute more during board deliberation as their investment is in the company. With regards to executive directors, they know the business operation best as they work in the company as full-time staff. Normally in Malaysia, executive directors hold a significant portion of shares in the company as they are usually the founder or related to the founder of the company (Noor Afza & Ayoib, 2009; Mazlina & Ayoib, 2011). This may affect their expectation with regards to board members' contribution.

This approach is similar to Wan and Ong's (2005) study using multiple respondents (chairman, an executive director, a non-executive director, company secretary) in assessing the board effectiveness of Singapore public companies. However, this study excludes the company secretaries because they are not the board members and do not involve directly in the decision making activities. In this study, 2,744<sup>13</sup> copies of questionnaires were distributed. The survey covered 686 companies after excluding 30 companies that participated during the pilot test, financial companies, REITs, and the close-end fund sectors, companies newly listed in 2007, 2008, or 2009, as well as PN17 and Amended PN17 companies.

Moreover, a week after the questionnaires were distributed, the researcher contacted the company secretary via phone to ensure that the company had received the letter and to determine its status regarding participation. This courtesy call was important

 $<sup>^{13}</sup>$  686 companies x 4 copies = 2,744.
because a company secretary receives quite a few questionnaires from various individuals for various purposes. Company secretaries registered with MAICSA were given priority. The secretaries' names and company contact numbers were obtained from the annual report since the information was stated in the corporate information section. The researcher expressed her expectations and appreciation to the company secretary via the phone call. A comment from one company secretary is worth mentioning: "Your questionnaire looks simple. I'm just afraid that too long and difficult questions will keep the directors from answering the questionnaire as we have experienced before." The researcher was able to build new networking relationships with a number of company secretaries through the process.

Some company secretaries asked the researcher to translate the questionnaire into the Chinese language since their directors were not fluent in English. Therefore, the researcher engaged an expert in the Chinese language to translate the questionnaire. Another step was taken to translate the questionnaire back into English by another person who is well versed in both languages. These steps were to ensure consistency in the meaning of every statement. The translated questionnaires (Appendix H) were posted back to the particular company secretaries. A follow-up phone call to the company secretaries was intended to increase the response rate.

Once the questionnaires were returned, the company that the respondent represented was identified. This study used the public listed company as the unit of analysis; therefore, responses from directors who represented the same company were averaged. As a result, the researcher had to wait until the end of data collection to average the data. Then, data on leadership structure, directors' age and tenure, board

size, and ownership structure of the company were gathered from the company annual report for the three-year period from 2007 to 2009. Regarding company leverage and performance, the data were extracted from datastream, a well-known database. Finally, once the data collection was complete, the data were analyzed using Statistical Package for Social Science (SPSS) version 15.0.

# 5.8 Measurement of Variables

The following sections describe the overall operationalisation of the variables, which include leverage, profitability, managerial ownership, leadership structure, board size, directors' tenure, and risk appetite; this information was collected from the annual reports and company websites.

### 5.8.1 Dependent Variables/Independent Variables

#### Leverage

Company leverage was the dependent variable in the relationship between board attributes and capital structure decision. Meanwhile, in the mediation analysis, company leverage was treated as an independent variable. Therefore, company leverage was treated as a dependent or independent variable in different functions and analyses.

This study used debt ratio as a proxy for leverage. The measurement of debt ratio at the end of each fiscal year was determined by dividing total debts by total assets. This ratio represents the percentage of company assets that are financed by debt, including both short- and long-term debt, while the remaining assets are financed by equity. The mean debt ratio for the three-year period (2007 to 2009) was used in the

analysis. The debt ratio was transformed into a logarithm to avoid the heteroscedasticity problem. This approach is consistent with Chen and Steiner (1999), Zulkarnain, Mohamad Ali, Annuar, and Zainal Abidin (2001), Brailsford *et al.*, (2002), Suhaila and Wan Mansor (2008), and Zuaini *et al.* (2011).

#### 5.8.2 Dependent Variables

## **Return on Equity**

Return on equity (ROE) is a company performance measurement. The ratio is determined by dividing net profit by the average shareholders equity. The average shareholders equity is calculated by adding the total amount of the previous and current year shareholders equity and then dividing by two. This performance indicator has been used in previous studies on board structure (Fosberg, 1989; Van Ees *et al.*, 2003; Shamsul Nahar, 2004; Halimi *et al.*, 2008; Hsu-Huei *et al.*, 2008; Uadiale, 2010). It also offers valuable information on the leverage performance in the company capital structure (Miller, Boehlje, & Dobbins, 2001). Even though there is no consensus on the best measurement of financial performance, the most important point is that the result must reflect the shareholders and accounting return (Cochran & Wood, 1984).

With regards to company performance, net income provides an immediate effect on ROE. In favourable economic conditions, companies that adopt more leverage tend to have better ROE. As the company net income is higher, the company is able to absorb the payment of interest expenses. However, if economic conditions turn sour, the company with more leverage tends to have lower ROE. This is due to the reduction in companies' sales and the simultaneous bearing of interest expenses from

borrowings (Keown *et al.*, 2008). As a result, company net profit declines significantly. Thus, based on the previous arguments, ROE is the best proxy for company performance. In this study, the scores of ROE for the three-year period (2007 to 2009) were averaged and the average scores were used in representing the ROE. The formula for ROE is as follows:

Some companies had negative net income and average shareholders equity. The negative average shareholders equity mostly came from the accumulated losses from previous year or the significant losses incurred on the current year. The paid-up capital was not able to absorb the losses (Keown *et al.*, 2008). Therefore, the ratio remained negative as the result indicated poor return on equity of that particular company. No transformation of value is needed as the value should remain in representing the actual scenario (Tabachnik & Fidell, 2007), particularly in the Malaysian economic environment.

#### 5.8.3 Independent Variables

#### 5.8.3.1 Board Composition

Data on board size were collected under board composition. Board size (BSIZE) refers to the number of directors that make up a board. For the purpose of analysis, this study did not consider the type of directors that were appointed to the board. The board size is measured using the average board size for the three-year period (2007 to 2009).

## 5.8.3.2 Board Structure

Under board structure, data on leadership structure were collected. There are two types of leadership structures. The first type is where the CEO holds the position of chairman simultaneously; this is referred to as the dual type. The second type is categorized as non-dual, where the positions of chairman and CEO are held by different persons. For the purpose of analysis, companies where the positions of CEO and chairman were held by different persons are coded as 1, otherwise 0 (Krishnan & Visvanathan, 2008; Noor Afza & Ayoib, 2009; Uadiale, 2010). If the company changed the leadership structure during the three-year period (2007 to 2009), the most frequent structure was chosen.

## **5.8.3.3 Board Characteristics**

Under board characteristics, data from directors' tenure and risk appetite were collected. Age of the directors represented the risk appetite of those directors. Age is measured using the mean age of directors for the three-year period (2007 to 2009). In terms of data analysis and interpretation, age and risk appetite have an inverse correlation. Meanwhile, directors' tenure (TENUR) is defined as the period of time the directors have held the position of director in the company. Information for directors' tenure was not readily available; thus, the data were determined by identifying the number of years the director had held that position starting from the first date of appointment. The scores of directors' tenure for the three-year period (2007 to 2009) were averaged and these averaged scores were used in the analysis.

#### 5.8.3.4 Board Process

Similar to Dulewicz (1999; 2004), board process reflects the process of running and organizing the board by the directors. This study identifies four dimensions that are imperative to board process: performance of independent directors, board's risk oversight, CEO performance evaluation, and directors' accessibility to information.

#### **Performance of Independent Directors**

A competent independent director, as argued by Tan Sri Ramon Navartnam, should have the skills and experience to provide true views and judgments (Yeap, 2009). Competent independent directors influence board decision making by providing valuable advice and act as a control mechanism to the management team (Judge & Dobbins, 1995; Westphal, 1999). Therefore, respondents were asked to evaluate the performance of independent directors on their board.

The statements were measured through 10 qualitative statements (P1-P10). The statements were adopted from Ingley and Van der Walt (2005). In measuring the competency aspect, a scale of very poor = 1, poor = 2, neutral = 3, good = 4, outstanding = 5 was used. The mean score for these items was used to represent the performance of independent directors. Higher scores indicate high competency of independent directors.

#### **Board's Risk Oversight**

The board's ability on risk oversight focuses on directors' behavior and actions. A board with a sound risk monitoring culture is more likely to influence the decision

making process, causing managers to employ a less risky capital structure. Eight statements were used to measure this construct.

In measuring the board's ability on risk oversight, five-point Likert scale was used: strongly disagree = 1, disagree = 2, neutral = 3, agree = 4, strongly agree = 5. The scores were averaged to determine the mean value for board's risk oversight for every company. Higher scores indicate high ability of board on risk oversight.

#### **CEO Performance Evaluation**

A board that establishes effective performance evaluation influences CEO behavior and eventually has a positive impact on company performance. CEOs tend to be more prudent in making investment decisions since their actions and decisions affect their remuneration and rewards.

With regards to CEO performance evaluation, eight statements (Q14 to Q21) were measured by using a five-point Likert scale similar to Kula's (2005): strongly disagree = 1, disagree = 2, neutral = 3, agree = 4, strongly agree = 5. The average scores for CEO performance evaluation were determined. Higher scores represent more effectiveness of boards in evaluating CEO performance.

## **Directors' Accessibility to Information**

Directors must receive sufficient information to function effectively during board deliberation. They can provide further arguments and challenge the management constructively when they have adequate knowledge about the company business operations. The information received can lead to better decision making. The accessibility of information among directors was measured through five statements and a five-point scale (strongly disagree = 1, disagree = 2, neutral = 3, agree = 4, strongly agree = 5). Kula (2005) also uses this scale to measure the approach taken by directors of Turkish companies in gaining access to information. The values for accessibility information by the directors were averaged. Higher scores indicate higher access to information by directors.

#### Aggregate Index of Board Process (During Moderation Analysis)

Previous studies have used various measurements in establishing the governance index. Krishnan and Visvanathan (2008) use six mechanisms: board size, percentage of outside directors on the board, number of directors and composition of independent directors on the audit committee, index of governance system, and percentage of institutional ownership in representing the governance average value. Chobpichien *et al.* (2007) employ board of directors and audit committee characteristics to create the index for board of director's quality. Meanwhile, Khanchel (2007) develops an index for determinants of good governance practices. Khanchel's (2007) studies four main indexes that represent the quality of board, audit committee, board committees, and overall value of index. Percentile rankings are performed in calculating the direction of governance in every category. The highest rank represents sound governance. The index is computed for 624 US listed companies between 1994 and 2003.

In developing a governance index, variables chosen are subjective and depend on the researcher's evaluation (Meon & Weill, 2005; Khanchel, 2007). Therefore, as this study put more weight on board process, four variables (performance of independent

directors, board's risk oversight, CEO performance evaluation, and directors' accessibility to information) were included in measuring the index of board process. The average values of four board process variables were added together and divided by four. Furthermore, the index was assigned as BPROCESS. The approach in creating this index was similar to the approach used by Chobpichien *et al.* (2007), Khanchel (2007), and Krishnan and Visvanathan (2008). By aggregating the value, the final index can indicate the overall effectiveness of company governance (Lara, Osma, & Penalva, 2007).

# **5.8.3.5** Ownership Structure

Ownership structure in this study is represented by managerial ownership. Managerial ownership refers to the total shares owned by all executive directors (Friend & Lang, 1988; Haniffa & Hudaib, 2006; Chobpichien *et al.*, 2008; Ngui *et al.*, 2008; Mazlina & Ayoib, 2011). Under section 69D(1) of the Companies Act 1965, any person who holds not less than 5% of the total shares is considered a substantial shareholder in that company. Substantial shareholders have more power in decision making. In addition, their rights are more heavily protected. In this study, all executive directors' shareholdings in a company were calculated for each year. After the three years of data (2007 to 2009) for managerial ownership were collected, the value was averaged.

For the purpose of analysis, a company having an average of executive directors' shareholdings of at least 5% of company shares was coded as 1, otherwise 0. This coding has been used in previous studies (Chobpichien *et al.*, 2007; Driffield *et al.*, 2007; Chobpichien *et al.*, 2008).

#### **5.8.4 Control Variables**

Three control variables were included in the study: company size, age, and sector. These control variables were chosen based on previous literature as factors that may be associated with the dependent variables (company leverage and performance).

## • Company Size

The level of leverage and profitability may differ from one company to another based on the size of the company, and this can lead to bias in results. This variable has been used in previous studies on capital structure (Berger *et al.*, 1997; Yu *et al.*, 2002; Fauzias & Bany, 2005). Company size is calculated based on the average value of total assets of three years (2007 to 2009) data. The average value was then transformed using a logarithm; this approach is similar to Rashidah *et al.* (2005), Driffield *et al.* (2007), Noor Afza and Ayoib (2011).

Kyereboah-Coleman (2007) provides evidence that a large company is more likely to employ high leverage and most companies are in favor of long-term borrowings. Larger companies are more diversified and more able to increase their cash flow than smaller companies (Morri & Cristanziani, 2009). Consequently, these companies have the capability to service their loans and thus face lower risks of bankruptcy (Friend & Lang, 1988).

With regards to company performance, this study predicts that company size and performance will be positively related. Chang (2004) and Ngui *et al.* (2008) provide evidence that large Malaysian companies are more likely to have better company performance. Larger companies can easily access resources (Kula, 2005; Feidakis & Rovolis, 2007). In addition, larger companies can increase investors' confidence in

safeguarding investors' interests (Tam & Tan, 2007) and establish various diversifications in business (Kyereboah-Coleman, 2007). Furthermore, those companies are able to attract good candidates to sit on their board (Kula, 2005) and maintain stable cash flow (Fu *et al.*, 2002). Moreover, large companies are less likely to be affected by changes in the market environment (Fu *et al.*, 2002). Furthermore, companies that have easy access to capital markets have lower company bankruptcy risk (Feidakis & Rovolis, 2007). The characteristics and advantages of large companies lead to better performance.

Nevertheless, larger companies face more challenges and problems than smaller companies, including huge competition, stiff pricing, and increases in costs. Such situations reduce company profitability (Nazli Anum, 2010).

## • Age of the Company

Company age is measured by subtracting the year of listing from the date of financial year ending in 2007, 2008, and 2009. The scores of company age for the three-year period were averaged. These scores were then used to represent the company age in the analysis. Kyereboah-Coleman (2007) finds that company age is positively associated with company leverage. Mature companies that have established themselves in the market find it easy to obtain external financing since these companies have a good reputation. In relation to company performance, Noor Afza (2011a) indicates a negative association between company age and company performance. The rationale behind the finding is that older company performance.

Thus, it is assumed that company leverage and performance are influenced by company age.

### • Sector/Industry Type

This study uses the classification provided by Bursa Malaysia for industry type. Industry classification might also affect the level of leverage (Scott & Martin, 1975) and company performance (Haniffa & Hudaib, 2006; Tam & Tan, 2007; Noor Afza & Ayoib, 2009). Early on, the researcher decided to use an approach similar to Puan (2009). Puan (2009) employs 10 industries: consumer product, construction, industrial product, trading/services, infrastructure, technology, properties, plantations, hotels, and mining. However, based on the descriptive results on the distribution of sample companies by sector, five sectors had low responses: properties, technology, plantation, infrastructure, and hotels. There was no response from the mining industry. Therefore, these sectors were grouped as other. This study included only five sectors in representing the control variable: industrial product, trading/services, consumer product, construction, and other. These sectors were represented by dummy variables. However, during analysis the number of dummies used was one less than the number of sector categories (m-1), leaving out the dummy variable for other. Thus, four usable sectors were included in the analysis: industrial product, construction, consumer product, and trading and services.

As explained in Section 5.3.1, this study excluded financial companies, REITs, and the close-end fund industries as the nature of their business and regulation differ from the included companies. Financial institutions are regulated by Bank Negara while those companies associated with investment and funds are regulated by the Securities Commission. In general, the finance sector has a high level of leverage because of the nature of its business where it receives depositors' funds and funds are treated as liabilities. In addition, financial institutions are guaranteed by the central bank. Meanwhile, REITs and the close-end fund sectors do not use leverage as these companies issue shares to fund assets and projects. Thus, company sector appears to be a primary determinant of capital structure because companies in similar industries tend to have similar needs in financing. With regards to company sector, dummy variables were used to identify the type of company sector (Tam & Tan, 2007).

# 5.8.5 Summary of Variables Measurement

Table 5.8

Table 5.8 provides a summary of the variables measurement selected in this study.

1 able 5.8		
Variables for Analysis		
Variables	Abbreviation	Description
Dependent variables		
Leverage	LEV	Natural log of total debt divided by natural log of total assets
Return on equity	ROE	Total net income divided by average shareholders equity
* In determining the associati independent variable (see Figure		ge and profitability, leverage is treated as an
Independent variables		
Board size	BSIZE	Number of directors on the board
Leadership structure	LEADS	Independent leadership structure, 1 if the positions of chairman and CEO are held by different persons, and 0 otherwise
Directors' tenure	DTEN	Average years in directors' position
Directors' risk appetite	RISKAPP	Directors' risk appetites are measured by referring to directors' age. Thus, age is measured by using the mean age of directors. Inverse score is used to measure the directors' risk appetite.

(table continues)

Table 5.8 (Continued)		
Variables	Acronym	Description
Independent variables Performance of independent directors	INDPERF	Directors' perception of performance of independent directors are measured on a scale ranging from "very poor" (1) to "outstanding" (5).
Board's risk oversight	RISKSOV	In measuring the directors' agreement on their involvement in managing risks, a scale ranging from "strongly disagree" (1) to "strongly agree" (5) is used.
CEO performance evaluation	CEOPE	Performance evaluation represents the extent of CEO is being evaluated by formal procedures. They are measured on a scale ranging from "strongly disagree" (1) to "strongly agree" (5).
Directors' accessibility to information	ACCESSINF	Directors' accessibility to information represents the extent of directors' ability to obtain company information. They are measured on a scale ranging from "strongly disagree" (1) to "strongly agree" (5).
Aggregate of board process	BPROCESS	The average value of board process variables (performance of independent directors, board's risk oversight, CEO performance evaluation, and directors' accessibility to information).
Managerial ownership	MOWN	1 if the average executive directors' shareholding represents at least 5% or more and 0 otherwise.
Control variables		
Company size	CSIZE	Average of natural logarithm (total assets).
Age of the company	AGECO	Average years listed in Bursa Malaysia.
Sector:		Dummy variables for type of industry according to Bursa Malaysia, namely:
Consumer product	SECCP	Consumer product; 1 if true, otherwise 0.
Industrial product	SECIP	Industrial product; 1 if true, otherwise 0.
Construction	SECCONS	Construction; 1 if true, otherwise 0.
Trading/services	SECTS	Trading/services; 1 if true, otherwise 0.

### **5.9 Non-Response Bias**

In addressing the possibility of non-response bias, studies conducted by Etter and Perneger (1997) and Nor Aziah (2004) are referred. Etter and Perneger (1997) use two methods in testing non-response bias. The first method compares respondent and non-respondent characteristics. The second method involves a comparative analysis based on the date of the returned questionnaire. They divided respondents into eight groups based on the number of reminder mailings that the respondents received.

Meanwhile, Nor Aziah (2004) uses the surrogate method. She compares the mean responses of the last 42 returned questionnaires with the balance of the respondents. The late respondents represent the non-respondents, 10% of total usable responses (420 questionnaires).

Similar to Nor Aziah (2004), this study measured non-response bias by comparing the mean responses of the last 26 returned questionnaires with the balance of the respondents. The 26 returned questionnaires represented 10% of the 263 usable responses. The results reveal no significant differences between late respondents and early respondents regarding the board's risk oversight (p=0.546), performance of independent directors (p=0.451), CEO performance evaluation (p=0.132), and directors' accessibility to information (p=0.712). The study shows that non-response bias is not a significant problem in this analysis.

#### **5.10 Multiple Respondents**

The returned questionnaires represented 175 companies. There were 36 out of 175 companies with two or more respondents. Out of 36 companies, 3 had two respondents, 14 had three respondents, and 19 had four directors responding from a single board (see Table 6.2). Similar to Wan and Ong (2005), an inter-rater reliability test was carried out individually for every company that had more than one respondent to determine the level of agreement between directors in the same company. The interclass correlation coefficient shows a level of correlation coefficient (r) of board process variables in the range between 0.72 and 0.96. These values of correlation (r) are acceptable to indicate that the respondents do have the same direction or perception towards their boards as a whole.

## **5.11 Data Analysis Techniques**

Data were analyzed using SPSS version 15.0. Descriptive statistics were performed to gain an understanding of the characteristics of the sampled companies in the threeyear period of analysis. The use of descriptive statistics was pertinent to portray the phenomena of interest. However, descriptive statistics cannot be used to draw conclusions about the relationship between independent variables and dependent variables.

Therefore, multiple regression analysis was used to examine the influence of board attributes (independent variables) on company leverage and performance (dependent variables). Prior to data analysis, regression diagnostics were conducted to ensure that the required assumptions for ordinary least squares (OLS) estimation were met.

In testing the interaction between board process variables and managerial ownership (moderator variable), three steps of hierarchical regression were used (Baron & Kenny, 1986). The first step examined the effects of board process on company leverage. The second step examined the effects of board process and managerial ownership on company leverage. The final step tested the interaction effect between board process variables and managerial ownership on company leverage.

Meanwhile, in analyzing whether company leverage mediates the relationship between board process and company performance, the study considered three other conditions (Baron & Kenny, 1986). First, board process should be significant to leverage. Second, board process should be associated with company performance. Third, board process should be associated with company performance in the presence of company leverage. Hierarchical regression was employed for the mediation analysis.

## **5.12 Chapter Summary**

This chapter has presented the justification for the research design and a description of the methods used in data collection. This chapter includes an explanation of the questionnaire development and its design. Then, the measurement of variables is presented. The survey method, population, and samples used are also explained in detail in this chapter. Finally, the chapter describes the techniques of data analysis used in analyzing the data. In the following chapter, the results of the study are presented.

# CHAPTER SIX

# DATA ANALYSIS AND FINDINGS

## 6.1 Introduction

This chapter outlines the analysis and discusses the results of this study. Initially, the discussion of data cleaning and screening is presented in Section 6.2. This is followed by a discussion of the validity and reliability test of the questionnaire and the distribution of companies by sector in Section 6.3 and 6.4, respectively. The descriptive statistics results that consist of data from annual reports and surveys of Malaysian directors are presented in Section 6.5. Before discussing the results of ordinary least square (OLS) analysis, the results of the regression diagnostic tests are first discussed in Section 6.6 to ensure that all the assumptions are met. The list of assumptions is essential to ensure correct inferences. Section 6.7 provides the empirical results of the regression analysis to answer the research hypotheses. All the analyses in the study used the Statistical Package for Social Science (SPSS). Two additional tests that were carried out to determine the sensitivity of the findings are discussed in Section 6.8. Finally, Section 6.9 summarizes the chapter.

# 6.2 Data Cleaning and Screening

Prior to data analysis, each variable in the study was examined for missing values and accuracy of data entry through SPSS. The problem of missing values was avoided as the researcher properly conducted data entry procedures.

In this study, four questionnaires were distributed to different directors (company chairman, an independent director, a non-independent non-executive director, and an executive director) in every public listed company. In total, 2,744 copies of the

questionnaire were distributed to 686 companies.<sup>14</sup> Within two weeks, eight questionnaires (representing two companies) were returned to the researcher. According to one company secretary via a telephone conversation, the company had to uphold its policies dictating that board members are not allowed to disclose their practices to outsiders. Hence, the final sample leads to 684 companies. After six months, 272 questionnaires had been received from respondents. However, out of these, 9 were incomplete, leaving 263 as usable questionnaires (10%). The questionnaire response and sample size rates are presented in Table 6.1.

	Questionna	aire response		Public liste	d companies
	Quantity	Response rate (%)	-	Quantity	Response rate (%)
Questionnaire distributed	2,744		Companies in valid population	686	
(-) Unanswered questionnaire returned			(-) Unanswered questionnaire		
due to company policy	(8)		returned	(2)	
Potential respondents	2,736	9.9%	Potential companies	684	26.9%
Total questionnaires received	272	2.270	Participation by companies	184	20.970
Incomplete responses	(9)		Incomplete responses by companies	(9)	
Usable response rate	263	9.6%	Usable sample Rate	175	25.6%

Table 6.1					
<b>Ouestionnaire</b>	Resnonse	and Sa	mple S	Size	Rates

The low questionnaire response rate is consistent with other studies, such as Westphal (1999). Westphal (1999) notes studies that involve top management always have a response rate of less than 25%. Nevertheless, the researcher believes that this rate is sufficient since it fulfills the minimum requirement of 10%, as

<sup>&</sup>lt;sup>14</sup> After excluding 30 companies that participated during the pilot test, financial companies, REITs, and the close-end fund sectors, new companies listed in 2007, 2008, or 2009, as well as PN17 and Amended PN17 companies.

suggested by Saunder, Lewis, and Thornhill (2003), for a survey-type study. However, the unit of analysis in this study is Malaysian listed companies in the main market and not the company directors. The returned questionnaires represent 175 companies (26%) out of 684 potential companies (see Appendix I).

Out of 175 companies, 139 (79%) have single respondent and 3 (2%) have two respondents. Meanwhile, 14 companies (8%) have three respondents and 19 (11%) have four directors who responded to the questionnaire. Table 6.2 presents the distribution of companies according to the number of questionnaires received. The table indicates that most of the companies are represented by a single respondent in providing views on board practices. There are 36 companies (20%) with multiple respondents. For analysis purposes, the average scores of questionnaire items were used for companies with multiple respondents.

Distribution of Companies According to the Number of Questionnaires Received				
Number of respondents representing a company	Number of companies	Percentage (%)		
Single	139	79.43		
Two	3	1.72		
Three	14	8.00		
Four	19	10.85		
	175	100.00		

 Table 6.2

 Distribution of Companies According to the Number of Questionnaires Received

 Number of companies According to the Number of Questionnaires Received

The analysis of the distribution of companies according to type of directors is presented in Table 6.3. The result shows that in answering the questionnaire, 21 companies (12%) are represented by a single independent director and 118 companies (67%) are represented by a single non-independent director. Two companies (1%) have more than one respondent who is an independent director, 6 (3%) have more than one respondent who is a non-independent director, and 28 (16%) have a mix of independent and non-independent directors respond to the questionnaire. The result shown in Table 6.3 indicates that most responses were

received from non-independent directors.

Table 6.3

Distribution of Companies According to Type of Director

Type of respondent	Number of companies	Percentage (%)
Single respondent who is independent director	21	12.0
Single respondent who is non-independent director	118	67.4
More than one respondent and all are independent directors	2	1.1
More than one respondent and all are non-independent directors	6	3.4
More than one respondent and a mix of independent and non-independent directors	28	16.0
-	175	100.00

Profiles of the respondents are summarized in Table 6.4.

Table 6.4

Respondent Profiles (N=263)
-----------------------------

Variables		Frequency	Percentage (%)
1. Type of directors	Independent	72	27.38
	Non-independent	191	72.62
2. Position:	Chairman	23	8.75
	CEO/Managing Director	13	4.94
	Non-Executive Director*	148	56.27
	Executive Director**	79	30.04
3. Length of	Less than 3 years	13	4.90
Directorship	3 to 6 years	136	51.70
	7 to 10 years	81	30.80
	11 years and above	33	12.50
4. Education	Diploma	14	5.30
	Bachelor's Degree	145	55.10
	Master's/PhD	73	27.80
	Other (Professional qualification, Sijil Pelajaran Malaysia-SPM)	31	11.80
5. Age	Below 40	39	14.82
•	41 to 50	74	28.14
	51 to 60	89	33.84
	61 to 70	46	17.49
	71 to 79	14	5.32
	80 and above	1	0.38
6. Race	Chinese	133	50.6
	Malay	103	39.2
	Other	18	6.8
	Indian	9	3.4

*Note:* \* Non-executive directors (NED) other than chairman

\*\* Executive directors (ED) other than chairman or CEO/managing director

In relation to type of director, non-independent directors represent the highest frequency at 191 (72.62%), followed by independent directors at 72 (27.38%). In terms of directors' position, non-executive director has the highest frequency at 148 (56.27%), followed by executive director at 79 (30.04%). In addition, 23 (8.75%) chairmen and 13 (4.94%) CEOs or managing directors answered the questionnaire. With regards to length of directorship, 250 respondents have more than three years of experience as a board member. The result shows that the respondents have sufficient experience and knowledge of their board practices. Most respondents hold bachelor's degree at 145 (55.10%), followed by a master's or PhD at 73 (27.80%). In terms of respondents' age, 33.84%, or 89 respondents are between 51 and 60 years old; this age range is the highest frequency among all age ranges. Out of 263 respondents, 133 (50.6%) are Chinese, followed by 103 (39.2%) who are Malay. Indian respondents only represent 9 (3.4%) of the respondents.

#### 6.3 Validity and Reliability Test of Questionnaire

In developing an effective measuring instrument, two essential criteria need to be fulfilled: validity and reliability. The measurements used in the questionnaire were based on adopted and adapted questionnaires from previous studies. Therefore, in assessing how well the measurements performed, the concepts of validity and reliability were applied.

Validity is the extent to which the score for every statement or question in the questionnaire represents the concept (Zikmund *et al.*, 2009). There are many approaches in establishing validity, including content and construct validity (Sekaran, 2003). Content validity is conducted to ensure that measures are adequate

to describe the concept. The researcher used three main stages. First, with regards to the questions and statements under board process variables, the researcher established the measurement of questionnaires based on past literature as well as adapted and adopted questionnaires. Second, the questionnaires were given to the supervisors, three academicians, and four industry experts who have strong background in related areas to gather feedback. Sekaran (2003) supports the idea that those who are experts in the area are able to confirm the content validity of instruments. Third, the questionnaires were distributed to 30 companies for pilot testing.

In addition, validity was also tested by using construct validity. Construct validity exists when the measurement measures the concept reliably (Zikmund *et al.*, 2009). Construct validity can be established through factor analysis. This is an appropriate technique to use to determine the number of factors and items that are most suitable in every factor (Sekaran, 2003). Most of the items under board's risk oversight and CEO performance evaluation have not been tested before. Therefore, the researcher performed exploratory analysis to determine the reliability of items in every factor (Decoster, 1998) by using the 263 returned questionnaires. The sample chosen for the factor analysis was based on the individual score and the original value from the five-point Likert scale (Bernstein & Teng, 1989).

The Bartlett test of sphericity and the Kaiser-Meyer-Olkin (KMO) measure of sampling and rotated factor matrix were conducted as the procedures for factor analysis. The Bartlett test of sphericity is a statistical test to confirm the presence of correlations among items. Based on the result, the construct of board process pass

the Bartlett test of sphericity with a significant value of 0.000. The KMO is another measurement to compute the level of inter-correlations among items (Hair, Black, Babin, & Anderson, 2010). If the overall value of KMO falls below 0.5, the specific items with a value of 0.5 and below should be deleted to achieve a better overall value for KMO. The result of KMO for this study is 0.911 and this is far greater than the unacceptable value, which is below 0.50. Table 6.5 presents the summary results of the Bartlett test of sphericity and the KMO test.

Table 6.5Result of Bartlett Test of Sphericity and Kaiser-Meyer-Olkin TestItemsBartlett test, SigKMOBoard process310.0000.911

The result of the rotated factor matrix, as shown in Table 6.6, identifies and confirms the number of factors and items of every factor used in this study. Factor 1 consists of the items on the effectiveness of independent directors' performance. The second factor (Factor 2) is related to CEO performance evaluation and Factor 3 comprises the items under board's risk oversight. The fourth factor (Factor 4) is the effectiveness of the board in gaining access to company information.

Table 6.6Rotated Component Matrix

Rotated Component Matrix Items	Factor				
	1	2	3	4	
Ability to provide strategic vision	0.775		U		
Effectiveness of independent directors in representing the	0.757				
interests of shareholders					
Relationship with senior management	0.696				
Effectiveness of independent directors in representing the	0.688				
interests of stakeholders					
Understanding of company business	0.677				
Contribution in board committees	0.650				
Record of constructively challenging and debating issues	0.650				
during board meetings					
Relationship with the CEO	0.601				
Ability to apply industry experience	0.601				
Interactive communication of independent directors with	0.536				
other board members					
Board communicates to the CEO on his/her success based on		0.835			
the evaluation result					
Board evaluates CEO by using KPI		0.786			
Board establishes an exit mechanism tied to CEO's		0.737			
performance					
Board implements a reward system based on long-term		0.724			
performance		0.724			
Board communicates to the CEO on his/her failures based on		0.721			
the evaluation result		0.721			
		0.710			
Board provides avenue for CEO to explain the state of		0.712			
CEO's performance					
Board communicates their expectations clearly to the CEO		0.708			
Board accepts feedback from CEO during the process of		0.677			
setting KPI					
Board requires senior management to deliberate on emerging			0.789		
risks that the management perceives the company will face					
Board receives updates from senior management on risk			0.731		
management matters					
Board raises concerns about risk management			0.712		
-					
Board communicates on risk tolerance to senior management			0.699		
Board attends relevant risk management training			$0.678 \\ 0.648$		
Board reviews its strategy during crisis Members of board encourage senior management to use			0.648		
scenario analysis in identifying potential vulnerabilities			0.014		
			0.504		
Board has necessary financial knowledge to analyze financial			0.584		
statements					
Directors discuss issues thoroughly with management				0.830	
Directors have access to information via managers				0.816	
When directors need to refer to company business records				0.726	
and books of accounts, their access is denied				0	
When outside professional services are needed, the expenses				0.726	
will be borne by the company				0 ===	
Directors receive sufficient materials/information before				0.759	
board meetings					

		Factor			
	1	2	3	4	
Eigen value	12.72	3.09	1.99	1.89	
Percentage variance explained	19.067	17.318	15.923	11.193	
Cumulative percentage	19.067	36.385	52.309	63.501	
$\mathbf{N}_{\mathbf{r}}$	11. Deulett's test of sult				

Note: K-M-O measure of sampling=0.911; Barlett's test of sphericity is significant; p < 0.000.

The absolute value for every item is more than 0.50. This indicates a high correlation between board process factors and the items. The eigenvalue is greater than 1 for four factors and considered significant for the factors to be included in the model. An eigenvalue that is less than 1 is deemed insignificant (Hair *et al.*, 2010). Meanwhile, the total variance is 63.50%. This shows that the four factors explain 63.50% of the board process dimension. In the social sciences, percentage of variance with 60% and above is considered satisfactory (Hair *et al.*, 2010). Therefore, the percentage of variance for this study is acceptable.

Meanwhile, reliability test was also established to ensure the consistency of measurement for every item in the questionnaire when it is used at any point of time. A number of reliability tests exist, including test-retest and the internal consistency method (Hair *et al.*, 2010). The test-retest method is an approach whereby the same respondent is asked to answer the same questionnaire but at different times. The purpose is to ensure that the measurements are reliable even though the questionnaire is tested at different times. Nevertheless, this study was not able to implement this method as the directors were reluctant to answer the questionnaire twice due to their work commitments.

Thus, this study used the internal consistency method. This method is commonly used in measuring the consistency of multipoint-scaled items (Sekaran, 2003). The idea behind this method is that the same items in the questionnaire measure similar constructs and the items should be highly correlated (Nunnally, 1978). The most popular test is Cronbach's coefficient alpha (Hair *et al.*, 2010). The range of Cronbach's alpha is from 0 to 1. When the coefficient is below 0.6, reliability is considered poor (Zikmund *et al.*, 2009). Table 6.7 shows Cronbach's alpha values for the constructs of board's risk oversight, performance of independent directors, CEO performance evaluation, and directors' accessibility to information.

#### Table 6.7

Cronbach's Alpha		
Construct	Number of questions	Cronbach's alpha
Board Process:		
Performance of independent directors (F1)	10	0.935
CEO performance evaluation (F2)	8	0.925
Board's risk oversight (F3)	8	0.911
Directors' accessibility to information (F4)	5	0.722

The alpha values fall in the range between 0.722 and 0.935. Scales between 0.70 and 0.80 are considered to have good reliability and scales between 0.80 and 0.95 reflect very good reliability (Zikmund *et al.*, 2009). Therefore, since the scores slant towards the high scale, the values of board process variables indicate high reliability.

#### 6.4 Public Listed Companies – Unit of Analysis

A summary of the companies selected in this study is shown in Table 6.8, along with the industry composition. The result indicates that industrial product represents the highest number of observations at 59, followed by trading/services (46), consumer product (23), construction (22), and other (25).

Number of companies Percentage (%) Sector Industrial product 59 33.71 Trading/services 46 26.29 Consumer product 23 13.14 Construction 22 12.58 Other 25 14.28 100.00 Total samples 175

Table 6.8Summary of the Distribution of Sample Companies by Sector

#### 6.5 Descriptive Statistical Results

The presentation of the descriptive result is divided into two parts. Section 6.5.1 presents the descriptive results concerning the secondary data. Section 6.5.2 displays the descriptive results of the primary data based on the questionnaire survey.

# 6.5.1 Descriptive Statistical Results – Secondary Data

For analysis purposes, average scores of three years (2007 to 2009) are used in the regression model for all secondary data: leverage, return on equity, board size, directors' tenure and age, managerial ownership, company size and age.

## 6.5.1.1 Descriptive Statistics of Capital Structure and Company Performance

Table 6.9 demonstrates that the average of company leverage for the years 2007 to 2009 is 41.61%. The mean figure of company leverage for the years 2007 to 2009 indicates that the leverage level increases from 40.30% in 2007 to 41.01% in 2008 to 43.51% in 2009. This could be due to the effect of the global financial crisis, which brought great uncertainties to the market outlook. Companies had to resort to bank borrowing during this period of uncertainty as raising capital in the capital markets was difficult and pricey amid great risk aversion of investors.

Company performance is measured by return on equity (ROE). The result indicates that the mean figure of ROE decreases from 7.97 in 2007 to -0.30 in 2008 and increases back to 0.94 in 2009. The reason for the significant drop in the ROE value for 2008 and 2009 is the US financial crisis. The uncertainty in market outlook led people around the world, including Malaysian citizens, to reduce their spending and the reduction affected company revenue.

	Ta	ble	6.9
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Variables	Denoted by	Mean	Std Deviation	Min	Max
Leverage (%)*	LEV				
Overall		41.61	20.63	4.63	89.64
2007		40.30	21.33	4.17	99.59
2008		41.01	21.46	3.90	98.59
2009		43.51	22.51	5.82	96.70
Return on Equity (%)	ROE				
Overall		2.61	28.47	-213.89	62.58
2007		7.97	19.02	-78.77	63.83
2008		-0.30	56.09	-579.29	65.37
2009		0.94	32.41	-171.20	67.88

Descriptive Statistics of Company Leverage and Return on Equity (N=175)

\* The data are before the transformation to natural log to have the actual view of the company leverage level.

The distribution of company leverage based on sectors is illustrated in Table 6.10. The table indicates that the construction sector has the highest average leverage at 54.60%.

Table 6.10Distribution of Capital Structure by Sectors

Sector	Ν	Mean (%)	SD (%)	<b>Min (%)</b>	Max (%)
Industrial product	59	40.66	20.86	7.55	89.64
Trading/services	46	46.69	19.84	11.76	86.16
Consumer product	23	33.16	17.88	11.62	78.92
Construction	22	54.60	20.99	17.68	82.89
Other	25	41.65	18.79	7.44	73.79

# 6.5.1.2 Descriptive Statistics of Board Data

In relation to board composition and characteristics, this study includes three variables: board size, directors' tenure, and directors' risk appetite. The descriptive statistics of board size, directors' tenure, and directors' risk appetite for 2007 to 2009 and the pooled data (combined for all three years) are illustrated in Table 6.11.

Table 6.11Descriptive Statistics of Board Data (N=175)

Variables	Denoted by	Mean	Std Deviation	Min	Max
Composition					
Board size	Bsize				
Overall		7.49	1.61	4	12
2007		7.49	1.72	4	12
2008		7.47	1.81	4	13
2009		7.54	1.70	4	13
Characteristics					
Directors' tenure	Dten				
Overall		6.91	3.98	0.63	17.21
2007		6.69	4.28	0.17	20.78
2008		7.08	4.30	0.17	21.78
2009		7.27	4.10	0.67	22.78
Directors' risk appetite (age)	Riskapp				
Overall		54.66	4.96	41.95	67.79
2007		54.26	5.24	41.27	68.38
2008		54.79	5.34	37.29	67.83
2009		55.08	5.18	38.30	68.83

The average board size ranges from 4 to 12. The board size finding is comparable to Rohana *et al.* (2009), where the study finds that the average board size of Malaysian listed companies is seven. In this study, the mean of directors' tenure is 6.91 years. In terms of directors' risk appetite, the variable is measured using directors' age. The mean of directors' age is 54.66, with a minimum average age of 37.29 and a maximum average age of 68.83.

In addition to board size and directors' tenure and risk appetite (as shown in Table 6.11), this study also incorporates leadership and ownership structure. Table 6.12 presents the descriptive statistics for leadership and ownership structure.

<b>m</b> 1	1	1	10
Tal	ble	6	12

*Descriptive Statistics of Leadership and Ownership Structure – Dummy Variable* (*N*=175)

Variables	Denoted by	Overall	2007	2008	2009
Structure	Leads				
Non-duality:					
Frequency		153	153	152	154
Percentage		87.4%	87.4%	86.9%	88.0%
Duality:					
Frequency		22	22	23	21
Percentage		12.6%	12.6%	13.1%	12%
Managerial					
ownership:					
At least 5%					
Frequency		77	73	73	70
Percentage		44.0%	41.7%	41.7%	40.0%
Less than 5%					
Frequency		98	102	102	105
Percentage		56.0%	58.3%	58.3%	60.0%

Leadership structure is measured by using dummy data in which 0 represents nondual leadership and 1 indicates the same person holds both the chairman and the CEO positions in the company. If the companies changed the leadership structure during the three-year period (2007 to 2009), the most frequent structure is chosen as the data used in all regression models were averaged.

Table 6.12 shows that 87.4% of Malaysian companies practice non-dual leadership, while 12.6% have dual leadership. The percentage of companies that have non-dual leadership increases from 87.4% in 2007 to 88.0% in 2009. Based on data from 2000 to 2002, Rashidah *et al.* (2005) find that 85.26% of companies use non-dual leadership. The result confirms that the practice of having different people as company chairman and CEO is increasing. In fact, MCCG also encourages companies to have non-dual leadership to secure better checks and balances on management decisions and actions.

With regards to ownership structure, managerial ownership is measured based on the percentage of equity holds by executive directors. The average scores of managerial ownership for the three-year period (2007 to 2009) are determined. Then, the dummy variable is used. If the average of executive directors' shareholdings reached at least 5% of company shares, it is coded as 1, otherwise 0. The result shows that, on average, 77 (44%) companies have at least 5% shares of total executive directors' shareholding in the company. The overall score for both dummy variables (managerial and leadership structure) is derived from the average score of the three years period (2007 to 2009).

Table 6.13 shows the descriptive data on the company characteristics of company age (average years listed in Bursa Malaysia) and size of company (total assets). These variables act as proxies for control variables. The average scores of company

age and size for the three-year period (2007 to 2009) were used. The mean for age of the companies is 15 years. On average, the sample companies have RM1,884,200 in total assets. Tenaga Nasional Berhad has the highest total assets among the listed companies in the samples for the three-year period.

Variables	Denoted by	Mean	Std Deviation	Min	Max
Composition					
Company age (years)	Ageco				
Overall		15	11.64	2	48
2007		14	11.64	1	47
2008		15	11.64	2	48
2009		16	11.64	3	49
Characteristics					
Company size (total assets:	Csize				
RM'000)					
Overall		1,884.2	6,787.5	25.8	69,643.1
2007		1,741.0	6,390.0	23.1	67,724.6
2008		1,856.8	6,687.0	22.9	69,841.9
2009		2,054.9	7,352,0	25.2	71,363.0

 Table 6.13

 Descriptive Statistics of Company Characteristics (N=175)

## 6.5.2 Descriptive Statistical Results – Primary Data (Board Process)

The following descriptive results of board process variables are based on 175 listed companies. For analysis purposes, companies used the average scores of every board process item.

## 6.5.2.1 Performance of Independent Directors

Table 6.14 provides the descriptive statistics results on performance of independent directors. The result shows that the item "interactive communication of independent directors with other board members" (P9) rated the highest, with a mean of 3.87. The companies perceive that their independent directors are competent to interact with other directors on the board. This is consistent with Leblanc's (2004) view in which he argues that interaction with other board members is essential to enable

board members to work together. The word independence is subjective since there are cases in which the independent director is an ex-employee of the company or has a personal relationship with other board members. Nevertheless, the most important point is that they must be able to speak their mind (Leblanc, 2004) and share information or other resources in board meetings (Finkelstein & Mooney, 2003).

The statement "independent directors' contribution in board committees" (P10) rated the second highest with a mean of 3.83. This implies that independent directors do contribute significantly to board committees.

#### Table 6.14

*Descriptive Statistics of Performance of Independent Directors' Attributes (N=175)* 

Variables	Denoted by	Mean	Std Deviation	Min	Max
Interactive communication of independent directors with other board members (P9)	INDPERF	3.87	0.67	1.00	5.00
Independent directors' contribution in board committees (P10)		3.83	0.69	1.00	5.00
Ability to apply industry experience (P6)		3.77	0.81	1.00	5.00
Understanding of company business (P1)		3.76	0.68	1.50	5.00
Relationship with the CEO (P2)		3.73	0.62	1.00	5.00
Record of constructively challenging and debating issues during board meetings (P5)		3.69	0.68	1.00	5.00
Effectiveness of independent directors in representing the interests of shareholders (P7)		3.68	0.79	1.00	5.00
Effectiveness of independent directors in representing the interests of stakeholders (P8)		3.67	0.72	2.00	5.00
Ability to provide strategic vision (P4)		3.57	0.67	2.00	5.00
Relationship with senior management (P3)		3.50	0.78	2.00	5.00

Meanwhile, the item "independent directors' relationship with senior management" (P3) rated the lowest with a mean of 3.50. Boards seem to be unsure of the relationship between independent directors and senior management of the company. This may be because two types of relationships exist. The first is marked by a good relationship with senior management and the second type is the opposite. The first type might lead to a decline in the monitoring function during board deliberation (Westphal, 1999) because independent directors are normally appointed to a company based on friendship. In contrast, the second type refers to independent directors whose relationship with the senior management is not as good because of a low frequency of board meeting. The lesser number of meetings might lead to lesser communication between the independent directors and senior management (Finkelstein & Mooney, 2003).

#### 6.5.2.2 Board's Risk Oversight

In part B of the questionnaire (Question 4), directors were asked to rank the board's main role in strategic planning. For analysis purposes, the response of a company with a single respondent was scored as 1. The scores of companies with multiple respondents were averaged. Based on the results shown in Table 6.15, 20.6% of the companies identify "define strategic framework" as the board's major role in strategic planning, followed by "approve strategy" (18.9%) and "decision making" (13.7%). "Guide" falls into fourth place.

Of note is one significant finding that relates to Malaysian boards' involvement in risk management. The item ranks fifth most important among the board's main roles in strategic planning. However, the result differs from Ingley and Van der Walt's (2005) study indicating that the boards of New Zealand companies rank the role in managing risks as the least important. This phenomenon might be explained by Malaysian boards being exposed in handling business activities during the financial crisis. Hence, the directors believe the board should pay more attention to risk management activities. This leads the board to be more cautious on matters that bring high risk to the company (Noriza, 2010).

	Number of companies	Percent (%)
Define strategic framework	36	20.6
Approve	33	18.9
Decision making	24	13.7
Guide	19	10.9
Risk management	16	9.1
Review	15	8.6
Discuss	15	8.6
Monitor	7	4.0
Ratify	7	4.0
Help formulate	3	1.7
Total	175	100.0

Table 6.15Main Board Roles in Strategic Planning (N=175)

In relation to the board's major role in strategy, Ingley and Van der Walt (2005) support these findings. Developing a strategic framework is considered the main board task of Malaysian companies. In addition, the finding is consistent with the result of Question 3 in part B of the questionnaire (Table 6.16). Respondent were asked to describe board involvement in developing corporate strategy. The result in Table 6.16 indicates that the strategy of 92.6% of Malaysian companies is developed with involvement of the board of directors. None of the boards develops company strategies all alone.
	Number of companies	Percent (%)
Management alone develops strategy	13	7.4
Management and board share strategy development	54	30.9
Board alone develops strategy	0	0.0
Management develops strategy and obtains board approval	91	52.0
Strategy is mostly developed by the board	17	9.7
Total	175	100.0

Table 6.16Board's Involvement in Developing Corporate Strategy (N=175)

The results regarding board approaches to risk management based on 175 Malaysian listed companies are shown in Table 6.17. The statistic shows that Malaysian boards do agree on risk management practices. The item "board receives updates from senior management on risk management matters" (R3) scores the highest mean at 4.09. Board that always get the latest information on actions implemented by the company in risk management and control systems enables them to make major decisions effectively (Cheah & Lee, 2009).

Variables	Denoted by	Mean	Std Deviation	Min	Max
Receives updates from senior management on risk management matters (R3)	RISKOV	4.09	0.70	1.50	5.00
Requires senior management to deliberate on emerging risks that the senior management perceives the company will face (R4)		4.00	0.78	1.00	5.00
Communicate on risk tolerance to senior management (R1)		3.99	0.77	1.00	5.00
Raise concerns on risk management (R2)		3.98	0.85	1.00	5.00
Reviews its strategy during crisis (R7)		3.92	0.83	1.00	5.00
Board has necessary financial knowledge to analyze financial statements (R6)		3.91	0.77	1.00	5.00
Attends relevant risk management training (R8)		3.87	0.74	1.40	5.00
Encourages senior management to use scenario analysis in identifying potential vulnerabilities (R5)		3.70	0.82	1.00	5.00

Table 6.17Descriptive Statistics of Board's Risk Oversight Attributes (N=175)

The second highest mean (4.00) is "board requires senior management to deliberate on emerging risks that senior management perceives the company will face" (R4). Boards are able to plan for any significant or abnormal events when they frequent ask the management to deliberate on risks (Murphy & Brown, 2009). In relation to financial knowledge, most of the boards perceive that they have the necessary knowledge in finance to analyze financial statements, with a mean of 3.91.

### 6.5.2.3 CEO Performance Evaluation

Table 6.18 presents the results concerning the CEO performance evaluation. As a whole, the mean ranges from 3.34 to 3.93 for all the items discussed in this part. Most of the Malaysian boards have appropriate approaches in evaluating the CEO's performance. This is consistent with Sang-Woo and II's (2004) finding that Malaysian boards are comparatively active in evaluating the performance of CEOs as compared to Thai and Korean companies.

In this study, the highest mean value comes from the statement "board communicates their expectations clearly to the CEO" (C3), at 3.93. The second highest mean is "board provides avenue for CEO to explain the state of CEO's performance" (C4) at 3.82. Meanwhile, the item "board establishes an exit mechanism tied to CEO's performance" (C6) rated the lowest with a mean of 3.34. The result for C6 indicates that most of the boards are unsure whether there is an appropriate mechanism to discontinue the CEO's services in their company policy.

Variables	Denoted by	Mean	Std	Min	Max
			Deviation		
Board communicates their expectations clearly to the CEO (C3)	CEOEV	3.93	0.84	1.00	5.00
Board provides avenue for CEO to explain the state of CEO's performance (C4)		3.82	0.77	1.00	5.00
Board evaluates CEO by using key performance indicator (KPI) (C1)		3.69	0.87	1.00	5.00
Board accepts feedback from CEO during the process of setting KPI (C2)		3.68	0.79	1.00	5.00
Board implements a rewards system based on long-term performance (C5)		3.60	0.88	1.00	5.00
Board communicates to the CEO on his/her success based on the evaluation result (C7)		3.60	0.82	1.00	5.00
Board communicates to the CEO on his/her failures based on the evaluation result (C8)		3.60	0.85	1.40	5.00
Board establishes an exit mechanism tied to CEO's performance (C6)		3.34	0.84	1.00	5.00

# Table 6.18Descriptive Statistics of CEO Performance Evaluation (N=175)

In addition, the result in Table 6.19 shows that 124 companies (70.9%) have a formal procedure to evaluate CEO performance while 51 companies (27.4%) use informal procedures.

Table 6.19

Total

Procedure for Conducting Performance Evaluation of Senior Management (N=175)							
	Number of companies						
Conducted formally	124	70.9					
Conducted informally	51	29.1					

175

100.0

## 6.5.2.4 Directors' Accessibility to Information

Table 6.20 displays the results on the accessibility of information by the directors. The average mean for all the items slanted to the high side, from 3.87 to 3.97. This implies that most of the Malaysian boards do have access to company information. The item "when directors need to refer to company business records and books of accounts, their access is denied" (A2) is negatively worded. The results shown below are after the statements (A2) have been recoded. The item "directors receive sufficient materials/information before board meetings" (A5) rated the highest with a mean value of 3.97.

This result is consistent with Sang-Woo and Il (2004), who find that Malaysian directors obtain sufficient information ahead of board meeting as compared to those in Thailand and Indonesia. The result also shows that the item "directors have access to information via management" (A1) ranked as the second most important. The result indicates that boards can easily access company information from management.

Variables	Denoted by	Mean	Std	Min	Max
			Deviation		
Directors receive sufficient materials/information before board meetings (A5)	ACCESSINF	3.97	0.78	1.00	5.00
Directors have access to information via management (A1)		3.93	0.80	1.00	5.00
When outside professional services are needed, the expenses will be borne by the company (A3)		3.92	0.77	1.00	5.00
When directors need to refer to company business records and books of accounts, their access is denied (A2)		3.89	0.87	1.00	5.00
Directors discuss issues thoroughly with management (A4)		3.87	0.74	1.00	5.00

# Table 6.20Descriptive Statistics of Directors' Accessibility to Information (N=175)

## 6.5.2.5 Overall Descriptive Statistics of Board Process Data (N=175)

In this study, the Malaysian company is chosen as the unit of analysis. Therefore, with regards to board process variables (performance of independent directors, board's risk oversight, CEO performance evaluation, and directors' accessibility to information), the respondents' answers are calculated based on the average value. Table 6.21 provides the descriptive data on board process based on 175 public listed companies.

Table 6.21Descriptive Statistics of Board Process Variables (N=175)

Variables	Denoted by	Mean	Std Deviation	Min	Max
Performance of independent directors	INDPERF	3.70	0.55	1.60	5.00
Board's risk oversight	RISKOV	3.93	0.56	1.50	5.00
CEO performance evaluation	CEOPE	3.65	0.67	1.38	5.00
Directors' accessibility to information	ACCESSINF	3.92	0.59	1.40	5.00

Table 6.21 shows that the mean value for the effectiveness of independent directors is 3.70, ranging from 1.60 to 5.00. The mean value for board's risk oversight and CEO performance evaluation is 3.93 and 3.65 respectively. Meanwhile, the mean for accessibility of information is 3.92. The findings reveal that Malaysian boards practice satisfactory level of governance towards the company and top management.

## 6.5.3 Summary of Descriptive Analysis

The summary of descriptive statistics for board characteristics (directors' tenure and risk appetite), board composition (board size), board process (performance of independent directors, board's risk oversight, CEO performance evaluation, and directors' accessibility to information), and company characteristics (company leverage, return on equity, size, and age) are based on 175 public companies. Table 6.22 presents the descriptive statistics summary. The scores of every variable were averaged out for the three-year period (2007 to 2009). These average scores were used in the analysis.

## Table 6.22

Descriptive Statistics Summary for Board Characteristics, Composition, Process, and Company Characteristics (N=175)

Variable	Abbreviation	Mean	Median	SD	Min	Max
Leverage	LEV	41.61	39.76	20.63	4.63	89.64
Company performance	ROE	2.61	7.44	28.47	-213.89	62.58
Board size	BSIZE	7.00	7.00	1.61	4.00	12.00
Directors' tenure	DTEN	6.91	6.37	3.98	0.63	17.21
Directors' risk appetite	RISKAPP	54.66	54.72	4.96	41.95	67.79
Performance of independent directors	INDPERF	3.70	3.80	0.55	1.60	5.00
Board's risk oversight	RISKOV	3.93	4.00	0.56	1.50	5.00
CEO performance evaluation	CEOPE	3.65	3.75	0.67	1.38	5.00
Directors' accessibility to information	ACCESSINF	3.92	4.00	0.59	1.40	5.00
Company age	AGECO	15.28	12.00	11.64	2.00	48.00
Company size	CSIZE	1,884.2M	3,832.7M	6,787.5M	25.84M	69,643.17M

Table 6.23 displays the summary of descriptive statistics for managerial ownership, leadership structure, and company sector. These variables are represented by dummy variables. The scores of the managerial and leadership structure data for the three-year period (2007 to 2009) were averaged and these average scores were used in the analysis.

Company Sec	(N=1/3)		
		Frequency	Percentage
Managerial	MOWN		
ownership			
At least 5%	1	77	44.0%
Less than	0	98	56.0%
5%			
Leadership	LEADS		
structure			
Non-dual	1	153	87.4%
Dual	0	22	12.6%
Construction	SECCONS		
Construction	1	22	12.6%
Otherwise	0	153	87.4%
Industrial	SECIP		
Product			
IP	1	59	33.7%
Otherwise	0	116	66.3%
Consumer	SECCP		
Product			
СР	1	23	13.1%
Otherwise	0	152	86.9%
Trading and	SECTS		
services			
TS	1	46	26.3%
Otherwise	0	129	73.7%
Others	SECOTH		
Others	1	25	14.3%
Otherwise	0	150	85.7%

Descriptive Statistics Summary for Managerial Ownership, Leadership Structure and Company Sector (N=175)

Table 6.23

## 6.6 Assumptions in Multiple Regression Analysis

Multiple regression analysis combines more than one explanatory variable to identify the influences of those variables on the dependent variable (Gujarati, 2006). This type of analysis is also a form of general linear modeling (Hair *et al.*, 2010). Therefore, there are several potential econometric problems associated with the estimation of the model. These problems need to be checked in order to ensure that the interpretations of the regression models are valid. Six major assumptions discussed in this section are ratio of cases to independent variables, outliers, normality, linearity, homoscedasticity and multicollinearity. The results indicate that all assumptions have been met. The assumptions in multiple regression analysis are discussed below.

#### 6.6.1 Ratio of Cases to Independent Variables

Each of the variables contained in Models 1 to 5 was put through data screening procedures before the variables were analyzed. At the early stage, each of the questionnaires was checked for completeness. Of the 272 returned questionnaires, nine were incomplete. Specifically, these respondents did not complete part A of the questionnaire, which contained essential questions for addressing the extent of company board effectiveness. Removing the incomplete responses resulted in a total of 263 usable questionnaires.

This study uses the public listed company as the unit of analysis. The usable questionnaires represented 175 companies. Suggestions made by Sekaran (2003) and Coakes, Steed, and Price (2008) are followed in determining the appropriate sample. Sekaran (2003) suggests that the number of samples for regression analysis should be 10 times the number of variables, while Coakes *et al.* (2008) indicate that the appropriate minimum number of samples is 5 times the number of variables. This study includes a maximum of 15 variables in a model (see Model 1); thus, at least 150 (10 x 15) samples are needed, and the minimum number of the sample is 75 (5 x 15). According to these guidelines, the sample size of 175 is sufficient for analysis.

#### 6.6.2 Outliers

Previous literature highlights various methods for identifying outliers, including boxplot, normal probability plot and detrended normal probability plot for individual variable (Coakes *et al.*, 2008). In addition, the Mahalanobis distance values can detect any multivariate outliers among independent variables (Coakes *et al.*, 2008). Therefore, the Mahalanobis values are used to check for outliers in every regression result.

The significant outliers can be seen in Model 3, in which the return on equity (ROE) is used as a proxy for company performance. The Mahalanobis  $D^2$  values<sup>15</sup> indicate that there is an observation (case 78) which are distinctly different from the others, since the value of 31.54 is slightly greater than the critical value of 31.264 at an alpha level of 0.001. The critical value is based on the number of variables included in every model (Tabachnik & Fidell, 2007).

One possible explanation for the existence of outliers is the violation of ROE in the years 2007 to 2009. The violation is significant in the year 2008 and 2009. During those years, the Malaysian economy was affected by the US financial crisis and most Malaysian companies experience lower sales as the local and international demand reduced significantly (Bank Negara Malaysia, 2009), resulting in a sharp decline in return to investors' equity. Thus, it seems logical to retain those outliers since they reflect the reality of that period of time (Hair *et al.*, 2010). In addition, the results shows that the change in  $R^2$  is not significant either with the inclusion or exclusion of the outliers ( $R^2 = 0.219$  with outliers included and  $R^2 = 0.217$  with outliers excluded).

<sup>&</sup>lt;sup>15</sup> Mahalanobis  $D^2$  is one of the statistics used to identify the outliers in multiple regression (Hair *et al.*, 2010).

According to Tabachnik and Fidell (2007), when multivariate outliers do not significantly affect the overall model, it is appropriate to retain them.

## 6.6.3 Normality

Various methods can be used to test normality, including histogram, boxplot, normal probability and stem-and-leaf plots. A number of statistical tests can also be used for this purpose, including the Kolmogorov-Smirnov or Shapiro Wilk statistic, skewness and kurtosis statistic (Tabachnick & Fidell, 2007). Four approaches are used in this study: skewness, kurtosis, histogram and normal probability. In the initial stage, the skewness and kurtosis values of all variables are identified. Table 6.24 presents the test on normality using skewness and kurtosis statistics.

Table 6.24

Skewness and Kurtosis Statistics

	Skewness statistic	Kurtosis statistic
Board size	0.301	-0.068
Directors' tenure	0.528	-0.129
Directors' risks appetite	-0.102	0.168
Performance of independent directors	-0.442	0.240
Board's risk oversight	-0.049	-0.010
CEO performance evaluation	-0.063	0.285
Directors' accessibility to information	-0.169	0.106
Company age	0.322	0.880
Company size	7.331	62.961
Leverage	1.380	-0.737
Return on equity	-0.862	2.982

The appropriate ranges for skewness and kurtosis are -0.5 to 0.5 and -1 to 1, respectively (Foster, Stine and Waterman, 1998). Table 6.24 shows that company size, leverage and return on equity fall in an unacceptable range for skewness and kurtosis. Since these data are not normally distributed, they need to be transformed to make them more systematically distributed. Table 6.25 shows the values of transformation of company size. The result indicates that log and square-root transformations resemble normal distribution.

Transformation	Formula	Test of	normality	
		Statistic	Sig	
Log	log(CSIZE)	0.062	$0.200^{*}$	
Square	CSIZE^2	0.179	0.000	
Cube	CSIZE^3	0.260	0.000	
Square-root	sqrt(CSIZE)	0.045	$0.200^{*}$	
Reciprocal root	1/sqrt(CSIZE)	0.117	0.000	
Reciprocal	1/CSIZE	0.184	0.000	
Reciprocal square	1/(CSIZE^2)	0.355	0.000	
Reciprocal cube	1/(CSIZE^3)	0.431	0.000	
Raw/identity (untransformed)	CSIZE	0.088	0.002	

Table 6.25Ladder of Powers for Variable 'CSIZE'

\* This is a lower bound of the true significance.

In order to determine the best distribution of company size data, the data were again checked for skewness and kurtosis after the transformation. The result indicates that log transformation is more appropriate than square root transformation since it fulfilled the acceptable range for both skewness and kurtosis.

Next, the data for company leverage were transformed using the same procedure. The result shows that log transformation is the most appropriate form in this case. The transformation is consistent with previous studies that use the same approach for company leverage (Norman *et al.*, 2005) and company size (Rashidah *et al.*, 2005; Norman *et al.*, 2005; Driffield *et al.*, 2007; Noor Afza & Ayoib, 2009).

Regarding data for return on equity, various transformations increased the values of skewness and kurtosis significantly. Therefore, the decision was made to retain the data as it is. This is consistent with Tabachnik and Fidell (2007), who argue that data should not be transformed if transformation does not alter the data or causes the data values to be significantly more unacceptable. In addition, the original interpretation of the data is remained.

Zikmund *et al.* (2009) suggest that the histogram is the most useful tool to provide a quick assessment of data distribution. Hence, the histogram and normal probability are used in analyzing data for Models 1 and 3 (Appendices J and K, respectively). Both models are the main models used in the study. The two histograms show that the assumptions of normality have been met.

#### 6.6.4 Linearity

Linearity refers to the assumption that the changes in a dependent variable are constant across the range of values for independent variables (Hair *et al.*, 2010). The easiest method for determining linearity is by using residual plots, wherein the standardized predicted value (\*ZPRED) is plotted against the standardized residual (\*ZRESID). Two dependent variables are used in this study – company leverage (in Models 1-2.3) and performance (in Models 3-5). The normal p-p plot and scatter plot are included for Model 1 and Model 3 (Appendix J and K). In both cases, the model represents the initial model used before conducting the analysis on the effects of moderating and mediating variables.

As shown in Appendix J and Appendix K, the normal p-p plot confirms the normality assumption in which the dots assemble on a straight line as per Model 1 and Model 3. In addition, the scatter plots of both models show no relationship between the residual and predicted values. These findings are consistent with the assumption of linearity (Coakes *et al.*, 2008).

#### 6.6.5 Homoscedasticity

In order to demonstrate homoscedasticity, the variance of the residual terms should be constant at each level of the independent variables (Gujarati, 2006). By plotting the standardized residual (\*ZRESID) against the predicted values (\*ZPRED), the findings can provide results on the residual issue. The most common patterns that exhibit the presence of heteroscedasticity are triangle-shaped, diamond-shaped, and non-linear-shaped (Hair *et al.*, 2010). As no such pattern appear (refer Appendix J and K), this implies that the heteroscedasticity is not a problem in this study.

## 6.6.6 Multicollinearity

Another major assumption of the classical regression model is the existence of multicollinearity among the variables included in the regression model. Multicollinearity exists when a variable can be explained by other variables in the regression model (Hair *et al.*, 2010). The adverse effect of this assumption is that high levels of collinearity increase the probability that a good predictor variable will be found to be non-significant.

Various methods can be used to identify multicollinearity. In this study, the Variance Inflation Factor (VIF), Pearson product-moment correlation coefficient (correlation matrix) and Durbin Watson are used. The VIF is able to identify whether a predictor variable has any linear relationship with any other predictor variables. Variables with VIF values greater than 10 show high multicollinearity (Chatterjee & Hadi, 2006). When the tolerance value (the reciprocal of VIF or 1/VIF) approaches 0, high multicollinearity is indicated.

The first research objective of this study is to determine the relationship between corporate governance variables and company leverage. This relationship is presented in Model 1. Table 6.27 confirms that there is no evidence of multicollinearity, since the variance inflation factor (VIF) value is between the range of 1.132 and 1.822 for Model 1.

The second research objective of this study is to determine the interaction effect of managerial ownership (MOWN) and board process (BPROCESS) on company leverage. Model 2 is constructed to fulfill this objective. The establishment of moderation analysis in Model 2 does not show any multicollinearity problem. Overall, the VIF value is in the range between 1.118 and 6.897 (see Table 6.28). The high value of VIF in moderation analysis is due to the same variables used in constructing a new variable which is referred as interaction term and being regressed together on a particular subject (Chennamaneni, Echambadi and Hess, 2008). In this study, the MOWN\*BPROCESS is constructed from the variables of MOWN and BPROCESS.

Model 3 is intended to identify the effects of board process on Malaysian company performance. As shown in Table 6.30, the VIF value falls in the acceptable range between 1.125 and 1.791. Model 4, which is constructed to evaluate the company leverage effects on company performance, is discussed further in Section 6.8.2.1, and the result of the Model 4 analysis is presented in Table 6.31. Table 6.31 confirms there is no issue of multicollinearity since the variance inflation factor (VIF) values fall in the range of 1.102 and 1.772.

The final objective of the study is to determine the effect of company leverage (the mediator variable) on the relationship between board process and company performance. For mediation analysis, the VIF values for all models are also in the acceptable range, between 1.125 and 1.799 (Table 6.32).

Further, multicollinearity is also assessed through the correlation matrix of variables in Models 1-2.3 in Table 6.26 (Section 6.8.1) and Models 3-5 in Table 6.29 (section 6.8.2). The matrix may detect any high collinearity among independent variables when the correlation value is above 0.8. As the variable coefficients do not exceed 0.8 (Hair *et al.*, 2010), the multicollinearity problem is not a concern for all models.

Regarding autocorrelation, which refers to a variable that is highly correlated with another variable (Gujarati, 2006), this study uses the Durbin Watson test. When the Durbin Watson value is in the range of 0 to 4, there is no significant evidence of autocorrelation. The closer the value is to 2, the less autocorrelation exists (Gujarati, 2006). The results shown for all models in Table 6.27-6.32 are in the range between 1.658 and 1.765, confirming that there is no problem of autocorrelation.

## 6.7 Multiple Regression Analysis

The coefficients of the regression model are tested to evaluate the significance and strength of each independent variable's effect upon dependent variables. The *p*-value corresponding to each independent variable determines whether the variable is significantly related to the dependent variable.

This study employs multiple regression analysis to further test the relationship between corporate governance attributes and company leverage using the regression model (Model 1). This analysis is similar to the method used by Yu *et al.* (2002), Rashidah *et al.* (2005), and Noriza (2010). The moderator effect of managerial ownership on the relationship between board process variables and company leverage is tested in Model 2.1-Model 2.3. An analysis is performed to determine the mediation effect of company leverage on the relationship between board process and company performance. Prior to this analysis, Model 3 is developed and tested to confirm the relationship between board process and company performance. The influence of leverage on company performance is also tested in Model 4. Finally, mediation analysis is conducted through three steps of hierarchical regression.

#### 6.7.1 Capital Structure Decisions (Model 1 to Model 2.3)

The relationship between board attributes and capital structure decisions is examined in Model 1, while Model 2.1 to Model 2.3 report the moderator effect on the relationship between board process variables and company leverage. The correlation coefficients of Models 1-2.3 are shown in Table 6.26.

Table 6.26	
Spearman's Rho Correlations (Model 1 to Model 2.3)	

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
BSIZE (1)	1.00	0.181**	0.134*	0.094	0.069	0.113	0.092	0.078	-0.012	0.094	0.290**	0.014	0.066	-0.050	-0.047	-0.050
LEADS (2)		1.00	0.102	-0.105	0.036	-0.026	-0.086	-0.052	-0.024	-0.042	0.040	0.047	0.035	0.045	-0.165**	0.044
RISKAPP (3)			1.00	0.376***	0.053	0.236**	0.189*	0.196**	-0.322***	0.329***	0.302***	-0.165*	-0.028	0.081	0.024	-0.163**
DTEN (4)				1.00	0.139*	0.059	0.060	0.099	-0.074	0.380**	0.151**	-0.014	0.114	0.060	-0.119	0.084
NDPERF (5)					1.00	0.110	0.131	0.098	0.099	0.026	-0.109	0.088	0.080	0.061	-0.211***	-0.369***
RISKOV (6)						1.00	0.114	0.102	-0.032	0.019	0.029	-0.047	-0.034	0.012	-0.046	-0.407***
CEOPE (7)							1.00	0.124	0.005	0.063	0.020	-0.058	-0.052	0.072	-0.073	-0.426***
ACCESSINF (8)								1.00	-0.109	0.055	-0.008	-0.045	-0.063	0.008	0.016	-0.375***
MOWN (9)									1.00	-0.279***	-0.335***	0.110	0.088	0.009	-0.038	-0.150**
AGECO (10)										1.00	0.238***	-0.067	0.037	0.130*	-0.080	0.003
CSIZE (11)											1.00	-0.080	0.014	-0.112	0.047	0.175**
SECIP (12)												1.00	-0.191**	-0.274***	-0.420***	0.020
SECCONS (13)													1.00	-0.106	-0.162**	0.167**
SECCP (14)														1.00	-0.232***	-0.124
SECTS (15)															1.00	0.167**
LEV (16)																1.00

\*\*\*, \*\*, \* indicates that the correlation is statistically significant at 1%, 5%, 10% respectively. Please refer to sections 6.7.1.1 and 6.7.1.2 for the description of the variables used in Model 1 and Model 2.

## 6.7.1.1 Results of Model 1 (Hypothesis 1 to Hypothesis 8)

The equation in Model 1 below summarizes the analysis of the company leverage and board governance regression models. The objective of Model 1 is to investigate the relationships between board governance characteristics and company leverage.

Fourteen independent variables are included in Model 1. Company leverage (LEV) is the dependent variable, board characteristics (BSIZE, LEADS, RISKAPP, DTEN) and process (RISKOV, INDPERF, CEOPE, ACCESSINF) are the independent variables and company age (AGECO) and size (CSIZE) are the control variables. The sectors included to control for industry type are industrial product (SECIP), construction (SECCONS), consumer product (SECCP) and trading and services (SECTS). Analysis is performed using SPSS regression. Model 1 is presented below, followed by the list of variables with their definitions.

Where;	
LEV	Natural log of total debts divided by natural log of total assets
bo	Regression coefficient for intercept
Bi	Regression coefficient associated with independent variable X <sub>i</sub>
BSIZE	Number of directors on the board
LEADS	1 if the positions of CEO and Chairman are held by different people; 0 otherwise
RISKAPP	Mean age of directors
DTEN	Average years in directors' position
RISKOV	Directors' agreement on their involvement in managing risks, on a scale ranging from "Strongly disagree" (1) to "Strongly agree" (5)
INDPERF	Directors' perception of performance of independent directors, on a scale ranging from "Very poor" (1) to "Outstanding" (5)
CEOPE	The extent of CEO is being evaluated by formal procedures, on a scale ranging from "Strongly disagree" (1) to "Strongly agree" (5)
ACCESSINF	Directors' agreement on their accessibility to information in the company, on a scale ranging from "Strongly disagree" (1) to "Strongly agree" (5).
AGECO	Average years listed in Bursa Malaysia

CSIZE	Average of natural logarithm (total assets)
SECIP	Industrial Product; 1 if true, otherwise 0
SECCONS	Construction; 1 if true, otherwise 0
SECCP	Consumer product; 1 if true, otherwise 0
SECTS	Trading and services; 1 if true, otherwise 0
ei	Error term

Table 6.27 summarizes the statistics resulting from running the equation of Model 1.

Table 6.27

Regression Model Summary Statistics of Company Leverage on Board Variables (N=175)

Dependent variable	Acronym	Model 1 (LEV)	VIF
Constant		( <i>t</i> statistics in parentheses) 2.958	
		(9.800)***	
Board size $(H_1)$	BSIZE	-0.008	1.132
		(-0.118)	
Leadership structure (H <sub>2</sub> )	LEADS	0.049	1.158
		(0.731)	
Directors' tenure $(H_3)$	DTEN	-0.015	1.291
		(-0.203)	
Directors' risk appetite (H <sub>4</sub> )	RISKAPP	-0.128	1.413
		(-1.712)*	
Performance of independent directors (H <sub>5</sub> )	INDPERF	-0.142	1.400
		(-1.911)*	
Board's risk oversight $(H_6)$	RISKOV	-0.189	1.385
		(-2.559)**	
CEO performance evaluation (H <sub>7</sub> )	CEOPE	-0.186	1.472
		(-2.443)**	
Directors' accessibility to information (H <sub>8</sub> )	ACCESSINF	-0.146	1.263
		(-2.068)**	
Company age	AGECO	0.027	1.293
		(0.379)	
Company size (log total asset)	CSIZE	0.174	1.257
		(2.469)**	
Industrial product	SECIP	0.053	1.813
1		(0.625)	
Construction	SECCONS	0.176	1.298
Construction	SLECONS	(2.463)**	1.270
Consumer product	SECCP	-0.008	1.473
Consumer product	SLeel	(-0.110)	1.475
Trading and services	SECTS	0.155	1.822
Trading and services	SECIS	(1.824)*	1.022
$R^2$		0.367	
Adjusted $R^2$		0.312	
<i>F</i> statistic		6.640***	
Significance of F		0.000	
Durbin-Watson		1.735	

\*\*\*, \*\*, \* indicates that regression analysis is statistically significant at 1%, 5%, and 10%, respectively.

The results in Table 6.27 show that eight of fifteen independent variables (directors' risk appetite, board's risk oversight, performance of independent directors, CEO performance evaluation, directors' accessibility to information, company assets, trading and services and construction industries) have a significant relationship with company leverage (debt ratio). In relation to board structure, the coefficient of directors' risk appetite is significant at the 10% level of significance. The finding indicates a positive<sup>16</sup> relationship, as predicted earlier in the study. This result supports Hypothesis 4 by demonstrating a positive relationship between directors' risk appetite and company leverage. However, the results demonstrate that board size, leadership structure and directors' tenure are not significantly related to company leverage (p > 0.1); therefore, Hypotheses 1, 2 and 3 are not supported.

Regarding board process, board's risk oversight, CEO performance evaluation and directors' accessibility to information are negatively related to leverage at the 5% level of significance. The results show support for Hypotheses 6, 7 and 8. Hypothesis 5 is also supported, as the performance of independent directors is found to have a negative relationship with leverage at the 10% level of significance.

Even though there is no hypothesis related to the control variables, the result indicates that company size has a positive relationship with company leverage at the 5% significance level. In addition, companies involved with construction as well as trading

<sup>&</sup>lt;sup>16</sup> Directors' age is the proxy for directors' risk appetite, as older directors are likely to have less appetite for risk than younger directors. The negative coefficient in the result reflects that older directors are more likely to choose low-risk financing structures due to their low appetite for risk. Therefore, the directors' appetite and capital structure decision are positively correlated.

and services are found to have a positive relationship with company leverage at the 5% and 10% significance levels, respectively. Nevertheless, the effects of company age and companies' involvement in industrial and consumer products on company leverage are not significant at p > 0.1.

#### 6.7.1.2 Analyses on the Moderator Effects - Model 2.1 to Model 2.3 (Hypothesis 9)

The moderated relationship can be expressed as follows:

$$Y = b_o + b_1 X_1 + b_2 X_2 + b_3 X_1 X_2$$

where;

 $b_0$  = intercept  $b_1X_1$  = linear effect of  $X_1$   $b_2X_2$  = linear effect of  $X_2$  $b_3X_1X_2$  = moderator effect of  $X_2$  on  $X_1$ 

In this moderation analysis, managerial ownership represents the moderator variable. This is similar to Busija's (2006) study, which treats ownership structure as a moderator variable on the relationship between corporate governance attributes and company leverage among family businesses in the US. However, there is still a need for studies that incorporate the effect of ownership structure on the relationship between board process and company leverage. Therefore, this study is designed to examine the interaction effect of board process and managerial ownership on company leverage.

Multiple regression analysis is performed in three main stages (Baron & Kenny, 1986). In the first stage, the variables under board process are regressed together with company leverage. Then, in the second stage, the managerial ownership, as the moderator variable, is inserted into the model in order to determine its effect on company leverage. In the final stage, the moderator variable (board process multiplied by managerial ownership) is introduced into the regression equation. There are four attributes under board process; an aggregate measure is used in calculating the average value of board process.

Following Baron and Kenny (1986), three steps of hierarchical regression are performed in the moderation analysis. The first regression equation regresses the board size (BSIZE), leadership structure (LEADS), directors' tenure (DTEN), directors' risk appetite (RISKAPP), board process (BPROCESS) and control variables (AGECO, CSIZE, SECIP, SECCONS, SECCP and SECTS) on company leverage (LEV). The regression equation for the first step (Model 2.1) is as follows:

The second regression equation is conducted by inserting managerial ownership (MOWN) as a new variable together with board size (BSIZE), leadership structure (LEADS), directors' tenure (DTEN), directors' risk appetite (RISKAPP), board process (BPROCESS) and control variables (AGECO, CSIZE, SECIP, SECCONS, SECCP and SECTS). These variables are then regressed together with company leverage (LEV). The second regression equation (Model 2.2) is shown below:

 $\begin{aligned} \text{Step 2: LEV} = & b_o + B_1 BSIZE + B_2 LEADS + B_3 RISKAPP + B_4 DTEN + B_5 PROCESS + B_6 MOWN \\ & + B_7 AGECO + B_8 SIZE + B_9 SECIP + B_{10} SECCONS + B_{11} SECCP + B_{12} SECTS + e_i \end{aligned}$ 

The effect of managerial ownership on board process and company leverage is tested in the third (final) stage. The third regression equation is performed by adding the interaction between managerial ownership (MOWN) and board process (BPROCESS), as a new variable called MOWN\*BPROCESS, together with board size (BSIZE), leadership structure (LEADS), directors' tenure (DTEN), directors' risk appetite (RISKAPP), board process (BPROCESS), managerial ownership (MOWN) and the control variables (AGECO, CSIZE, SECIP, SECCONS, SECCP and SECTS). These variables are then regressed on company leverage (LEV). The final regression equation (Model 2.3) is as follows:

Where;	
LEV	Natural log of total debts divided by natural log of total assets
bo	Regression coefficient for intercept
B <sub>i</sub>	Regression coefficient associated with independent variable X <sub>i</sub>
BSIZE	Number of directors on the board
LEADS	1 if the position of CEO and chairman is held by different person and 0
	otherwise
RISKAPP	Mean age of directors
DTEN	Average years in directors' position
BPROCESS	The average value of board process variables (performance of independent
	directors, board's risk oversight, CEO performance evaluation and directors'
	accessibility to information by the directors)
MOWN	1 if the average executive directors' shareholding represents at least 5% and
	0 otherwise
AGECO	Average years listed in Bursa Malaysia
CSIZE	Average of natural logarithm (total assets)
SECIP	Industrial product; 1 if true, otherwise 0
SECCONS	Construction; 1 if true, otherwise 0
SECCP	Consumer product; 1 if true, otherwise 0
SECTS	Trading and services; 1 if true, otherwise 0
ei	Error term

The results of the moderation analysis are shown in Table 6.28.

Table 6.28

Variables	Step 1		Step 2		Step 3	
	(column 1)		(column 2)		(column 3)	
	Coefficients	VIF	Coefficients	VIF	Coefficients	VIF
Darze	( <i>t</i> statistic)	1.120	( <i>t</i> statistic)	1.107	( <i>t</i> statistic)	1 1 2 5
BSIZE	-0.009	1.130	-0.008	1.135	-0.007	1.137
	(-0.129)		(-0.102)		(-0.114)	
LEADS	0.051	1.145	0.048	1.145	0.061	1.160
	(0.765)		(0.729)		(0.932)	
RISKAPP	-0.131	1.393	-0.166	1.452	-0.160	1.455
	(-1.779)*		(-2.239)**		(-2.169)**	
DTEN	-0.012	1.282	-0.008	1.282	-0.030	1.327
	(-0.169)		(-0.110)		(-0.432)	
BPROCESS	-0.480	1.118	-0.479	1.118	-0.484	1.120
	(-7.275)***		(-7.370)***		(-7.485)***	
<b>Moderating variable</b> MOWN			-0.163	1.273	-0.415	6.711
			-0.165 (-2.347)**	1.273	-0.415 (-2.624)**	0./11
Interaction term			(-2.347)**		(-2.024)**	
MOWN*BPROCESS					0.284	6.897
INCOLL DI ROCLOG					(1.772)*	0.077
Control variables					· · · · · -/	
AGECO	0.029	1.279	0.001	1.316	0.012	1.327
	(0.406)		(0.012)		(0.174)	
CSIZE	0.169**	1.221	0.133	1.285	0.142	1.292
	(2.458)		(1.905)*		(2.044)**	
SECIP	0.055	1.787	0.078	1.812	0.069	1.818
	(0.664)		(0.943)		(0.839)	
SECCONS	0.179**	1.281	0.199	1.300	0.187	1.312
	(2.535)		(2.832)***		(2.670)***	
SECCP	-0.008	1.447	-0.008	1.458	-0.015	1.463
	(-0.105)		(-0.102)		(-0.203)	
SECTS	0.155*	1.808	0.169	1.818	0.160	1.825
	(1.844)		(2.034)**		(1.937)*	
$R^2_{2}$	0.366		0.387		0.399	
$R^2$ change	-		0.021		0.012	
Adjusted $R^2$	0.323		0.342		0.350	
F statistic	8.563***		8.526***		8.216***	
Durbin-Watson	1.738		1.765		1.747	

Hierarchical Regression Analysis on Moderator Effects on Board Process–Company Leverage Relationship (N=175)

\*\*\*, \*\*, \* indicates that the regression analysis is statistically significant at 1%, 5%, and 10%, respectively.

The results in column 1 indicate that board process has a strong negative relationship with company leverage at the 1% significance level. This shows that effective board proces has a significant influence in management's choosing less risk capital structure decisions.

Further, the inclusion of managerial ownership in the second step (column 2) demonstrates a significant negative relationship between managerial ownership and company leverage. This finding suggests that directors who have ownership in the company are likely to employ less debt than those who do not. It is also interesting to examine whether managerial ownership alters the effect of board process on company leverage. The results in column 3 indicate that the influence of insiders with a high level of ownership weakens the board's influence in capital structure decision makings. This is shown by the positive coefficient of MOWN\*BPROCESS.

Regarding managerial ownership, the result in column 3 is consistent with the two previous analyses (shown in columns 1 and 2 of Table 6.28). Even though the managers with high ownership prefer less debt financing due to the risk of inability to pay back the debt (Friend & Lang, 1988), they still need some debt financing in order to avoid the dilution of their stakes in the company (Agrawal & Mandelker, 1987). Therefore, their appetite for debt is higher than that of other directors with fewer shares in the company. This result indicates that top management shareholders create difficulties for the board since the managers have more power to influence decision makings including capital structure decisions, as well as the ability to "entrench themselves and increase their discretion" (Chobpichien *et al.*, 2007, p. 30). This scenario creates the negative effect of the relationship between board process and company leverage; thus, Hypothesis 9 is supported.

Figure 6.1 below presents the results of the interaction. Managerial ownership significantly moderates the relationship between board process and company leverage, which is weaker when managerial ownership is high and stronger when managerial ownership is low.



Figure 6.1 Interaction Effect of Board Process and Managerial Ownership on Capital Structure Decisions

## 6.7.2 Company Performance (Model 3 to Model 5)

The association between board process and company performance is examined in Model 3, while the relationship between company performance and company leverage is determined in Model 4. This is followed by three steps of hierarchical regression analysis to determine the effect of capital structure decisions as the mediator variable on the relationship between board process and company performance in Model 5.

The correlation coefficients of Model 3-5 are presented in Table 6.29. The data indicate no multicollinearity problem since the coefficient values are less than 0.8 (Hair *et al.*, 2010).

	INDPERF	RISKOV	CEOPE	ACCESSINF	AGECO	CSIZE	SCIP	SCCON	SECCP	SECTS	LEV	ROE
INDPERF	1.00	0.110	0.131	0.098	0.026	-0.109	0.088	0.080	0.061	-0.211***	-0.369***	.0246***
RISKOV		1.00	0.114	0.102	0.019	0.029	-0.047	-0.034	0.012	-0.046	-0.407***	.428***
CEOPE			1.00	0.124	0.063	0.020	-0.058	-0.052	0.072	-0.073	-0.426***	.0.133
ACCESSINF				1.00	0.055	-0.008	-0.045	-0.063	0.008	0.016	-0.375***	.183
AGECO					1.00	0.238***	0.130*	0.037	0.130*	-0.080	0.003	-0.028
CSIZE						1.00	-0.112	0.014	-0.112	0.047	0.175**	0.165**
SECIP							1.00	-0.191**	-0.274***	-0.420***	0.020	-0.148*
SECCONS								1.00	-0.106	-0.162**	0.167**	0.007
SECCP									1.00	-0.232***	-0.124	0.118
SECTS										1.00	0.167**	0.085
LEV											1.00	-0.310**
ROE												1.00

Table 6.29Spearman's Rho Correlations (Model 3 to Model 5)

\*\*\*, \*\*, \* indicates that the correlation is statistically significant at 1%, 5%, and 10%, respectively.

Please refer to section 6.7.2.1, 6.7.2.2 and 6.7.2.3 for descriptions of the variables used in Model 3, Model 4 and Model 5, respectively.

## 6.7.2.1 The Results of Model 3 (Hypothesis 10 to Hypothesis 13)

In this study, board effectiveness is the essential variables to be focused. Thus, the effect of board process variables on company performance is investigated in Model 3.<sup>17</sup> Company performance (ROE) is the dependent variables, and the board process variables (INDPERF, RISKOV, CEOPE and ACCESSINF) are the independent variables. Six control variables (AGECO, CSIZE, SECIP, SECCONS, SECCP and SECTS) remain in Model 3. Model 3 is shown below:

Where;	
ROE	Total net income divided by average shareholders' equity
bo	Regression coefficient for intercept
$\mathbf{B}_{\mathbf{i}}$	Regression coefficient associated with independent variable X <sub>i</sub>
RISKOV	Directors' agreement on their involvement in managing risks, on a scale ranging from "Strongly disagree" (1) to "Strongly agree" (5) is used
INDPERF	Directors' perception of performance of independent directors, on a scale ranging from "Very poor" (1) to "Outstanding" (5)
CEOPE	The extent of CEO is being evaluated by formal procedures, on a scale ranging from "Strongly disagree" (1) to "Strongly agree" (5)
ACCESSINF	Directors' agreement on their accessibility to information in the company, on a scale ranging from "Strongly disagree" (1) to "Strongly agree" (5)
AGECO	Average years listed in Bursa Malaysia
CSIZE	Average of natural logarithm (total assets)
SECIP	Industrial Product, equals 1 if true, otherwise 0
SECCONS	Construction, equals 1 if true, otherwise 0
SECCP	Consumer product, equals 1 if true, otherwise 0
SECTS	Trading and services, equals 1 if true, otherwise 0
ei	Error term

As shown in Table 6.30, Model 3 explains 21.9% of the variance in company performance at the 1% significance level (p = 0), which demonstrates that the regression model can be used to explain the company performance level.

<sup>&</sup>lt;sup>17</sup> Previous studies have reported less evidence or no consensus on the relationship between board characteristics and company performance (see Dalton *et al.*, 1998; 1999; Leblanc, 2004; Halimi *et al.*, 2008; Rohana *et al.*, 2009).

Variables	Acronym	Model 3 (ROE) ( <i>t</i> statistics in parentheses)	VIF
Constant		-0.473	
		(-5.534)***	
Performance of independent directors	INDPERF	0.203	1.387
(H <sub>10</sub> )		(2.502)**	
Board's risk oversight (H <sub>11</sub> )	RISKOV	0.210	1.366
		(2.601)**	
CEO performance evaluation $(H_{12})$	CEOEV	0.044	1.411
		(0.540)	
Directors' accessibility to information	ACCESSINF	0.086	1.252
(H <sub>13</sub> )		(1.113)	
Company age	AGECO	-0.111	1.125
		(-1.510)	
Company size (log total asset)	CSIZE	0.158	1.154
		(2.137)**	
Industrial product	SECIP	-0.022	1.791
		(-0.236)	
Construction	SECCONS	0.056	1.270
		(0.718)	
Consumer product	SECCP	0.169	1.471
		(2.013)**	
Trading and services	SECTS	0.186	1.749
-		(2.036)**	
$R^2$		0.219	
Adjusted $R^2$		0.171	
F statistic		4.585***	
Durbin-Watson		1.758	

Table 6.30 Regression Model Summary Statistics of Board Process on Company Performance (N-175)

\*\*\*, \*\*, \* indicates that the regression analysis is statistically significant at 1%, 5%, and 10%, respectively.

The results demonstrate that the performance of independent directors and the board's risk oversight are statistically significant to company performance at the 5% level of significance. Therefore, Hypotheses 10 and 11 are supported. The results in Table 6.30 also indicate that the effects of CEO performance evaluation and directors' accessibility to information on company performance are not significant. Thus, Hypotheses 12 and 13 are not supported.

With regard to control variables, the coefficients of company size, trading and services and consumer products industries are all significant at the 5% level of significance. These results indicate that companies in consumer product and trading and services industries are positively related to company performance. In addition, the results show that the larger a company is, the better its performance will be.

## 6.7.2.2 The Results of Model 4 (Hypothesis 14)

Model 4 is tested to determine the relationship between company leverage and return on equity. For consistency with previous models, all control variables (AGECO, CSIZE, SECIP, SECCONS, SECCP and SECTS) are included in the model. The model is presented below:

Where;	
ROE	Total net income divided by average shareholders equity
bo	Regression coefficient for intercept
B <sub>i</sub>	Regression coefficient associated with independent variable X <sub>i</sub>
LEV	Natural log of total debts divided by natural log of total assets
AGECO	Average years listed in Bursa Malaysia
CSIZE	Average of natural logarithm (total assets)
SECIP	Industrial Product; 1 if true, otherwise 0
SECCONS	Construction; 1 if true, otherwise 0
SECCP	Consumer product; 1 if true, otherwise 0
SECTS	Trading and services; 1 if true, otherwise 0
e <sub>i</sub>	Error term

Table 6.31 summarizes the statistics results from the equation in Model 4. The constant value ( $b_0$ ) is significant at the 5% level, and company leverage is found to be negatively related to return on equity at p < 0.01. Therefore, Hypothesis 14 is supported. This finding is consistent with Suto (2003) and Tam and Tan (2007). The result also demonstrates that increases in company size contribute to higher

company performance. Similar results are also documented by Noor Afza and Ayoib (2009), Tam and Tan (207), Chang (2004) and Fu *et al.* (2002). Meanwhile, the relationship between age and company performance is shown to be insignificant. Companies involved in trading and service industries and consumer products industries contribute a better return to shareholders; however, nonetheless, the effects of sectors (industrial products and construction) on company performance are not significant.

*Regression Model Summary Statistics of Company Performance on Company Leverage (N=175)* 

Dependent variable	Acronym	Model 4 (ROE)	VIF	
		( <i>t</i> statistics in		
Constant		<b>parentheses</b> ) 0.035		
Constant		(1.992)**		
Leverage	LEV	-0.338	1.102	
20101480		(-4.541)***		
Company age	AGECO	-0.116	1.115	
		(-1.550)		
Company size (log total asset)	CSIZE	0.192	1.141	
		(2.541)**		
Industrial product	SECIP	-0.014	1.772	
		(-0.144)		
Construction	SECCONS	0.109	1.295	
		(1.348)		
Consumer product	SECCP	0.152	1.444	
		(1.789)*		
Trading and services	SECTS	0.181	1.755	
		(1.932)*		
$R^2$		0.162		
Adjusted $R^2$		0.127		
F statistic		4.606***		
Durbin-Watson		1.658		

\*\*\*, \*\*, \* indicates that the regression analysis is statistically significant at 1%, 5%, and 10%, respectively.

Table 6.31

## 6.7.2.3 Analyses of the Mediation (Company Leverage) Effects (Hypothesis 15a to Hypothesis 15d)

As indicated by Baron and Kenny (1986), mediation regression analysis is performed in three steps. First, the mediator variable is regressed together with the independent variable. The independent variables are assumed to influence the mediator variable; therefore, there must be a significant relationship between them. Second, the dependent variable is regressed together with the independent variables. Third, the dependent variable is regressed together with both the independent and mediator variables. In all three steps, the results of the relationship between independent variables and dependent variables need to be significant. The significant relationships are to prove the mediation effect on the relationship between the independent variables and the dependent variables.

In the first step of the mediation regression analysis, company leverage is regressed on the board process variables. This step is similar to Model 1 except that in this case, other board variables (board size, leadership structure, directors' risk appetite and directors' tenure) are excluded from the mediation analysis. As mentioned in the research framework (Section 4.3), the main focus is by studying the way the directors' work, and this can be explained through board process. For this reason, the study only considers board process in the mediation analysis. The regression equation for the first step is as follows:

In the second step, company performance is regressed on the board process variables.

This model is similar to Model 3. The regression equation is as follows:

In the third step (Model 5), company performance is regressed on the board process variables and the company leverage (mediator variable). The regression equation is as follows:

Step 3: ROE=	$b_0 + B_1INDPERF + B_2RISKOV + B_3CEOPE + B_4ACCESSINF + B_5LEV + B_5LEV$
	$B_{6}AGECO + B_{7}CSIZE + B_{8}SECIP + B_{9}SECCONS + B_{10}SECCP + B_{11}SECTS + e_{i}$

Where;	
ROE	Total net income divided by average shareholders' equity
bo	Regression coefficient for intercept
B <sub>i</sub>	Regression coefficient associated with independent variable X <sub>i</sub>
LEV	Natural log of total debts divided by natural log of total assets
INDPERF	Directors' perception of performance of independent directors, on a scale ranging from "Very poor" (1) to "Outstanding"(5)
RISKOV	Directors' agreement on their involvement in managing risks, on a scale ranging from "Strongly disagree" (1) to "Strongly agree" (5) is used
CEOPE	The extent of CEO is being evaluated by formal procedures, on a scale ranging from "Strongly disagree" (1) to "Strongly agree" (5)
ACCESSINF	Directors' agreement on their accessibility to information in the company, on a scale ranging from "Strongly disagree" (1) to "Strongly agree" (5)
AGECO	Average years listed in Bursa Malaysia
CSIZE	Average of natural logarithm (total assets)
SECIP	Industrial Product; 1 if true, otherwise 0
SECCONS	Construction; 1 if true, otherwise 0
SECCP	Consumer product; 1 if true, otherwise 0
SECTS	Trading and services; 1 if true, otherwise 0
e <sub>i</sub>	Error term

The industrial product (SECIP), construction (SECCONST), consumer product (SECCP) and trading and services (SECTS) sectors, company size (CSIZE) and age of company (AGECO) are related to control variables in the model. However, the directors' ownership is excluded in order to determine only the effect of board process and the mediator variable (company leverage) on company performance. Table 6.32 depicts the effects of capital structure decisions on the relationship between board process and company performance.
Table 6.32

Variable	Standardized Coefficient Beta	$R^2$	R <sup>2</sup> change	F statistic	VIF
IFV					
	0 155**				1.154
					1.134
					1.791
					1.791
					1.270
					1.471
SECIS	0.145*				1.749
INDPERF	-0 1/12*				1.387
					1.366
					1.411
					1.252
ACCLOSIN	-0.150	0 353	_	8 947***	1.232
		0.555		0.742	
ROE					
	0 158**				1.154
					1.125
					1.791
					1.270
					1.471
					1.749
INDPERF	0.203**				1.387
	0.210**				1.366
CEOEV	0.044				1.411
					1.252
		0.219	-	4.585***	
ROE					
CSIZE	0.185**				1.191
AGECO	-0.113				1.126
SECIP	-0.010				1.799
SECCONS	0.086				1.317
SECCP	0.167**				1.471
SECTS	0.211**				1.781
LEV	-0.173**				1.545
INDPERF	0 179**				1.418
RISKOV	0.175				1.426
131313377V	0.170				
	0.007				1 / 82
CEOEV ACCESSINF	0.007 0.059				1.482 1.291
	Variable LEV CSIZE AGECO SECIP SECCONS SECCP SECTS INDPERF RISKOV CEOEV ACCESSINF ROE CSIZE AGECO SECIP SECCONS SECCP SECTS INDPERF RISKOV CEOEV ACCESSINF RISKOV CEOEV ACCESSINF RISKOV CEOEV ACCESSINF ROE CSIZE AGECO SECIP SECTS LEV INDPERF	Variable         Standardized Coefficient Beta           LEV         0.155**           AGECO         -0.017           SECIP         0.068           SECCONS         0.174**           SECCP         -0.010           SECTS         0.143*           INDPERF         -0.142*           RISKOV         -0.197***           CEOEV         -0.214***           ACCESSINF         -0.158**           ROE         0.158**           CSIZE         0.158**           AGECO         -0.111           SECIP         0.022           SECCONS         0.056           SECTS         0.186**           INDPERF         0.203**           RISKOV         0.210**           CEOEV         0.044           ACCESSINF         0.086           SECCP         0.167**           SECONS         0.086           SECIP         0.167**           SECTS         0.211**           LEV         -0.173**           INDPERF         0.179**	Variable         Standardized Coefficient Beta $R^2$ LEV         0.155**         AGECO         -0.017           SECIP         0.068         -0.017           SECCONS         0.174**         -0.142*           SECCP         -0.010         -0.143*           INDPERF         -0.142*         -0.197***           CEOEV         -0.214***         -0.353           ROE         -0.158**         0.353           ROE         0.3553         -0.353           ROE         -0.111         -0.122           CSIZE         0.158**         0.353           ROE         -0.169**         -0.22           SECCONS         0.056         -0.169**           SECTS         0.186**         -0.210**           INDPERF         0.203**         -0.219           ROE         -0.210**         -0.210**           CEOEV         0.044         -0.219           ROE         -0.210**         -0.219           ROE         -0.113         -0.219           ROE         -0.113         -0.219           ROE         -0.113         -0.219           ROE         -0.173**         -0.211**	Variable         Standardized Coefficient Beta $R^2$ $R^2$ change           LEV         CSIZE         0.155** $AGECO$ -0.017           SECIP         0.068 $SECCONS$ 0.174**           SECCP         -0.010 $SECTS$ 0.143*           INDPERF         -0.142* $RSKOV$ -0.197***           CEOEV         -0.214*** $ACESSINF$ -0.158**           AGECO         -0.111 $SECTS$ $0.353$ -           ROE         CSIZE         0.158** $0.353$ -           ROE         CSIZE $0.169**$ $SECTS$ $0.169**$ SECTS         0.169** $SECTS$ $0.169**$ SECTS $0.169**$ $0.210**$ $-$ RISKOV $0.210**$ $0.219$ $-$ ROE         CSIZE $0.185**$ $0.219$ $-$ ROE         CSIZE $0.185**$ $0.219$ $-$ ROE         COE $0.210**$ $ 0.219$ $-$ ROE         CSIZE $0.168**$ $0.21$	Coefficient Beta         D           LEV         0.155**           CSIZE         0.155**           AGECO         -0.017           SECIP         0.068           SECCONS         0.174**           SECCP         -0.010           SECTS         0.143*           INDPERF         -0.142*           RISKOV         -0.197***           CEOEV         -0.214***           ACCESSINF         -0.158**           ACCESSINF         -0.158**           AGECO         -0.111           SECIP         -0.022           SECCONS         0.056           SECCP         0.169**           SECTS         0.186**           INDPERF         0.210**           CEOEV         0.210**           CEOEV         0.044           ACCESSINF         0.086           CSIZE         0.185**           AGECO         -0.113           SECIP         -0.010           SECCONS         0.086           SECIP         -0.010           SECCONS         0.086           SECIP         -0.010           SECCP         0.167**

Analysis of the Mediation (Company Leverage) Effects on Board Process and Company Performance (N=175)

\*\*\*, \*\*, \* indicates that the regression analysis is statistically significant at 1%, 5%, and 10%, respectively.

In step 1, the results indicate that performance of independent directors (INDPERF), board's risk oversight (RISKOV), CEO performance evaluation (CEOEV) and directors' accessibility to information (ACCESSINF) are all negatively related with company leverage (LEV). These results suggest that board governance has a significant influence in monitoring capital structure decisions, implying that an effective board can influence management to employ low level of leverage. This result meets the first requirement of mediation analysis.

Step 2 examines the direct effects of performance of independent directors (INDPERF), board's risk oversight (RISKOV), CEO performance evaluation (CEOEV) and directors' accessibility to information (ACCESSINF) on company performance, which is represented by return on equity (ROE). The results indicate that the performance of independent directors (INDPERF) and the board's risk oversight (RISKOV) each have a strong positive relationship with company performance at p < 0.05. These results show that the competency of independent directors and boards that increase risk monitoring activities lead to sound company performance. Nevertheless, the other two board process variables (CEO performance evaluation and directors' accessibility to information) are found to have an insignificant relationship with company performance.

As in the third step, the result shows that company leverage has a significant negative relationship with company performance at p < 0.05. The insertion of company leverage explains an additional 1.9% of the variance in company performance. This result fulfills the third requirement of mediation analysis. Further, the coefficient for the performance of independent directors (INDPERF) in steps 2 and 3 is reduced by 0.024 (-0.142 x -0.173), from 0.203 to 0.179, due to mediating effect of company

leverage (LEV). Since the coefficient for the performance of independent directors changed when the company leverage is controlled, the result shows that there is a partial mediation effect of company leverage, suggesting that competent independent directors still have effects on company performance even when company leverage is excluded. Full mediation is indicated when the independent variables do not influence the dependent variables when the mediator variable is controlled (Baron & Kenny, 1986).

Hypothesis 15a, which predicts that company leverage mediates the performance of independent directors and company performance, is thus supported. This result suggests that competent independent directors are likely to influence management to use less leverage, which increases company performance. The mediation effect of company leverage on the relationship between performance of independent directors and company performance is illustrated in Figure 6.2 below.



- Individual coefficient values
- \*\* Joint coefficient of performance of independent directors to company performance with company leverage effect
- <sup>a</sup> Changes in beta value; 0.024 = 0.203 0.179 = -0.142 x 0.173
- <sup>b</sup> New beta value

## Figure 6.2

Mediation Effect (Company Leverage) on the Relationship between Performance of Independent Directors and Company Performance In addition to the above findings, the results in steps 2 and 3 (Table 6.32) also show that the coefficient between the board's risks oversight and company performance is reduced by 0.034, from 0.210 to 0.176. The reduction in the board's risk oversight effect after company leverage has been controlled indicates the partial mediation of company leverage. The study assumes that by devoting more attention to company risks particularly by investing in a less risky capital structure, contributes to the success of the company. Thus, Hypothesis 15b is supported. The relationships among the board's risk oversight, company leverage and company performance are illustrated in Figure 6.3.



<sup>\*</sup> Individual coefficient values

\*\* Joint coefficient of board's risk oversight to company performance with company leverage effect

<sup>a</sup> Changes in beta value; 0.034 = 0.210 - 0.176 = -0.197 x - 0.173

<sup>b</sup> New beta value

#### Figure 6.3



Both CEO performance evaluation and directors' accessibility to information failed to show a significant influence on company performance. Hence, because these two variables do not fulfill the requirement in the second step of mediation analysis, Hypotheses 15c and 15d are not supported. In all models, company size and company involvement in the trading and services sector are shown to have a relationship with company leverage and performance.

### 6.8 Sensitivity Analysis

Two additional tests are conducted to determine the sensitivity of the findings reported in section 6.7. The tests take into account the individual years of observation and the issue of self-selection bias.

### 6.8.1 Individual Years of Observation

This section examines the robustness of the regression results by analyzing the effect of board governance characteristics on company leverage in three separate years. A possibly shortcoming of using pooled data (time series for secondary data and crosssectional observation for primary data) is that differences in individual years may not be evident in the regression results, specifically in relation to the directors' behavior and practices. Table 6.33 presents the results of the individual-year analysis.

Company Leverage								
	All		2007		2008		2009	
	Coeff.	t stat						
Constant	2.958	9.800***	2.739	8.236***	2.858	8.643***	2.936	9.408***
BSIZE	-0.008	-0.118	-0.008	-0.116	-0.047	-0.687	-0.022	-0.330
LEADS	0.049	0.731	0.008	0.114	0.014	0.198	0.026	0.378
DTEN	-0.015	-0.203	-0.025	-0.322	-0.076	-0.975	-0.044	-0.605
RISKAPP	-0.128	-1.712*	-0.008	-0.092	-0.044	-0.537	-0.131	-1.698*
INDPERF	-0.142	-1.911*	-0.125	-1.635	-0.136	-1.751*	-0.127	-1.668*
RISKOV	-0.189	-2.559**	-0.163	-2.141**	-0.137	-1.735*	-0.178	-2.306**
CEOPE	-0.186	-2.443**	-0.237	-3.054***	-0.238	-3.109***	-0.167	-2.151**
ACCESSINF	-0.146	-2.068**	-0.154	-2.125**	-0.131	-1.792*	-0.143	-1.983**
AGECO	0.027	0.379	0.002	0.023	0.068	0.913	-0.016	-0.214
Company size	0.174	2.469**	0.173	2.367**	0.164	2.299**	0.196	2.735***
SECIP	0.053	0.625	0.052	0.592	0.072	0.821	0.037	0.419
SECCONS	0.176	2.463**	0.151	2.061**	0.222	2.987***	0.143	1.945*
SECCP	-0.008	-0.110	-0.049	-0.622	0.035	0.444	-0.006	-0.079
SECTS	0.155	1.824*	0.105	1.198	0.139	1.585	0.148	1.719*
R square $(R^2)$ Adjusted $R^2$ <i>F</i> statistic		0.367 0.312 6.640***		0.336 0.278 5.791***		0.335 0.276 5.720***		0.339 0.282 5.873***

 Table 6.33

 Comparison of Regression Models – Board Governance Characteristics and

 Company Leverage

\*\*\*, \*\*, \* indicates that the regression analysis is statistically significant at 1%, 5%, and 10%, respectively.

As reported in Table 6.33, the *F*-values for each of the three years and the pooled data are statistically significant at 1%. The adjusted  $R^2$  values are 27.8% for 2007, 27.6% for 2008, 28.2% for 2009, and 31.2% for the combined three-year period (pooled data). The results for the individual years are relatively similar to the results for the pooled data except for a few variables. Table 6.34 compares the regression results for 2007, 2008, 2009, and the pooled data for all three years.

	All	2007	2008	2009
BSIZE	(-) No	(-) No	(-) No	(-) No
LEADS	(+) No	(+) No	(+) No	(+) No
DTEN	(-) No	(-) No	(-) No	(-) No
RISKAPP	(-) Yes	(-) No	(-) No	(-) Yes
INDPERF	(-) Yes	(-) No	(-) Yes	(-) Yes
RISKOV	(-) Yes	(-) Yes	(-) Yes	(-) Yes
CEOPE	(-) Yes	(-) Yes	(-) Yes	(-) Yes
ACCESSINF	(-) Yes	(-) Yes	(-) Yes	(-) Yes
% Sig. Variables	5/8 (63%)	3/8 (38%)	4/8 (50%)	5/8 (63%)
% Supported Hypothesis	5/8 (63%)	3/8 (38%)	4/8 (50%)	5/8 (63%)

Table 6.34 Analysis of Variables' Sign (+/-) and Significance (Yes/No) Among Models

As shown in Table 6.34, the effects of board size (BSIZE), leadership structure (LEADS), directors' tenure (DTEN), board's risk oversight (RISKOV), CEO performance evaluation (CEOPE) and directors' accessibility to information (ACCESSINF) on company leverage for the individual years remain similar to the pooled data. The analysis shows an insignificant result on the relationship between directors' risks appetite (RISKAPP) and company leverage in 2007 and 2008. However, the regression coefficient remains as predicted for both years.

The results also show that the relationship between performance of independent directors (INDPERF) and company leverage is not significant in 2007, although a negative regression coefficient is indicated as predicted. The results for 2008 and 2009 show a significant negative association between performance of independent directors and company leverage, which may be due to the effective assessment of the independent directors by the nomination committee. The assessment process for such directors is stressed in MCCG (Revised 2007), and thus the effect can be seen in 2008 and onwards. With an effective evaluation process, the independent

directors are more likely to be active during board deliberation and to be able to challenge the management's ideas in order to ensure that the management really understands the subject matter before making any decisions (Coombes & Wong, 2004). Further, upon the appointment of independent directors, the MCCG (Revised 2007) requires the nomination committee to consider the directors' skills, knowledge, experience, expertise and ability to carry out the responsibilities. Together, sound criteria for appointment and an effective evaluation process contribute to better decision making by this group.

The results in Tables 6.33 and 6.34 indicate that the effects of boards of directors' practices on company capital structure decisions for the three individual years are similar, demonstrating that board effectiveness contributes to less risky capital structure decision making.

#### 6.8.2 Self-Selection Bias

Self-selection biases distort surveys because respondents who feel strongly about a subject are more likely to respond to a survey with extreme positions than are respondents who feel indifferent about the subject (Zikmund *et al.*, 2009). This study asked respondents to provide views on their board practices. Directors who have been board members for longer periods of time may have been more knowledgeable. With this in mind, the mean perceptions of independent directors' performance are compared based on the directors' length of tenure on the board. As presented in Table 6.2, multiple respondents included 124 (51 independent and 73 non-independent) directors from 36 public listed companies. The 124 directors'

responses are used to test for any difference between the directors' perception of independent directors' performance and the directors' length of tenure.

Following Hasnah and Hasnah (2008), the directors' tenure is classified into four categories: category 1 includes directors who have been on the board less than 3 years (TENCAT1); category 2 (TENCAT2), 3 to 6 years; category 3 (TENCAT3), 7 to 10 years; and category 4 (TENCAT4), 11 or more years.

Table 6.35 shows the mean of perceptions of the performance of independent directors based on the directors' tenure. The lowest mean, 3.70, represents the views of directors with less than 3 years of tenure on the board. Conversely, the highest mean, 3.92, represents directors with 11 years of tenure or more.

Table 6.35The Mean of Perceptions of the Performance of Independent Directors Based onDirectors' Tenure

Directors' tenure category	Mean	SD
Less than 3 years	3.76	0.50
3 to 6 years	3.71	0.51
7 to 10 years	3.70	0.64
11 years or more	3.92	0.33

In order to interpret the output, the Levene's test is used to check the assumption of homogeneity. As shown in Table 6.36, the results of the Levene's test are not significant (p>0.05), indicating that the homogeneity of variance is fulfilled. Table 6.36 also provides the results of the one-way ANOVA for mean differences in perceptions of the performance of independent directors between tenure categories, which indicate an insignificant difference of 0.831 (p>0.05) among the four categories.

	Sum of squares	df	Mean Square	F Ratio	Sig.
Between groups	0.275	3	0.092	0.354	0.786
Within groups	31.102	120	0.259		
Total	31.378				
	10				
Test of Homogeneity of V		istic	df1	df2	Sig
Test of Homogeneity of V Performance of	Variances <sup>18</sup> Levene stati 0.292	istic	<b>df1</b> 3	<b>df2</b> 120	<b>Sig.</b> 0.831

 Table 6.36

 One-way ANOVA of Performance of Independent Directors

This confirms that the directors' perceptions of performance of independent directors are similar regardless of their length of tenure. It can thus be assumed that directors with shorter tenure periods on the board nonetheless are knowledgeable about the performance of independent directors on their board, and therefore, self-selection bias is not an issue in this study.

## 6.9 Chapter Summary

The primary objective of this study is to determine the factors associated with corporate governance mechanisms that have effects on company leverage. The study provides evidence that directors' risk appetite, board's risk oversight, performance of independent directors, CEO performance evaluation, directors' accessibility to information, company assets and sector type (specifically construction and trading and service industries) have significant effects on company leverage.

In addition, the study also reveals evidence to support the idea that the interaction of managerial ownership and board process variables has an effect on company leverage. Further, a regression analysis is run to determine the effects of board's risk

<sup>&</sup>lt;sup>18</sup> Levene's test is used to determine the variances for each group. Since the result is not significant, this shows that the groups' variances are similar and the homogeneity assumption is not violated.

oversight, performance of independent directors, CEO performance evaluation and directors' accessibility to information on company performance. However, the results indicate that only board's risk oversight and performance of independent directors affect company performance.

The study further analyzes the mediation effects of company leverage on the relationship between board process variables and company performance. The results support the predictions and show that board's risk oversight and performance of independent directors are related to company performance. The effects on company performance occur via the effectiveness in capital structure decisions made by the board members. The next chapter discusses the findings, limitations and contributions of the study as well as recommendations for future research.

## CHAPTER SEVEN

# **DISCUSSION AND CONCLUSION**

#### 7.1 Introduction

This chapter is organized as follows. Section 7.2 presents an overview of the study, followed by further discussion of the results and the effects of board governance on capital structure decisions in Section 7.3. This is followed by a discussion of the moderating effect of managerial ownership on the relationship between board process and capital structure. Next, a discussion of the mediating effect of capital structure on the association between board process and company performance is presented. Section 7.4 describes the contribution of the current study from body of knowledge, theoretical and practical perspectives. The limitations of the study are presented in Section 7.6. Finally, the conclusion of the study is presented in Section 7.7.

#### 7.2 Overview of the Study

The main objective of this study is to identify the possible board governance attributes (e.g., board structure, composition, characteristics and process) that affect capital structure decisions. Further, the study aims to investigate the effect of managerial ownership on the relationship between board process and capital structure decisions, as well as the effect of capital structure decisions as the mediating variable on the association between board process and company performance. Based on these objectives, the study focuses on five key research questions: 1) Do board structure, composition, characteristics, and process influence company leverage?

2) Does the interaction between managerial ownership and board process influence company leverage? 3) Is there any relationship between board process and company performance? 4) Does company leverage affect company performance? 5) Do capital structure decisions mediate the relationship between board process and company performance?

Research has documented that companies with good corporate governance practices are likely to have a less risky capital structure than other companies. The results of prior studies related to issues associated with boards of directors (e.g., board structure, composition, characteristics and ownership) indicate mixed results regarding the association of these variables with company leverage (Yu *et al.*, 2002; Rashidah *et al.*, 2005; Abor, 2007; Noriza, 2010). Studies on the impact of board process on company leverage are still lacking (Abor, 2007). Such an investigation is conducted in this study, in which four essential characteristics are included to represent board process dimensions: performance of independent directors, board's risk oversight, CEO performance evaluation and directors' accessibility to information. Hypotheses 1 to Hypothesis 8 relate to the effect of board governance attributes on company leverage. Further, managerial ownership is treated as the moderating variable in determining its interaction effect with board process on company leverage. Hypothesis 9 addresses this relationship.

Another important issue addressed in this study is the impact of board process on company performance. In Malaysia, studies that incorporate directors' perceptions of their duties are very lacking due to the difficulties in data collection. Hasnah and Hasnah (2009) have made an essential contribution in exploring the relationship between board roles and company performance in Malaysia. Using a different angle in representing the board's roles as compared to Hasnah and Hasnah (2009), this study incorporated four essential directors' practices, one of which is the board's risk oversight. In her foreword for MCCG 2012, Tan Sri Zarinah Anwar urges directors to play their oversight role to ensure the company risks are managed effectively. Therefore, the effectiveness of the board in managing company risks is appropriate for investigation. Hypotheses 10 to Hypothesis 13 of the current study deal with the proposed positive relationship between board process and company performance.

Next, the impact of company leverage on company performance, addressed in Hypothesis 14, is investigated. Finally, this study extended the direct relationship between board process and company performance by inserting company leverage as a mediating variable. Hypotheses 15a to Hypothesis 15d relate to the mediation effect of company leverage on the relationship between board process and company performance.

Two types of data were used, annual reports and a questionnaire survey sent to Malaysian directors. The responses from the questionnaires were matched with the secondary data for each company. The returned questionnaires represent 175 of 684 companies, for a response rate of 26%.

#### 7.3 Discussion of Results

#### 7.3.1 Overview of Results

This study tested a total of 18 hypotheses, of which 11 are supported. Hypothesis 1 is formed to determine the impact of board structure (size) on company leverage.

The result is not found to be significant, thus Hypothesis 1 is not supported. From the next three hypotheses, Hypothesis 2 to Hypothesis 4, only the directors' risks appetite is found to be positively related to company leverage, thus supporting Hypothesis 4. Meanwhile, the results indicate an insignificant relationship between non-duality leadership structure and company leverage. The direction of this relationship appears to be contrary to expectation, and thus Hypothesis 2 is not supported. Further, the relationship between directors' tenure and company leverage is not found to be significant, and thus Hypothesis 3 is not supported.

The next four hypotheses, Hypothesis 5 to Hypothesis 8, relating to the board process (performance of independent directors, board's risk oversight, CEO performance evaluation and directors' accessibility to information) are all supported, indicating a significant and negative relationship between these four board process characteristics and company leverage.

Hypothesis 9 predicts that the effect of board governance on company leverage is influenced by managerial ownership such that the higher the percentage of insider shareholding, the weaker the effect of board governance on capital structure decisions. Hypothesis 9 is supported in the predicted directions.

Of the next four hypotheses, Hypothesis 10 to Hypothesis 13, performance of independent directors and board's risk oversight are both found to be positively related to company performance, thus supporting Hypothesis 10 and Hypothesis 11. Meanwhile, the influence of CEO performance evaluation and directors' accessibility to information on company performance are not found to be significant, thus not

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supporting either Hypothesis 12 or Hypothesis 13. Further, Hypothesis 14 which predicts a negative relationship between company leverage and performance, is supported.

Finally, Hypothesis 15a to Hypothesis 15d predict that company leverage mediates the relationship between each of the four variables of board process (performance of independent directors (Hypothesis 15a), board's risk oversight (Hypothesis 15b), CEO performance evaluation (Hypothesis 15c) and directors' accessibility to information (Hypothesis 15d) and company performance. Only Hypothesis 15a and Hypothesis 15b are supported.

Table 7.1 below shows a summary of the overall results, followed by more in-depth discussion of the research findings related to each of the hypotheses.

Table 7.1Summary of the Results

Hypot	heses	Results
H <sub>1</sub>	The number of directors on the board is negatively related to company leverage	Not supported
$H_2$	The non-dual leadership structure is negatively related to company leverage	Not supported
$H_3$	Directors' tenure is negatively related to company leverage	Not supported
$H_4$	Directors' risk appetite is positively related to company leverage	Supported
H <sub>5</sub>	The performance of independent directors is negatively related to company leverage	Supported
$H_6$	The board's risk oversight is negatively related to company leverage	Supported
$H_7$	The CEO performance evaluation is negatively related to company leverage	Supported
$H_8$	The directors' accessibility to information is negatively related to company leverage	Supported
H9	The effect of board governance on company leverage is influenced by managerial ownership, such that the higher the percentage of insider shareholding, the weaker the effect of board governance on capital structure decisions	Supported
$H_{10}$	The performance of independent directors is positively related to company performance	Supported
$H_{11}$	The board's risk oversight is positively related to company performance	Supported
H <sub>12</sub>	The CEO performance evaluation is positively related to company performance	Not Supported
H <sub>13</sub>	The directors' accessibility to information is positively related to company performance	Not Supported
$H_{14}$	Company leverage is negatively related to company performance	Supported
$H_{15a}$	Company leverage mediates the relationship between performance of independent directors and company performance	Supported
H <sub>15b</sub>	Company leverage mediates the relationship between board's risk oversight and company performance	Supported
H <sub>15c</sub>	Company leverage mediates the relationship between CEO performance evaluation and company performance	Not supported
H <sub>15d</sub>	Company leverage mediates the relationship between directors' accessibility to information and company performance	Not supported

# 7.3.2 The Effects of Board Structure, Composition and Characteristics on Company Leverage (Hypothesis 1 to Hypothesis 4)

Hypothesis 1 suggests that the number of directors on the board is negatively related to company leverage. The hypothesis predicts that larger board size reduces company leverage. However, the results show an insignificant association between the number of directors on the board and company leverage (Table 6.27). This finding is consistent with Yu *et al.* (2002). Even though the result is insignificant, the direction of the relationship between board size and company leverage is found to be negative.

A possible explanation for the insignificance of the result is the low standard deviation of board sizes (Table 6.11). On average, the Malaysian boards comprises of seven members. As shown in Appendix L, 113 of 175 companies in this study (65% of the sample) have six to eight board members. Therefore, the variance in the number of board members among companies is not significant.

Further, Hypothesis 2 predicts that a separation between the positions of CEO and chairman provides a vigorous monitoring mechanism to prevent management from using excessive leverage. The finding in the study, however, not only demonstrate an insignificant result between the two variables but also indicates the opposite regression coefficient (Table 6.27). This unexpected finding may be due to the culture of leadership structure. The descriptive result shows that 153 of 175 companies in this study follow the recommendation by MCCG (Table 6.12) to have a separate chairman and CEO, while only 22 companies have a dual chairman and CEO. Further analysis shows that 89 of the 153 non-dual companies (58%) have a non-independent directors in both the CEO's and chairman's position. This scenario indicates that in most cases the two positions are held by individuals who have a vested interest in the company.

More than half of Malaysian companies are family-owned business (Claessens *et al.*, 1999, 2000). Normally, the chairman might be a family member (Limpaphayom, 2000) or an individual investor with significant stakes in the company. Since any decisions would be influenced by their interests and they would not wish for their

ownership to be diluted, such chairman would be likely to choose to use leverage in the company's financing decisions.

Hypothesis 3 predicts that a longer period of directors' tenure results in lower company leverage. Directors' tenure refers to the period that the directors have held their position in the company. While the result shows an insignificant relationship between directors' tenure and company leverage, the direction of the relationship between the two variables is consistent with the hypothesis (Table 6.27). This result can be explained by the preferences of Malaysian companies to retain the same directors on their boards for long periods of time, as the board is likely to be more comfortable with familiar members and there is no limit on directors' tenure in Malaysia (KPMG, 2009). A long period of directorship contributes to a better understanding of the company business and thus the effectiveness of the board deliberation (Vafeas, 2003). However, Tan Sri Navaratnam, the former president of Transparency International Malaysia, argues that young people should be given the opportunity to be company directors in order to generate new and fresh ideas (Yeap, 2009). Research by KMPG (2009) shows evidence that less than 15% of nonexecutive directors in Malaysia have served on their respective boards for less than two years. Table 6.11 indicates that average directors' tenure is 6.91 years, which is considered high. Research on directors' tenure and its influence on company leverage is still limited, and most such research has focused on the association between CEOs' tenure and company leverage (Berger et al., 1997; Kin and Hian, 2007; Abor, 2007). Therefore, this is an interesting finding for investigation in future research.

Further, Hypothesis 4 predicts that directors' risk appetite (represented by directors' age) influences company leverage. This study reveals a significant positive<sup>19</sup> correlation between directors' risk appetite and company leverage (Table 6.27), which is consistent with Busija (2006). This finding can be explained by the fact that directors with low risks appetite are more likely to choose non-risky investment decisions. The knowledge and wisdom they have gained through their life experience make them more prudent in making decisions (Noor Afza, 2011b) and more likely to try to avoid possible negative consequences, particularly problems that arise when their companies are not able to pay back their debts (e.g., bankruptcy or damage to the company's reputation with creditors). Thus, less debt is preferable in the company capital structure when the board is populated with older directors.

In line with this idea, a study by KPMG (2009) finds that 65% of non-executive directors are 61 years of age or older. The figure indicates that the demand is higher for older directors (who have less risk appetite) than for younger directors. This finding somewhat supports the notion, that older directors have a positive impact on company decision making.

In sum, of the first four hypotheses, only Hypothesis 4 is found to be significant. The results of Hypotheses 1, 2 and 3 support Leblanc's (2004) view, that board structure, composition and characteristic studies always provide insignificant results or no consensus on the direction. Further, the result of Hypothesis 4 provides empirical support for the regulation by Companies Act 1965 requiring no less than a

<sup>&</sup>lt;sup>19</sup> Directors' age is used as a proxy for directors' risk appetite. Older directors are more likely to have low risk appetite. The negative coefficient in the result reflects that older directors are more likely to utilize a low level of leverage due to low risk appetite. Therefore, the directors' risk appetite is positively correlated with capital structure decisions.

three-fourths majority vote for the reappointment of directors 70 years of age or older. In particular, older directors tend to have more knowledge, experience and wisdom; these attributes influence their level of risks appetite, which, in turn, may have positive significant implications in their decision making.

# 7.3.3 The Effects of Board Process on Company Leverage (Hypothesis 5 to Hypothesis 8)

Hypothesis 5 predicts that independent directors who perform their roles effectively influence the management to make less risky financing decisions. Hypothesis 5 is supported by the results (Table 6.27), indicating that independent directors who contribute effectively in board committees, leveraging their industry experience, accountable to shareholders and stakeholders and able to provide a strategic vision positively influence the decision making process. Similarly, Petra (2005) asserts that independent directors influence the strength of company board and decision controls.

In addition, the result of Hypothesis 5 supports the recommendations of the UK Corporate Governance Code (formerly known as the Combined Code) and the Sarbanes-Oxley Act to have a majority of independent directors on the board. In addition, the MCCG and Bursa Malaysia Listing Requirement encourage companies to have one third of their directors' positions filled by independent directors. However, the latest amendment to the MCCG (2012) recommends that companies in which the positions of chairman and CEO are held by the same person should have a majority of independent board directors. Such guidelines indicate the importance of independent board directors where such directors provide advice and monitoring activities to put pressure on the management to pursue an effective debt strategy. Nevertheless, studies on the relationship between the performance of independent

directors and company leverage are still limited. Thus, further tests should be conducted to confirm the findings.

Hypothesis 6 predicts that boards that manage their risks effectively make less risky capital structure decisions. This hypothesis is supported by the results (Table 6.27), which reveals that the board's risk oversight has a significant influence on the level of company leverage. An effective board risk oversight involves frequent updates from the senior management on risk matters, emphasis on conducting stress tests or scenario analyses to identify potential vulnerabilities, and encouraging the senior management to deliberate on emerging risks and review the company's strategy during crises. All these actions prevent management from adopting excessive leverage (Raber, 2003; Sobel & Reding, 2004; Murphy & Brown, 2009).

The finding regarding Hypothesis 6 provides empirical support for the guidelines recommended by the Turnbull, UK Corporate Governance Code, MCCG, Bursa Malaysia Listing Requirement and Companies (Amendment) Act 2007 on the importance of board's risk oversight. In particular, the new amendment of the MCCG (2012) emphasizes the responsibility of the whole board in establishing a sound structure in order to manage the company risks. Recommendation 6.1 of the MCCG (2012) states that:

The board should determine the company's level of risk tolerance and actively identify, assess and monitor key business risks to safeguard shareholders' investments and the company assets. Internal controls are important for risk management and the board should be committed to articulating, implementing and reviewing the company's internal control system.

In addition, the Companies (Amendment) Act 2007 highlights the duties of directors in managing risks to avoid any misuse of company assets that could lead to company losses (see section 167A). The advantages of effective risk oversight by the board may put pressure on management to pursue lower leverage. The board's risk oversight is a new variable that has been developed in this study, further studies need to be conducted to verify its relationship with company leverage.

Hypothesis 7 predicts that the CEO performance evaluation is negatively related to company leverage. This study finds a significant relationship between the effectiveness of CEO performance evaluation and company leverage (Table 6.27). One of the potential reasons for this is that a good CEO performance evaluation takes into account not only profit but also level of risk assumed such as leverage level that is risk-adjusted return. Effective assessment of the CEO's performance restricts the CEO from adopting risky financing decisions (Wyman, 2009).

In addition, Hypothesis 7 supports the MCCG guidelines suggesting that the board needs to have a proper assessment to evaluate the CEO's performance in order to continuously monitor the company performance (Hasnah & Hasnah, 2009) and to help CEOs to improve themselves (Robbins & Judge, 2009; Gomez, 2010). In other words, the board evaluation of the CEO's performance has significant implications for the CEO's effectiveness and, in turn, influences the CEO's decisions, including capital structure decisions. Further studies are needed in order to confirm the result

of this study, since the influence of CEO performance evaluation on company leverage is still a new area in finance research.

Hypothesis 8 predicts that boards that receive adequate access to company information are more likely to influence the management to avoid choosing risky financing decisions. This hypothesis is supported by the results (Table 6.27), showing that directors given better access to company information and sufficient time to digest the material are better able to make informed decisions regarding the company financial structure (Murphy & Brown, 2009).

The result relating to Hypothesis 8 provides empirical support for the guidelines recommended by the UK Corporate Governance Guide, Bursa Malaysia Listing Requirement and the MCCG regarding the accessibility of information by the board. In particular, the guidelines by the MCCG and Bursa Malaysia Listing Requirement state that the management should provide sufficient information to the board. The benefits derived from the board's full access to company information may enhance board preparation and participation during board deliberation. Such board actions enhance board monitoring level towards management decisions, particularly company capital structure decisions (Aza Azlina, Zuaini, & Nor Aziah, 2011; Zuaini *et al.*, 2011). This variable, however, is a new board governance mechanism to be tested in the capital structure area; thus, further studies are needed to verify the result.

In summary, the analyses of Hypothesis 5 to Hypothesis 8 show that boards who monitor and manage the company's risks, evaluate the CEO's performance, receive

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access to company information and comprise competent independent directors are more effective in monitoring top management, causing the managers to adopt lower leverage. In addition, the positive board process elements mitigate the concentration of decisions controlled by the management.

#### 7.3.4 The Moderating Effect of Managerial Ownership (Hypothesis 9)

Hypothesis 9 (H<sub>9</sub>) predicts that owner-managers with larger ownership are more likely to reduce the board influence on capital structure decisions. The result of the study supports the hypothesis (Table 6.28), consistent with Chobpichien *et al.* (2007) and Westphal (1999), who indicate that board monitoring is weaker when the concentration of insider ownership is higher. Managers with a high level of ownership have the power to make decisions related to their interests (Chobpichien *et al.*, 2008). In relation to external financing, managers prefer to employ debt (Myers, 2001), as the procedure to obtain the financing is easy and they are able to protect their ownership from dilution (Kin & Hian, 2007). Further, debt financing allows the company to receive tax deductions from the interests, thus positively impacting the company's profit (Keown *et al.*, 2008).

Even though the earliest view of agency theory assumes that managerial ownership can align the interests of managers and shareholders (Jensen & Meckling, 1976), this view is not supportable in every situation. For instance, in 75% of the listed companies in Malaysia, the managers are the controlling shareholders (Claessens *et al.*, 2000). With such ownership structure, the managers have more power in the company's decisions and are able to influence the board to suit their decisions with the financing preferences. Therefore, this scenario reduces the negative relationship between board effectiveness and company leverage.

# 7.3.5 The Effects of Board Process on Company Performance (Hypothesis 10 to Hypothesis 13)

Hypothesis 10 predicts that competent independent directors improve company performance. This hypothesis is supported by the results (Table 6.30), consistent with Petra (2005) and Hasnah and Hasnah (2009). Petra (2005) emphasizes that independent directors are capable of influencing decisions. Hasnah and Hasnah (2009) point out that boards that are able to independently influence the management in decision making are found in high performing companies, as the main duty of independent directors is to check top management's behavior and decisions in order to ensure that the shareholders' interests are protected and mitigate the managers' opportunistic behaviors (Zulkarnain, Mohamad Ali, Azhar, Azemin, Narimah, Ridzwana, & Zaidi, 2008). Furthermore, as argued by Zubaidah, Nurmala, and Kamaruzaman (2009), competent independent directors with diverse backgrounds, areas of expertise and characteristics also contribute to the effectiveness of board process, decision making and company performance.

Hypothesis 11 predicts that the board's risk oversight improves company performance. The result of the analysis in this study shows a significant positive relationship between the two variables (Table 6.30), implying that effective risk management by the board has a positive effect on company performance. The role of monitoring by the board is the key component of the risk management framework (Sobel & Reding, 2004); thus, this finding is consistent with Hasnah and Hasnah (2009) and Shamsher and Zulkarnain (2011) who assert that the board's role in monitoring the management decisions is associated with company performance.

Further, risk management is ranked among five essential board roles of Malaysian companies (Table 6.15). The result indicates that Malaysian boards pay serious attention in managing company risks. Wan Fauziah and Amrstrong (2012) also support this study when they stress that directors who are competent in managing company risk are able to strengthen the company's viability. In order to strengthen their role in risk management, directors need to equip themselves with the ability to understand financial statements. With such knowledge, directors are able to monitor and give advice on whether or not the balance sheet is over-leveraged or incorrectly valued (Yeap, 2009).

In addition, as mentioned in Section 7.3.3, the findings of this study support the recommendation of the MCCG, Turnbull and UK Corporate Governance Code to have a board that is responsible for ensuring the implementation of appropriate systems and procedures in risk management. The benefits of having an effective board in monitoring company risks may have a significant effect on company performance.

Hypothesis 12 predicts that the CEO performance evaluation is positively related to company performance. While the multiple regression result indicates that there is no significant relationship between the CEO performance evaluation and company performance, the direction between the two variables shows a positive regression coefficient as predicted (Table 6.30), indicating that effective performance

evaluations of CEOs by boards motivate the CEOs to perform well. An effective CEO enhances the company reputation and performance. Since studies on the association between the CEO performance evaluation and return on equity are still limited, further investigation should be undertaken in the future to understand the reasons behind the significant positive direction. The result in this study is consistent with Hasnah and Hasnah (2009), who find insignificant relationship between Malaysian companies performance and the board's role in evaluating the performance of top executives. However, the result is not consistent with Kula (2005).

Hypothesis 13 predicts that greater access by the board to company information leads to an improvement in company performance. The result, however, demonstrates that the directors' accessibility to information and company performance are not significantly related, though it does show a positive regression coefficient (Table 6.30). A possible explanation for the insignificant result is that the effectiveness of board in attaining access to company information could be best identified in the event of a company facing operational difficulties. At such times, directors are more likely to devote extra attention to monitoring the management decisions. The directors' discussions, preparations and participation during board meetings tend to be more thorough when the business faces difficulties (Vafeas, 1999). Vafeas (1999) finds that company performance is likely to improve with frequent and high-quality board meetings. The direction of the result is similar to Kula and Tatoglu (2006) and Hasnah and Hasnah (2009).

In sum, out of four hypotheses (Hypothesis 10 to Hypothesis 13) only two (Hypothesis 10 and Hypothesis 11) indicate significant relationships. These results show that the board's risk oversight and the performance of independent directors influence company performance.

# 7.3.6 The Effects of Company Leverage on Company Performance (Hypothesis 14)

Hypothesis 14 predicts that company leverage is negatively related to company performance. The strong statistical significance of the leverage suggests that companies with a high dependency on debt financing are more likely to obtain less profit (Table 6.31). Thus, Hypothesis 14 is supported. This finding is consistent with Fu *et al.* (2002), Sang-Woo and Il (2004), Chang (2004) and Tam and Tan (2007).

High levels of debt limit a company's ability to invest in risky and profitable projects. These companies may also face difficulties in obtaining funds from financial institutions or creditors. In addition, financial institutions charge a higher rate of interest to companies with high leverage due to the probability of loan default. Finally, loan interests reduce company profitability. Such a situation is worsened when the demand for the company's products or services decline for various reasons (e.g., economic recessions, changes in customer preferences and inflation). Documented evidence in Malaysia has shown that companies with excessive leverage, such as Axis Incorporation Berhad, Vastalux Energy Berhad and Ho Hup Construction Berhad, experience extreme financial difficulties, which in turn leads to negative effects on company performance.

# 7.3.7 The Mediation Effects of Company Leverage (Hypothesis 15a to Hypothesis 15d)

The most essential components in strategic implementation are financial structure decisions, which can influence company performance with effective governance (Johnson *et al.*, 1996). The multiple regression analysis indicates that effective independent directors influence management to adopt lower leverage, which in turn enhances company performance. This finding supports Hypothesis 15a (Table 6.32).

A less risky capital structure results when an effective group of independent directors closely monitor the company financing decisions and express their ideas on the risks involved in using financial instruments (Leblanc, 2004; Pye & Pettigrew, 2005). Independent directors can apply their experience, particularly in managing company financing during financial crises, to encourage and advise the management to adopt less debt (Yeap, 2009). In an uncertain economy that provides great challenges to businesses, companies with excessive leverage are exposed to liquidity risks (Haniffa & Hudaib, 2006) and less profitability (Tam & Tan, 2007). If the economy is not in the company's favor, companies with a low level of leverage have less risk as they do not have to struggle to pay back their debts (Keown *et al.*, 2008). These companies are more sustainable than those with excessive leverage. This helps to explain how effective independent directors are able to influence company performance by encouraging less risky capital structure decisions.

Meanwhile, the results of this study also imply that decisions regarding company leverage mediate the relationship between the board's risk oversight and company performance. This result supports Hypothesis 15b (Table 6.32). Boards with effective risk oversight place more emphasis on the risks that their companies might be exposed to in order to determine the right capital structure decisions (Murphy & Brown, 2009). As excessive leverage creates more risks to the company, the used of minimal debt is preferable (Tam & Tan, 2007). Warrant Buffet also argues that companies must consider avoiding debt in order to succeed (Izma, 2009). Therefore, a less risky capital structure results from the board effectiveness in risk oversight, thus leading to improved company performance.

Nevertheless, the finding does not support Hypothesis 15c because the result in the second step of mediation analysis failed to show any association between the CEO performance evaluation and company performance (Table 6.32). This result is inconsistent with Kula (2005); however, it is consistent with Hasnah and Hasnah (2009), who also find no association between the CEO performance evaluation and company performance. A possible explanation for this result is that the effectiveness of the CEO's evaluation procedure is different from one company to another as there is no standardized procedure. In this study, 124 of 175 companies (71%) have a formal evaluation process, while the remaining 51 companies (29%) conduct their evaluation process informally (Table 6.19).

Even though the MCCG strongly recommends the evaluation of CEOs by the board, the code does not provide details for carrying out such assessments. Although Bursa Malaysia (2009) issues a performance evaluation sheet to assist with the evaluation process, there is still no guarantee that every public listed company follows the template. Company ownership also influences the evaluation process. Directors that have family ties with the controlling shareholders may reduce the effectiveness of the CEO's evaluation (Westphal, 1999) due to the close relationship between them. As no significant relationship is found between the CEO performance evaluation and company performance, further tests associated with the mediation effect are not performed.

Hypothesis 15d predicts that company leverage mediates the relationship between directors' accessibility to information and company performance. However, in the second step of mediation analysis, the result indicates no relationship between directors' accessibility to information and company performance (Table 6.32); therefore, this hypothesis is not supported. Since no relationship is found, further tests on the mediation effect of directors' accessibility to information are not executed.

## 7.3.8 Control Variables

The discussion in this section is divided into two parts covering the effect of control variables on both company leverage and company performance. The study determines the effect of seven different control variables on company leverage in Models 1 and 2. The results of the study indicate a significant relationship between company leverage and three of the seven control variables: company size, construction and trading and services sector. The other four control variables (companies classified under industrial products, consumer products, and other categorizes as well as company age) are not found to be significant.

Company size is found to have a positive relationship with company leverage. Such companies are well-established in the market and are able to maintain a stable cash flow (Fu et. al, 2002). This also supports the idea that larger companies have the potential to service its loans (Kyereboah-Coleman, 2007) and minimize the risks of bankruptcy (Friend & Lang, 1988). The results provide support to prior capital structure research (Fauzias & Bany, 2005; Yu *et al.*, 2002).

Further, the construction sector is found to have a positive significant relationship with company leverage. This could be explained by the nature of this sector's business, which is highly capital-intensive and long-term. Construction companies need to borrow large amounts to finance their initial costs, as the sales proceeds from their buyers may only come based on the progress of the project.

In addition, the trading and services sector also shows a positive relationship with company leverage. This result is aligned with Mazlina, Hashanah, and Badriyah (2011), who find that trading and services sector in Malaysia has the highest total liabilities, likely due to the fact that their activities require immediate cash and large capital at the initial operating stages.

For Models 3, 4 and 5, the study identifies the effects of control variables on company performance. Three of seven variables (company size, consumer product and trading and services sector) indicate significant results. This shows that company performance is positively associated with company size, indicating that the larger the company is, the better its performance will be. Large companies tend to have more diversified activities (Kyereboah-Coleman, 2007), better disclosure (Fauzias & Bany,

2005) and more liquid (Fu *et al.*, 2002), all of which may lead to sound company performance. The result is consistent with Chang (2004) and Ngui *et al.* (2008).

Further, the trading and services sector is found to have a positive impact on company performance. Under the 9th (2006 to 1010) and 10th (2011 to 2015) Malaysian Plans, the Malaysian government has identified the trading and services business as one of the potential new growth sectors in the economy. This sector is expected to grow at 7.2% annually until 2015 (Malaysian Investment Development Authority, MIDA). The sector has been given various promotions to attract investors and incentives, which influence company performance. The result in this study is consistent with Haniffa and Hudaib (2006) and Noor Afza (2011b).

Consistent with expectations, the consumer products sector is found to be positively associated with company performance, confirming the result found by Noor Afza and Ayoib (2009). Companies classified under consumer products are likely to be mature and able to market their products both abroad and in their home countries. The strong and continuous consumer spending habits in this sector also contribute to positive company performance (Tan, 2011).

## 7.4 Contributions of the Current Study

The contributions of the current study are discussed in the following three sections, covering the study's contribution to the body of knowledge, theory development and practices.

#### 7.4.1 Body of Knowledge

The findings of this study make several contributions to the available body of knowledge. This study extends the contribution of prior studies on factors that influence company leverage and performance. In particular, the study attempts to fill gaps in the literature caused by the lack of empirical evidence on the effect of board process on company leverage as well as on company performance. The study also addresses the mixed and inconsistent results of previous studies related to the effect of board structure, composition and characteristics on company leverage.

Specifically, the study finds that the lower the directors' risk appetite, the more cautious and less risky will be the decisions regarding company leverage. The study contributes to the literature by providing evidence in line with Busija (2006) on the impact of directors' risk appetite on company leverage. In addition, the study also indicates that those competent independent directors, high directors' accessibility to company information, effective evaluation of CEO performance and vigorous monitoring on company risks by the board lead to low company leverage.

The findings demonstrate that the board process variables are relatively more important as compared to board structure, composition and characteristics in pursuing effective corporate governance. More evidence needs to be sought on the impact of board process (performance of independent directors, board's risk oversight, CEO performance evaluation and directors' accessibility to information) on company leverage, as the previous studies on this issue are lacking. Nevertheless, the findings contribute to the extension of the corporate governance and finance literatures. This study also contributes to the literature by providing evidence on the effect of managerial ownership as the moderator variable on the relationship between board process and company leverage. Regarding such relationship, the study finds that the influence of board effectiveness on capital structure decisions is weaker when the percentage of managerial ownership is higher.

Further, the study offers an extension on board process variables that influence company performance. The study indicates that the more competent the independent directors and the higher the extent of the board's risk oversight, the greater will be their contribution to company performance.

Further, this study extends prior studies by offering evidence on the effect of company leverage on company performance. The findings indicate that the lower the company leverage, the greater will be the company performance. This is in line with Suto (2003), who finds that Malaysian companies "with a high debt ratio suffered more during the period of economic distress" (p. 37), which leads to poor company performance. In addition, excessive leverage has adverse effects on companies' performance regardless of whether the companies are experiencing normal (Noor Afza & Ayoib, 2009) or uncertain market conditions (Suto, 2003; Zuaini *et al.*, 2011). Even though companies with higher leverage do enjoy higher returns in the short term, the opposite could happen in the long term. When economic conditions turn sour, companies that still need to service loans are exposed to liquidity problems that ultimately affect their profitability.
This study also fulfills Nicholson and Kiel's (2007) recommendation to investigate the mediating variable (company leverage) that has an effect on board process and company performance relationship. The findings show that a board with vigorous risks oversight and competent independent directors may influence the management to employ less risky capital structure decisions, resulting in better company performance.

## 7.4.2 Theoretical Aspects

The findings of this study imply that Malaysian companies follow the agency theory (Jensen & Meckling, 1976) on the use of a board of directors to align the interest of owners and managers. The board of directors comprises several individuals whose responsibility it is to monitor the management. Previous literature has highlighted the agency theory in the context of board composition (Rohana *et al.*, 2009; Nazli Anum, 2010; Teh *et al.*, 2012), characteristics (Yu *et al.*, 2002; Kin & Hian, 2007) and structure (Noriza, 2010; Uadile, 2010). The use of agency theory in board process studies is still lacking (Hasnah & Hasnah, 2009). Therefore, the major contribution of this study is the application of agency theory to the context of board process. The results indicate that board process variables influence company leverage and performance. Vigorous monitoring by the board tends to put pressure on the managers, causing them to be more prudent in their decision making. This, in turn, has a positive effect on company capital structure decisions and performance.

Nevertheless, the presence of managerial ownership hampers the effectiveness of the board of directors; this study shows that larger managerial ownership reduces the board's monitoring of capital structure decisions. Companies with large managerial ownership tend to have higher levels of leverage. It seems that the agency theory's recommendation of good practices is applicable to a certain extent. Therefore, other types of governance mechanism, such as more independent directors on the board, could provide better governance in monitoring companies with a high level of managerial ownership.

#### 7.4.3 Practical Aspects

From the practical perspective, this study offers feedback to directors, regulators (particularly the MSWG (Minority Shareholder Watchdog Group), Securities Commission and Bursa Malaysia) and shareholders. Specifically, the following findings are important:

- The board's role should be enhanced by maximizing their contributions to the stakeholders. By understanding the different dimensions of board process, the board could perform better during board deliberation. The way the board members work is important, as the result can influence capital structure decisions and company performance. Hence, the strategy developed by Bursa Malaysia to remove any public listed companies directors who are incompetent or too busy with other commitments (Oh, 2011), proposed to be implemented in 2012, is deemed appropriate.
- 2. Corporate governance structures need to improve, especially in ensuring that the independent directors are experienced and knowledgeable regarding the company business upon their appointment. This result, consistent with the MCCG, supports the importance of independent directors on the board. Therefore, an

appropriate assessment of independent directors' performance should be made. One solution is to allow a representative from the MSWG to assess the performance of the independent directors randomly by conducting interviews or continuously attending board meetings. In addition, the establishment of the Independent Directors Pool (ID Pool), a database providing information on qualified independent directors by the MSWG, can be considered a positive step for companies toward appointing competent board members.

3. The CEO performance evaluation by the board is found to be an essential determinant of capital structure decisions and company performance. As such, regulators, companies, shareholders and board members should emphasize the importance of more transparent evaluations, the details of which should be disclosed publicly. Specifically, regulators (particularly the Securities Commission) should specify the minimum requirement for evaluating the CEO's performance in the code.

Further, CEO compensation should be associated with company performance over a number of years, so that the compensation will take into account the risks to which the CEO has exposed the company. In addition, yearly bonuses should be awarded over a number of years instead of the lump sum payments CEOs presently received. This would encourage CEOs to be more prudent in their decisions, particularly those that involve high exposure to risks. If a company fails as a result of its CEO's actions, it cannot recover the losses from bonuses have been rewarded in previous years. Even if the CEO is charged with misconduct, the penalty imposed will not be commensurate with the company losses.

- 4. High leverage contributes to poor company performance. This finding may assist companies and regulators (e.g., Bank Negara and Securities Commissions) to improve guidelines on loan applications. Financial institutions should be more vigilant in providing loans, particularly in an uncertain economy. A strengthen matrix based on important criteria such as the company financial performance and industry needs to be considered wisely. The collapse of Lehman Brothers and Bear Stearns in the US should give the financial institutions a wake-up call, as even giants of industry are capable of failing if their loans are defaulted.
- 5. Shareholders can benefit from the findings of this study by gaining a better understanding of how the board process affects capital structure decisions and company performance. Shareholders should be more aware of these issues in order to avoid any appointment or reappointment of incompetent directors. More 'homework' should be done for instance by reviewing the candidates' or directors' educational background, industry experience and existing contributions before making any decisions on the appointment of directors.

### 7.5 Limitations of the Study

Despite the contributions of the study, a number of limitations should be noted. Many of these limitations present opportunities for future research. The limitations of this study are as follows:

- The study is intended to obtain responses from four types of directors for every public listed company in Malaysia, in order to gain a balanced perspective in relation to board effectiveness. However, not all directors in every company respond to the questionnaire. As mentioned by Westphal (1999), studies that involve top management often have difficulties in obtaining responses. Thus, similar to the approach taken by Wan and Ong (2005) and Hasnah and Hasnah (2009), a single director's response is deemed appropriate to represent a company in the study.
- 2. In some cases, the respondents may have avoided answering the questionnaire. As pointed out by a few company secretaries, if a questionnaire is perceived as too long, the directors may get bored, be reluctant to answer or giving untruthful answers in an effort to finish the questionnaire as soon as possible. In addition, there is also the possibility that some respondents may not have provided honest responses. They might have thought there was a risk that their answers could be revealed to their competitors, shareholders, the public or regulatory bodies. In order to overcome the problem, the cover letter stated that all answers would be kept confidential.

3. The period of questionnaire distribution is different from the period of secondary data. In this study, the questionnaires were distributed in June 2010 and secondary data were collected for the three-year period covering 2007 to 2009. Secondary data was collected from the time the responses from directors were obtained. The data collection was completed at the end of December 2010. Data for the year 2010 were excluded since the annual report was not accessible at that point in time. Furthermore, the board practices were more or less the same during the three-year period.

Several other studies have used this approach (see Dulewicz & Herbert, 2004; Sang-Woo & II, 2004); for instance, Sang-Woo and II (2004) disseminate their questionnaires to Malaysian boards from the end of 2003 to early 2004 and collected data for the six-year period covering 1997 to 2002. Thus, the results of this study are expected to be significant even though the periods of survey and secondary data are different.

# 7.6 Future Research

Given the evidence presented in the study, a number of avenues are available for future research:

 Five new variables are tested in this study. Four of the variables (board's risk oversight, performance of independent directors, CEO performance evaluation and directors' accessibility to information) are found to be significantly related to capital structure decisions, while the relationship between directors' tenure and capital structure decisions is not found to be significant. It would be interesting to execute further tests on these variables in order to confirm the result with body of knowledge in finance area.

- 2. The findings show that board attributes influence the level of company leverage. In order to obtain a greater understanding of the findings and actual situations of corporate governance practices in Malaysian companies, interviews can be conducted with some of the companies chairmen or CEOs. In addition, case analyses can be executed by examining a few Malaysian companies in greater details.
- 3. The findings indicating that company performance is affected by company leverage, used data covering a three-year period (2007 to 2009). In future research, data covering a longer period could be used to compare and confirm the results of this study.
- 4. This study includes managerial ownership as the moderator variable in the relationship between board process and company leverage. Other variables could also be treated as moderators, such as family, foreign and institutional investors' ownership. This would provide further understand and explanation of the effect of various ownership structures towards the board process–company leverage relationship.
- 5. In relation to board structure, composition and characteristics, this study tested four variables (board size, leadership structure, directors' risks appetite and tenure), only one of which (directors' risks appetite) is found to be related to

company leverage. Thus, it would be interesting to test other variables, such as directors' gender and ethnicity. In the latest amendment of the MCCG (2012), the issue of the gender composition of boards of directors in public listed companies receives serious attention. The participation of women on boards is seen to add value to the corporate decision-making process (Guy, Niethammer, & Moline, 2011). With regard to directors' ethnicity, prior research by Wan Masliza, Nik, and Rashidah (2011) indicate that a board with a balanced ethnic constitution is more likely to induce the monitoring mechanism. As such, further studies should explore the effect of such variables on capital structure decisions.

6. Cornforth (2001) and Wan and Ong (2005) include other board process variables, such as managing conflict, in order to assess their effects on board performance. The present study does not examine the effect of managing conflict on company leverage and company performance. Future research should examine the ability to solve conflicts between board members in the Malaysian context and its influence on capital structure decisions as well as company performance.

## 7.7 Conclusion

Research on the quality of board implications on capital structure decisions and company performance remains the subject of ongoing study globally. This study examines issues related to capital structure decisions, company performance, board governance characteristics and managerial ownership in Malaysia. Uncovering the way boards operate and reach decisions contributes to significance implications. The study reports evidence on the influence of board process (board's risk oversight, performance of independent directors, CEO performance evaluation and directors' accessibility to information) on capital structure decisions and company performance. The study also demonstrates that managerial ownership weakens the board's influences on the company capital structure decisions. In addition, the study reveals that the effect of board effectiveness on company performance occurs through capital structure decisions, which are important for ensuring the survival and sustainability of a company.

Overall, the findings of this study support the agency theory that a board of directors is an effective governance mechanism for Malaysian companies. These findings are expected to serve as a basis for more effective and efficient corporate governance policies and practices in Malaysia. In addition, the study proposes several avenues for future research to encourage other researchers to execute more studies on corporate governance.

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PART C: Please tick ( $\sqrt{}$ ) in the appropriate box in respect of the following items.

1. Please indicate your role on the Board:	Non Independent Directors
2. Please indicate your position on the boa	Chief Executive Officer
Non Executive Director*	Executive Director**
<ul> <li>Other; please specify</li> <li>Non Executive Director other than Chairman</li> <li>** Executive Director other than Chairman or Chief</li> </ul>	 ef Executive Officer/ Managing Director
3. Please indicate how long you have serve	
Less than 3 years	7 to 10 years
3 to 6 years	11 years and above
4. Education Level	
Diploma	Master's/ PhD
Bachelor's Degree	Other; please specify
<b>5. Age Profile</b> Below 40	61 to 70
41 to 50	71 to 79
51 to 60	80 and above
6. Race	Malay
Indian	Other
	questionnaires is solely those of the respondent and do not
necessarily represent the company he/sh	e is representing
Signature:	
Date:	
Name of company (OPTIONAL):	

I greatly appreciate your time and assistance. Please check to make sure that you have not skipped any of the questions. Thank you

\_\_\_\_\_

\_\_\_\_

### CHARTERED SECRETARIES MALAYSIA

Appendix B

30 April 2010

Ms Aza Azlina Md Kassim No 4, Jalan Spektrum U16/10 Taman Bukit Subang 40160 Shah Alam Selangor Darul Ehsan

Dear Ms Aza Azlina.

Re: Approval to Approach MAICSA Members for Board Effectiveness Research Study

I am pleased to inform you that the Institute has agreed to assist you with your request to approach MAICSA members for the purposes of circulating your questionnaires on Board Effectiveness to directors of public listed companies.

I wish you all the best for your research.

Yours sincerely, 21

YC Chan FCIS Chief Executive



The Malaysian Institute of Chartered Secretaries and Administrators Institut Selbuseho due Pentadbir Beckaron Moleysia

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## **RE: Requesting for MICG support on my PhD research**

To 'Aza Azlina' From:**shahabdin** (shahabdin@micg.net) Sent: Monday, 19 Apr, 2010 12:48 PM To: 'Aza Azlina' (aza\_nana@hotmail.com)

Dear Azlina,

Your note of 9/4/10 refers.

The proposed research paper appears interesting especially on the role of independent directors and also the issue of board risk management.

You have our blessings on your project. We shall see to full endorsement subject to your presentation of more leads on your proposed subtopics and samples of your initial drafts and progressively.

At the appropriate date, we shall be happy to share time with you to exchange thoughts on the project.Meanwhile,proceed in haste,proceed with zest.Insha Allah,it will be a good paper.

All best wishes and Salam.

SHAHAB B.HJ DIN

From: Aza Azlina [mailto:aza\_nana@hotmail.com]
Sent: Friday, April 09, 2010 6:50 PM
To: shahabdin@micg.net
Subject: Requesting for MICG support on my PhD research

Assalamualaikum,

Encik Ahmad Shahab,

# **REQUESTING FOR MICG SUPPORT – RESEARCH TOPIC: BOARD EFFECTIVENESS AND CAPITAL STRUCTURE DECISIONS: THE EVIDENCE FROM MALAYSIAN COMPANIES**

Kindly refer to the above matters.

I am a PhD student at Universiti Utara Malaysia (matrix no: 92296). I am currently conducting a research on board effectiveness. The study is focused on board risk oversight, competency of independent directors and CEO's performance management undertaken by the board and its influence on capital structure decisions among Malaysian listed companies. The study being supervised by Prof Madya Dr Zuaini Ishak and Prof Madya Dr Nor Aziah Abdul Manaf.

I would like to request for MICG support in order to make the research successful. I am looking forward for your favorable reply. The research abstract and a sample of questionnaire are per the attachment.

Thank you.

#### SAMPLES OF PUBLIC LISTED COMPANIES CODES

No	Stock	Stock Name	Stock Long Name	Board	Sector	Code-CCM
	Code					
1	4197	SIME	SIME DARBY BHD	MAIN MARKET	TRADING/SERVICES	57651-D
2	6012	MAXIS	MAXIS BERHAD	MAIN MARKET	TRADING/SERVICES	867573-A
3	5347	TENAGA	TENAGA NASIONAL BHD	MAIN MARKET	TRADING/SERVICES	200866-W
4	3816	MISC	MISC BHD	MAIN MARKET	TRADING/SERVICES	8178-H
5	3182	GENTING	GENTING BHD	MAIN MARKET	TRADING/SERVICES	7916-A
6	6888	ΑΧΙΑΤΑ	AXIATA GROUP BERHAD	MAIN MARKET	TRADING/SERVICES	242188-H
7	4715	GENM	GENTING MALAYSIA BERHAD	MAIN MARKET	TRADING/SERVICES	58019-U
8	5052	PLUS	PLUS EXPRESSWAYS BHD	MAIN MARKET	TRADING/SERVICES	570244-T
9	4863	тм	TELEKOM MALAYSIA BHD	MAIN MARKET	TRADING/SERVICES	128740-P
10	5681	PETDAG	PETRONAS DAGANGAN BHD	MAIN MARKET	TRADING/SERVICES	88222-D
11	2194	MMCCORP	MMC CORPORATION BHD	MAIN MARKET	TRADING/SERVICES	30245-H
12	2267	TANJONG	TANJONG PUBLIC LIMITED COMPANY	MAIN MARKET	TRADING/SERVICES	990903-V
13	1562	вјтото	BERJAYA SPORTS TOTO BHD	MAIN MARKET	TRADING/SERVICES	9109-K
14	5076	ASTRO	ASTRO ALL ASIA NETWORKS PLC	MAIN MARKET	TRADING/SERVICES	994178-M
15	5657	PARKSON	PARKSON HOLDINGS BHD	MAIN MARKET	TRADING/SERVICES	89194-P
16	4219	BJLAND	BERJAYA LAND BHD	MAIN MARKET	TRADING/SERVICES	201765-A
17	3395	BJCORP	BERJAYA CORPORATION BHD	MAIN MARKET	TRADING/SERVICES	554790-X
18	3786	MAS	MALAYSIAN AIRLINE SYSTEM BHD	MAIN MARKET	TRADING/SERVICES	10601-W
19	5014	AIRPORT	MALAYSIA AIRPORT HOLDINGS BHD	MAIN MARKET	TRADING/SERVICES	487092-W
20	2356	SARAWAK	SARAWAK ENERGY BERHAD	MAIN MARKET	TRADING/SERVICES	7199-W
21	5099	AIRASIA	AIRASIA BHD	MAIN MARKET	TRADING/SERVICES	284669-W
22	5077	MAYBULK	MALAYSIAN BULK CARRIERS BHD	MAIN MARKET	TRADING/SERVICES	175953-W
23	8575	SAPCRES	SAPURACREST PETROLEUM BHD	MAIN MARKET	TRADING/SERVICES	45631-D
24	5032	BIPORT	BINTULU PORT HOLDINGS BHD	MAIN MARKET	TRADING/SERVICES	380802-T
25	6084	STAR	STAR PUBLICATIONS (M) BHD	MAIN MARKET	TRADING/SERVICES	10894-D
26	5122	KENCANA	KENCANA PETROLEUM BHD	MAIN MARKET	TRADING/SERVICES	667490-M
27	3859	МРНВ	MULTI-PURPOSE HOLDINGS BHD	MAIN MARKET	TRADING/SERVICES	24217-M
28	7277	DIALOG	DIALOG GROUP BHD	MAIN MARKET	TRADING/SERVICES	178694-V
29	6599	AEON	AEON CO. (M) BHD	MAIN MARKET	TRADING/SERVICES	126926-H
30	3034	HAPSENG	HAP SENG CONSOLIDATED BHD	MAIN MARKET	TRADING/SERVICES	26877-W
31	3492	KFC	KFC HOLDINGS (M) BHD	MAIN MARKET	TRADING/SERVICES	65787-T
32	5509	NCB	NCB HOLDINGS BHD	MAIN MARKET	TRADING/SERVICES	475221-K
33	4502	MEDIA	MEDIA PRIMA BHD	MAIN MARKET	TRADING/SERVICES	532975-A
34	5878	KPJ	KPJ HEALTHCARE BHD	MAIN MARKET	TRADING/SERVICES	247079-M
35	6351	AMWAY	AMWAY (M) HOLDINGS BHD	MAIN MARKET	TRADING/SERVICES	340354-U
36	4634	POS	POS MALAYSIA BHD	MAIN MARKET	TRADING/SERVICES	229990-M
37	5115	ALAM	ALAM MARITIM RESOURCES BHD	MAIN MARKET	TRADING/SERVICES	700849-K
38	9415	QSR	QSR BRANDS BHD	MAIN MARKET	TRADING/SERVICES	599171-D

39	5090	MEDIAC	MEDIA CHINESE INTERNATIONAL LT	MAIN MARKET	TRADING/SERVICES	995098-A
40	6866	BERNAS	PADIBERAS NASIONAL BHD	MAIN MARKET	TRADING/SERVICES	295514-U
41	5177	DFZ	DFZ CAPITAL BHD	MAIN MARKET	TRADING/SERVICES	104556-X
42	9032	MTD	MTD CAPITAL BHD	MAIN MARKET	TRADING/SERVICES	256187-T
43	3875	MEASAT	MEASAT GLOBAL BHD	MAIN MARKET	TRADING/SERVICES	2866-T
44	7668	HAIO	HAI-O ENTERPRISE BHD	MAIN MARKET	TRADING/SERVICES	22544-D
45	4804	TWSCORP	TRADEWINDS CORPORATION BHD	MAIN MARKET	TRADING/SERVICES	6393-A
46	5843	KPS	KUMPULAN PERANGSANG SELANGOR	MAIN MARKET	TRADING/SERVICES	23737-K
47	5983	MBMR	MBM RESOURCES BHD	MAIN MARKET	TRADING/SERVICES	284496-V
48	8524	TALIWRK	TALIWORKS CORPORATION BHD	MAIN MARKET	TRADING/SERVICES	6052-V
49	5141	DAYANG	DAYANG ENTERPRISE HOLDINGS BHD	MAIN MARKET	TRADING/SERVICES	712243-U
50	1368	FABER	FABER GROUP BHD	MAIN MARKET	TRADING/SERVICES	5067-M
51	3905	MULPHA	MULPHA INTERNATIONAL BHD	MAIN MARKET	TRADING/SERVICES	19764-T
52	9296	RCECAP	RCE CAPITAL BHD	MAIN MARKET	TRADING/SERVICES	2444-M
53	7081	PHARMA	PHARMANIAGA BHD	MAIN MARKET	TRADING/SERVICES	467709-M
54	0058	JOBST	JOBSTREET CORPORATION BHD	MAIN MARKET	TRADING/SERVICES	641378-W
55	7108	PETRA	PETRA PERDANA BHD	MAIN MARKET	TRADING/SERVICES	372113-A
56	3891	MUIIND	MALAYAN UNITED INDUSTRIES BHD	MAIN MARKET	TRADING/SERVICES	3809-W
57	6521	SURIA	SURIA CAPITAL HOLDINGS BHD	MAIN MARKET	TRADING/SERVICES	96895-W
58	7013	HUBLINE	HUBLINE BHD	MAIN MARKET	TRADING/SERVICES	83568-H
59	3999	NSTP	NEW STRAITS TIMES PRESS(M), THE	MAIN MARKET	TRADING/SERVICES	14117-X
60	8885	RPB	RELIANCE PACIFIC BHD	MAIN MARKET	TRADING/SERVICES	244521-A
61	7045	SCOMIMR	SCOMI MARINE BHD	MAIN MARKET	TRADING/SERVICES	397979-A
62	5125	PANTECH	PANTECH GROUP HOLDINGS BHD	MAIN MARKET	TRADING/SERVICES	733607-W
63	3069	MFCB	MEGA FIRST CORPORATION BHD	MAIN MARKET	TRADING/SERVICES	6682-V
64	4456	TIME	TIME ENGINEERING BHD	MAIN MARKET	TRADING/SERVICES	10039-P
65	8567	SALCON	SALCON BHD	MAIN MARKET	TRADING/SERVICES	593796-T
66	5133	PENERGY	PETRA ENERGY BHD	MAIN MARKET	TRADING/SERVICES	718388-H
67	5041	PBA	PBA HOLDINGS BHD	MAIN MARKET	TRADING/SERVICES	515119-U
68	6157	KONSORT	KONSORTIUM LOGISTIK BHD	MAIN MARKET	TRADING/SERVICES	89243-A
69	9555	INTEGRA	INTEGRAX BHD	MAIN MARKET	TRADING/SERVICES	49317-W
70	0138	MYEG	MY E.G. SERVICES BHD	MAIN MARKET	TRADING/SERVICES	505639-K
71	0091	DAYA	DAYA MATERIALS BHD	MAIN MARKET	TRADING/SERVICES	636357-W
72	6025	BJMEDIA	BERJAYA MEDIA BHD	MAIN MARKET	TRADING/SERVICES	290601-T
73	6874	KUB	KUB MALAYSIA BHD	MAIN MARKET	TRADING/SERVICES	6022-D
74	7228	TGOFFS	TANJUNG OFFSHORE BHD	MAIN MARKET	TRADING/SERVICES	662315-U
75	8265	EPIC	EASTERN PACIFIC IND. CORP	MAIN MARKET	TRADING/SERVICES	66667-K
76	7000	TRANMIL	TRANSMILE GROUP BHD	MAIN MARKET	TRADING/SERVICES	373741-W
77	7206	RAMUNIA	RAMUNIA HOLDINGS BHD	MAIN MARKET	TRADING/SERVICES	634775-D
78	9652	SAAG	SAAG CONSOLIDATED (M) BHD	MAIN MARKET	TRADING/SERVICES	92246-X
79	5056	ENGTEX	ENGTEX GROUP BHD	MAIN MARKET	TRADING/SERVICES	536693-X
80	6491	KFIMA	KUMPULAN FIMA BHD	MAIN MARKET	TRADING/SERVICES	11817-V
81	0101	TMCLIFE	TMC LIFE SCIENCES BHD	MAIN MARKET	TRADING/SERVICES	624409-A
82	5021	NVMULTI	NV MULTI CORPORATION BHD	MAIN MARKET	TRADING/SERVICES	204888-D

83	3204	GKENT	GEORGE KENT (M) BHD	MAIN MARKET	TRADING/SERVICES	1945-X
84	8559	M3NERGY	M3NERGY BHD	MAIN MARKET	TRADING/SERVICES	206596-H
85	3441	JOHAN	JOHAN HOLDINGS BHD	MAIN MARKET	TRADING/SERVICES	314-K
86	5711	TSTORE	THE STORE CORPORATION BHD	MAIN MARKET	TRADING/SERVICES	252670-P
87	7201	PICORP	PROGRESSIVE IMPACT CORPORATION	MAIN MARKET	TRADING/SERVICES	203352-V
88	5614	ILB	INTEGRATED LOGISTICS BHD	MAIN MARKET	TRADING/SERVICES	229690-K
89	0037	RGB	RGB INTERNATIONAL BHD	MAIN MARKET	TRADING/SERVICES	603831-K
90	7236	HELP	HELP INTERNATIONAL CORPORATION	MAIN MARKET	TRADING/SERVICES	700568-H
91	0128	FRONTKN	FRONTKEN CORPORATION BHD	MAIN MARKET	TRADING/SERVICES	651020-T
92	5104	CNI	CNI HOLDINGS BHD	MAIN MARKET	TRADING/SERVICES	181758-A
93	7117	CENTURY	CENTURY LOGISTICS HOLDINGS BHD	MAIN MARKET	TRADING/SERVICES	424341-A
94	3018	OLYMPIA	OLYMPIA INDUSTRIES BHD	MAIN MARKET	TRADING/SERVICES	63026-U
95	0016	SYMPHNY	SYMPHONY HOUSE BHD	MAIN MARKET	TRADING/SERVICES	592563-P
96	5132	DELEUM	DELEUM BHD	MAIN MARKET	TRADING/SERVICES	715640-T
97	5055	ATIS	ATIS CORPORATION BHD	MAIN MARKET	TRADING/SERVICES	446118-T
98	5035	KNUSFOR	KNUSFORD BHD	MAIN MARKET	TRADING/SERVICES	380100-D
99	0064	EFFICEN	EFFICIENT E-SOLUTIONS BHD	MAIN MARKET	TRADING/SERVICES	632479-H
100	5008	HARISON	HARRISONS HOLDINGS (M) BHD	MAIN MARKET	TRADING/SERVICES	194675-H
101	5016	WARISAN	WARISAN TC HOLDINGS BHD	MAIN MARKET	TRADING/SERVICES	424834-W
102	4774	EON	EDARAN OTOMOBIL NASIONAL BHD	MAIN MARKET	TRADING/SERVICES	119767-X
103	5037	COMPUGT	COMPUGATES HOLDINGS BHD	MAIN MARKET	TRADING/SERVICES	669287-H
104	5143	LUXCHEM	LUXCHEM CORPORATION BHD	MAIN MARKET	TRADING/SERVICES	224414-D
105	2062	HARBOUR	HARBOUR-LINK GROUP BHD	MAIN MARKET	TRADING/SERVICES	592902-D
106	7250	UZMA	UZMA BHD	MAIN MARKET	TRADING/SERVICES	115199-W
107	5119	SWEEJOO	SWEE JOO BHD	MAIN MARKET	TRADING/SERVICES	431424-H
108	8702	TEXCHEM	TEXCHEM RESOURCES BHD	MAIN MARKET	TRADING/SERVICES	16318-K
109	7471	EDEN	EDEN INC. BHD	MAIN MARKET	TRADING/SERVICES	36216-V
110	8842	TSM	TSM GLOBAL BHD	MAIN MARKET	TRADING/SERVICES	73170-V
111	7455	HEXAGON	HEXAGON HOLDINGS BHD	MAIN MARKET	TRADING/SERVICES	280116-H
112	5147	SAMCHEM	SAMCHEM HOLDINGS BERHAD	MAIN MARKET	TRADING/SERVICES	797567-U
113	7091	UNIMECH	UNIMECH GROUP BHD	MAIN MARKET	TRADING/SERVICES	407580-X
114	8508	NOMAD	THE NOMAD GROUP BHD	MAIN MARKET	TRADING/SERVICES	426627-H
115	7210	FREIGHT	FREIGHT MANAGEMENT HLDGS BHD	MAIN MARKET	TRADING/SERVICES	380410-P
116	5140	TASCO	TASCO BERHAD	MAIN MARKET	TRADING/SERVICES	20218-T
117	5908	DKSH	DKSH HOLDINGS(M)BHD	MAIN MARKET	TRADING/SERVICES	231378-A
118	3824	MMOSAIC	MALAYSIAN MOSAICS BHD	MAIN MARKET	TRADING/SERVICES	5371-V
119	5754	UTUSAN	UTUSAN MELAYU (M) BHD	MAIN MARKET	TRADING/SERVICES	7170-V
120	3514	MARCO	MARCO HOLDINGS BHD	MAIN MARKET	TRADING/SERVICES	8985-P
121	9792	SEG	SEG INTERNATIONAL BHD	MAIN MARKET	TRADING/SERVICES	145998-U
122	8346	PRKCORP	PERAK CORPORATION BHD	MAIN MARKET	TRADING/SERVICES	210915-U
123	6939	FIAMMA	FIAMMA HOLDINGS BHD	MAIN MARKET	TRADING/SERVICES	88716-W
124	7240	VOIR	VOIR HOLDINGS BHD	MAIN MARKET	TRADING/SERVICES	765218-V
125	7242	GLOBALC	GLOBAL CARRIERS BHD	MAIN MARKET	TRADING/SERVICES	329687-X
126	5081	EIG	ESTHETICS INTERNATIONAL GROUP	MAIN MARKET	TRADING/SERVICES	408061-P

127	9474	TAMADAM	TAMADAM BONDED WAREHOUSE BHD	MAIN MARKET	TRADING/SERVICES	82731-A
128	9865	SUIWAH	SUIWAH CORPORATION BHD	MAIN MARKET	TRADING/SERVICES	253837-H
129	9318	FITTERS	FITTERS DIVERSIFIED BHD	MAIN MARKET	TRADING/SERVICES	149735-M
130	6254	PDZ	PDZ HOLDINGS BHD	MAIN MARKET	TRADING/SERVICES	360419-T
131	7253	HANDAL	HANDAL RESOURCES BERHAD	MAIN MARKET	TRADING/SERVICES	816839-X
132	7083	ANALABS	ANALABS RESOURCES BHD	MAIN MARKET	TRADING/SERVICES	468971-A
133	9911	TRIUMPL	TRIUMPHAL ASSOCIATES BHD	MAIN MARKET	TRADING/SERVICES	33113-M
134	4103	PMIND	PAN MALAYSIAN INDUSTRIES BHD	MAIN MARKET	TRADING/SERVICES	5138-W
135	8397	TNLOGIS	TIONG NAM LOGISTICS HOLDINGS	MAIN MARKET	TRADING/SERVICES	182485-V
136	4847	КТВ	KONSORTIUM TRANSNASIONAL BHD	MAIN MARKET	TRADING/SERVICES	617580-T
137	7241	BHS	BHS INDUSTRIES BHD	MAIN MARKET	TRADING/SERVICES	719660-W
138	7209	СНЕЕТАН	CHEETAH HOLDINGS BHD	MAIN MARKET	TRADING/SERVICES	430404-H
139	3557	ECOFIRS	ECOFIRST CONSOLIDATED BHD	MAIN MARKET	TRADING/SERVICES	15379-V
140	5136	COMPLET	COMPLETE LOGISTIC SERVICES BHD	MAIN MARKET	TRADING/SERVICES	716241-X
141	8672	KAMDAR	KAMDAR GROUP(M)BHD	MAIN MARKET	TRADING/SERVICES	577740-A
142	5533	OCB	OCB BHD	MAIN MARKET	TRADING/SERVICES	3465-H
143	7110	HAISAN	HAISAN RESOURCES BHD	MAIN MARKET	TRADING/SERVICES	502213-D
144	7579	AWC	AWC BERHAD	MAIN MARKET	TRADING/SERVICES	550098-A
145	5059	PSPRING	PULAI SPRINGS BHD	MAIN MARKET	TRADING/SERVICES	514941-K
146	1201	SUMATEC	SUMATEC RESOURCES BHD	MAIN MARKET	TRADING/SERVICES	428355-D
147	7137	UMS	UMS HOLDINGS BHD	MAIN MARKET	TRADING/SERVICES	74125-V
148	5673	IPMUDA	IPMUDA BHD	MAIN MARKET	TRADING/SERVICES	22146-T
149	9806	NATWIDE	NATIONWIDE EXPRESS COURIER SER	MAIN MARKET	TRADING/SERVICES	133096-M
150	7293	YINSON	YINSON HOLDINGS BHD	MAIN MARKET	TRADING/SERVICES	259146-A
151	7036	BORNOIL	BORNEO OIL BHD	MAIN MARKET	TRADING/SERVICES	121919-H
152	7219	MINETEC	MINETECH RESOURCES BHD	MAIN MARKET	TRADING/SERVICES	575543-X
153	5128	OGAWA	OGAWA WORLD BHD	MAIN MARKET	TRADING/SERVICES	712499-V
154	7053	SEEHUP	SEE HUP CONSOLIDATED BHD	MAIN MARKET	TRADING/SERVICES	391077-V
155	7218	TOCEAN	TRANSOCEAN HOLDINGS BHD	MAIN MARKET	TRADING/SERVICES	36747-U
156	6998	BINTAI	BINTAI KINDEN CORPORATION BHD	MAIN MARKET	TRADING/SERVICES	290870-P
157	4464	NICORP	NAIM INDAH CORPORATION BHD	MAIN MARKET	TRADING/SERVICES	19727-P
158	7185	SAMUDRA	KEJURUTERAAN SAMUDRA TIMUR BHE	MAIN MARKET	TRADING/SERVICES	142241-X
159	7122	PJI	PJI HOLDINGS BHD	MAIN MARKET	TRADING/SERVICES	499758-W
160	9121	KPSCB	KPS CONSORTIUM BHD	MAIN MARKET	TRADING/SERVICES	143816-V
161	7251	VASTALX	VASTALUX ENERGY BHD	MAIN MARKET	TRADING/SERVICES	710571-W
162	7040	MMM	MALAYSIAN MERCHANT MARINE BHD	MAIN MARKET	TRADING/SERVICES	259253-X
163	5036	EDARAN	EDARAN BHD	MAIN MARKET	TRADING/SERVICES	241644-W
164	5079	KBES	KBES BHD	MAIN MARKET	TRADING/SERVICES	597132-A
165	7031	AMTEL	AMTEL HOLDINGS BHD	MAIN MARKET	TRADING/SERVICES	409449-A
166	3808	MECHMAR	MECHMAR CORPORATION (M) BHD	MAIN MARKET	TRADING/SERVICES	13380-M
167	9431	SJC	SENI JAYA CORPORATION BHD	MAIN MARKET	TRADING/SERVICES	279860-X
168	7018	CME	CME GROUP BHD	MAIN MARKET	TRADING/SERVICES	52235-K
169	7170	LFECORP	LFE CORPORATION BHD	MAIN MARKET	TRADING/SERVICES	579343-A
170	7177	LCL	LCL CORPORATION BHD	MAIN MARKET	TRADING/SERVICES	610841-T

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171	9377	FSBM	FSBM HOLDINGS BHD	MAIN MARKET	TRADING/SERVICES	115609-U
172	3697	OILCORP	OILCORP BHD	MAIN MARKET	TRADING/SERVICES	553069-T
173	7212	SATANG	SATANG HOLDINGS BHD	MAIN MARKET	TRADING/SERVICES	633265-K
174	8923	NAGAMAS	NAGAMAS INTERNATIONAL BHD	MAIN MARKET	TRADING/SERVICES	111365-U
175	9563	STAMCOL	STAMFORD COLLEGE BHD	MAIN MARKET	TRADING/SERVICES	194977-A
176	7927	NGIUKEE	NGIU KEE CORPORATION (M) BHD	MAIN MARKET	TRADING/SERVICES	381317-H
177	7234	MESB	MESB BHD	MAIN MARKET	TRADING/SERVICES	337554-D
178	7105	GOLSTA	GOLSTA SYNERGY BHD	MAIN MARKET	TRADING/SERVICES	484964-H
179	5046	HSLEONG	HOCK SIN LEONG GROUP BHD	MAIN MARKET	TRADING/SERVICES	21690-M
180	7315	AHB	AHB HOLDINGS BHD	MAIN MARKET	TRADING/SERVICES	274909-A
181	7032	RHYTHM	RHYTHM CONSOLIDATED BHD	MAIN MARKET	TRADING/SERVICES	400037-D
182	7039	WWE	WWE HOLDINGS BHD	MAIN MARKET	TRADING/SERVICES	182388-D
183	3867	MPI	MALAYSIAN PACIFIC INDUSTRIES	MAIN MARKET	TECHNOLOGY	4817-U
184	5005	UNISEM	UNISEM (M) BHD	MAIN MARKET	TECHNOLOGY	183314-V
185	0082	GPACKET	GREEN PACKET BHD	MAIN MARKET	TECHNOLOGY	534942-H
186	7204	D&O	D & O VENTURES BHD	MAIN MARKET	TECHNOLOGY	645371-V
187	0083	NOTION	NOTION VTEC BHD	MAIN MARKET	TECHNOLOGY	637546-D
188	0143	KEYASIC	KEY ASIC BHD	MAIN MARKET	TECHNOLOGY	707082-M
189	7022	GTRONIC	GLOBETRONICS TECHNOLOGY BHD	MAIN MARKET	TECHNOLOGY	410285-W
190	9008	FRB	FORMIS RESOURCES BHD	MAIN MARKET	TECHNOLOGY	530701-T
191	8826	ENG	ENG TEKNOLOGI HOLDINGS BHD	MAIN MARKET	TECHNOLOGY	234669-M
192	9822	LKT	LKT INDUSTRIAL BHD	MAIN MARKET	TECHNOLOGY	298188-A
193	8338	DATAPRP	DATAPREP HOLDINGS BHD	MAIN MARKET	TECHNOLOGY	183059-H
194	9075	LITYAN	LITYAN HOLDINGS BHD	MAIN MARKET	TECHNOLOGY	260002-W
195	5028	HTPADU	HEITECH PADU BHD	MAIN MARKET	TECHNOLOGY	310628-D
196	5011	MSNIAGA	MESINIAGA BHD	MAIN MARKET	TECHNOLOGY	79244-V
197	9547	AIC	AIC CORPORATION BHD	MAIN MARKET	TECHNOLOGY	194514-M
198	9334	KESM	KESM INDUSTRIES BHD	MAIN MARKET	TECHNOLOGY	13022-A
199	0097	VITROX	VITROX CORPORATION BHD	MAIN MARKET	TECHNOLOGY	649966-K
200	7042	PATIMAS	PATIMAS COMPUTERS BHD	MAIN MARKET	TECHNOLOGY	244510-H
201	0043	MTRONIC	METRONIC GLOBAL BHD	MAIN MARKET	TECHNOLOGY	632068-V
202	0021	GHLSYS	GHL SYSTEMS BHD	MAIN MARKET	TECHNOLOGY	293040-D
203	9393	ITRONIC	INDUSTRONICS BHD	MAIN MARKET	TECHNOLOGY	23699-X
204	6971	KOBAY	KOBAY TECHNOLOGY BHD	MAIN MARKET	TECHNOLOGY	308279-A
205	7195	COMCORP	COMINTEL CORPORATION BHD	MAIN MARKET	TECHNOLOGY	630068-T
206	7160	PENTA	PENTAMASTER CORPORATION BHD	MAIN MARKET	TECHNOLOGY	572307-U
207	7068	AKN	AKN TECHNOLOGY BHD	MAIN MARKET	TECHNOLOGY	126552-P
208	8664	SPSETIA	SP SETIA BHD	MAIN MARKET	PROPERTY	19698-X
209	5148	UEMLAND	UEM LAND HOLDINGS BHD	MAIN MARKET	PROPERTY	830144-W
210	5089	KLCCP	KLCC PROPERTY HOLDINGS BHD	MAIN MARKET	PROPERTY	641576-U
211	1597	IGB	IGB CORPORATION BHD	MAIN MARKET	PROPERTY	5745-A
212	5215	IJMLAND	IJM LAND BERHAD	MAIN MARKET	PROPERTY	187405-T
213	5158	TAGB	TA GLOBAL BHD	MAIN MARKET	PROPERTY	828855-P
214	6289	SUNCITY	SUNWAY CITY BHD	MAIN MARKET	PROPERTY	87564-X

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215	8583	MAHSING	MAH SING GROUP BHD	MAIN MARKET	PROPERTY	230149-P
216	1783	SPB	SELANGOR PROPERTIES BHD	MAIN MARKET	PROPERTY	5199-X
217	6653	KASSETS	KRISASSETS HOLDINGS BHD	MAIN MARKET	PROPERTY	24123-H
218	6165	SUNRISE	SUNRISE BHD	MAIN MARKET	PROPERTY	7685-V
219	2577	YTLLAND	YTL LAND & DEVELOPMENT BHD	MAIN MARKET	PROPERTY	1116-M
220	3417	E&O	EASTERN & ORIENTAL BHD	MAIN MARKET	PROPERTY	555-K
221	1473	BRDB	BANDAR RAYA DEVELOPMENTS BHD	MAIN MARKET	PROPERTY	5521-A
222	5073	NAIM	NAIM HOLDINGS BHD	MAIN MARKET	PROPERTY	585467-M
223	1503	GUOCO	GUOCOLAND (MALAYSIA) BHD	MAIN MARKET	PROPERTY	300-K
224	3158	YNHPROP	YNH PROPERTY BHD	MAIN MARKET	PROPERTY	561986-V
225	3239	BJASSET	BERJAYA ASSETS BERHAD	MAIN MARKET	PROPERTY	3907-W
226	8893	MKLAND	MK LAND HOLDINGS BHD	MAIN MARKET	PROPERTY	
227	1589	TEBRAU	TEBRAU TEGUH BHD	MAIN MARKET	PROPERTY	8256-A
228	5401	DIJACOR	DIJAYA CORPORATION BHD	MAIN MARKET	PROPERTY	47908-K
229	2976	WINGTM	WING TAI MALAYSIA BERHAD	MAIN MARKET	PROPERTY	6716-D
230	5038	KSL	KSL HOLDINGS BHD	MAIN MARKET	PROPERTY	511433-P
231	5020	GLOMAC	GLOMAC BHD	MAIN MARKET	PROPERTY	110532-M
232	5075	PLENITU	PLENITUDE BHD	MAIN MARKET	PROPERTY	531086-T
233	5355	DAIMAN	DAIMAN DEVELOPMENT BHD	MAIN MARKET	PROPERTY	11681-T
234	1945	PJDEV	PJ DEVELOPMENT HOLDINGS BHD	MAIN MARKET	PROPERTY	5938-A
235	4561	UMLAND	UNITED MALAYAN LAND BHD	MAIN MARKET	PROPERTY	4131-M
236	1724	PARAMON	PARAMOUNT CORPORATION BHD	MAIN MARKET	PROPERTY	8578-A
237	6114	METROK	METRO KAJANG HOLDINGS BHD	MAIN MARKET	PROPERTY	50948-T
238	6017	SHL	SHL CONSOLIDATED BHD	MAIN MARKET	PROPERTY	293565-W
239	3107	FIMACOR	FIMA CORPORATION BHD	MAIN MARKET	PROPERTY	21185-P
240	1007	AMDB	AMCORP PROPERTIES BHD	MAIN MARKET	PROPERTY	6386-K
241	2224	SDRED	SELANGOR DREDGING BHD	MAIN MARKET	PROPERTY	4624-U
242	2305	TAHPS	TAHPS GROUP BHD	MAIN MARKET	PROPERTY	37-K
243	5789	LBS	LBS BINA GROUP BHD	MAIN MARKET	PROPERTY	518482-H
244	5018	HUNZPTY	HUNZA PROPERTIES BHD	MAIN MARKET	PROPERTY	461624-X
245	5959	A&M	A & M REALTY BHD	MAIN MARKET	PROPERTY	177214-H
246	2259	TALAM	TALAM CORPORATION BHD	MAIN MARKET	PROPERTY	1120-H
247	3174	L&G	LAND & GENERAL BHD	MAIN MARKET	PROPERTY	5507-H
248	6076	ENCORP	ENCORP BHD	MAIN MARKET	PROPERTY	506836-X
249	1716	APLAND	ASIA PACIFIC LAND BHD	MAIN MARKET	PROPERTY	4069-K
250	1538	BOLTON	BOLTON BHD	MAIN MARKET	PROPERTY	5572-H
251	6246	KHSB	KUMPULAN HARTANAH SELANGOR BH		PROPERTY	559747-W
252	3484	DBHD	DAMANSARA REALTY BHD	MAIN MARKET	PROPERTY	4030-D
253	5043	MUTIARA	MUTIARA GOODYEAR DEVELOPMENT	MAIN MARKET	PROPERTY	40282-V
254	6718	CRESNDO	CRESCENDO CORPORATION BHD	MAIN MARKET	PROPERTY	359750-D
255	5738	СННВ	COUNTRY HEIGHTS HOLDINGS BHD	MAIN MARKET	PROPERTY	119416-K
256	2968	GPLUS	GOLDEN PLUS HOLDINGS BHD	MAIN MARKET	PROPERTY	113076-T
257	3115	KBUNAI	KARAMBUNAI CORP BHD	MAIN MARKET	PROPERTY	6461-P
258	6181	MALTON	MALTON BHD	MAIN MARKET	PROPERTY	320888-T

259	8613	PRDUREN	PERDUREN (M) BHD	MAIN MARKET	PROPERTY	236800-T
260	5827	ОІВ	ORIENTAL INTEREST BHD	MAIN MARKET	PROPERTY	ppendix D 272144-M
261	5975	ASAS	ASAS DUNIA BHD	MAIN MARKET	PROPERTY	94528-T
262	9725	MAHJAYA	MAHAJAYA BHD	MAIN MARKET	PROPERTY	391035-P
263	6769	KELADI	KELADI MAJU BHD	MAIN MARKET	PROPERTY	154232-K
264	3913	MUIPROP	MUI PROPERTIES BHD	MAIN MARKET	PROPERTY	6113-W
265	6661	OSKPROP	OSK PROPERTY HOLDINGS BHD		PROPERTY	201666-D
266	6335	FOUTAIN	FOUNTAIN VIEW DEVELOPMENT BHD	MAIN MARKET	PROPERTY	201000-D
267	5084	IBRACO		MAIN MARKET		11286-P
267	4057	ASIAPAC	IBRACO BHD ASIAN PAC HOLDINGS BHD	MAIN MARKET	PROPERTY	129-T
					PROPERTY	543867-T
269	1147			MAIN MARKET		12200-M
270	6548	MPCORP	MALAYSIA PACIFIC CORP BHD PASDEC HOLDINGS BHD	MAIN MARKET	PROPERTY PROPERTY	367122-D
271	6912	PASDEC		MAIN MARKET		
272	9962	GMUTUAL			PROPERTY	625034-X 172003-W
273	6602	BCB	BCB BHD		PROPERTY	8507-X
274	3573	LIENHOE			PROPERTY	494928-T
275	5033	MHOUSE	MERGE HOUSING BHD	MAIN MARKET	PROPERTY	
276	5062	HUAYANG	HUA YANG BHD	MAIN MARKET	PROPERTY	44094-M
277	6173	BDB	BINA DARULAMAN BHD	MAIN MARKET	PROPERTY	332945-X
278	1694	MENANG	MENANG CORPORATION (M) BHD	MAIN MARKET	PROPERTY	5383-K
279	5339	NILAI	NILAI RESOURCES GROUP BERHAD	MAIN MARKET	PROPERTY	17654-P
280	2208	PTGTIN	PETALING TIN BHD	MAIN MARKET	PROPERTY	324-H
281	5049	CVIEW	COUNTRY VIEW BHD	MAIN MARKET	PROPERTY	78320-K
282	6815	EUPE	EUPE CORPORATION BHD	MAIN MARKET	PROPERTY	377762-V
283	9814	BERTAM	BERTAM ALLIANCE BHD	MAIN MARKET	PROPERTY	305530-A
284	8206	FOCAL	FOCAL AIMS HOLDINGS BHD	MAIN MARKET	PROPERTY	17777-V
285	4596	SAPRES	SAPURA RESOURCES BHD	MAIN MARKET	PROPERTY	3136-D
286	5040	MEDAINC	MEDA INC. BHD	MAIN MARKET	PROPERTY	507785-P
287	4375	SMI	SOUTH MALAYSIA INDUSTRIES BHD	MAIN MARKET	PROPERTY	8482-D
288	6041	FARLIM	FARLIM GROUP (M) BHD	MAIN MARKET	PROPERTY	82275-A
289	2429	TANCO	TANCO HOLDINGS BHD	MAIN MARKET	PROPERTY	3326-K
290	7889	MULPHAL	MULPHA LAND BHD	MAIN MARKET	PROPERTY	182350-H
291	3085	EKRAN	EKRAN BHD	MAIN MARKET	PROPERTY	224747-K
292	2097	FBO	FURQAN BUSINESS ORGANISATION	MAIN MARKET	PROPERTY	515965-A
293	8141	MJPERAK	MAJUPERAK HOLDINGS BHD	MAIN MARKET	PROPERTY	585389-X
294	5622	TRIPLC	TRIPLC BHD	MAIN MARKET	PROPERTY	242896-A
295	7003	Y&G	Y&G CORPORATION BHD	MAIN MARKET	PROPERTY	6403-X
296	5452	PRIME	PRIME UTILITIES BHD	MAIN MARKET	PROPERTY	225290-A
297	1961	IOICORP	IOI CORPORATION BHD	MAIN MARKET	PLANTATION	9027-W
298	2445	KLK	KUALA LUMPUR KEPONG BHD	MAIN MARKET	PLANTATION	15043-V
299	2291	GENP	GENTING PLANTATIONS BERHAD	MAIN MARKET	PLANTATION	34993-X
300	1899	BKAWAN	BATU KAWAN BHD	MAIN MARKET	PLANTATION	6292-U
301	2771	BSTEAD	BOUSTEAD HOLDINGS BHD	MAIN MARKET	PLANTATION	3871-H
302	2089	UTDPLT	UNITED PLANTATIONS BHD	MAIN MARKET	PLANTATION	240-A

303	2003	KULIM	KULIM (M) BHD	MAIN MARKET	PLANTATION	23370-V
304	2216	IJMPLNT	IJM PLANTATIONS BHD	MAIN MARKET	PLANTATION	133399-A
305	5138	HSPLANT	HAP SENG PLANTATIONS HOLDINGS	MAIN MARKET	PLANTATION	769962-K
306	5126	SOP	SARAWAK OIL PALMS BHD	MAIN MARKET	PLANTATION	7949-M
307	2593	UMCCA	UNITED MALACCA BHD	MAIN MARKET	PLANTATION	1319-V
308	5029	FAREAST	FAR EAST HOLDINGS BHD	MAIN MARKET	PLANTATION	14809-W
309	6327	TWSPLNT	TRADEWINDS PLANTATION BHD	MAIN MARKET	PLANTATION	650234-A
310	9059	TSH	TSH RESOURCES BHD	MAIN MARKET	PLANTATION	49548-D
311	5112	THPLANT	TH PLANTATIONS BHD	MAIN MARKET	PLANTATION	12696-M
312	5019	UNICO	UNICO-DESA PLANTATIONS BHD	MAIN MARKET	PLANTATION	78983-V
313	1929	CHINTEK	CHIN TECK PLANTATIONS BHD	MAIN MARKET	PLANTATION	3250-V
314	5027	KMLOONG	KIM LOONG RESOURCES BHD	MAIN MARKET	PLANTATION	22703-K
315	5135	SWKPLNT	SARAWAK PLANTATION BHD	MAIN MARKET	PLANTATION	451377-P
316	6572	KWANTAS	KWANTAS CORPORATION BHD	MAIN MARKET	PLANTATION	356602-W
317	2372	GNEALY	GLENEALY PLANTATIONS (M) BHD	MAIN MARKET	PLANTATION	3453-W
318	9695	PLS	PLS PLANTATIONS BERHAD	MAIN MARKET	PLANTATION	160032-K
319	2054	TDM	TDM BHD	MAIN MARKET	PLANTATION	6265-P
320	5069	BLDPLNT	BLD PLANTATION BHD	MAIN MARKET	PLANTATION	562699-A
321	3948	DUTALND	DUTALAND BHD	MAIN MARKET	PLANTATION	7296-V
322	2038	NSOP	NEGRI SEMBILAN OIL PALMS BHD	MAIN MARKET	PLANTATION	592-D
323	5193	KURNIA	KURNIA SETIA BHD	MAIN MARKET	PLANTATION	7770-D
324	5047	NPC	NPC RESOURCES BHD	MAIN MARKET	PLANTATION	502313-P
325	1996	KRETAM	KRETAM HOLDINGS BHD	MAIN MARKET	PLANTATION	168285-H
326	8982	CEPAT	CEPATWAWASAN GROUP BHD	MAIN MARKET	PLANTATION	536499-K
327	7382	GLBHD	GOLDEN LAND BERHAD	MAIN MARKET	PLANTATION	298367-A
328	2607	INCKEN	INCH KENNETH KAJANG RUBBER PLC	MAIN MARKET	PLANTATION	990261-M
329	5113	RSAWIT	RIMBUNAN SAWIT BHD	MAIN MARKET	PLANTATION	691393-U
330	2542	RVIEW	RIVERVIEW RUBBER ESTATES BHD	MAIN MARKET	PLANTATION	820-V
331	2569	SBAGAN	SUNGEI BAGAN RUBBER CO (M) BHD	MAIN MARKET	PLANTATION	3327-U
332	2453	KLUANG	KLUANG RUBBER CO (M) BHD	MAIN MARKET	PLANTATION	3441-K
333	7501	HARNLEN	HARN LEN CORPORATION BHD	MAIN MARKET	PLANTATION	502606-H
334	7054	AASIA	ASTRAL ASIA BHD	MAIN MARKET	PLANTATION	374600-X
335	5026	MHC	MHC PLANTATIONS BHD	MAIN MARKET	PLANTATION	4060-V
336	4936	MALPAC	MALPAC HOLDINGS BHD	MAIN MARKET	PLANTATION	197424-V
337	1902	MVEST	MULTI VEST RESOURCES BHD	MAIN MARKET	PLANTATION	222-D
338	2313	AMOLEK	AYER MOLEK RUBBER CO BHD, THE	MAIN MARKET	PLANTATION	1292-P
339	8419	PWE	PWE INDUSTRIES BHD	MAIN MARKET	PLANTATION	
340	2186	KUCHAI	KUCHAI DEVELOPMENT BHD	MAIN MARKET	MINING	7573-V
341	6947	DIGI	DIGI.COM BHD	MAIN MARKET	INFRASTRUCTURE PF	425190-X
342	6742	YTLPOWR	YTL POWER INTERNATIONAL BHD	MAIN MARKET	INFRASTRUCTURE PF	406684-H
343	6645	LITRAK	LINGKARAN TRANS KOTA HOLDINGS	MAIN MARKET	INFRASTRUCTURE PF	335382-V
344	6807	PUNCAK	PUNCAK NIAGA HOLDINGS BHD	MAIN MARKET	INFRASTRUCTURE PF	416087-U
345	5031	TIMECOM	TIME DOTCOM BHD	MAIN MARKET	INFRASTRUCTURE PF	413292-P
346	8516	AIRB	ALIRAN IHSAN RESOURCES BHD	MAIN MARKET	INFRASTRUCTURE PF	504096-T

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347	5078	SILKHLD	SILK HOLDINGS BERHAD	MAIN MARKET	INFRASTRUCTURE PF	405897-V
348	6033	PETGAS	PETRONAS GAS BHD	MAIN MARKET	INDUSTRIAL PRODUC	101671-H
349	3794	LMCEMNT	LAFARGE MALAYAN CEMENT BHD	MAIN MARKET	INDUSTRIAL PRODUC	1877-T
350	4324	SHELL	SHELL REFINING CO (F.O.M.) BHD	MAIN MARKET	INDUSTRIAL PRODUC	3926-U
351	7164	KNM	KNM GROUP BHD	MAIN MARKET	INDUSTRIAL PRODUC	521348-H
352	7113	TOPGLOV	TOP GLOVE CORPORATION BHD	MAIN MARKET	INDUSTRIAL PRODUC	474423-X
353	5103	TITAN	TITAN CHEMICALS CORP. BHD	MAIN MARKET	INDUSTRIAL PRODUC	222357-P
354	8737	YTLCMT	YTL CEMENT BHD	MAIN MARKET	INDUSTRIAL PRODUC	31384-K
355	1619	DRBHCOM	DRB-HICOM BHD	MAIN MARKET	INDUSTRIAL PRODUC	203430-W
356	5142	WASEONG	WAH SEONG CORPORATION BHD	MAIN MARKET	INDUSTRIAL PRODUC	495846-A
357	5168	HARTA	HARTALEGA HOLDINGS BHD	MAIN MARKET	INDUSTRIAL PRODUC	741883-X
358	6556	ANNJOO	ANN JOO RESOURCES BHD	MAIN MARKET	INDUSTRIAL PRODUC	371152-U
359	8133	BHIC	BOUSTEAD HEAVY INDUSTRIES CORP	MAIN MARKET	INDUSTRIAL PRODUC	11106-V
360	7106	SUPERMX	SUPERMAX CORPORATION BHD	MAIN MARKET	INDUSTRIAL PRODUC	420405-P
361	5012	TAANN	TA ANN HOLDINGS BHD	MAIN MARKET	INDUSTRIAL PRODUC	419232-K
362	4235	LIONIND	LION INDUSTRIES CORPORATION	MAIN MARKET	INDUSTRIAL PRODUC	415-D
363	3476	KSENG	KECK SENG (M) BHD	MAIN MARKET	INDUSTRIAL PRODUC	8157-D
364	2879	ССМ	CHEMICAL COMPANY OF MALAYSIA	MAIN MARKET	INDUSTRIAL PRODUC	5136-T
365	7153	KOSSAN	KOSSAN RUBBER INDUSTRIES BHD	MAIN MARKET	INDUSTRIAL PRODUC	48166-W
366	5060	KINSTEL	KINSTEEL BHD	MAIN MARKET	INDUSTRIAL PRODUC	210-470-M
367	5665	SSTEEL	SOUTHERN STEEL BHD	MAIN MARKET	INDUSTRIAL PRODUC	5283-X
368	3328	HUMEIND	HUME INDUSTRIES (M) BHD	MAIN MARKET	INDUSTRIAL PRODUC	4434-A
369	4383	JTIASA	JAYA TIASA HOLDINGS BHD	MAIN MARKET	INDUSTRIAL PRODUC	3751-V
370	5146	PERWAJA	PERWAJA HOLDINGS BERHAD	MAIN MARKET	INDUSTRIAL PRODUC	798513-D
371	4448	TASEK	TASEK CORPORATION BHD	MAIN MARKET	INDUSTRIAL PRODUC	4698-W
372	5101	EVERGRN	EVERGREEN FIBREBOARD BHD	MAIN MARKET	INDUSTRIAL PRODUC	217120-W
373	5071	COASTAL	COASTAL CONTRACTS BHD	MAIN MARKET	INDUSTRIAL PRODUC	517649-A
374	3042	ESSO	ESSO MALAYSIA BHD	MAIN MARKET	INDUSTRIAL PRODUC	3927-V
375	2011	LINGUI	LINGUI DEVELOPMENT BHD	MAIN MARKET	INDUSTRIAL PRODUC	7574-D
376	7048	ATLAN	ATLAN HOLDINGS BHD	MAIN MARKET	INDUSTRIAL PRODUC	173250-W
377	7064	LATEXX	LATEXX PARTNERS BHD	MAIN MARKET	INDUSTRIAL PRODUC	86100-V
378	0012	ЗA	THREE-A RESOURCES BHD	MAIN MARKET	INDUSTRIAL PRODUC	481559-M
379	2739	HUAAN	SINO HUA-AN INTERNATIONAL BHD	MAIN MARKET	INDUSTRIAL PRODUC	732227-T
380	5015	APM	APM AUTOMOTIVE HOLDINGS BHD	MAIN MARKET	INDUSTRIAL PRODUC	424838-D
381	3522	KIANJOO	KIAN JOO CAN FACTORY BHD	MAIN MARKET	INDUSTRIAL PRODUC	3186-P
382	7100	UCHITEC	UCHI TECHNOLOGIES BHD	MAIN MARKET	INDUSTRIAL PRODUC	457890-A
383	5094	CSCSTEL	CSC STEEL HOLDINGS BERHAD	MAIN MARKET	INDUSTRIAL PRODUC	640357-X
384	2852	CMSB	CAHYA MATA SARAWAK BHD	MAIN MARKET	INDUSTRIAL PRODUC	21076-T
385	3581	LIONCOR	LION CORPORATION BHD	MAIN MARKET	INDUSTRIAL PRODUC	12890-A
386	7158	SCOMI	SCOMI GROUP BHD	MAIN MARKET	INDUSTRIAL PRODUC	571212-A
387	4243	WTK	WTK HOLDINGS BHD	MAIN MARKET	INDUSTRIAL PRODUC	тя
388	5072	HIAPTEK	HIAP TECK VENTURE BHD	MAIN MARKET	INDUSTRIAL PRODUC	421340-U
389	7191	ADVENTA	ADVENTA BHD	MAIN MARKET	INDUSTRIAL PRODUC	618533-M
390	8869	PMETAL	PRESS METAL BHD	MAIN MARKET	INDUSTRIAL PRODUC	153208-W

391	6904	SUBUR	SUBUR TIASA HOLDINGS BHD	MAIN MARKET	INDUSTRIAL PRODUC	341792-W
392	7076	CBIP	CB INDUSTRIAL PRODUCT HOLDING	MAIN MARKET	INDUSTRIAL PRODUC	428930-H
393	0047	PERISAI	PERISAI PETROLEUM TEKNOLOGI	MAIN MARKET	INDUSTRIAL PRODUC	632811-X
394	7366	SCOMIEN	SCOMI ENGINEERING BHD	MAIN MARKET	INDUSTRIAL PRODUC	111633-M
395	4529	LEADER	LEADER UNIVERSAL HOLDINGS BHD	MAIN MARKET	INDUSTRIAL PRODUC	172736-A
396	4731	SCIENTX	SCIENTEX INCORPORATED BHD	MAIN MARKET	INDUSTRIAL PRODUC	7867-P
397	5009	WTHORSE	WHITE HORSE BHD	MAIN MARKET	INDUSTRIAL PRODUC	455130-X
398	5145	SEALINK	SEALINK INTERNATIONAL BHD	MAIN MARKET	INDUSTRIAL PRODUC	800981-X
399	5436	PERSTIM	PSAHAAN SADUR TIMAH MSIA	MAIN MARKET	INDUSTRIAL PRODUC	663700-P
400	2887	LIONDIV	LION DIVERSIFIED HOLDINGS BHD	MAIN MARKET	INDUSTRIAL PRODUC	9428-T
401	7131	SUPPORT	SUPPORTIVE INTERNATIONAL	MAIN MARKET	INDUSTRIAL PRODUC	189740-X
402	5916	MSC	MALAYSIA SMELTING CORPORATION	MAIN MARKET	INDUSTRIAL PRODUC	43072-A
403	5007	CHINWEL	CHIN WELL HOLDINGS BHD	MAIN MARKET	INDUSTRIAL PRODUC	371551-T
404	7095	PIE	P.I.E. INDUSTRIAL BHD	MAIN MARKET	INDUSTRIAL PRODUC	424086-X
405	4537	UAC	UAC BHD	MAIN MARKET	INDUSTRIAL PRODUC	5149-H
406	9466	ККВ	KKB ENGINEERING BHD	MAIN MARKET	INDUSTRIAL PRODUC	26495-D
407	3883	MUDA	MUDA HOLDINGS BHD	MAIN MARKET	INDUSTRIAL PRODUC	10427-A
408	8443	HIL	HIL INDUSTRIES BHD	MAIN MARKET	INDUSTRIAL PRODUC	8812-M
409	6963	VS	V.S INDUSTRY BHD	MAIN MARKET	INDUSTRIAL PRODUC	88160-P
410	7803	RUBEREX	RUBBEREX CORPORATION (M) BHD	MAIN MARKET	INDUSTRIAL PRODUC	372642-U
411	6505	DELLOYD	DELLOYD VENTURES BHD	MAIN MARKET	INDUSTRIAL PRODUC	380429-W
412	5010	TONGHER	TONG HERR RESOURCES BHD	MAIN MARKET	INDUSTRIAL PRODUC	432139-W
413	3247	GUH	GUH HOLDINGS BHD	MAIN MARKET	INDUSTRIAL PRODUC	4104-W
414	6149	METROD	METROD (M) BHD	MAIN MARKET	INDUSTRIAL PRODUC	66954-H
415	5098	MASTEEL	MALAYSIA STEEL WORKS (KL)BHD	MAIN MARKET	INDUSTRIAL PRODUC	7878-V
416	5797	CHOOBEE	CHOO BEE METAL INDUSTRIES BHD	MAIN MARKET	INDUSTRIAL PRODUC	10587-A
417	5371	KIMHIN	KIM HIN INDUSTRY BHD	MAIN MARKET	INDUSTRIAL PRODUC	18203-V
418	8125	DAIBOCI	DAIBOCHI PLASTIC & PACKAGING	MAIN MARKET	INDUSTRIAL PRODUC	12994-W
419	5134	SAB	SOUTHERN ACIDS (M) BHD	MAIN MARKET	INDUSTRIAL PRODUC	64577-K
420	7231	WELLCAL	WELLCALL HOLDINGS BHD	MAIN MARKET	INDUSTRIAL PRODUC	707346-W
421	2127	IRCB	INTEGRATED RUBBER CORPORATION	MAIN MARKET	INDUSTRIAL PRODUC	852-D
422	9644	HIRO	HIROTAKO HOLDINGS BHD	MAIN MARKET	INDUSTRIAL PRODUC	209806-H
423	5105	CANONE	CAN-ONE BHD	MAIN MARKET	INDUSTRIAL PRODUC	638899-K
424	3778	MELEWAR	MELEWAR INDUSTRIAL GROUP BHD	MAIN MARKET	INDUSTRIAL PRODUC	8444-W
425	2674	ALCOM	ALUMINIUM COMPANY OF MALAYSIA	MAIN MARKET	INDUSTRIAL PRODUC	3859-U
426	7765	RAPID	RAPID SYNERGY BHD	MAIN MARKET	INDUSTRIAL PRODUC	325935-U
427	4944	NYLEX	NYLEX (M) BHD	MAIN MARKET	INDUSTRIAL PRODUC	9378-T
428	7229	FAVCO	FAVELLE FAVCO BHD	MAIN MARKET	INDUSTRIAL PRODUC	249243-W
429	6106	SINDORA	SINDORA BHD	MAIN MARKET	INDUSTRIAL PRODUC	13418-K
430	7207	SUCCESS	SUCCESS TRANSFORMER CORP BHD	MAIN MARKET	INDUSTRIAL PRODUC	636939-W
431	9016	EKSONS	EKSONS CORPORATION BHD	MAIN MARKET	INDUSTRIAL PRODUC	205814-V
432	5568	АРВ	APB RESOURCES BHD	MAIN MARKET	INDUSTRIAL PRODUC	564838-V
433	5149	TAS	TAS OFFSHORE BERHAD	MAIN MARKET	INDUSTRIAL PRODUC	810179-T
434	4758	ANCOM	ANCOM BHD	MAIN MARKET	INDUSTRIAL PRODUC	8440-M

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435	5022	PAOS	PAOS HOLDINGS BHD	MAIN MARKET	INDUSTRIAL PRODUC	452536-W
436	7374	TIENWAH	TIEN WAH PRESS HOLDINGS BHD	MAIN MARKET	INDUSTRIAL PRODUC	340434-K
437	2135	GOPENG	GOPENG BHD	MAIN MARKET	INDUSTRIAL PRODUC	109465-X
438	9326	LBALUM	LB ALUMINIUM BHD	MAIN MARKET	INDUSTRIAL PRODUC	138535-V
439	7248	SLP	SLP RESOURCES BHD	MAIN MARKET	INDUSTRIAL PRODUC	663862-H
440	2755	FCW	FCW HOLDINGS BHD	MAIN MARKET	INDUSTRIAL PRODUC	3116-K
441	9458	PREMIUM	PREMIUM NUTRIENTS BHD	MAIN MARKET	INDUSTRIAL PRODUC	589272-D
442	7609	AJIYA	AJIYA BHD	MAIN MARKET	INDUSTRIAL PRODUC	377627-W
443	8435	CEPCO	CONCRETE ENGINEERING PRODUCTS	MAIN MARKET	INDUSTRIAL PRODUC	88143-P
444	5048	YILAI	YI-LAI BHD	MAIN MARKET	INDUSTRIAL PRODUC	516043-K
445	3298	HEXZA	HEXZA CORPORATION BHD	MAIN MARKET	INDUSTRIAL PRODUC	8705-K
446	6378	TEKALA	TEKALA CORPORATION BHD	MAIN MARKET	INDUSTRIAL PRODUC	357125-D
447	2747	JAVA	JAVA BERHAD	MAIN MARKET	INDUSTRIAL PRODUC	2511-M
448	7249	EWEIN	EWEIN BERHAD	MAIN MARKET	INDUSTRIAL PRODUC	742890-W
449	4359	SITATT	SITT TATT BHD	MAIN MARKET	INDUSTRIAL PRODUC	rs
450	5092	LCTH	LCTH CORPORATION BHD	MAIN MARKET	INDUSTRIAL PRODUC	633871-A
451	9873	PRESTAR	PRESTAR RESOURCES BHD	MAIN MARKET	INDUSTRIAL PRODUC	123066-A
452	7223	JADI	JADI IMAGING HOLDINGS BHD	MAIN MARKET	INDUSTRIAL PRODUC	526319-P
453	5100	BPPLAS	BP PLASTICS HOLDING BHD	MAIN MARKET	INDUSTRIAL PRODUC	644902-V
454	4081	PMCORP	PAN MALAYSIA CORPORATION BHD	MAIN MARKET	INDUSTRIAL PRODUC	4920-D
455	0149	FIBON	FIBON BERHAD	MAIN MARKET	INDUSTRIAL PRODUC	811010-H
456	3611	GBH	GOH BAN HUAT BHD	MAIN MARKET	INDUSTRIAL PRODUC	1713-A
457	7155	SKPRES	SKP RESOURCES BHD	MAIN MARKET	INDUSTRIAL PRODUC	524297-T
458	7111	WEIDA	WEIDA (M) BHD	MAIN MARKET	INDUSTRIAL PRODUC	504747-W
459	5087	MYCRON	MYCRON STEEL BHD	MAIN MARKET	INDUSTRIAL PRODUC	622819-D
460	7087	MAGNI	MAGNI-TECH INDUSTRIES BHD	MAIN MARKET	INDUSTRIAL PRODUC	422585-V
461	7020	YUNKONG	YUNG KONG GALVANISING IND	MAIN MARKET	INDUSTRIAL PRODUC	32939-U
462	7173	TOYOINK	TOYO INK GROUP BHD	MAIN MARKET	INDUSTRIAL PRODUC	590521-D
463	7080	PERMAJU	PERMAJU INDUSTRIES BHD	MAIN MARKET	INDUSTRIAL PRODUC	379057-V
464	5001	MIECO	MIECO CHIPBOARD BHD	MAIN MARKET	INDUSTRIAL PRODUC	12849-K
465	7034	TGUAN	THONG GUAN INDUSTRIES BHD	MAIN MARKET	INDUSTRIAL PRODUC	324203-K
466	8745	LEWEKO	LEWEKO RESOURCES BHD	MAIN MARKET	INDUSTRIAL PRODUC	568420-K
467	7014	YLI	YLI HOLDINGS BHD	MAIN MARKET	INDUSTRIAL PRODUC	367249-A
468	7133	ULICORP	UNITED U-LI CORPORATION BHD	MAIN MARKET	INDUSTRIAL PRODUC	510737-H
469	7773	EPMB	EP MANUFACTURING BHD	MAIN MARKET	INDUSTRIAL PRODUC	390116-T
470	9741	TECNIC	TECNIC GROUP BERHAD	MAIN MARKET	INDUSTRIAL PRODUC	302675-A
471	7016	CHUAN	CHUAN HUAT RESOURCES BHD	MAIN MARKET	INDUSTRIAL PRODUC	290729-W
472	7162	ASTINO	ASTINO BHD	MAIN MARKET	INDUSTRIAL PRODUC	523085-X
473	7217	EMETALL	EONMETALL GROUP BHD	MAIN MARKET	INDUSTRIAL PRODUC	631617-D
474	7225	PA	P.A. RESOURCES BHD	MAIN MARKET	INDUSTRIAL PRODUC	664612-X
475	4022	WIJAYA	WIJAYA BARU GLOBAL BHD	MAIN MARKET	INDUSTRIAL PRODUC	8184-W
476	7285	ТОМҮРАК	TOMYPAK HOLDINGS BHD	MAIN MARKET	INDUSTRIAL PRODUC	337743-W
477		PWORTH	PRICEWORTH WOOD PRODUCTS BHD		INDUSTRIAL PRODUC	399292-V
477			·			

480 481	7171 1481	CENBOND	CENTURY BOND BHD	MAIN MARKET	INDUSTRIAL PRODUC	228669-V	
481	1481						
		ASB	ADVANCE SYNERGY BHD	MAIN MARKET	INDUSTRIAL PRODUC	1225-D	
482	7075	MAEMODE	MALAYSIAN AE MODELS HOLDINGS	MAIN MARKET	INDUSTRIAL PRODUC	239808-H	
702	7096	GPA	GPA HOLDINGS BHD	MAIN MARKET	INDUSTRIAL PRODUC	493897-V	
483	7919	HPI	HPI RESOURCES BHD	MAIN MARKET	INDUSTRIAL PRODUC	376950-K	
484	7222	IMASPRO	IMASPRO CORPORATION BHD	MAIN MARKET	INDUSTRIAL PRODUC	657527-H	
485	7027	CHANG	CHANGHUAT CORPORATION BHD	MAIN MARKET	INDUSTRIAL PRODUC	333769-X	
486	3743	MAICA	MALAYSIA AICA BHD	MAIN MARKET	INDUSTRIAL PRODUC	8235-K	
487	7104	JOTECH	JOTECH HOLDINGS BHD	MAIN MARKET	INDUSTRIAL PRODUC	334818-P	
488	9881	LSTEEL	LEADER STEEL HOLDINGS BHD	MAIN MARKET	INDUSTRIAL PRODUC	267209-K	
489	7169	DOMINAN	DOMINANT ENTERPRISE BHD	MAIN MARKET	INDUSTRIAL PRODUC	221206-D	
490	8281	GFB	GOLDEN FRONTIER BHD	MAIN MARKET	INDUSTRIAL PRODUC	12771-K	
491	8648	JASKITA	JASA KITA BHD	MAIN MARKET	INDUSTRIAL PRODUC	239256-M	
492	9202	MAXTRAL	MAXTRAL INDUSTRY BHD	MAIN MARKET	INDUSTRIAL PRODUC	584501-H	
493	8117	POLY	POLY GLASS FIBRE (M) BHD	MAIN MARKET	INDUSTRIAL PRODUC	42138-X	
494	5095	HEVEA	HEVEABOARD BHD	MAIN MARKET	INDUSTRIAL PRODUC	275512-A	
495	7544	QUALITY	QUALITY CONCRETE HOLDINGS BHD	MAIN MARKET	INDUSTRIAL PRODUC	378282-D	
496	2682	AISB	AMALGAMATED INDUSTRIAL STEEL	MAIN MARKET	INDUSTRIAL PRODUC	9118-M	
497	6297	BOXPAK	BOX-PAK (MALAYSIA) BHD	MAIN MARKET	INDUSTRIAL PRODUC	21338-W	
498	8087	RCI	ROCK CHEMICAL INDUSTRIES (M)	MAIN MARKET	INDUSTRIAL PRODUC	13625-T	
499	9199	LYSAGHT	LYSAGHT GALVANIZED STEEL BHD	MAIN MARKET	INDUSTRIAL PRODUC	46426-P	
500	5152	MBL	MUAR BAN LEE GROUP BERHAD	MAIN MARKET	INDUSTRIAL PRODUC	753588-P	
501	9113	SANBUMI	SANBUMI HOLDINGS BHD	MAIN MARKET	INDUSTRIAL PRODUC	8386-P	
502	6262	INNO	INNOPRISE PLANTATIONS BERHAD	MAIN MARKET	INDUSTRIAL PRODUC	285072-P	
503	7232	RESINTC	RESINTECH BHD	MAIN MARKET	INDUSTRIAL PRODUC	341662-X	
504	8362	КҮМ	KYM HOLDINGS BHD	MAIN MARKET	INDUSTRIAL PRODUC	84303-A	
505	5151	HALEX	HALEX HOLDINGS BERHAD	MAIN MARKET	INDUSTRIAL PRODUC	206220-U	
506	9504	LINEAR	LINEAR CORPORATION BHD	MAIN MARKET	INDUSTRIAL PRODUC	288687-W	
507	9601	HWGB	HO WAH GENTING BHD	MAIN MARKET	INDUSTRIAL PRODUC	272923-H	
508	7233	DUFU	DUFU TECHNOLOGY CORP. BHD	MAIN MARKET	INDUSTRIAL PRODUC	581612-A	
509	7008	ΑΟΤΟΥ	AUTOV CORPORATION BHD	MAIN MARKET	INDUSTRIAL PRODUC	108253-W	
510	5835	DOLMITE	DOLOMITE CORPORATION BHD	MAIN MARKET	INDUSTRIAL PRODUC	290455-W	
511	7112	INGRESS	INGRESS CORPORATION BHD	MAIN MARKET	INDUSTRIAL PRODUC	490799-K	
512	7358	SUNCRN	SUNCHIRIN INDUSTRIES (M) BHD	MAIN MARKET	INDUSTRIAL PRODUC	157215-V	
513	9849	YOKO	TAI KWONG YOKOHAMA BHD	MAIN MARKET	INDUSTRIAL PRODUC	182913-P	
514	7086	GEFUNG	GEFUNG HOLDINGS BHD	MAIN MARKET	INDUSTRIAL PRODUC	654188-H	
515	7059	METALR	METAL RECLAMATION BHD	MAIN MARKET	INDUSTRIAL PRODUC	424773-V	
516	7157	CYL	CYL CORPORATION BHD	MAIN MARKET	INDUSTRIAL PRODUC	516143-V	
517	7192	GOODWAY	GOODWAY INTEGRATED INDUSTRIES	MAIN MARKET	INDUSTRIAL PRODUC	618972-T	
518	7247	SCGM	SCGM BHD	MAIN MARKET	INDUSTRIAL PRODUC	779028-H	
519	8494	LBICAP	LBI CAPITAL BHD	MAIN MARKET	INDUSTRIAL PRODUC	41412-X	
520	5082	СҮМАО	CYMAO HOLDINGS BHD	MAIN MARKET	INDUSTRIAL PRODUC	445931-U	
521	7109	OCTAGON	OCTAGON CONSOLIDATED BHD	MAIN MARKET	INDUSTRIAL PRODUC	497913-X	
522	7168	FURNWEB	FURNIWEB INDUSTRIAL PRODUCTS	MAIN MARKET	INDUSTRIAL PRODUC	541706-V	

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523	9997	PENSONI	PENSONIC HOLDINGS BHD	MAIN MARKET	INDUSTRIAL PRODUC	300426-P
524	2984	FACBIND	FACB INDUSTRIES INCORPORATED	MAIN MARKET	INDUSTRIAL PRODUC	48850-K
525	5025	NWP	NWP HOLDINGS BHD	MAIN MARKET	INDUSTRIAL PRODUC	495476-M
526	7181	ATURMJU	ATURMAJU RESOURCES BHD	MAIN MARKET	INDUSTRIAL PRODUC	448934-M
527	8818	wwткн	WAWASAN TKH HOLDINGS BHD	MAIN MARKET	INDUSTRIAL PRODUC	540218-A
528	7183	IRETEX	IRE-TEX CORPORATION BHD	MAIN MARKET	INDUSTRIAL PRODUC	576121-A
529	7189	EKIB	EMAS KIARA INDUSTRIES BHD	MAIN MARKET	INDUSTRIAL PRODUC	485144-H
530	7130	KPOWER	KUMPULAN POWERNET BHD	MAIN MARKET	INDUSTRIAL PRODUC	419227-X
531	7167	JOHOTIN	JOHORE TIN BHD	MAIN MARKET	INDUSTRIAL PRODUC	532570-V
532	7498	RALCO	RALCO CORPORATION BHD	MAIN MARKET	INDUSTRIAL PRODUC	333101-V
533	7190	PPG	PELANGI PUBLISHING GROUP BHD	MAIN MARKET	INDUSTRIAL PRODUC	593649-H
534	7199	KEINHIN	KEIN HING INTERNATIONAL BHD	MAIN MARKET	INDUSTRIAL PRODUC	616056-T
535	7140	OKA	OKA CORPORATION BHD	MAIN MARKET	INDUSTRIAL PRODUC	519941-H
536	5576	MINHO	MINHO (M) BHD	MAIN MARKET	INDUSTRIAL PRODUC	200930-H
537	7811	SAPIND	SAPURA INDUSTRIAL BHD	MAIN MARKET	INDUSTRIAL PRODUC	17547-W
538	7146	AEM	AE MULTI HOLDINGS BHD	MAIN MARKET	INDUSTRIAL PRODUC	539777-D
539	7196	YAHORNG	YA HORNG ELECTRONIC (M) BHD	MAIN MARKET	INDUSTRIAL PRODUC	185643-K
540	7127	UKB	UNITED KOTAK BHD	MAIN MARKET	INDUSTRIAL PRODUC	78806-V
541	9148	ADVPKG	ADVANCED PACKAGING TECHNOLOGY	MAIN MARKET	INDUSTRIAL PRODUC	82982-K
542	7172	PMBTECH	PMB TECHNOLOGY BHD	MAIN MARKET	INDUSTRIAL PRODUC	584257-X
543	7235	SUPERLN	SUPERLON HOLDINGS BHD	MAIN MARKET	INDUSTRIAL PRODUC	740412-X
544	9342	HARVEST	HARVEST COURT INDUSTRIES BHD	MAIN MARKET	INDUSTRIAL PRODUC	36998-T
545	7187	BKOON	BOON KOON GROUP BHD	MAIN MARKET	INDUSTRIAL PRODUC	553434-U
546	7033	HIGHTEC	KUMPULAN H&L HIGH-TECH BHD	MAIN MARKET	INDUSTRIAL PRODUC	317805-V
547	7854	TIMWELL	TIMBERWELL BHD	MAIN MARKET	INDUSTRIAL PRODUC	387185-W
548	8311	MITHRIL	MITHRIL BHD	MAIN MARKET	INDUSTRIAL PRODUC	577765-U
549	7245	WZSTEEL	WZ STEEL BERHAD	MAIN MARKET	INDUSTRIAL PRODUC	666098-X
550	7043	JMR	JMR CONGLOMERATION BHD	MAIN MARKET	INDUSTRIAL PRODUC	592280-W
551	7214	ARANK	A-RANK BHD	MAIN MARKET	INDUSTRIAL PRODUC	633621-X
552	5223	MENTIGA	MENTIGA CORPORATION BHD	MAIN MARKET	INDUSTRIAL PRODUC	10289-K
553	7097	TAWIN	TA WIN HOLDINGS BHD	MAIN MARKET	INDUSTRIAL PRODUC	291592-U
554	7221	BSLCORP	BSL CORPORATION BERHAD	MAIN MARKET	INDUSTRIAL PRODUC	651118-K
555	9237	SCIB	SARAWAK CONSOLIDATED IND BHD	MAIN MARKET	INDUSTRIAL PRODUC	25583-W
556	7220	IRMGRP	IRM GROUP BHD	MAIN MARKET	INDUSTRIAL PRODUC	628000-T
557	5000	NARRA	NARRA INDUSTRIES BHD	MAIN MARKET	INDUSTRIAL PRODUC	62227-X
558	7676	GUNUNG	GUNUNG CAPITAL BERHAD	MAIN MARKET	INDUSTRIAL PRODUC	330171-P
559	7005	BIG	B.I.G. INDUSTRIES BHD	MAIN MARKET	INDUSTRIAL PRODUC	195285-D
560	7239	SCNWOLF	SCANWOLF CORPORATION BHD	MAIN MARKET	INDUSTRIAL PRODUC	740909-T
561	8044	CFM	COMPUTER FORMS (M) BHD	MAIN MARKET	INDUSTRIAL PRODUC	4423-H
562	7050	WONG	WONG ENGINEERING CORPORATION	MAIN MARKET	INDUSTRIAL PRODUC	409959-W
563	8273	PPHB	PUBLIC PACKAGES HOLDINGS BHD	MAIN MARKET	INDUSTRIAL PRODUC	162413-K
564	7226	WATTA	WATTA HOLDING BHD	MAIN MARKET	INDUSTRIAL PRODUC	324384-A
565	8192	MERCURY	MERCURY INDUSTRIES BHD	MAIN MARKET	INDUSTRIAL PRODUC	10550-K
566	8052	CICB	CENTRAL INDUSTRIAL CORPORATION	MAIN MARKET	INDUSTRIAL PRODUC	12186-K

567	7118	LIPO	LIPO CORPORATION BHD	MAIN MARKET	INDUSTRIAL PRODUC	491485-V	
568	7116	AIKBEE	AIKBEE RESOURCES BHD	MAIN MARKET	INDUSTRIAL PRODUC	428890-D	
569	7595	VINTAGE	VTI VINTAGE BHD	MAIN MARKET	INDUSTRIAL PRODUC	589167-W	
570	8656	SUPER	SUPER ENTERPRISE HOLDINGS BHD	MAIN MARKET	INDUSTRIAL PRODUC	240346-X	
571	7188	BTM	BTM RESOURCES BHD	MAIN MARKET	INDUSTRIAL PRODUC	303962-T	
572	7227	UMSNGB	UMS-NEIKEN GROUP BHD	MAIN MARKET	INDUSTRIAL PRODUC	650473-V	
573	5065	ORNA	ORNAPAPER BHD	MAIN MARKET	INDUSTRIAL PRODUC	573695-W	
574	7986	CNASIA	CN ASIA CORPORATION BHD	MAIN MARKET	INDUSTRIAL PRODUC	399442-A	
575	7017	KOMARK	KOMARKCORP BHD	MAIN MARKET	INDUSTRIAL PRODUC	374265-A	
576	7061	ABRIC	ABRIC BHD	MAIN MARKET	INDUSTRIAL PRODUC	187259-W	
577	7186	UDSCAP	UDS CAPITAL BHD	MAIN MARKET	INDUSTRIAL PRODUC	502246-P	
578	7077	GSB	GSB GROUP BHD	MAIN MARKET	INDUSTRIAL PRODUC	287036-X	
579	6637	PNEPCB	PNE PCB BHD	MAIN MARKET	INDUSTRIAL PRODUC	168098-V	
580	7161	FUTUTEC	FUTUTECH BHD	MAIN MARKET	INDUSTRIAL PRODUC	122592-U	
581	7132	SMISCOR	SMIS CORPORATION BHD	MAIN MARKET	INDUSTRIAL PRODUC	491857-V	
582	8907	EG	EG INDUSTRIES BHD	MAIN MARKET	INDUSTRIAL PRODUC	222897-W	
583	7073	SEACERA	SEACERA TILES BHD	MAIN MARKET	INDUSTRIAL PRODUC	163751-H	
584	8095	MAYPAK	MALAYSIA PACKAGING INDUSTRY	MAIN MARKET	INDUSTRIAL PRODUC	22265-U	
585	7163	PJBUMI	PJBUMI BHD	MAIN MARKET	INDUSTRIAL PRODUC	141537-M	
586	7115	SKBSHUT	SKB SHUTTERS CORPORATION BHD	MAIN MARKET	INDUSTRIAL PRODUC	430362-U	
587	4995	VERSATL	VERSATILE CREATIVE BHD	MAIN MARKET	INDUSTRIAL PRODUC	603770-D	
588	7197	GESHEN	GE-SHEN CORPORATION BHD	MAIN MARKET	INDUSTRIAL PRODUC	633814-X	
589	7114	DNONCE	DNONCE TECHNOLOGY BHD	MAIN MARKET	INDUSTRIAL PRODUC	503292-K	
590	7004	MULTICO	MULTI-CODE ELECTRONICS INDS	MAIN MARKET	INDUSTRIAL PRODUC	193094-K	
591	7781	MTEAM	MAJOR TEAM HOLDINGS BHD	MAIN MARKET	INDUSTRIAL PRODUC	567427-W	
592	8079	LEESK	LEE SWEE KIAT GROUP BHD	MAIN MARKET	INDUSTRIAL PRODUC	607583-T	
593	9954	PAHANCO	PAHANCO CORPORATION BHD	MAIN MARKET	INDUSTRIAL PRODUC	71024-T	
594	7025	WOODLAN	WOODLANDOR HOLDINGS BHD	MAIN MARKET	INDUSTRIAL PRODUC	376693-D	
595	9687	UBB	UNITED BINTANG BHD	MAIN MARKET	INDUSTRIAL PRODUC	44676-M	
596	9024	METECH	METECH GROUP BHD	MAIN MARKET	INDUSTRIAL PRODUC	219350-H	
597	8176	DENKO	DENKO INDUSTRIAL CORPORATION	MAIN MARKET	INDUSTRIAL PRODUC	190155-M	
598	7079	MINPLY	MINPLY HOLDINGS (M) BHD	MAIN MARKET	INDUSTRIAL PRODUC	325631-V	
599	6211	KIALIM	KIA LIM BHD	MAIN MARKET	INDUSTRIAL PRODUC	342868-P	
600	8257	TENGARA	TENGGARA OIL BHD	MAIN MARKET	INDUSTRIAL PRODUC	8695-M	
601	7099	SMPC	SMPC CORPORATION BHD	MAIN MARKET	INDUSTRIAL PRODUC	79082-V	
602	7147	TRACOMA	TRACOMA HOLDINGS BHD	MAIN MARKET	INDUSTRIAL PRODUC	361067-M	
603	7447	AXIS	AXIS INCORPORATION BHD	MAIN MARKET	INDUSTRIAL PRODUC	587853-T	
604	7044	AUTOAIR	AUTOAIR HOLDINGS BHD	MAIN MARKET	INDUSTRIAL PRODUC	414010-M	
605	9938	BRIGHT	BRIGHT PACKAGING INDUSTRY BHD	MAIN MARKET	INDUSTRIAL PRODUC	161776-W	
606	7049	OCI	OCI BERHAD	MAIN MARKET	INDUSTRIAL PRODUC	95161-H	
607	7070	ASUPREM	ASTRAL SUPREME BHD	MAIN MARKET	INDUSTRIAL PRODUC	442371-A	
608	8699	SKW	SYARIKAT KAYU WANGI BHD	MAIN MARKET	INDUSTRIAL PRODUC	64915-T	
609	9539	MUH	MULTI-USAGE HOLDINGS BHD	MAIN MARKET	INDUSTRIAL PRODUC	228933-D	
610	7143	STONE	STONE MASTER CORPORATION BHD	MAIN MARKET	INDUSTRIAL PRODUC	498639-X	

611	7194	LIMAHSN	LIMAHSOON BHD	MAIN MARKET	INDUSTRIAL PRODUC	602026-H
612	7552	EVERMAS	EVERMASTER GROUP BHD	MAIN MARKET	INDUSTRIAL PRODUC	334221-A
613	7175	POLYTWR	POLY TOWER VENTURES BHD	MAIN MARKET	INDUSTRIAL PRODUC	481960-U
614	7092	JPK	JPK HOLDINGS BHD	MAIN MARKET	INDUSTRIAL PRODUC	442173-V
615	7587	WWCABLE	WONDERFUL WIRE & CABLE BHD	MAIN MARKET	INDUSTRIAL PRODUC	169561-D
616	5068	LUSTER	LUSTER INDUSTRIES BHD	MAIN MARKET	INDUSTRIAL PRODUC	156148-P
617	7166	ENGLOTC	ENGLOTECHS HOLDING BHD	MAIN MARKET	INDUSTRIAL PRODUC	534222-U
618	5517	SHANG	SHANGRI-LA HOTELS (M) BHD	MAIN MARKET	HOTEL	10889-U
619	1643	LANDMRK	LANDMARKS BHD	MAIN MARKET	HOTEL	185202-H
620	5592	GCE	GRAND CENTRAL ENTERPRISES BHD	MAIN MARKET	HOTEL	131696-V
621	3263	GPERAK	GULA PERAK BHD	MAIN MARKET	HOTEL	8104-X
622	4065	PPB	PPB GROUP BHD	MAIN MARKET	CONSUMER PRODUC	8167-W
623	4162	BAT	BRITISH AMERICAN TOBACCO (M)	MAIN MARKET	CONSUMER PRODUC	4372-M
624	4707	NESTLE	NESTLE (M) BHD	MAIN MARKET	CONSUMER PRODUC	110925-W
625	4588	UMW	UMW HOLDINGS BHD	MAIN MARKET	CONSUMER PRODUC	90278-P
626	3689	F&N	FRASER & NEAVE HOLDINGS BHD	MAIN MARKET	CONSUMER PRODUC	4205-V
627	4006	ORIENT	ORIENTAL HOLDINGS BHD	MAIN MARKET	CONSUMER PRODUC	5286-U
628	5304	PROTON	PROTON HOLDINGS BHD	MAIN MARKET	CONSUMER PRODUC	623177-A
629	3255	GAB	GUINNESS ANCHOR BHD	MAIN MARKET	CONSUMER PRODUC	5350-X
630	4405	TCHONG	TAN CHONG MOTOR HOLDINGS BHD	MAIN MARKET	CONSUMER PRODUC	12969-P
631	2836	CARLSBG	CARLSBERG BREWERY MALAYSIA BHI	MAIN MARKET	CONSUMER PRODUC	9210-K
632	7084	QL	QL RESOURCES BHD	MAIN MARKET	CONSUMER PRODUC	428915-X
633	2615	JTINTER	JT INTERNATIONAL BHD	MAIN MARKET	CONSUMER PRODUC	9244-D
634	3301	HLIND	HONG LEONG INDUSTRIES BHD	MAIN MARKET	CONSUMER PRODUC	5486-P
635	4421	TWS	TRADEWINDS (M) BHD	MAIN MARKET	CONSUMER PRODUC	19123-K
636	3719	PANAMY	PANASONIC MANUFACTURING MSIA	MAIN MARKET	CONSUMER PRODUC	6100-K
637	3026	DLADY	DUTCH LADY MILK INDUSTRIES BHD	MAIN MARKET	CONSUMER PRODUC	5063-V
638	5066	NTPM	NTPM HOLDINGS BHD	MAIN MARKET	CONSUMER PRODUC	384662-U
639	5606	GOLDIS	GOLDIS BHD	MAIN MARKET	CONSUMER PRODUC	515802-U
640	7129	ASIAFLE	ASIA FILE CORPORATION BHD	MAIN MARKET	CONSUMER PRODUC	313192-P
641	5131	ZHULIAN	ZHULIAN CORPORATION BHD	MAIN MARKET	CONSUMER PRODUC	415527-P
642	7052	PADINI	PADINI HOLDINGS BHD	MAIN MARKET	CONSUMER PRODUC	50202-A
643	5231	PELIKAN	PELIKAN INT.CORPORATION BHD	MAIN MARKET	CONSUMER PRODUC	63611-U
644	2925	ССВ	CYCLE & CARRIAGE BINTANG BHD	MAIN MARKET	CONSUMER PRODUC	7378-D
645	5155	XINQUAN	XINGQUAN INT SPORTS HLDG LTD	MAIN MARKET	CONSUMER PRODUC	995177-V
646	3662	MFLOUR	MALAYAN FLOUR MILLS BHD	MAIN MARKET	CONSUMER PRODUC	4260-M
647	7148	CCMDBIO	CCM DUOPHARMA BIOTECH BHD	MAIN MARKET	CONSUMER PRODUC	524271-W
648	5282	MAMEE	MAMEE-DOUBLE DECKER (M) BHD	MAIN MARKET	CONSUMER PRODUC	222363-T
649	8486	LIONFIB	LION FOREST INDUSTRIES BHD	MAIN MARKET	CONSUMER PRODUC	82056-X
650	7136	SILVER	SILVER BIRD GROUP BHD	MAIN MARKET	CONSUMER PRODUC	277977-X
651	2828	CIHLDG	C.I. HOLDINGS BHD	MAIN MARKET	CONSUMER PRODUC	37918-A
652	6432	APOLLO	APOLLO FOOD HOLDINGS BHD	MAIN MARKET	CONSUMER PRODUC	291471-M
653	4642	YHS	YEO HIAP SENG (M) BHD	MAIN MARKET	CONSUMER PRODUC	3405-X

655	4839	LHH	LEONG HUP HOLDINGS BHD	MAIN MARKET	CONSUMER PRODUC	51316-D	
656	2658	AJI	AJINOMOTO (M) BHD	MAIN MARKET	CONSUMER PRODUC	4295-W	
657	5156	XDL	XIDELANG HOLDINGS LTD	MAIN MARKET	CONSUMER PRODUC	995210-W	
658	3921	MWE	MWE HOLDINGS BHD	MAIN MARKET	CONSUMER PRODUC	5713-D	
659	7213	HOVID	HOVID BHD	MAIN MARKET	CONSUMER PRODUC	58476-A	
660	5150	MSPORTS	MULTI SPORTS HOLDINGS LTD	MAIN MARKET	CONSUMER PRODUC	995199-H	
661	7060	NHFATT	NEW HOONG FATT HOLDINGS BHD	MAIN MARKET	CONSUMER PRODUC	425709-K	
662	5080	POHKONG	POH KONG HOLDINGS BHD	MAIN MARKET	CONSUMER PRODUC	586139-K	
663	7237	PWOOT	POWER ROOT BHD	MAIN MARKET	CONSUMER PRODUC	733268-U	
664	9172	FPI	FORMOSA PROSONIC INDUSTRIES	MAIN MARKET	CONSUMER PRODUC	172312-K	
665	5024	HUPSENG	HUP SENG INDUSTRIES BHD	MAIN MARKET	CONSUMER PRODUC	226098-P	
666	7205	COCOLND	COCOALAND HOLDINGS BHD	MAIN MARKET	CONSUMER PRODUC	516019-H	
667	7216	KAWAN	KAWAN FOOD BHD	MAIN MARKET	CONSUMER PRODUC	640445-V	
668	7030	KENMARK	KENMARK INDUSTRIAL CO. (M) BHD	MAIN MARKET	CONSUMER PRODUC	173964-V	
669	7149	ENGKAH	ENG KAH CORPORATION BHD	MAIN MARKET	CONSUMER PRODUC	435649-H	
670	5102	GUANCHG	GUAN CHONG BHD	MAIN MARKET	CONSUMER PRODUC	646226-K	
671	7120	ACOSTEC	ACOUSTECH BHD	MAIN MARKET	CONSUMER PRODUC	496665-W	
672	7090	AHEALTH	APEX HEALTHCARE BHD	MAIN MARKET	CONSUMER PRODUC	473108-T	
673	5074	DXN	DXN HOLDINGS BHD	MAIN MARKET	CONSUMER PRODUC	363120-V	
674	7246	SIGN	SIGNATURE INTERNATIONAL BHD	MAIN MARKET	CONSUMER PRODUC	754118-K	
675	7119	DEGEM	DEGEM BHD	MAIN MARKET	CONSUMER PRODUC	415726-T	
676	4251	IBHD	I-BHD	MAIN MARKET	CONSUMER PRODUC	7029-H	
677	7006	LATITUD	LATITUDE TREE HOLDINGS BHD	MAIN MARKET	CONSUMER PRODUC	302829-W	
678	7035	ССК	CCK CONSOLIDATED HOLDINGS BHD	MAIN MARKET	CONSUMER PRODUC	396692-T	
679	7757	UPA	UPA CORPORATION BHD	MAIN MARKET	CONSUMER PRODUC	384490-P	
680	5159	YOCB	YOONG ONN CORPORATION BERHAD	MAIN MARKET	CONSUMER PRODUC	814138-K	
681	7178	YSPSAH	Y.S.P.SOUTHEAST ASIA HOLDING	MAIN MARKET	CONSUMER PRODUC	552781-X	
682	7152	JAYCORP	JAYCORP BHD	MAIN MARKET	CONSUMER PRODUC	459789-X	
683	7200	TEKSENG	TEK SENG HOLDINGS BHD	MAIN MARKET	CONSUMER PRODUC	579572-M	
684	7103	SPRITZR	SPRITZER BHD	MAIN MARKET	CONSUMER PRODUC	265348-V	
685	7252	TEOSENG	TEO SENG CAPITAL BHD	MAIN MARKET	CONSUMER PRODUC	732762-T	
686	5584	YEELEE	YEE LEE CORPORATION BHD	MAIN MARKET	CONSUMER PRODUC	13585-A	
687	7107	OFI	ORIENTAL FOOD INDUSTRIES HLDG	MAIN MARKET	CONSUMER PRODUC	389769-M	
688	7126	LONBISC	LONDON BISCUITS BHD	MAIN MARKET	CONSUMER PRODUC	72057-H	
689	0002	KOTRA	KOTRA INDUSTRIES BHD	MAIN MARKET	CONSUMER PRODUC	497632-P	
690	7184	YEN	YEN GLOBAL BHD	MAIN MARKET	CONSUMER PRODUC	570396-D	
691	7230	TOMEI	TOMEI CONSOLIDATED BHD	MAIN MARKET	CONSUMER PRODUC	692959-W	
692	7125	EMIVEST	EMIVEST BHD	MAIN MARKET	CONSUMER PRODUC	415622-V	
693	7935	MILUX	MILUX CORPORATION BHD	MAIN MARKET	CONSUMER PRODUC	313619-W	
694	5886	MINTYE	MINTYE INDUSTRIES BHD	MAIN MARKET	CONSUMER PRODUC	26870-D	
695	7203	WANGZNG	WANG-ZHENG BHD	MAIN MARKET	CONSUMER PRODUC	612237-K	
696	5091	EKOWOOD	EKOWOOD INTERNATIONAL BHD	MAIN MARKET	CONSUMER PRODUC	301735-D	
697	7089	LIIHEN	LII HEN INDUSTRIES BHD	MAIN MARKET	CONSUMER PRODUC	301361-U	
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699	7088	POHUAT	POH HUAT RESOURCES HOLDINGS	MAIN MARKET	CONSUMER PRODUC	443169-X
700	7215	NIHSIN	NI HSIN RESOURCES BHD	MAIN MARKET	CONSUMER PRODUC	653353-W
701	7722	HINGYAP	HING YIAP GROUP BHD	MAIN MARKET	CONSUMER PRODUC	22414-V
702	7182	KBB	KBB RESOURCES BHD	MAIN MARKET	CONSUMER PRODUC	583565-U
703	7085	LTKM	LTKM BHD	MAIN MARKET	CONSUMER PRODUC	442942-H
704	9369	TGL	TEO GUAN LEE CORPORATION BHD	MAIN MARKET	CONSUMER PRODUC	283710-A
705	7198	DPS	DPS RESOURCES BHD	MAIN MARKET	CONSUMER PRODUC	630878-X
706	4316	SHCHAN	SIN HENG CHAN (MALAYA) BHD	MAIN MARKET	CONSUMER PRODUC	4690-V
707	7002	NAKA	NAKAMICHI CORPORATION BHD	MAIN MARKET	CONSUMER PRODUC	301384-H
708	5107	IQGROUP	IQ GROUP HOLDINGS BHD	MAIN MARKET	CONSUMER PRODUC	636944-U
709	7174	CAB	CAB CAKARAN CORPORATION BHD	MAIN MARKET	CONSUMER PRODUC	583661-W
710	7094	EUROSP	EUROSPAN HOLDINGS BHD	MAIN MARKET	CONSUMER PRODUC	351927-M
711	7128	CAMRES	CAM RESOURCES BHD	MAIN MARKET	CONSUMER PRODUC	535311-D
712	7208	EURO	EURO HOLDINGS BHD	MAIN MARKET	CONSUMER PRODUC	646559-T
713	9385	LAYHONG	LAY HONG BHD	MAIN MARKET	CONSUMER PRODUC	107129-H
714	7062	KHIND	KHIND HOLDINGS BHD	MAIN MARKET	CONSUMER PRODUC	380310-O
715	9946	REX	REX INDUSTRY BHD	MAIN MARKET	CONSUMER PRODUC	282664-K
716	7180	SERNKOU	SERN KOU RESOURCES BHD	MAIN MARKET	CONSUMER PRODUC	519103-X
717	7139	YIKON	YIKON CORPORATION BHD	MAIN MARKET	CONSUMER PRODUC	527272-V
718	7243	BIOOSMO	BIO OSMO BHD	MAIN MARKET	CONSUMER PRODUC	740838-A
719	5649	GPHAROS	GOLDEN PHAROS BHD	MAIN MARKET	CONSUMER PRODUC	152205-W
720	6203	KHEESAN	KHEE SAN BHD	MAIN MARKET	CONSUMER PRODUC	304376-A
721	5157	SINARIA	SINARIA CORPORATION BERHAD	MAIN MARKET	CONSUMER PRODUC	838172-P
722	7121	XIANLNG	XIAN LENG HOLDINGS BHD	MAIN MARKET	CONSUMER PRODUC	468142-U
723	9091	EMICO	EMICO HOLDINGS BHD	MAIN MARKET	CONSUMER PRODUC	230326-D
724	7141	HUATLAI	HUAT LAI RESOURCES BHD	MAIN MARKET	CONSUMER PRODUC	323723-T
725	9776	FARMBES	FARMS BEST BHD	MAIN MARKET	CONSUMER PRODUCT	S
726	7193	BIOSIS	BIOSIS GROUP BHD	MAIN MARKET	CONSUMER PRODUC	618768-D
727	5058	HYTEXIN	HYTEX INTEGRATED BHD	MAIN MARKET	CONSUMER PRODUC	562871-H
728	7211	TAFI	TAFI INDUSTRIES BHD	MAIN MARKET	CONSUMER PRODUC	640935-P
729	8532	SINOTOP	SINOTOP HOLDINGS BHD	MAIN MARKET	CONSUMER PRODUC	114842-H
730	6068	PCCS	PCCS GROUP BHD	MAIN MARKET	CONSUMER PRODUC	280929-K
731	9407	PARAGON	PARAGON UNION BHD	MAIN MARKET	CONSUMER PRODUC	286457-V
732	8931	JERASIA	JERASIA CAPITAL BHD	MAIN MARKET	CONSUMER PRODUC	503248-A
733	7692	WIDETEC	WIDETECH (M) BHD	MAIN MARKET	CONSUMER PRODUC	113939-U
734	7134	PW	PW CONSOLIDATED BHD	MAIN MARKET	CONSUMER PRODUC	420049-H
735	7179	DBE	D.B.E. GURNEY RESOURCES BHD	MAIN MARKET	CONSUMER PRODUC	535763-A
736	7154	CAELY	CAELY HOLDINGS BHD	MAIN MARKET	CONSUMER PRODUC	408376-U
737	7165	APP	APP INDUSTRIES BHD	MAIN MARKET	CONSUMER PRODUC	504718-U
738	7082	SYF	SYF RESOURCES BHD	MAIN MARKET	CONSUMER PRODUC	364372-H
739	7098	HLSCORP	HOCK LOK SIEW CORPORATION BHD	MAIN MARKET	CONSUMER PRODUC	463440-X
740	7176	TPC	TPC PLUS BHD	MAIN MARKET	CONSUMER PRODUC	615330-T
741	7029	MASTER	MASTER-PACK GROUP BERHAD	MAIN MARKET	CONSUMER PRODUC	297020-W
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743	7156	BASWELL	BASWELL RESOURCES BHD	MAIN MARKET	CONSUMER PRODUC	540508-D	
744	9423	CHEEWAH	CHEE WAH CORPORATION BHD	MAIN MARKET	CONSUMER PRODUC	32250-D	
745	8478	HWATAI	HWA TAI INDUSTRIES BHD	MAIN MARKET	CONSUMER PRODUC	19688-V	
746	7439	TECGUAN	TECK GUAN PERDANA BHD	MAIN MARKET	CONSUMER PRODUC	307097-A	
747	8966	PRLEXUS	PROLEXUS BHD	MAIN MARKET	CONSUMER PRODUC	250857-T	
748	7412	SHH	SHH RESOURCES HOLDINGS BHD	MAIN MARKET	CONSUMER PRODUC	304227-V	
749	5039	BANENG	BANENG HOLDINGS BHD	MAIN MARKET	CONSUMER PRODUC	307139-W	
750	9733	MAXBIZ	MAXBIZ CORPORATION BHD	MAIN MARKET	CONSUMER PRODUC	587870-T	
751	7066	YONGTAI	YONG TAI BHD	MAIN MARKET	CONSUMER PRODUC	311186-T	
752	7071	TAKASO	TAKASO RESOURCES BHD	MAIN MARKET	CONSUMER PRODUC	440508-K	
753	8605	FFHB	FEDERAL FURNITURE HOLDINGS (M)	MAIN MARKET	CONSUMER PRODUC	97092-W	
754	7051	AMTEK	AMTEK HOLDINGS BHD	MAIN MARKET	CONSUMER PRODUC	125863-K	
755	7943	LCHEONG	LEN CHEONG HOLDING BHD	MAIN MARKET	CONSUMER PRODUC	339810-A	
756	5017	ΝΙΚΚΟ	NIKKO ELECTRONICS BHD	MAIN MARKET	CONSUMER PRODUC	174076-U	
757	4677	YTL	YTL CORPORATION BHD	MAIN MARKET	CONSTRUCTION	92647-H	
758	3336	IJM	IJM CORPORATION BHD	MAIN MARKET	CONSTRUCTION	104131-A	
759	5398	GAMUDA	GAMUDA BHD	MAIN MARKET	CONSTRUCTION	29579-T	
760	9679	WCT	WCT BHD	MAIN MARKET	CONSTRUCTION	66538-K	
761	5085	MUDAJYA	MUDAJAYA GROUP BHD	MAIN MARKET	CONSTRUCTION	605539-H	
762	1651	MRCB	MALAYSIAN RESOURCES CORP	MAIN MARKET	CONSTRUCTION	7994-D	
763	4308	SUNWAY	SUNWAY HOLDINGS BHD	MAIN MARKET	CONSTRUCTION	37465-A	
764	6238	HSL	HOCK SENG LEE BHD	MAIN MARKET	CONSTRUCTION	45556-X	
765	5030	RANHILL	RANHILL BHD	MAIN MARKET	CONSTRUCTION	430537-K	
766	5117	PPEDANA	PUTRAJAYA PERDANA BHD	MAIN MARKET	CONSTRUCTION	465327-P	
767	5703	MUHIBAH	MUHIBBAH ENGINEERING (M) BHD	MAIN MARKET	CONSTRUCTION	12737-K	
768	2283	ZELAN	ZELAN BHD	MAIN MARKET	CONSTRUCTION	27676-V	
769	3166	GCORP	GENERAL CORPORATION BHD	MAIN MARKET	CONSTRUCTION	8622-X	
770	7706	LOH&LOH	LOH & LOH CORPORATION BHD	MAIN MARKET	CONSTRUCTION	389765-V	
771	4723	JAKS	JAKS RESOURCES BERHAD	MAIN MARKET	CONSTRUCTION	585648-T	
772	5070	PRTASCO	PROTASCO BHD	MAIN MARKET	CONSTRUCTION	548078-H	
773	5054	TRC	TRC SYNERGY BHD	MAIN MARKET	CONSTRUCTION	413912-D	
774	7078	AZRB	AHMAD ZAKI RESOURCES BHD	MAIN MARKET	CONSTRUCTION	432768-X	
775	8877	EKOVEST	EKOVEST BHD	MAIN MARKET	CONSTRUCTION	132493-D	
776	7047	FAJAR	FAJARBARU BUILDER GRP BHD	MAIN MARKET	CONSTRUCTION	281645-U	
777	8761	BREM	BREM HOLDINGS BHD	MAIN MARKET	CONSTRUCTION	66756-P	
778	7617	MAGNA	MAGNA PRIMA BHD	MAIN MARKET	CONSTRUCTION	369519-P	
779	9083	JETSON	KUMPULAN JETSON BHD	MAIN MARKET	CONSTRUCTION	34134-H	
780	3565	KEURO	KUMPULAN EUROPLUS BHD	MAIN MARKET	CONSTRUCTION	534368-A	
781	5042	TSRCAP	TSR CAPITAL BHD	MAIN MARKET	CONSTRUCTION	541149-W	
782	9261	GADANG	GADANG HOLDINGS BHD	MAIN MARKET	CONSTRUCTION	278114-K	
783	5924	MTDACPI	MTD ACPI ENGINEERING BHD	MAIN MARKET	CONSTRUCTION	258836-V	
784	9598	PTARAS	PINTARAS JAYA BHD	MAIN MARKET	CONSTRUCTION	189900-H	
785	7528	DKLS	DKLS INDUSTRIES BHD	MAIN MARKET	CONSTRUCTION	369472-P	
786	4901	NAMFATT	NAM FATT CORPORATION BHD	MAIN MARKET	CONSTRUCTION	44548-H	

787	8591	CRESBLD	CREST BUILDER HOLDINGS BHD	MAIN MARKET	CONSTRUCTION	573382-P
788	5932	BPURI	BINA PURI HOLDINGS BHD	MAIN MARKET	CONSTRUCTION	207184-X
789	5169	HOHUP	HO HUP CONSTRUCTION COMPANY	MAIN MARKET	CONSTRUCTION	14034-W
790	9628	LDAUN	LEBAR DAUN BHD	MAIN MARKET	CONSTRUCTION	590945-H
791	8834	IREKA	IREKA CORPORATION BHD	MAIN MARKET	CONSTRUCTION	25882-A
792	5129	MELATI	MELATI EHSAN HOLDINGS BHD	MAIN MARKET	CONSTRUCTION	673293-X
793	7055	PLB	PLB ENGINEERING BHD	MAIN MARKET	CONSTRUCTION	418224-X
794	9571	MITRA	MITRAJAYA HOLDINGS BHD	MAIN MARKET	CONSTRUCTION	268257-T
795	7028	ZECON	ZECON BHD	MAIN MARKET	CONSTRUCTION	134463-X
796	7323	KEN	KEN HOLDINGS BHD	MAIN MARKET	CONSTRUCTION	106173-M
797	1813	SPK	SPK-SENTOSA CORPORATION BHD	MAIN MARKET	CONSTRUCTION	5347-X
798	7145	PSIPTEK	PRINSIPTEK CORPORATION BHD	MAIN MARKET	CONSTRUCTION	595000-H
799	5207	SBCCORP	SBC CORPORATION BHD	MAIN MARKET	CONSTRUCTION	199310-P
800	7023	BGYEAR	BINA GOODYEAR BHD	MAIN MARKET	CONSTRUCTION	18645-H
801	9717	SYCAL	SYCAL VENTURES BHD	MAIN MARKET	CONSTRUCTION	547651-U
802	5006	MERGE	MERGE ENERGY BHD	MAIN MARKET	CONSTRUCTION	420099-X
803	7641	SELOGA	SELOGA HOLDINGS BHD	MAIN MARKET	CONSTRUCTION	361052-H
804	4073	PILECON	PILECON ENGINEERING BHD	MAIN MARKET	CONSTRUCTION	29223-P
805	7007	ARK	ARK RESOURCES BHD	MAIN MARKET	CONSTRUCTION	393342-X
806	7010	HOOVER	GRAND HOOVER BHD	MAIN MARKET	CONSTRUCTION	10493-P
807	5108	ICAP	ICAPITAL.BIZ BHD	MAIN MARKET	CLOSED/FUND	674900-X

#### FORMAT OF COMPANY ADDRESS SENT BY CCM

vchcompanyn	vchregisteredaddress1	vchregisteredaddress2	vchregisteredaddress3	vchregaddre	chrregae	vcpostcode
455130	PLO 464,JLN GANGSA	PASIR GUDANG INDUSTRIAL EST	PASIR GUDANG, JOHOR	NULL	J	81700
189740	57-G PERSIARAN BAYAN INDAH	BAYAN BAY, SUNGAI NIBONG	NULL	BAYAN LEP	Р	11900
44676	8-3,JALAN SEGAMBUT	KUALA LUMPUR.	NULL	NULL	W	51200
995177	312, 3RD FLOOR, BLOCK C	KELANA SQUARE	17, JALAN SS 7/26	PETALING J	В	47301
78983	TINGKAT 8, MENARA BGI	PLAZA BERJAYA	12,JALAN IMBI;KUALA LUM	NULL	W	55100
6682	A-12-01,LEVEL 12 BLOCK A PJ8	NO.23,JALAN BARAT	SEKSYEN 8	PETALING J	В	46050
24123	LEVEL 32, THE GARDENS SOUTH TOWER	MID VALLEY CITY	LINGKARAN SYED PUTRA	KUALA LUN	W	59200
3116	8-3,JALAN SEGAMBUT	KUALA LUMPUR	NULL	NULL	W	51200
3186	LOT 10, JALAN PERUSAHAAN 1	BATU CAVES	SELANGOR	NULL	В	68100
274909	SUITE 11.1A, LEVEL 11 MENARA WELD	76 JLN RAJA CHULAN	K.LUMPUR	NULL	W	50200
324384	SUITE 11.1A LEVEL 11	MENARA WELD	76 JLN RAJA CHULAN;KUAL	NULL	W	50200
416087	10TH FLOOR, WISMA ROZALI	NO 4 PERSIARAN SUKAN	SEKSYEN 13	SHAH ALAN	В	40100
17654	WISMA BBN, PT 7454	JALAN BBN 1/1A	PUTRA NILAI	NILAI	N	71800
820	33A, JALAN TUN SAMBANTHAN	NULL	NULL	IPOH	A	30000
224747	LOT 5428-5429 BLK 16,KCLD	LRG LAPANGAN TERBANG BARU	KUCHING,SARAWAK	NULL	Y	93350
624409	312,3RD FLOOR,BLOCK C	KELANA SQUARE	17, JALAN SS7/26	PETALING J	В	47301
115199	NO.12	TKT.2, BGN SEDC	7 PINTU 3TKT, JLN MAJU	ΚΟΤΑ ΒΗΑΓ	D	15000
301361	NO. 67,TKT. 2	ROOM B,JALAN ALI,MUAR	JOHOR.	NULL	J	84000
23699	NO.9,JALAN TAMING 3	TAMAN TANMING JAYA	SERI KEMBANGAN;SELANG	NULL	В	43300
199310	WISMA SIAH BROTHERS	NO.74A JALAN PAHANG	NULL	KUALA LUN	W	53000
200930	31A,JLN SATU KAW.16	BERKELEY TOWN CENTRE	KLANG;SELANGOR DARUL E	NULL	В	41300
442173	LEV.7,MEN.MILENIUM	JLN.DAMANLELA	PST.BDR.DAMANSARA.D;SA	NULL	W	50490
431424	LOT 7766-7771, SECTION 64 KTLD	JLN DATUK ABANG ABDUL RAHI	NULL	KUCHING	Y	93450
7878	UNIT B-05-3A, 5TH FLOOR, BLOCK B (WEST V	PJ8 OFFICE SUITE, NO. 23, JALAI	SEKSYEN 8	PETALING J	В	46050
145998	6TH FLOOR, SEGI UNIVERSITY COLLEGE	NO. 9, JALAN TEKNOLOGI, TAM	KOTA DAMANSARA, PJU 5	PETALING J	В	47810
304227	NO. 7 ( 1ST FLOOR), JALAN PESTA 1/1	TAMAN TUN DR. ISMAIL 1	JALAN BAKRI	MUAR	J	84000
185643	NO. 2513, LORONG PERUSAHAAN 8	PERAI INDUSTRIAL COMPLEX	PERAI.	NULL	Р	13600
7770	BANGUNAN KURNIA SETIA	NO. 1 JALAN BESAR	NULL	KUANTAN	С	25000
284496	SUITE C-5-4, WISMA GOSHEN	JALAN PANTAI BAHARU	PLAZA PANTAI	KUALA LUN	W	59200
502606	6TH FLOOR,JOHOR TOWER	NO.15,JALAN GEREJA	JOHOR BAHRU, JOHOR	NULL	J	80100

vchcompanyn	vchregisteredaddress1	vchregisteredaddress2	vchregisteredaddress3	vchregaddre	chrregac	vcpostcode
468142	SUITE 1301, 13TH FLOOR	CITY PLAZA	JALAN TEBRAU	JOHOR BAH	J	80300
50202	3RD FLOOR	NO.17, JALAN IPOH KECIL	NULL	KUALA LUN	W	50350
26877	21ST FLOOR, MENARA HAP SENG	JALAN P.RAMLEE	NULL	KUALA LUN	W	50250
163751	NO.312 TINGKAT 3 BLOCK C	KELANA SQUARE	17,JALAN SS 7/36	PETALING J	В	47301
18645	TINGKAT 11,BLOCK B,KELANA CENTRE POINT	3 JALAN SS 7/19	KELANA JAYA;SEL	NULL	В	47301
409449	NO.7,JALAN PJS 7/19	BANDAR SUNWAY	PETALING JAYA, SELANGOR	NULL	В	46150
410285	51-21-A, MENARA BHL BANK	JALAN SULTAN AHMAD SHAH	NULL	GEORGETO	Р	10050
667490	LOT 6.08,6TH FLOOR	PLAZA NATIONWIDE	NO:161, JALAN TUN H.S.LEE	KUALA LUN	W	50000
519103	LOT PTD 6019	JLN.PERINDUSTRIAN 1	KAW.PERINDUSTRIAN BKT.	NULL	l	84200
519941	NO.6	LEBUHRAYA CHATEAU	OFF PESIARAN KAMPAR	IPOH	А	30250
111633	LEVEL 17,1 FIRST AVENUE	BANDAR UTAMA	NULL	PETALING J	В	47800
465327	3RD FLOOR, NO.5	JALAN P16	PRECINCT 16	PUTRAJAYA	W	62150
504096	LEVEL 8	KOMPLEKS ANTARABANGSA	JALAN SULTAN ISMAIL	KUALA LUN	W	50250
12696	TINGKAT 23, BANGUNAN TH SELBORN	153 JALAN TUN RAZAK	NULL	KUALA LUN	W	50400
241644	NO.33-1,JALAN 2/76C	DESA PANDAN	KUALA LUMPUR	NULL	W	55100
71024	NO. 9, JALAN BAYU TINGGI 2A/KS6	TAIPAN 2, BATU UNJUR	NULL	KLANG	В	41200
113939	10TH FLOOR, MENARA HAP SENG	NO. 1 & 3, JALAN P. RAMLEE	NULL	KUALA LUN	W	50250
89194	LEVEL 14, OFFICE TOWER, NO. 1	JALAN NAGASARI	OFF JALAN RAJA CHULAN	KUALA LUN	W	50200
3453	LEVEL 42, MENARA MAXIS	KUALA LUMPUR CITY CENTRE	KUALA LUMPUR	NULL	W	50088
3927	LEVEL 29, MENARA EXXONMOBIL	KUALA LUMPUR CITY CENTRE	KUALA LUMPUR	NULL	W	50088
4817	LEVEL 9, WISMA HONG LEONG	18 JALAN PERAK	KUALA LUMPUR	NULL	W	50450
110532	TKT 12,WISMA GLOMAC 3	KOMP. KEKANA CENTRE POINT	JLN SS7/19;KELANA JAYA	NULL	В	47301
573695	LOT 1A 6TH FLR	MENARA PERTAM JLN BBP2	TAMAN BATU BERENDAM I	MELAKA	Μ	75350
468971	UNIT 621 6TH FLOOR BLOCK A	KELANA CENTRE POINT NO. 3	JALAN SS 4/19 KELANA JAY	PETALING J	В	47301
84303	12, LORONG MEDAN TUANKU SATU	KUALA LUMPUR.	NULL	NULL	W	50300
562699	B-13A-6, BLK.B	MEGAN AVENUE II	NO.12,JALAN YAP KWAN SE	NULL	W	50450
673293	5,JALAN TITIWANGSA	KUALA LUMPUR	NULL	NULL	W	53200
37465	#LEVEL 16,MENARA SUNWAY	JALAN LAGOON TIMUR	BDR SUNWAY;PETALING JA	NULL	W	46150
570396	51-13-A, MENARA BHL BANK	JALAN SULTAN AHMAD SHAH	NULL	GEORGETO	Р	10050
187405	2ND FLOOR, WISMA IJM	JALAN YONG SHOOK LIN	NULL	PETALING J	В	46050
11681	SUITE 1301,13TH.FLOOR	CITY PLAZA	JALAN TEBRAU;JOHOR BAH	NULL	J	80300
295514	LEVEL 31, MENARA HLA	NO. 3, JALAN KIA PENG	NULL	KUALA LUN	W	50450

589272 LEVEL 27	WISMA TUN SAMBANTHAN	NO.2, JLN. SULTAN SULAIM	NULL	W	50000
49317 17TH FLOOR	TOWER BLOCK KOMPLEKS ANT	JALAN SULTAN ISMAIL	KUALA LUN	W	50250
669287 17-2, JALAN SOLARIS 3	SOLARIS MONT' KIARA	NULL	KUALA LUN	W	50480
249243 LOT 586,2ND MILE	JALAN BATU TIGA LAMA	KLANG;SELANGOR	NULL	В	41300
250857 51-21-A,MENARA BHL BANK	JLN.SULTAN AHMAD SHAH	PENANG.	NULL	Р	10050
640935 35-1,(ROOM A)	JALAN DATO HJ.HASSAN	MUAR JOHOR	NULL	J	84000
502213 LOT 506, JLN. PELABUHAN UTARA	BDR.SULTAN SULEIMAN	PELABUHAN KLANG;SEL.	NULL	В	42000
502246 NO.67,2ND FLOOR,ROOM B	JALAN ALI	JOHOR	NULL	J	84000
532570 SUITE 1301, 13TH FLOOR	CITY PLAZA	JALAN TEBRAU	JOHOR BAI	ŀJ	80300
607583 LOT 6122	JALAN HAJI SALLEH	OFF JALAN MERU	KLANG	В	41050
3809 5TH FLOOR, MENARA PML	NO.2, JALAN CHANGKAT CEYLO	NULL	KUALA LUN	W	50200
541706 SUITE 11.1A, LEVEL 11	MENARA WELD	76, JALAN RAJA CHULAN	KUALA LUN	W	50200
504747 WISMA HOCK PENG,GRD-2ND FLR	123 GREEN HEIGHTS	JLN LPGN TERBANG;KUCHI	NULL	Υ	93250
19764 BGN MULPHA	17,JLN SEMANGAT	PETALING JAYA	NULL	В	46200
222363 SUITE 1301,13TH.FLOOR	CITY PLAZA	JALAN TEBRAU; JOHOR BAH	I NULL	J	80300
300426 NO. 87, MUNTRI STREET	NULL	NULL	GEORGETC	) P	10200
119416 10TH FLOOR, BLOCK C	THE MINES WATERFRONT BUSI	I NO.3, JALAN TASIK, THE MI	SERI KEMB	В	43300
732762 201-203 JLN ABDULLAH	NULL	NULL	MUAR	J	84000
66756 TKT 3,BREM HOUSE	CRYSTAL CROWN HOTEL	12,LRG UTARA A,OFF JLN U	NULL	В	46200
356602 1ST FLR, FORDECO BUILDING	JLN SINGA MATA	LAHAD DATU.	LAHAD DA	٦X	91100
816839 25-6, JALAN PJU 1/42A	DATARAN PRIMA	NULL	PETALING .	JB	47301
300 LEVEL 10, WISMA HONG LEONG	18,JALAN PERAK	NULL	KUALA LUN	<b>W</b>	50450
324 1ST.FLR.,NO.118,JALAN SEMANGAT	PETALING JAYA	SELANGOR	NULL	В	46300
2866 LEVEL 39, MENARA MAXIS	KUALA LUMPUR CITY CENTRE	KUALA LUMPUR	NULL	W	50088
4260 22ND FLOOR	WISMA MCA	JALAN AMPANG	KUALA LUN	<b>W</b>	50450
290729 WISMA LIM KIM CHUAN	LOT 50A, SEC.92A	BT.3 1/2, OFF J.SG. BESI;K.L	NULL	W	57100
380429 NO.52A, LEBUH ENGGANG	KLANG,SELANGOR	NULL	NULL	В	41150
381317 LOT LG03, G04B2 & 1.03	WISMA SABERKAS,JLN TUN ABO	KUCHING.	NULL	Υ	93000
632479 NO. 3, JALAN ASTAKA U8/82	TAMAN PERINDUSTRIAN BUKIT	SEKSYEN U8, BUKIT JELUTO	SHAH ALAN	۱B	40150
380100 33-35 GROUND FLOOR WISMA EKOVEST	JLN DESA GOMBAK 6, TMN SRI	OFF JALAN GOMBAK	KUALA LUN	W	53000
258836 1, JALAN BATU CAVES	NULL	NULL	BATU CAVI	E B	68100
143816 LOT 765 JALAN HAJI SIRAT	OFF JALAN MERU	KLANG;SELANGOR	NULL	В	42100
493897 NO 8-3 JALAN SEGAMBUT	KUALA LUMPUR	NULL	NULL	W	51200

494928 LEVEL 18, THE GARDENS NORTH TOWER	MID VALLEY CITY	LINGKARAN SYED PUTRA	KUALA LUN	W	59200
498639 NO.78,JALAN SS 21/39	DAMANSARA UTAMA	PETALING JAYA;SELANGOR.	NULL	В	47400
12969 62-68, JALAN IPOH	NULL	NULL	KUALA LUN	W	51200
23737 TKT 16,PLAZA PERANGSANG	PERSIARAN PERBANDARAN	SHAH ALAM;SELANGOR	NULL	В	40000
536693 LOT 36,JLN.BRP 9/2B	PUTRA INDUS.PARK	BKT.RAHMAN PUTRA,SG.BL	NULL	В	47000
481960 LOT 2570,JALAN SG JATI	KLANG	SELANGOR	NULL	В	41000
590521 LOT 4.100,TINGKAT 4	WISMA CENTRAL	JALAN AMPANG;KUALA LUM	NULL	W	50450
32250 6428 LRG. MAK MANDIN TIGA	MAK MANDIN INDUS. ESTATE	NULL	BUTTERWO	Р	13400
231378 74, JLN. UNIVERSITY	PETALING JAYA	SELANGOR.	NULL	В	46200
374265 LOT 6.05, LEVEL 6	KPMG TOWER	8 FIRST AVENUE, BANDAR L	PETALING J	В	47800
430537 36TH FLOOR, VISTA TOWER	NO.182, JALAN TUN RAZAK	NULL	KUALA LUN	W	50400
707346 UNIT C-6-5,6THF LOOR	BLOCK C, MEGAN AVENUE 11	NO.12, JALAN YAP KWAN SE	KUALA LUN	W	50450
530701 20TH FLOOR, MENARA PANGLOBAL	8 LORONG P.RAMLEE	KUALA LUMPUR	NULL	W	50250
21076 LEVEL 6, WISMA MAHMUD,	JALAN SUNGAI SARAWAK,	NULL	KUCHING	Υ	93100
310628 TKT 15,HEITECH VILLAGE	PRSN KEWAJIPAN	USJ 1, UEP SUBANG JAYA; SE	NULL	В	47600
420405 LEVEL 18, THE GARDENS NORTH TOWER	MID VALLEY CITY	LINGKARAN SYED PUTRA	KUALA LUN	W	59200
409959 SUITE 2-1,2ND FLOOR	MENARA PENANG GARDEN	42A JALAN SULTAN AHMAC	GEORGETO	Р	10050
384490 LOT 10,THE HIGHWAY CENTRE	JALAN 51/205	NULL	PETALING J	В	46050
5286 1ST.FLR	WISMA PENANG GARDEN	42 JLN. SULTAN AHMAD SH	GEORGETO	Р	10200
8482 SUITE 1301,13TH.FLOOR	CITY PLAZA	JALAN TEBRAU; JOHOR BAH	NULL	J	80300
5136 13TH FLOOR, MENARA PNB	201-A, JALAN TUN RAZAK	NULL	KUALA LUN	W	50400
653353 LOT 6.05,LEVEL 6	KPMG TOWER,8 FIRST AVENUE	BANDAR UTAMA	PETALING J	В	47800
65787 LEVEL 17, WISMA KFC	17, JALAN SULTAN ISMAIL	KUALA LUMPUR	NULL	W	50250
9428 LEVEL 14, OFFICE TOWER	NO. 1, JALAN NAGASARI (OFF JA	NULL	KUALA LUN	W	50200
633871 312, 3RD FLOOR, BLOCK C	KELANA SQUARE	17 JLN SS 7/26	PETALING J	В	47301
225290 GROUND FLOOR,	8,LORONG UNIVERSITI B,	SECTION 16,	PETALING J	В	46350
50948 SUITE 1,TINGKAT 5	WISMA METRO KAJANG	JALAN SEMENYIH;KAJANG,S	NULL	В	43000
495476 UNIT 1119,TKT.11,BLK.A	DAMANSARA INTAN	1,JLN.SS20/27;P.JAYA;SELAI	NULL	В	47400
357125 WISMA TEKALA, LOT 2,	LORONG INDAH JAYA 29,	TAMAN INDAH JAYA, JALAN	SANDAKAN	X	90000
182350 17,JALAN SEMANGAT	P.JAYA	SELANGOR	NULL	В	46100
82731 10TH FLOOR	MENARA HAP SENG	NO 1 & 3 JLN P.RAMLEE	KUALA LUN	W	50250
224414 LEVEL 18, THE GARDENS NORTH TOWER	MID VALLEY CITY	LINGKARAN SYED PUTRA	KUALA LUN	W	59200
615330 54B,DAMAI COMPLEX,	JALAN LUMUT,	NULL	KUALA LUN	W	50400

399292 1ST FLR,LOT 5,BLOCK 4			JLN UTARA, P.O. BOX 2848 S			90732
119598 KAWASAN LEMBAGA PELABUHAN KUANT	ſAN			KUANTAN	С	25740
64577 NO. 9, JALAN BAYU TINGGI 2A/KS6		TAIPAN 2, BATU UNJUR	NULL	KLANG	В	41200
630068 37,JLN PELUKIS U1/46		SEC U1, TEMASYA INDUSTRIAL P	GLENMARIE S.ALAM	NULL	В	40150
8622 NO:332A-20, 20TH FLOOR		PLAZA AMPANG CITY	JALAN AMPANG	KUALA LUN	W	50450
96895 LOT 8CF01-8CF02, 8TH FLOOR,		BLOCK C, KOMPLEKS KARAMUN	KM 2.4, JLN TUARAN,	KOTA KINA	X	88300
691393 NO.85 & 86,		PUSAT SURIA PERMATA,	JALAN UPPER LANANG 12A	SIBU	Υ	96000
526319 NO.1, JALAN PEGUAM U1/25A		SECTION U1	HICOM GLENMARIE INDUST	SHAH ALAN	В	40150
90278 3RD FLR, THE CORPORATE		10,JLN UTAS (15/7)	BT.TIGA INDUST.EST.;SHAH	NULL	В	40200
376693 312,TKT 3,BLK.C		KELANA SQUARE	17,JLN.SS 7/26,P.JAYA;SELA	NULL	В	47301
610841 NO. A-15-4, NORTHPOINT OFFICES		MEDAN SYED PUTRA UTARA, 1.	SYED PUTRA, MID VALLEY C	KUALA LUN	W	59200
247079 SUITE 12B, LEVEL 12		MENARA ANSAR	NO. 65, JALAN TRUS	JOHOR BAH	J	80000
311186 GROUND FLOOR		8, LORONG UNIVERSITI 8	SECTION 16	PETALING J	В	46350
625034 SUITE 1301, 13TH FLOOR		CITY PLAZA	JALAN TEBRAU	JOHOR BAH	J	80300
12849 LEVEL 10 MENARA BRDB		285 JALAN MAAROF	BUKIT BANDARAYA	KUALA LUN	W	59000
259253 568-9-41,9TH FLOOR		KOMPLEKS MUTIARA	3 1/2 MILES JALAN IPOH	KUALA LUN	W	51200
7916 TINGKAT 24,WISMA GENTING		JLN.SULTAN ISMAIL	KUALA LUMPUR	NULL	W	50250
9118 LOT 11A JALAN UTAS 15/7		SHAH ALAM	SELANGOR	NULL	В	40000
63611 LOT 3410,MUKIM PETALING		BATU 12 1/2, JALAN PUCHONG	NULL	PUCHONG	В	47100
361052 312,3RD FLR,BLK C		KELANA SQUARE	17, JLN SS7/26; PETALING JA	NULL	В	47301
44094 NO. 123A		JALAN TUANKU BAINUN	JALAN KAMPAR	IPOH	А	30250
45556 LOT 1004 JALAN KWONG LEE BANK		KUCHING	SARAWAK	NULL	Υ	93450
8256 SUITE 1301,13TH FLOOR		CITY PLAZA	JALAN TEBRAU	JOHOR BAH	J	80300
161776 23,JALAN DELIMA 1/3		SUBANG HI-TECH INDS.PARK	SHAH ALAM;SELANGOR	NULL	В	40000
305530 LEVEL 18, THE GARDENS NORTH TOWER,		MID VALLEY CITY,	LINGKARAN SYED PUTRA,	KUALA LUN	W	59200
811010 NO. 31-04, LEVEL 31		MENARA LANDMARK , MAIL BO	NO. 12, JALAN NGEE HENG	JOHOR BAH	J	80000
256187 1 JALAN BATU CAVES		NULL	NULL	BATU CAVE	В	68100
129 12TH FLOOR, MENARA SMI		6 LORONG P.RAMLEE	KUALA LUMPUR	NULL	W	50250
1877 LEVEL 12, BANGUNAN TH UPTOWN 3		NO.3, JALAN SS 21/39	P.JAYA;SELANGOR	NULL	В	47400
174076 SUITE 7.21 & 7.22		TINGKAT 7,IMBI PLAZA	KUALA LUMPUR.	NULL	W	55100
584501 TB 324,TKT 2,LOT 21		BLOK 38, FAJAR COMPLEX	TAWAU	TAWAU	х	91000
279860 LEVEL 7, MENARA MILENIUM		JALAN DAMANLELA	PUSAT BANDAR DAMANSA	KUALA LUN	W	50490
372642	41	JALAN MEDAN IPOH 6	BANDAR BARU MEDAN IPC	IPOH	A	31400

49548 LEVEL 10, MENARA TSH	NO. 8 JALAN SEMANTAN	DAMANSARA HEIGHTS	KUALA LUI	١W	50490
623177 CENTRE OF EXCELLENCE	KM 33.8, WESTBOUND SHAH AI	EXPRESSWAY	SUBANG J	ΑB	47600
281645 NO. 1 & 1A, TINGKAT 2 (ROOM 2)	JALAN IPOH KECIL	NULL	KUALA LUI	NW	50350
393342 SUITE 3A.02, LEVEL 3A	WISMA E & C	NO 2 LORONG DUNGUN KI	DAMANSA	.I W	50490
10427 LOT 7 JALAN 51A/241	PETALING JAYA	SELANGOR	NULL	В	46100
535311 10TH FLOOR, MENARA HAP SENG	NO. 1 & 3 JALAN P.RAMLEE	NULL	KUALA LUI	N W	50250
1225 LEVEL 3, EAST WING	WISMA SYNERGY	NO. 72, PESIARAN JUBLI PE	SHAH ALAI	NB	40000
6022 LEVEL 8 BLOCK D	KOMPLEKS KELANA CENTRE PO	JLN SS 7/19	KELANA JA	ŇВ	47301
8184 5TH FLOOR, WIJAYA INTERNATIONAL MEDIC	NO. 1, JALAN 215	SECTION 51, OFF JALAN TEN	PETALING	JB	46050
592563 LEVEL 8, SYMPHONY HOUSE	BLOCK D13, PUSAT DAGANGAN	JALAN PJU 1A/46	PETALING	JB	47301
304376 54B, DAMAI COMPLEX	JALAN LUMUT	NULL	KUALA LUI	N W	50400
9109 LOT 13-01A, LEVEL 13 (EAST WING)	BERJAYA TIMES SQUARE	NO.1 JALAN IMBI	KUALA LUI	N W	55100
43072 B-15-11, BLOCK B, 15TH FLOOR, UNIT 11	MEGAN AVENUE II	12, JALAN YAP KWAN SENG	KUALA LUI	N W	50450
4690 SUITE 2.02,LEVEL 2,WISMA E & C	NO:2,LORONG DUNGUN KIRI	DAMANSARA HEIGHTS	KUALA LUI	N W	50490
7949 124-126 JLN BENDAHARA	MIRI,SARAWAK	NULL	NULL	Υ	98000
9027 TWO IOI SQUARE	IOI RESORT	PUTRAJAYA;MALAYSIA	NULL	U	62502
421340 LOT 6096,JALAN HAJI ABDUL MANAN	BATU 5 1/2,OFF JALAN MERU	KLANG,S'GOR.	NULL	В	41050
422585 51-21-A,MENARA BHL BANK	JLN. SULTAN AHMAD SHAH	NULL	GEORGET	) P	10050
710571 7TH FLOOR, TOWER BLOCK	PLAZA DWI TASIK, NO.21, JALAN	BANDAR SRI PERMAISURI	KUALA LUI	N W	56000
5347 12TH FLOOR, MENARA PERAK	NO. 24, JALAN PERAK	NULL	KUALA LUI	N W	50450
553434 51-13-A, MENARA BHL BANK	JALAN SULTAN AHMAD SHAH	NULL	GEORGET	ΟP	10050
413912 TINGKAT 23	BANGUNAN TH SELBORN	153,JALAN TUN RAZAK	KUALA LUI	N W	50400
548078 312,3RD.FLOOR,BLOCK C	KELANA SQUARE	17, JALAN SS2/26; PETALING	NULL	В	47301
650473 LOT 5,BT.17 1/2,JALAN IPOH	RAWANG INDUSTRIAL ESTATE	RAWANG;SEL	NULL	W	48000
302829 LOT 6.05, LEVEL 6, KPMG TOWER	8 FIRST AVENUE	BANDAR UTAMA	PETALING	JB	47800
240346 LOT 6.05, LEVEL 6	KPMG TOWER, 8 FIRST AVENUE	BANDAR UTAMA	PETALING	JB	47800
12890 LEVEL 14, OFFICE TOWER,	NO:1,JALAN NAGASARI,	(OFF JALAN RAJA CHULAN),	KUALA LUI	N W	50200
663862 SUITE 12A LEVAL 12	MENARA NORTHAM	25 JLN SULTAN AHMAD SHA	NULL	Р	10050
516143 LEVEL 18 THE GARDENS NORTH TOWER	MID VALLEY CITY	LINGKARAN SYED PUTRA	KUALA LUI	N W	59200
82275 NO.2-8,BGN.FARLIM	JALAN PJS 10/32	BANDAR SRI SUBANG;PETA	NULL	В	46000
172736 SUITE 7A, MENARA NORTHAM	55 JALAN SULTAN AHMAD SHAH	PENANG	NULL	Р	10050
376950 SUITE 3.6, LEVEL 3	MENARA PELANGI	NO. 2, JALAN KUNING, TAN	JOHOR BA	۴J	80400
226098 SUITE 6.1A, MENARA PELANGI	2 JLN KUNING, TMN PELANGI	JOHOR BAHRU;	NULL	J	80400

618768 LOT 10, THE HIGHWAY CENTRE	JALAN 51/205	NULL	PETALING J	I B	46050
10493 63-G,JLN.ANGGERIK VANILLA_T31/T	KOTA KEMUNING	SEC.31,S.ALAM;SELANGOR	NULL	В	40460
207184 WISMA BINA PURI	88 JALAN BUKIT IDAMAN 8/1	BUKIT IDAMAN, SELAYANG,	NULL	W	68100
636939 3-2, 3RD MILE SQUARE	NO. 151, JALAN KELANG LAMA	BATU 3 1/2, JALAN IPOH	KUALA LUN	W	58100
260002 BGN.C, PEREMBA SQUARE	SAUJANA RESORT, SEC. U2	SHAH ALAM;SELANGOR	NULL	В	40150
646559 SUITE 1603, 16TH.FLOOR	WISMA LIM FOO YONG	86, JLN RAJA CHULAN;K.L	NULL	W	50200
333101 SUITE 27-03, 27 TH FLOOR	MENARA KECK SENG	203 JLN BUKIT BINTANG	KUALA LUN	W	55100
400037 35,1ST FLOOR	JALAN KELISA EMAS 1	TAMAN KELISA EMAS	SEBERANG	Р	13700
505639 LOT 6.05, LEVEL 6, KPMG TOWER	8 FIRST AVENUE	BANDAR UTAMA	PETALING J	I B	47800
640445 UNIT 07-02, LEVEL 7	PERSOFT TOWER	6B, PERSIARAN TROPICANA	PETALING J	IB	47410
7029 D-1-4, JALAN MULTIMEDIA 7/AJ	CITYPARK, I-CITY	NULL	SHAH ALAN	В	40000
123066 LVL.7, MENARA MILENIUM	JLN.DAMANLELA	PUSAT BDR.D'SARA;DAMAN	NULL	W	50490
499758 UNIT 07-02 LEVEL 7 PERSOFT TOWER	6B PERSIARAN TROPICANA	NULL	PETALING J	IВ	47410
636357 SUITE 18.01,18TH FLOOR	MWE PLAZA	8 LEBUH FARQUHAR; PENA	NULL	Р	10200
20218 312,TKT.3,BLOK C	KELANA SQUARE	17, JALAN SS7/26; PETALING	NULL	В	47301
307097 NO.318, TECK GUAN REGENCY	JLN.ST.PATRICK	OFF JALAN BELUNU;TAWAU	TAWAU	Х	91000
5350 SUNGEI WAY BREWERY,LOT 1135	BT.9,JLN KLANG LAMA	P.O BOX 144, P.JAYA, SEL	NULL	В	46710
8985 8-3,JALAN SEGAMBUT	NULL	NULL	KUALA LUN	W	51200
1713 NO 8-3, JALAN SEGAMBUT	NULL	NULL	KUALA LUN	W	51200
491857 LOT 6.05, LEVEL 6, KPMG TOWER	8 FIRST AVENUE	BANDAR UTAMA	PETALING J	I B	47800
654188 SUITE 11.1A, LEVEL 11	MENARA WELD	76, JALAN RAJA CHULAN	KUALA LUN	W	50200
6403 10-1 JALAN SRI HARTAMAS 8	SRI HARTAMAS	NULL	KUALA LUN	W	50480
367122 TINGKAT 14, MENARA TERUNTUM	JALAN MAHKOTA,KUANTAN,PA	NULL	NULL	С	25000
4104 PART OF PLOT 1240 & 1241	BAYAN LEPAS FREE INDUSTRIAL	PHASE 3, BAYAN LEPAS	PENANG	Р	11900
457890 SUITE 12-02, 12TH. FLOOR,	MENARA MAA,	NO. 170, JALAN ARGYLL	GEORGETO	P	10050
570244 MENARA KORPORAT, PERSADA PLUS	PERSIMPANGAN BERTINGKAT S	KM15, LEBUHRAYA BARU L	PETALING J	I B	47301
172312 LEVEL 18, THE GARDENS NORTH TOWER	MID VALLEY CITY	LINGKARAN SYED PUTRA	KUALA LUN	W	59200
47908 C-06-02, 6TH FLOOR	BLOCK C, WISMA TT	NO. 1, JALAN PJS 8/15, DAT	PETALING J	I B	46150
10289 LEVEL 18, THE GARDENS NORTH TOWER	MID VALLEY CITY	LINGKARAN SYED PUTRA	KUALA LUN	W	59200
114842 312,3RD FLOOR	BLOCK C, KELANA SQUARE	17,JALAN SS7/26	PETALING J	IВ	47301
10889 13TH FLOOR, UBN TOWER	10 JALAN P.RAMLEE	KUALA LUMPUR	NULL	W	50250
66954 LEVEL 18, THE GARDENS NORTH TOWER	MID VALLEY CITY	LINGKARAN SYED PUTRA	KUALA LUN	W	59200
13380 1,JALAN PERUNDING U1/17	SECT. U1, HICOM-GLENMARIE IN	S'GOR	NULL	В	40150

26495 LOT 865 SECTION 66	BINTAWA INDUSTRIAL ESTATE	JALAN KILANG;KUCHING	NULL	Y	93450
765218 B-3-9 3RD FLOOR BLOCK B	MEGAN AVENUE II	12 JALAN YAP KWAN SENG	KUALA LUI	١W	50450
339810 50-1, 52-1 & 54-1,	JALAN BPM 2	TAMAN BUKIT PIATU MUT	IMELAKA	Μ	75150
12200 LEVEL 18, THE GARDENS NORTH TOWER	MID VALLEY CITY	LINGKARAN SYED PUTRA	KUALA LUI	١W	59200
391035 1-4-2, WISMA MAHAJAYA, BLOK A	MEGAN SALAK PARK	JALAN 2/125E, TAMAN DES	KUALA LUI	١W	57100
990261 22ND FLR, MENARA PROMET	JALAN SULTAN ISMAIL	KUALA LUMPUR.	NULL	W	50050
534222 NO. 60,	SRI BAHARI ROAD	NULL	GEORGET	) P	10050
719660 312, 3RD FLOOR, BLOCK C	KELANA SQUARE	17 JALAN SS 7/26	PETALING	JB	47301
330171 LOT 5911,JLN.P'USAHAAN 1	KAMUNTING INDUSTRIAL ESTA	KAMUNTING;TAIPING	NULL	А	34600
424834 62-68 JALAN IPOH	KUALA LUMPUR	NULL	NULL	W	51200
301384 312, 3RD FLOOR, BLOCK C	KELANA SQUARE	17 JALAN SS7/26	PETALING	JB	47301
168285 LOT 6,BLOCK 44	LEBOH TIGA	SANDAKAN,SABAH	SANDAKAN	NХ	90000
361067 LOT 13.33, TINGKAT 13	PERTAMA COMPLEX	JALAN TUANKU ABDUL RAH	KUALA LUI	١W	50100
634775 LEVEL 7, MENARA MILENIUM	JLN DAMANLELA	PUSAT BDR DAMANSARA;K	NULL	W	50490
5371 21ST FLOOR,	MENARA HAP SENG,	JALAN P.RAMLEE,	KUALA LUI	١W	50250
397979 LEVEL 17, 1 FIRST AVENUE	BANDAR UTAMA	NULL	PETALING	JB	47800
517649 BLOCK G, LOT 3B	BANDAR LEILA	W.D.T.259,	SANDAKAN	NХ	90009
618533 1, JALAN 8, PENGKALAN CHEPA 2	INDUSTRIAL ZONE	NULL	КОТА ВНА	FD	16100
7296 LEVEL 23, MENARA OLYMPIA	NO.8,JALAN RAJA CHULAN	KUALA LUMPUR	NULL	W	50200
8167 TKT.17, WISMA JERNEH	NO.38,JLN.SULTAN ISMAIL	K.LUMPUR	NULL	W	50250
515119 LEVEL 33, KOMTAR	PENANG	NULL	NULL	Р	10000
363120 SUITE 2-1, 2ND FLOOR	MENARA PENANG GARDEN	42A, JALAN SULTAN AHMA	GEORGET	) P	10050
424086 57-G, PERSIARAN BAYAN INDAH	BAYAN BAY	NULL	SUNGAI NI	ll P	11900
133096 LOT 11A, PSRN SELANGOR	SEKSYEN 15	NULL	SHAH ALAI	NB	40200
244521 BLK.A,UNIT A-5-3	MEGAN AVENUE 11	12 JLN. YAP KWAN SENG;KU	NULL	W	50450
451377 8TH FLOOR, WISMA NAIM	2 1/2 MILE ROCK ROAD, KUCHIN	NULL	NULL	Y	93200
814138 SUITE 13A.01(A), LEVEL 13A	WISMA GOLDHILL	67 JALAN RAJA CHULAN	KUALA LUI	١W	50200
149735 NO. 1, JALAN TEMBAGA SD 5/2	BANDAR SRI DAMANSARA	NULL	KUALA LUI	١W	52200
4434 LEVEL 9, WISMA HONG LEONG	18 JALAN PERAK	KUALA LUMPUR	NULL	W	50450
3326 NO.1, PERSIARAN LEDANG	OFF JALAN DUTA	NULL	KUALA LUI	١W	50480
275512 10TH FLOOR, MENARA HAP SENG	NO.1 & 3, JALAN P.RAMLEE	NULL	KUALA LUI	١W	50250
51316 201-203, JALAN ABDULLAH	MUAR	JOHOR	NULL	J	84000
389765 LEVEL 7, MENARA MILENIUM	JALAN DAMANLELA, PUSAT BAN	DAMANSARA HEIGHTS	KUALA LUI	١W	50490

592280 52-C, RANGOON ROAD	NULL	NULL	GEORGETO	Р	10400
461624 SUITE 12-02, 12TH. FLOOR,	MENARA MAA,	NO. 170, JALAN ARGYLL	GEORGETO	Р	10050
9244 6TH FLOOR, MENARA MANULIFE	NO:6 JALAN GELENGGANG	DAMANSARA HEIGHTS	KUALA LUN	W	50490
663700 NO. 40-2, SECOND FLOOR	JALAN 14/48A, SENTUL RAYA	OFF JALAN SENTUL	KUALA LUN	W	51000
630878 50-1, 52-1 & 54-1	JALAN BPM 2	TAMAN BUKIT PIATU MUTI	MELAKA	М	75150
418224 51-13-A, MENARA BHL BANK	JALAN SULTAN AHMAD SHAH	NULL	GEORGETO	Р	10050
597132 NO.400, JALAN KAMUNTING BT. 2	TAMAN SAUJANA	NULL	KAMUNTIN	А	34600
21338 LOT 10, JALAN PERUSAHAAN SATU	BATU CAVES	SELANGOR	NULL	В	68100
715640 NO.2, JALAN BANGSAR UTAMA 9	BANGSAR UTAMA	NULL	KUALA LUN	W	59000
579343 LOT 43117	OFF JALAN BALAKONG	BALAKONG	SERI KEMB	В	43300
14809 SUITE 5&6,TKT.8	KOMPLEKS TERUNTUM,	JALAN MAHKOTA	KUANTAN	С	25000
8705 LOT 6&20, PERSIARAN TASEK, KWSN. PERIN	ENULL	NULL	NULL	А	31400
5149 10TH FLOOR, MENARA UAC	NO.12 JALAN PJU 7/5	MUTIARA DAMANSARA	PETALING J	В	47800
10587 55 MEDAN IPOH 1A	MEDAN IPOH BISTARI	NULL	IPOH	А	31400
1116 11TH FLOOR, YEOH TIONG LAY PLAZA	55 JALAN BUKIT BINTANG	KUALA LUMPUR	NULL	W	55100
371152 WISMA ANN JOO,LOT 19391	BATU 8 1/2,JLN. KELANG LAMA	P. JAYA;SELANGOR	NULL	В	46000
317805 1ST FLOOR,	275, JALAN HARUAN 1,	OAKLAND INDUSTRIAL PAR	SEREMBAN	Ν	70200
428930 UNIT 1C,3C & 5C,3RD FLOOR,BLOCK 2,	WORLDWIDE BUSINESS CENTRE	JALAN TINJU 13/50,SEKSYE	I SHAH ALAN	В	40675
206220 NO. 9, JALAN TARUKA	TAMPOI INDUSTRIAL ESTATE	NULL	JOHOR BH/	J	81200
369472 D-3-7	GREENTOWN SQUARE	JALAN DATO SERI AHMAD	IPOH	A	30450
8440 LEVEL 18, THE GARDENS NORTH TOWER	MID VALLEY CITY	LINGKARAN SYED PUTRA	KUALA LUN	W	59200
396692 LOT 999 SECTION 66 JALAN KELULI	BINTAWA INDUSTRIAL ESTATE	KUCHING	NULL	Y	93450
425709 SUITE 11.1A, LEVEL 11, MENARA WELD	76 JALAN RAJA CHULAN	NULL	KUALA LUN	W	50200
384662 SUITE 18.05,MWE PLAZA	NO 8,LEBUH FARQUHAR	PENANG	NULL	Р	10200
640357 49-B JALAN MELAKA RAYA 8	TAMAN MELAKA RAYA	NULL	MELAKA	Μ	75000
415622 LOT 13A,JALAN PBR 1	FASA 1,KAWASAN PERINDUSTR	BUKIT RAMBAI	MELAKA	Μ	75250
110925 22-1, 22ND FLOOR MENARA SURIAN	NO. 1, JALAN PJU 7/3	MUTIARA DAMANSARA	PETALING J	В	47810
651020 17-2, JALAN SOLARIS 3	SOLARIS MONT' KIARA	NULL	KUALA LUN	W	50480
5521 LEVEL 10 MENARA BRDB	285 JALAN MAAROF	BUKIT BANDARAYA	KUALA LUN	W	59000
424838 3RD FLOOR, TAN CHONG BUILDING	62-68,JALAN IPOH	K.LUMPUR	NULL	W	51200
341792 NO.66-78 PUSAT SURIA PERMATA	JALAN UPPER LANANG	NULL	SIBU	Υ	96000
599171 LEVEL 17, WISMA KFC	NO 17 JALAN SULTAN ISMAIL	NULL	KUALA LUN	W	50250
125863 LEVEL 2A, NO.88 JALAN PERDANA	TAMAN TASEK PERDANA	NULL	KUALA LUN	W	50480

239808 9, JALAN WAWASAN 12	KAWASAN PERINDUSTRIAN SRI	NULL	BATU PAH	4 J	83300
6100 NO.3,JALAN SESIKU 15/2	SECTION 15	SHAH ALAM INDUSTRIAL SI	NULL	В	40200
14117 81 MEZZANINE FLOOR	JALAN TUN ISMAIL	NULL	KUANTAN	С	NULL
15043 WISMA TAIKO	NO.1,JLN.S.P. SEENIVASAGAM	IPOH	NULL	А	30000
518482 PLAZA SERI SETIA	LEVEL 1-4,NO. 1 JALAN SS9/2	PETALING JAYA, SELANGOR	NULL	В	47300
13625 LOT 45157, GUNUNG PANJANG	P.O.BOX 18,GOPENG	PERAK.	NULL	А	31600
550098 THIRD FLOOR,NO.79(ROOM A)	JALAN SS21/60	DAMANSARA UTAMA;PETA	NULL	В	47400
797567 NO.6, JALAN BANGSAR UTAMA 9	BANGSAR UTAMA	NULL	KUALA LUN	W	59000
162413 WISMA PUBLIC PACKAGES	PLOT 67, LINTANG KAMPUNG J	BAYAN LEPAS INDUSTRIAL	BAYAN LEP	Р	11900
78320 ST 5.11&5.12	5TH FLR. MENARA TJB	NO 9, JLN. SYED MOHD.MU	JOHOR BAI	۰J	80000
178694 109 BLOK G,PHILEO DAMANSARA 1	9 JLN 16/11	PETALING JAYA;SELANGOR	NULL	В	46350
459789 JA 1880,BATU 22 1/2,PARIT PERAWAS	SUNGAI RAMBAI, MELAKA	NULL	NULL	М	77400
516043 SUITE 7E, LEVEL 7	MENARA ANSAR	65, JALAN TRUS	JOHOR BAI	۰J	80000
7378 LEVEL 18, THE GARDENS NORTH TOWER	MID VALLEY CITY	LINGKARAN SYED PUTRA	KUALA LUN	W	59200
15379 SUITE 11.1A, LEVEL 11	MENARA WELD	76, JALAN RAJA CHULAN	KUALA LUN	W	50200
36998 LOT 450,JALAN PAPAN	PANDAMARAN INDUSTRIAL ARI	PORT KLANG;SELANGOR	NULL	В	42000
800981 LOT 1035, BLOCK 4,	MCLD, PIASAU IND. AREA,	NULL	MIRI	Υ	98000
484964 11 JALAN TTC 30	TAMAN TEKNOLOGI	MELAKA	NULL	Μ	75260
8104 MEZZANINE FLOOR	EMPRESS HOTEL SEPANG, JALA	MEDAN 88, BANDAR BARU	SEPANG	В	43900
586139 UNIT 07-02, LEVEL 7, PERSOFT TOWER	6B PERSIARAN TROPICANA	NULL	PETALING .	JB	47410
692959 SUITE B13A-4, TOWER B, LEVEL 13A	NORTHPOINT OFFICES, MID VAI	NO.1, MEDAN SYED PUTRA	KUALA LUN	W	59200
21185 SUITE 4.1,LEVEL 4	BLOCK C, PLAZA DAMANSARA	45 JLN MEDAN SETIA 1;K.L	NULL	W	50490
313192 SUITE 2-1 2ND FLR	MENARA PENANG GARDEN	42A JLN SUL AHMAD SHAH;	NULL	Р	10050
732227 LEVEL 7 MENARA MILENIUM	JALAN DAMANLELA	PUSAT BANDAR DAMANSA	I KUALA LUN	W	50490
4030 LEVEL 2,	PERSADA JOHOR INTERNATION	JALAN ABDULLAH IBRAHIM	JOHOR BAI	۱	80000
5938 18TH FLOOR, PLAZA OSK	JALAN AMPANG	KUALA LUMPUR	NULL	W	50450
8507 TKT.18, MENARA LIEN HOE	NO.8 PERSIARAN TROPICANA	P.JAYA,SELANGOR	NULL	В	47410
425190 LOT 6.05,LEVEL 6,KMPG TOWER,	8,FIRST AVENUE,	BANDAR UTAMA,	PETALING .	JB	47800
445931 MPT 4604 3RD FLOOR	LOT 15-16 BLOCK B	BANDARAN BARU JALAN BA	TAWAU	Х	91000
380802 LOT 15,BLOCK 20 KLD	12TH MILE, TANJUNG KIDURON	BINTULU	NULL	Y	97000
473108 134-2, KOMPLEKS PERNIAGAAN MUNSHI ABI	JLN MUNSHI ABDULLAH	MELAKA	NULL	М	75000
636944 SUITE 12-02, 12TH. FLOOR,	MENARA MAA,	NO. 170, JALAN ARGYLL	GEORGETC	P	10050
585467 9TH FLOOR, WISMA NAIM	2 1/2 MILES,ROCK ROAD	KUCHING	NULL	Υ	93200
474423 LOT 4969 JALAN TERATAI	BATU 6 OFF JALAN MERU	NULL	KLANG	В	41050
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182388 NO. 6-G, 6-1 & 6-2, JALAN PRESIDEN F U1/F	ACCENTRA GLENMARIE	SEKSYEN U1	SHAH ALAI	۱B	40150
515965 NO. 1 & 1A, 2ND FLOOR (ROOM 2)	JALAN IPOH KECIL	NULL	KUALA LUN	١W	50350
182913 SUITE 13.03,13TH FLOOR	MENARA TAN &TAN	207, JALAN TUN RAZAK	KUALA LUN	Ŵ	50400
712499 LOT 6.05, LEVEL 6	KPMG TOWER, 8 FIRST AVENUE	BANDAR UTAMA	PETALING	JB	47800
485144 LEVEL 18, THE GARDENS NORTH TOWER	MID VALLEY CITY	LINGKARAN SYED PUTRA	KUALA LU	r w i	59200
197424 1ST FLOOR, 275 JALAN HARUAN 1	OAKLAND INDUSTRIAL PARK	SEREMBAN	NULL	Ν	70200
313619 1ST FLR,LOT 1,PERSIARAN SUNGAI BULOH	TAMAN SAINS SELANGOR 1	KOTA DAMANSARA	PETALING	JB	47810
113076 SUITE 6-7 & 6-8, WISMA UOA DAMANSARA	NO.6, JALAN CHANGKAT SEMAN	DAMANSARA HEIGHTS	KUALA LUN	١W	50490
408061 LOT 11	JALAN ASTAKA U8/88	BUKIT JELUTONG, SEKSYEN	SHAH ALAI	۱B	40150
740412 NO.3-2,3RD MILE SQUARE	NO.151, JALAN KELANG LAMA	BATU 3 1/2	KUALA LUN	١W	58100
89243 LOT 3410,MUKIM PETALING	BATU 12 1/2, JALAN PUCHONG	PUCHONG;SELANGOR.	NULL	В	47100
154232 NO.8-3, JALAN SEGAMBUT	KUALA LUMPUR	NULL	NULL	W	51200
57651 19TH FLOOR	WISMA SIME DARBY	JLN RAJA LAUT	KUALA LUN	W	50350
645371 NO.15,BUKIT LEDANG	OFF JALAN DUTA	KUALA LUMPUR	NULL	W	50480
583565 51-21-A MENARA BHL BANK	JALAN SULTAN AHMAD SHAH	NULL	GEORGET	) P	10050
432139 57-1 & 57-2, PERSIARAN BAYAN INDAH	BAYAN BAY	SUNGAI NIBONG	BAYAN LEF	P	11900
539777 51-13-A, MENARA BHL BANK	JALAN SULTAN AHMAD SHAH	NULL	GEORGET	) P	10050
58019 24TH FLOOR, WISMA GENTING	JALAN SULTAN ISMAIL	KUALA LUMPUR	NULL	W	50250
19688 12,JALAN JORAK	KAWASAN PERINDUSTRIAN TOP	BATU PAHAT;JOHOR	NULL	J	83010
22414 LOT 59-60 LORONG KUANG BULAN	TAMAN KEPONG	KUALA LUMPUR	NULL	W	52100
26870 729,TKT.7,SUN COMPLEX	JALAN BUKIT BINTANG	KUALA LUMPUR	NULL	W	55100
201765 LOT 13-01A, LEVEL 13 (EAST WING)	BERJAYA TIMES SQUARE	NO. 1, JALAN IMBI	KUALA LUN	\W	55100
280116 LEVEL 18, THE GARDENS NORTH TOWER	MID VALLEY CITY	LINGKARAN SYED PUTRA	KUALA LUN	W	59200
341662 LOT 3 & 5,JALAN WAJA 14	KAW PERIND. TELOK PANGLIMA	TELOK PANGLIMA GARANG	KLANG	В	42500
122592 LEVEL 3A(ANNEXE)MENARA MILENIUM	8,JLN DAMANLELA,PUSAT BDR I	DAMANSARA HEIGHTS	KUALA LUN	W	50490
335382 TKT 2 KOM.OPERASI LITRAK	KM 19 L/RAYA DAMANSARA-PU	PJS 9,P.JAYA;	NULL	В	47500
430362 SUITE 2-1,2ND FLR	MENARA PENANG GARDEN	42A JLN SULTAN AHMAD SH	NULL	Р	10050
7170 46M,JALAN LIMA	OFF JALAN CHAN SOW LIN	NULL	KUALA LUN	\W	55200
8235 8-3,JALAN SEGAMBUT	NULL	NULL	KUALA LUN	\W	51200
108253 WISMA AIC,LOT 3	PERSIARAN KEMAJUAN	SECTION 16	SHAH ALAI	۱B	40200
267209 SUITE 2-1,2ND.FLR.	MENARA PENANG GARDEN	42A JLN.SLT.AHMAD SHAH;	NULL	Р	10050
132493 33-35, GROUND FLOOR, WISMA EKOVEST	JALAN DESA GOMBAK 6,	TAMAN SRI SETAPAK,OFF JA	KUALA LUN	W	53000

79244 11TH FLOOR, MENARA MESINIAGA	1A,JLN SS 16/1	NULL	SUBANG J	ΔB	47500
733268 NO. 31-04, LEVEL 31		MAIL BOX 172, NO. 12, JAL			80000
1945 #GEORGE KENT TECHNOLOGY CENTRE	LOT 1115,BATU 15,JLN DENGKIL		NULL	В	47100
83568 2,TMN.SG.CHUA		SELANGOR.	NULL	В	43000
175953 LEVEL 17 & 18,PJ TOWER	18,JLN.PERSIARAN BARAT	OFF JLN.TIMUR;P.JAYA	NULL	В	46050
567427 UNIT 07-02,LEVEL 7	MENARA LUXOR	6B PERSIARAN TROPICANA	; NULL	В	47410
502313 LOT 9, T3,	TAMAN TSHUN NGEN,	MILE 5, JALAN LABUK,	SANDAKAI	NX	90000
651118 LEVEL 18 THE GARDENS NORTH TOWER	MID VALLEY CITY	LINGKARAN SYED PUTRA	KUALA LUI	N W	59200
34993 TKT.24,WISMA GENTING	JALAN SULTAN ISMAIL	KUALA LUMPUR	NULL	W	50250
633265 SUITE 10.03, LEVEL 10	THE GARDENS SOUTH TOWER	MID VALLEY CITY, LINGKAR	KUALA LUI	N W	59200
209806 NO.18, PERSIARAN SABAK BERNAM	SEKSYEN 26	NULL	SHAH ALA	NB	40400
101671 TOWER 1, PETRONAS TWIN TOWERS	KUALA LUMPUR CITY CENTRE	KUALA LUMPUR.	NULL	W	50088
990903 LEVEL 30 MENARA MAXIS	KUALA LUMPUR_CITY CENTRE	KUALA LUMPUR	NULL	W	50088
30245 LEVEL 8, KOMPLEKS ANTARABANGSA	JALAN SULTAN ISMAIL	NULL	KUALA LUI	N W	50250
646226 NO. 7 (1ST FLOOR), JALAN PESTA 1/1	TAMAN TUN DR. ISMAIL 1	JALAN BAKRI	MUAR	J	84000
62227 LEVEL 9, WISMA HONG LEONG	18 JALAN PERAK	KUALA LUMPUR	NULL	W	50450
66667 3RD FLOOR, ANNEXE BUILDING	KEMAMAN SUPPLY BASE	TELUK KALONG	KEMAMAN	ΝT	24007
618972 LOT 1 & 3, JALAN RIVET 15/15	SEKSYEN 15	NULL	SHAH ALA	NB	40000
280929 PLO 10,KAW.PERINDUSTRIAN PARIT RAJA	ΒΑΤU ΡΑΗΑΤ	JOHOR	NULL	J	86400
378282 2ND FL.,RM 209	WISMA BUKIT MATA KUCHING	JLN TKU ABD RAHMAN;KUC	NULL	Υ	93100
587870 LEVEL 7, MENARA MILENIUM	JLN DAMANLELA	PUSAT BDR D'SARA; D'SARA	NULL	W	50490
590945 WISMA LEBAR DAUN	NO.2, JLN T.AMPUAN ZABEDAH	SEKSYEN 9,SHAH ALAM.	NULL	В	40000
497632 48 JALAN KOTA LAKSAMANA 2/15	TAMAN KOTA LAKSAMANA	SEKSYEN 2	MELAKA	М	75200
156148 SUITE 2-1,2ND FL	MENARA PENANG GARDEN	42A, JLN SULTAN AHMAD SI	NULL	Р	10050
37918 LEVEL 10 MENARA YAYASAN TUN RAZAK	NO 200 JALAN BUKIT BINTANG	NULL	KUALA LUI	NW	55100
6386 LEVEL 7, MENARA MILENIUM	JALAN DAMANLELA	PUSAT BANDAR DAMANSA	I KUALA LUI	NW	50490
230326 51-21-A, MENARA BHL BANK	JALAN SULTAN AHMAD SHAH	PENANG.	NULL	Р	10050
242896 8 GROUND FLOOR	JALAN APOLLO CH U5/CH	BDR PINGGIRAN SUBANG,S	SHAH ALA	NB	40150
86100 LOT 18374, JALAN PERUSAHAAN 3	KAMUNTING INDUSTRIAL ESTAT	NULL	KAMUNTI	NA	34600
94528 WISMA ASAS	228-B LEBUH CHULIA	PENANG.	NULL	Р	10200
340434 LOT 6.05, LEVEL 6, KPMG TOWER	8 FIRST AVENUE	BANDAR UTAMA	PETALING	JB	47800
487092 MALAYSIA AIRPORTS CORPORATE OFFICE	PERSIARAN KORPORAT KLIA	NULL	SEPANG	В	64000
5507 LEVEL 5, BLOK D	SRI DAMANSARA BUSINESS PAR	PERSIARAN INDUSTRI	BANDAR S	FW	52200

7685 PENTHOUSE, WISMA SUNRISE	PLAZA MONT'KIARA	2 JALAN KIARA, MONT'KIAR	KUALA LUN	W	50480
18203 4 1/2 MILE,KUNG PHIN ROAD	OFF PENRISSEN ROAD	KUCHING;SARAWAK	NULL	Υ	93250
428355 LEVEL 15-2, FABER IMPERIAL COURT	JLN SULTAN ISMAIL	KUALA LUMPUR	NULL	W	50250
342868 SIYE 6.1A, MENARA PELANGI	JLN KUNING, TMN PELANGI	JOHOR BAHRU;	NULL	J	80400
779028 LEVEL 15-2, FABER IMPERIAL COURT	JALAN SULTAN ISMAIL	NULL	KUALA LUN	W	50250
141537 TINGKAT 5, LOT 10, BANGUNAN BKA	JALAN ASTAKA U8/84, SECTION	BUKIT JELUTONG	SHAH ALAN	В	40150
380310 NO.2,JLN.ASTAKA U8/82	SEKSYEN U8	BEKIT JELUTONG;SHAH ALA	NULL	В	40150
571212 5.03,5TH FLR	WISMA CHASE PERDANA	OFF JLN SEMANTAN;DAMA	NULL	W	50490
87564 LEVEL 16 MENARA SUNWAY	JALAN LAGOON TIMUR	BANDAR SUNWAY;PETALIN	NULL	В	46150
278114 WISMA LAI SING	52 JLN TAGO 2,OFF JLN PRSN U	SRI DAMANSARA;K.LUMPU	NULL	W	52200
552781 16TH FLOOR,PLAZA VADS,	NO:1, JALAN TUN MOHD FUAD,	TAMAN TUN DR,ISMAIL,	KUALA LUN	W	60000
828855 MENARA TA ONE	TINGKAT 34	22 JALAN P. RAMLEE	KUALA LUN	W	50250
593649 SUITE 6.1A, MENARA PELANGI	JALAN KUNING, TAMAN PELANO	JOHOR BAHRU	NULL	J	80400
595000 NO:83 & 85,JLN SS15/4C	NULL	NULL	SUBANG JA	В	47500
10894 LEVEL 15, MENARA STAR	15 JALAN 16/11	PETALING JAYA;SELANGOR	NULL	В	46350
1319 6TH FLOOR NO 61	JALAN MELAKA RAYA 8	TAMAN MELAKA RAYA	MELAKA	М	75000
297020 51-21-A MENARA BHL BANK	JALAN SULTAN AHMAD SHAH		GEORGETO	Р	10050
995210 LEVEL 18, THE GARDENS NORTH TOWER	MID VALLEY CITY	LINGKARAN SYED PUTRA	KUALA LUN	W	59200
733607 LEVEL 15-2 FABER IMPERIAL COURT	JALAN SULTAN ISMAIL	NULL	KUALA LUN	W	50250
78806 SUITE 7E, LEVEL 7	MENARA ANSAR	65, JALAN TRUS	JOHOR BAH	J	80000
187259 LEVEL 18, THE GARDENS NORTH TOWER	MID VALLEY CITY	LINGKARAN SYED PUTRA	KUALA LUN	W	59200
440508 1120A, DAMANSARA INTAN	1,JALAN SS 20/27	PETALING JAYA;SELANGOR.	NULL	В	47400
534368 SUITE 2.05,LEVEL 2	MENARA MAXISEGAR	JLN PANDAN INDAH 4/2;PA	NULL	W	55100
14034 NO:18 JALAN 17/155C	BANDAR BUKIT JALIL	NULL	KUALA LUN	W	57000
638899 2B-4,LEVEL 4	JALAN SS 6/6	KELANA JAYA	PETALING J	В	47301
463440 LOT 5613,	SUNGAI KETAPANG	NULL	GURUN	К	8300
553069 NO.2-2,JALAN SS 6/6	KELANA JAYA	PETALING JAYA, SELANGOR	NULL	В	47301
644902 5A JALAN WAWASAN 2	KAW PERIND SRI GADING	BATU PAHAT;JOHOR.	NULL	J	83300
242188 LEVEL 5, AXIATA CENTRE	9 JALAN STESEN SENTRAL 5	KUALA LUMPUR SENTRAL	KUALA LUN	W	50470
524271 13TH FLOOR, MENARA PNB	201-A JLN TUN RAZAK	NULL	KUALA LUN	W	50400
2444 NO:312, 3RD FLOOR, BLOCK C	KELANA SQUARE	NO:17 JALAN SS7/26	PETALING J	В	47301
6052 UNIT 07-02,LEVEL 7	PERSOFT TOWER	6B, PERSIARAN TROPICANA	PETALING J	В	47410
286457 UNIT 07-02, LEVEL 7 PERSOFT TOWER	6B, PERSIARAN TROPICANA	NULL	PETALING J	В	47410

288687 NO. 60 JALAN SRI BAHARI	NULL	NULL	GEORGETO	Р	10050
633621 1ST FLR,275 JLN.HARUAN 1	AOKLAND INDUSTRIAL PARK	SEREMBAN;N.SEMBILAN	NULL	W	70200
48850 ETIQA TWINS,TOWER 1,	LEVEL 13,	11,JALAN PINANG,	KUALA LUN	W	50450
510737 62C JALAN SS21/62	DAMANSARA UTAMA	PETALING JAYA	NULL	В	47400
561986 55 MEDAN IPOH 1A	MEDAN IPOH BISTARI	NULL	IPOH	A	31400
367249 2579 LORONG PERUSAHAAN 10	PRAI INDUSTRIAL ESTATE	NULL	PRAI	Р	13600
298188 SUITE 2-1,2ND FLOOR	MENARA PENANG GARDEN	42A JALAN SULTAN AHMAD	GEORGETO	Р	10050
22544 UNIT 621, 6TH FLOOR,BLOCK A	KELANA CENTRE POINT	NO.3, JALAN SS 7/19, KELAI	PETALING J	В	47301
229690 NO:6,JALAN BANGSAR UTAMA 9	BANGSAR UTAMA	NULL	KUALA LUN	W	59000
7574 LEVEL 42	MENARA MAXIS,K.LUMPUR CIT	KUALA LUMPUR	NULL	W	50088
126926 3RD FLOOR	JUSCO TMN MALURI SHOPPING	JLN JEJAKA, TMN MALURI; K	NULL	W	55100
5138 5TH FLOOR,	MENARA PMI,	NO.2 JALAN CHANGKAT CE	KUALA LUN	W	50200
373741 TRANSMILE CENTRE	CARGO COMPLEX	SULTAN ABDUL AZIZ AIRPO	SUBANG	В	47200
351927 35, 1ST FLOOR, JLN KELISA EMAS 1	TAMAN KELISA EMAS	NULL	SEBERANG	Р	13700
3441 SUITE 6.1A	LEVEL 6, MENARA PELANGI	JALAN KUNING, TAMAN PEL	NULL	J	80400
3859 NO.3,PERSIARAN WAJA	BUKIT RAJA INDUSTRIAL ESTATE	KLANG;SELANGOR	NULL	В	41050
4423 LOT 2,JLN USAHAWAN 5	PKNS SETAPAK INDUSTRIAL ARE	OFF JLN GENTING KELANG	KUALA LUN	W	53300
475221 HEADQUARTER'S BLDG	JLN PELABUHAN	PELABUHAN UTARA;PELAB	NULL	В	42000
8695 NW3-13, COVA SQUARE	JALAN TEKNOLOGI	PJU 5, KOTA DAMANSARA	PETALING J	В	47810
48166 WISMA KOSSAN	LOT 782, JALAN SG. PUTUS	OFF BT.3 3/4, JALAN KAPAR	NULL	В	42100
234669 SUITE 18.05	MWE PLAZA	NO.8 LEBUH FARQUHAR;PE	NULL	Р	10200
324203 SUITE 2-1,2ND FLR.	MENARA PENANG GRDN	42A JLN SULTAN AHMAD SH	NULL	Р	10050
2511 SUITE 2.02, LEVEL 2,WISMA E & C	NO 2 LORONG DUNGUN KIRI	DAMANSARA HEIGHTS	KUALA LUN	W	50490
3250 SUITE 2B-3A-2,BLOK 2B,LEVEL 3A	PLAZA SENTRAL, JALAN STESEN	KUALA LUMPUR SENTRAL	KUALA LUN	W	50470
994178 TKT.3 ADMINISTRATION BLDG	ALL ASIA BROADCAST CTR	TEKNOLOGY PARK MSIA	NULL	W	57000
24217 TKT 39, MENARA MULTI-PURPOSE	CAPITAL SQUARE	8, JLN MUNSHI ABDULLAH; K	NULL	W	50100
25583 LOT 1258,JALAN UTAMA	PENDING INDUSTRIAL ESTATE	KUCHING,SARAWAK.	NULL	γ	93450
9378 UNIT C508, BLOCK C	KELANA SQUARE	JALAN SS7/26, KELANA JAY	PETALING J	В	47301
63026 LEVEL 23, PLAZA RAJA CHULAN	8 JALAN RAJA CHULAN	KUALA LUMPUR	NULL	W	50200
532975 SRI PENTAS	3 PERSIARAN BANDAR UTAMA	PETALING;SELANGOR	NULL	В	47800
387185 LOT 8 & 9, BLOCK A, 2ND FLOOR,	DAMAI POINT COMMERCIAL CE	OFF JALAN DAMAI, LUYANG	ΚΟΤΑ ΚΙΝΑ	Х	88300
3751 NO.1-9, PUSAT SURIA PERMATA	LORONG UPPER LANANG 10A	NULL	SIBU	Υ	96000
244510 LOT 6.05,LEVEL 6,KPMG TOWER,	FIRST AVENUE,	BANDAR UTAMA,	PETALING J	В	47800

490799 LOT 2778, 5TH FLOOR	BANGUNAN INGRESS AUTO	JALAN DAMANSARA, SUNG	KUALA LU	ΝW	60000
419227 LEVEL 3, EAST WING, WISMA SYNERGY	72 PERSIARAN JUBLI PERAK	SEKSYEN 22	SHAH ALA	N B	40000
707082 LEVEL 18, THE GARDENS NORTH TOWER	MID VALLEY CITY	LINGKARAN SYED PUTRA	KUALA LU	ΝW	59200
12737 LOT 579 & 586, 2ND MILES	JALAN BATU TIGA LAMA	NULL	KLANG	В	41300
73170 NO.12,LORONG MEDAN TUANKU SATU	KUALA LUMPUR.	NULL	NULL	W	50300
754118 SUITE 13A.01(A),WISMA GOLDHILL,	LEVEL 13A	67,JALAN RAJA CHULAN,	KUALA LU	٨W	50200
995098 LEVEL 8 SYMPHONY HOUSE	BLOCK D13 PUSAT DAGANGAN	JALAN PJU 1A/46	PETALING	JB	47301
3405 7,JLN.TANDANG	PETALING JAYA	SELANGOR.	NULL	В	46050
399442 LOT 7907,BATU 11	JALAN BALAKONG	SERI KEMBANGAN;SELANG	NULL	В	43300
12994 LOT 3 & 7 AIR KEROH INDUSTRIAL ESTATE	PHASE IV	MELAKA.	NULL	Μ	75450
157215 LOT 7,JLN API-API 26/1	HICOM INDUSTRIAL ESTATE, SEC	NULL	SHAH ALA	N B	40400
194977 LOT 4.100.TINGKAT 4	WISMA CENTRAL	JALAN AMPANG;KUALA LUI	NULL	W	50450
194675 10TH FLOOR, MENARA HAP SENG	NO. 1 & 3 JALAN P.RAMLEE	NULL	KUALA LU	٨W	50250
577740 LEVEL 15-2, FABER IMPERIAL COURT	JALAN SULTAN ISMAIL	KUALA LUMPUR	NULL	W	50250
650234 LEVEL 9, MENARA HLA	NO. 3, JALAN KIA PENG	NULL	KUALA LU	ΝW	50450
377627 SUITE 6.1A,LEVEL 6	MENARA PELANGI	JLN KUNING, TAMAN PELAN	NULL	J	80400
128740 LEVEL 51,NORTH WING,MENARA TM	JALAN PANTAI BAHARU	NULL	KUALA LU	٨W	50672
523085 SUITE 12-A, LEVEL 12	MENARA NORTHAM	NO. 5 JALAN SULTAN AHMA	GEORGET	ОР	10050
664612 LEVEL 8 SYMPHONY HOUSE	BLOCK D13, PUSAT DAGANGAN	JALAN PJU 1A/46	PETALING	JB	47301
649966 57-G PERSIARAN BAYAN INDAH	BAYAN BAY	SUNGAI NIBONG	BAYAN LE	ΡP	11900
40282 LEVEL 11, MENARA TUN RAZAK	JALAN RAJA LAUT	KUALA LUMPUR.	NULL	W	50350
541149 2-2 JALAN 4/62D	MEDAN PUTRA BUSINESS CENT	BDR MANJALARA;K.LUMPU	NULL	W	52200
514941 NO. 55, MEDAN IPOH 1A	MEDAN IPOH BISTARI	NULL	IPOH	А	31400
189900 NO.8,JALAN MAJISTRET U1/26	HICOM-GLENMARIE INDUSTRIA	SELANGOR	NULL	В	40150
712243 SUBLOT 5 - 10,	LOT 46, BLOCK 10,	JALAN TAMAN RAJA, MCLD	MIRI	Υ	98000
29223 NO.2, JLN.U1/26, SEKSYEN U1	HICOM-GLENMARIE INDST PAR	I SHAH ALAM;S'NGOR	NULL	В	40150
217120 SUITE 6.1A	LEVEL 6, MENARA PELANGI	JLN. KUNING, TMN. PELANO	JOHOR BA	VF J	80400
867573 LEVEL 18, MENARA MAXIS	KUALA LUMPUR CITY CENTRE	OFF JALAN AMPANG	KUALA LU	ΝW	50088
452536 NO.308, BLOCK A (3RD FLOOR)	KELANA BUSINESS CENTRE	97, JALAN SS7/2, KELANA JA	PETALING	JB	47301
585648 312,3RD FLOOR,BLOCK C	KELANA SQUARE	NO 17,JALAN SS7/26	PETALING	JB	47301
52235 LOT 19,JLN DELIMA1/1	SUBANG HI-TECH INDUSTRIAL P	BATU 3;SHAH ALAM	NULL	В	40000
138535 275, (1ST FLOOR)	JLN HARUAN 1	OAKLAND IND.PARK	SEREMBA	NN	70200
405897 SUITE 2.03, 2ND FLOOR	WISMA MIRAMA	JALAN WISMA PUTRA	KUALA LU	ΝW	50460

					50450
5486 LEVEL 9, WISMA HONG LEONG	18 JALAN PERAK	K.LUMPUR	NULL	W	50450
82056 LEVEL 14, OFFICE TOWER	NO. 1, JALAN NAGASARI	(OFF JALAN RAJA CHULAN)			50200
19698 PLAZA 138 SUITE 18.03	18TH FLOOR 138 JALAN AMPAN	-	KUALA LUN		50450
5745 LEVEL 32, THE GARDENS SOUTH TOWER	MID VALLEY CITY	LINGKARAN SYED PUTRA	KUALA LUN		59200
391077 SUITE 2-1,2ND FLR	MENARA PENANG GARDEN	42A JLN SULTAN AHMAD SH		Р	10050
583661 SUITE 12-02, 12TH. FLOOR,	MENARA MAA,	NO. 170, JALAN ARGYLL	GEORGETC		10050
371551 51-21-A, MENARA BHL BANK	JALAN SULTAN AHMAD SHAH	PENANG.	NULL	Р	10050
562871 LEVEL 18 THE GARDENS NORTH TOWER	MID VALLEY CITY	LINGKARAN SYED PUTRA	KUALA LUN	N W	59200
131696 NO.1 & 1A, 2ND FLOOR	(ROOM 2), JALAN IPOH KECIL	NULL	KUALA LUN	N W	50350
11817 SUITE 4.1,LEVEL 4	BLK C,PLAZA DAMANSARA	NO 45 JLN MEDAN SETIA 1;	NULL	W	50490
535763 400,JLN.KAMUNTING	BT.2,TMN.SAUJANA	NULL	KAMUNTIN	NA	34600
628000 LEVEL 7, MENARA MILENIUM	JLN DAMANLELA, PUSAT BDR DA	DAMANSARA HEIGHTS	KUALA LUN	NW .	50490
521348 15,JALAN DAGANG SB 4/1	TAMAN SUNGAI BESI INDAH	SERI KEMBANGAN;SELANG	NULL	В	43300
428890 LEVEL 18, THE GARDENS NORTH TOWER	MID VALLEY CITY	LINGKARAN SYED PUTRA	KUALA LUN	Ŵ	59200
583661 57-2, PERSIARAN BAYAN INDAH,	BAYAN BAY,	SUNGAI NIBONG,	BAYAN LEP	Р	11900
284669 25-5,BLOCK H,JALAN PJU 1/37	DATARAN PRIMA	PETALING JAYA, SELANGOR	NULL	В	47301
253837 NO. 1-20-1 SUNTECH @ PENANG CYBERCITY	LINTANG MAYANG PASIR 3	NULL	BAYAN BAI	FP	11950
22265 6 1/2 MILES	SIMPANG SALAK SOUTH BARU	(LOT 3, JLN KUCHAI LAMA);	NULL	W	58200
219350 SUITE 2-1 2ND FLR	MENARA PENANG GARDEN	42A, JLN SULTAN AHMAD	GEORGETO	) P	10050
506836 LEVEL 2,BLOCK B-59	TAMAN SRI SARAWAK MALL	JLN.TUANKU ABDUL RAHM	NULL	W	93100
407580 57-1, PERSIARAN BAYAN INDAH	BAYAN BAY	SUNGAI NIBONG	BAYAN LEP	Р	11900
193094 SUITE 5.11 & 5.12, 5TH FLOOR	MENARA TJB	NO. 9, JALAN SYED MOHD	JOHOR BAI	۲J	80000
334818 LOT 6,JALAN 6/4	KAW.PERINDUSTRIAN SERI KEM	SERI KEMBANGAN;S'GOR	NULL	В	43300
6461 NO:1,NEXUS DRIVE EAST	KARAMBUNAI,	MENGGATAL;	ΚΟΤΑ ΚΙΝΑ	X	88450
617580 NO. 38 JALAN CHOW KIT	NULL	NULL	KUALA LUN	Ŵ	50350
190155 SUITE 1301, 13TH FLOOR	CITY PLAZA	JALAN TEBRAU	JOHOR BAI	۲J	80300
415 LEVEL 14, OFFICE TOWER	1 JALAN NAGASARI	(OFF JALAN RAJA CHULAN)	KUALA LUN	Ŵ	50200
666098 SUITE 13.03 13TH FLOOR	MENARA TAN & TAN	207 JALAN TUN RAZAK	KUALA LUN	Ŵ	50400
240 JENDARATA ESTATE	NULL	NULL	TELUK INT/	4 A	36009
4372 VIRGINIA PARK	JALAN UNIVERSITI	PETALING JAYA;SELANGOR	NULL	В	46200
4624 WISMA SELANGOR DREDGING	TKT. 18, WEST BLOCK	142-C, JLN. AMPANG;K.L.	NULL	W	50451
109465 NO.6, JALAN SULTAN ISKANDAR SHAH	ІРОН	PERAK	NULL	A	30000
573382 14-2,JALAN 4A/27A	SECTION 2, WANGSA MAJU	KUALA LUMPUR.	NULL	W	53300
/- /	,		-		

413292 LEVEL 4,NO.14	JALAN MAJISTRET U1/26	HICOM GLENMARIE INDUS	SHAH ALAN	В	40150
173250 LEVEL 4, WISMA ATLAN	8, PERSIARAN KG. JAWA	NULL	BAYAN LEP	Р	11900
272923 WISMA HO WAH GENTING	NO.35 JLN MAHARAJALELA	KUALA LUMPUR	NULL	W	50150
769962 21ST FLOOR	MENARA HAP SENG	JALAN P.RAMLEE	KUALA LUN	W	50250
104556 WISMA ATLAN	8, PERSIARAN KAMPUNG JAWA	NULL	BAYAN LEP	P	11900
210915 D-3-7	GREENTOWN SQUARE	JALAN DATO'SERI AHMAD S	IPOH	А	30450
496665 LEVEL 18, THE GARDENS NORTH TOWER	MID VALLEY CITY	LINGKARAN SYED PUTRA	KUALA LUN	W	59200
632068 NO. 4, TINGKAT 2	JALAN 3/27F	DESA SETAPAK, WANGSA M	KUALA LUN	Ŵ	53300
602026 NO.A-15-4 NORTHPOINT OFFICES	MEDAN SYED PUTRA UTARA	1 JALAN SYED PUTRA MID \	KUALA LUN	Ŵ	59200
830144 19-2, MERCU UEM	JALAN STESEN SENTRAL 5	KUALA LUMPUR SENTRAL	KUALA LUN	W	50470
181758 WISMA CNI, 2 JALAN U1/17,	SEKSYEN U1,	HICOM-GLENMARIE INDUS	SHAH ALAN	В	40000
152205 LEVEL 18, THE GARDENS NORTH TOWER	MID VALLEY CITY	LINGKARAN SYED PUTRA	KUALA LUN	W	59200
446118 WISMA KVC,LOT 3	JLN P10/12	KAW.PERUSAHAAN BANGI;	NULL	В	43650
142241 SUITE A-21-13A LEVEL 21	MENARA UOA BANGSAR	NO. 5 JALAN BANGSAR UTA	KUALA LUN	W	59000
810179 LOT 199 JALAN SG MA'AW	SG BIDUT,	NULL	SIBU	Υ	96000
13418 SUITE 12B, LEVEL 12	MENARA ANSAR	NO. 65, JALAN TRUS	JOHOR BAH	- 1	80000
674900 LEVEL 18, THE GARDENS NORTH TOWER	MID VALLEY CITY	LINGKARAN SYED PUTRA	KUALA LUN	W	59200
10601 TINGKAT 3	ADMINISTRTION BUILDING 1, N	SULTAN ABDUL AZIZ SHAH	SUBANG	В	47200
221206 SUITE 1301, 13TH FLOOR	CITY PLAZA	JALAN TEBRAU	JOHOR BAH	- 1	80300
504718 58-A,CANTONMENT ROAD	PENANG.	NULL	NULL	Р	10250
334221 SUITE 11.05B, LEVEL 11	THE GARDENS SOUTH TOWER	MID VALLEY CITY, LINGKARA	KUALA LUN	W	59200
6265 ARAS 5,BANGUNAN UMNO TERENGGANU	LOT 3224, JALAN MASJID ABIDIN	NULL	KUALA TER	Т	20100
22146 BANGUNAN IPMUDA	12 JALAN DATOH	IPOH,PERAK	NULL	А	30000
511433 WISMA KSL,148	BATU 1 1/2,JLN.BULOH KASAP	SEGAMAT; JOHOR DARUL TA	NULL	J	85000
8444 SUITE 20.03, 20TH FLOOR	MENARA MAA	NO. 12 JALAN DEWAN BAH	NULL	W	50460
126552 SUITE 18.05,MWE PLAZA	NO.8 LEBUH FARQUHAR	PULAU PINANG	NULL	Р	10200
222 LEVEL 7, MENARA MILENIUM	JALAN DAMANLELA, PUSAT BDF	DAMANSARA HEIGHTS	KUALA LUN	W	50490
290455 LOT 6.05, LEVEL 6, KPMG TOWER	8 FIRST AVENUE	BANDAR UTAMA	PETALING J	JB	47800
205814 TB 4327, BLOCK 31	2ND FLOOR, FAJAR COMPLEX	JALAN HAJI KARIM	TAWAU	Х	91000
307139 LOT 4979, 2 1/2 MILES	JALAN TANJONG LABOH	NULL	BATU PAHA	٤J	83000
172003 NO.4B, 2ND FLOOR & 3RD FLOOR	JALAN SENTOL	SOUTH WING - KLUANG PA	KLUANG	J	86000
414010 312,3RD FLOOR,BLOCK C,	KELANA SQUARE,	17,JALAN SS7/26,	PETALING J	JB	47301
177214 36A LORONG GELUGOR	OFF PERSIARAN SULTAN IBRAH	KLANG;SELANGOR	NULL	В	41300

337554 10TH FLOOR, MENARA HAP SENG	NO:1 & 3 JALAN P.RAMLEE	NULL	KUALA LUI	\W	50250
314 11TH FLOOR, WISMA E & C	NO:2 LORONG DUNGUN KIRI	DAMANSARA HEIGHTS	KUALA LUI	\W	50490
185202 20TH FLOOR, MENARA HAW PAR	JLN SULTAN ISMAIL	NULL	KUALA LUI	\W	50250
364372 LEVEL 18, THE GARDENS NORTH TOWER	MID VALLEY CITY	LINGKARAN SYED PUTRA	KUALA LUI	\W	59200
36216 15TH FLR	AMCORP TOWER	AMCORP TRADE CENTRE;18	NULL	В	46050
133399 2ND FLOOR, WISMA IJM	JALAN YONG SHOOK LIN	PETALING JAYA;SELANGOR	NULL	В	46050
4698 6TH FLOOR, OFFICE BLOCK	GRAND MILENNIUM KUALA LUN	160 JALAN BUKIT BINTANG	KUALA LUI	\W	55100
740909 41, JALAN MEDAN IPOH 6	BANDAR BARU MEDAN IPOH	NULL	IPOH	А	31400
19123 LEVEL 12	MENARA HLA	NO.3 JALAN KIA PENG	KUALA LU	ſW	50450
589167 SUITE 10.03, LEVEL 10, THE GARDENS SOUTH	MID VALLEY CITY	LINGKARAN SYED PUTRA	KUALA LUI	١W	59200
390116 NO.8 & 10,JALAN JURUTERA U1/23	SEK.U1,KAW.PERINDS.HICOM	SHAH ALAM;SEL	NULL	В	40150
372113 6-8,JALAN 3/3C	BATU 7, JALAN IPOH	NULL	KUALA LUI	\W	68100
252670 PLAZA 138,SUITE 18.03,18TH FLOOR	138,JALAN AMPANG	NULL	KUALA LUI	\W	50450
194514 WISMA AIC,LOT NO 3	PERSIARAN KEMAJUAN	SEKSYEN 16;SHAH ALAM,SE	NULL	В	40200
641576 LEVEL 54, TOWER 2	PETRONAS TWIN TOWERS	KUALA LUMPUR CITY CENT	KUALA LUI	١W	50088
92246 UNIT 19-5,BLOK C1	DATARAN PRIMA	JALAN PJU 1/41;PETALING J	NULL	В	47301
587853 26 & 26A,JALAN LAMBAK	TAMAN JOHOR	JOHOR BAHRU;JOHOR	NULL	J	81200
111365 SUITE 11-1A, LEVEL 11	MENARA WELD	76, JALAN RAJA CHULAN	KUALA LUI	\W	50200
29579 78,JALAN SS 22/21	DAMANSARA JAYA	PETALING JAYA;SELANGOR	NULL	В	47400
58476 121, JALAN TUNKU ABDUL RAHMAN	NULL	NULL	IPOH	А	30010
277977 SILVER BIRD COMPLEX	LOT 72 PERSIARAN JUBLI PERAK	SEKSYEN 21	SHAH ALAI	NΒ	40300
121919 1ST & 2ND FLOOR, VICTORIA POINT	JALAN OKK AWANG BESAR	NULL	LABUAN	L	87007
5283 LEVEL 3	2723, LORONG PERUSAHAAN 12	PRAI INDUSTRIAL ESTATE	PRAI	Р	13600
5383 TK 8,SOUTH BLK	WISMA SEL DRED.	142A J,AMPANG;AMPANG	NULL	W	0
6393 TKT 21,WIS.ZELAN	1,JLN.TASIK P'SURI 2	BDR.TUN RAZAK, CHERAS; K.	NULL	W	56000
7867 JLN.UTAS 15/7	SHAH ALAM	SELANGOR	NULL	В	40000
838172 NO. 57-G PERSIARAN BAYAN INDAH	BAYAN BAY	NULL	SUNGAI NI	I P	11900
173964 312, 3RD FLOOR, BLOCK C	KELANA SQUARE,	17 JALAN SS 7/26	PETALING	JB	47301
265348 LOT 85 JLN PORTLAND	TASEK INDUSTRIAL ESTATE	IPOH, PERAK	NULL	А	31400
153208 LOT 6.05, LEVEL 6	KPMG TOWER 8	FIRST AVENUE, BANDAR UT	PETALING	JB	47800
641378 LOT 6.05, LEVEL 6	KPMG TOWER, 8 FIRST AVENUE	BANDAR UTAMA	PETALING	JB	47800
45631 SAPURA @ MINES NO.7, JLN. TASIK	THE MINES RESORT CITY	SERI KEMBANGAN	NULL	В	43300
603831 SUITE 2-1, 2ND FLOOR	MENARA PENANG GARDEN	42-A, JALAN SULTAN AHMA	GEORGET	) P	10050

5572 LEVEL 9, SYMPHONY HOUSE	DANA 1,COMMERCIAL CENTRE	JALAN PJU 1A/46	PETALING	JB	47301
1120 2.05, LEVEL 2, MENARA MAXISEGAR	JALAN PANDAN INDAH 4/2	PANDAN INDAH	KUALA LU	ΝW	55100
3465 2B-5,LEVEL 5	JALAN SS 6/6	KELANA JAYA;PETALING JAY	NULL	В	47301
515802 SUITE 28-03,LEVEL 28,GTOWER	199 JALAN TUN RAZAK	NULL	KUALA LU	ΝW	50400
291592 NO 4-1, KOMPLEK NIAGA	MELAKA PERDANA, JALAN KNM	BUKIT KATIL	MELAKA	М	75450
88222 TOWER 1 PETRONAS TWIN	KUALA LUMPUR CITY CENTRE	KUALA LUMPUR	NULL	W	50080
182485 LOT 30462,JALAN KEMPAS BARU	JOHOR BAHRU, JOHOR	NULL	NULL	J	81200
183314 LETTER BOX 95,TKT 9	UBN TOWER	NO.10 JLN P.RAMLEE;KUAL	NULL	W	50250
577765 SUITE 20.03,20TH FLOOR	MENARA MAA	NO.12, JALAN DEWAN BAHA	KUALA LU	N W	50460
293040 SUITE 10.03, LEVEL 10	THE GARDENS SOUTH TOWER	MID VALLEY CITY, LINGKAR	KUALA LU	ΝW	59200
612237 SUITE 10.03, LEVEL 10	THE GARDENS SOUTH TOWER	MID VALLEY CITY, LINGKAR	KUALA LU	N W	59200
718388 9TH FLOOR, SURIAN TOWER	NO. 1, JALAN PJU 7/3	MUTIARA DAMANSARA	PETALING	JB	47810
79082 55, MEDAN IPOH 1A	MEDAN IPOH BISTARI	NULL	IPOH	А	31400
7994 LEVEL 21, 1 SENTRAL	JALAN TRAVERS	KUALA LUMPUR SENTRAL	KUALA LU	N W	50470
377762 5TH FLR WISMA RIA	TAMAN RIA	SUNGAI PETANI;KEDAH	NULL	К	8000
379057 4TH.FLR,BGN.INDAHSABAH	SEGAMA COMM.COMPLEX	KOTA KINABALU,SABAH.	ΚΟΤΑ ΚΙΝΑ	АX	88000
593796 TINGKAT 15,MENARA SUMMIT	PERSIARAN KEWAJIPAN,USJ 1	NULL	SUBANG J	AB	47600
66538 NO. 12, JALAN MAJISTRET U1/26	SEKSYEN U1, LOT 44	HICOM-GLENMARIE INDUS	SHAH ALA	NB	40150
31384 TKT 11	PLAZA YEOH TIONG LAY	55;JLN BKT BINTANG;K.L.	NULL	W	55100
700849 38F, LEVEL 2, JALAN RADIN ANUM	BANDAR BARU SERI PETALING	NULL	KUALA LU	ΝW	57000
637546 LOT 6.05, LEVEL 6	KPMG TOWER, 8 FIRST AVENUE	BANDAR UTAMA	PETALING	JB	47800
798513 LEVEL 31,MAJU TOWER	1001 JALAN SULTAN ISMAIL	NULL	KUALA LU	ΝW	50250
576121 35, 1ST FLOOR	JALAN KELISA EMAS 1	TAMAN KELISA EMAS	SEBERANG	δP	13700
592 SUITE 2B-3A-2,BLOCK 2B	LEVEL 3A, PLAZA SENTRAL	JLN STESEN SENTRAL 5,K.LU	KUALA LU	N W	50470
17777 SUITE 338,3RD FLOOR	JOHOR TOWER, JALAN GEREJA	JOHOR BAHRU	NULL	J	80100
426627 NO. 222 JALAN AMPANG	NULL	NULL	KUALA LU	NW	50450
119767 LEVEL 5, WISMA DRB-HICOM	NO.2, JALAN USAHAWAN	U1/8, SEKSYEN U1	SHAH ALA	NB	40150
16318 LEVEL 18, MENARA BOUSTED PENANG	39 JALAN SULTAN AHMAD SHAI	NULL	GEORGET	) P	10050
633814 LEVEL 7, MENARA MILENIUM	JLN DAMANLELA	PUSAT BANDAR DAMANSA	KUALA LU	N W	50490
5063 13,JLN.SEMANGAT	SECTION 13	PETALING JAYA;SELANGOR	NULL	В	46200
6292 WISMA TAIKO	1,JALAN S.P.SEENIVASAGAM	IPOH,PERAK	NULL	А	30000
8157 SUITE 1301,13TH FLR	CITY PLAZA, JLN. TEBRAU	JOHOR BAHRU;JOHOR.	NULL	J	80300
8578 LEVEL 8,UPTOWN 1	1 JALAN SS21/58	DAMANSARA UPTOWN;PET	NULL	В	47400

8812 LOT 3,JLN. LADA SULAH 16/11	SECTION 16, SHAH ALAM	SELANGOR D.EHSAN	NULL	В	40000
360419 NO.8,3RD FLOOR	JALAN SEGAMBUT	KUALA LUMPUR	NULL	W	51200
44548 40B, PERSIARAN SULTAN IBRAHIM	KLANG	SELANGOR DARUL EHSAN	NULL	В	41300
4295 LOT 5710,JALAN KUCHAI LAMA	PETALING	NULL	KUALA LUN	W	58200
4131 SUITE 1.1,1ST FLOOR	KOMPLEKS ANTARABANGSA	JALAN SULTAN ISMAIL;K.LU	NULL	W	50250
700568 LEVEL 11, WISMA HELP	LORONG DUNGUN KIRI	DAMANSARA HEIGHTS	KUALA LUN	W	50490
88160 SUITE 7E, LEVEL 7	MENARA ANSAR	NO. 65, JALAN TRUS	JOHOR BAI	J	80000
575543 10TH FLOOR, MENARA HAP SENG	NO.1 & 3 JALAN P.RAMLEE	NULL	KUALA LUN	W	50450
534942 10TH FLOOR, MENARA HAP SENG	NO.1 & 3, JALAN P.RAMLEE	NULL	KUALA LUN	W	50250
374600 67 & 69,JALAN SBC 1	TAMAN SRI BATU CAVES	BATU CAVES;SELANGOR	NULL	В	68100
568420 36-38,LENGKOK TASEK TIMUR	TAMAN TASEK INDRA	IPOH;PERAK DARUL RIDZUA	NULL	A	31400
107129 NO.9, JALAN BAYU TINGGI 2A/KS6,	TAIPAN 2, BATU UNJUR	NULL	KLANG	В	41200
12771 5TH FLOOR, NO.11	LORONG KINTA	PENANG	NULL	Р	10400
555 LEVEL 3A (ANNEXE),MENARA MILENIUM	8 JALAN DAMANLELA	DAMANSARA HEIGHTS	KUALA LUN	W	50490
325631 NO. 482, GROUND FLOOR	JALAN ZAMRUD 6	ΤΑΜΑΝ ΚΟ-ΟΡ	SEREMBAN	N	70200
13022 312,3RD FLOOR,BLOCK C	KELANA SQUARE 17	JALAN SS7/26	PETALING .	JB	47301
430404 SUITE 11.1A LEVEL 11	MENARA WELD	76 JALAN RAJA CHULAN	KUALA LUN	W	50200
716241 82-F, JALAN PULASAN	NULL	NULL	KLANG	В	41000
503248 SUITE 1008, 10TH FLOOR	WISMA LIM FOO YONG	NO. 86, JALAN RAJA CHULA	KUALA LUN	W	50200
41412 LOT 1282,JALAN BUKIT KEMUNING	SEKSYEN 32,SHAH ALAM	SELANGOR D.EHSAN	NULL	В	40460
204888 LEVEL 3A, WISMA NV MULTI	NO 1,JALAN 1/116A	OFF JALAN SUNGAI BESI	KUALA LUN	W	57100
34134 LOT 6.05, LEVEL 6, KPMG TOWER	8 FIRST AVENUE	BANDAR UTAMA	PETALING .	JB	47800
8178 LEVEL 25,MENARA DAYABUMI	JALAN SULTAN HISHAMUDDIN	KUALA LUMPUR	NULL	W	50050
8386 WISMA EMC	972 JALAN BARU	PRAI, PENANG	NULL	Р	13700
64915 312, TINGKAT 3, BLOK C	KELANA SQUARE	17 JALAN SS 7/26	PETALING .	JB	47301
268257 NO.9, BLOCK D	PUSAT PERDAGANGAN PUCHO	TAMAN PUCHONG PRIMA;	PUCHONG	В	47150
287036 LEVEL 8, SYMPHONY HOUSE	BLOCK D13, PUSAT DAGANGAN	I JALAN PJU 1A/46	PETALING .	JB	47301
536499 LOT 70, BLOCK 6, PRIMA SQUARE	MILE 4, NORTH ROAD	NULL	SANDAKAN	X	90000
632811 LEVEL 15-2 FABER IMPERIAL COURT	JALAN SULTAN ISMAIL	NULL	KUALA LUN	W	50250
3871 TINGKAT 28, WISMA BOUSTEAD	69, JALAN RAJA CHULAN	K.LUMPUR	NULL	W	50200
585389 TINGKAT 6, WISMA WAN MOHAMED	JLN.PANGLIMA BKT.GANTANG	NULL	IPOH	А	30000
236800 38-3-1,JALAN 4/91,	TAMAN SHAMELIN PERKASA,	CHERAS,	KUALA LUN	W	56100
380410 LEVEL 18, THE GARDENS NORTH TOWER,	MID VALLEY CITY,	LINGKARAN SYED PUTRA,	KUALA LUN	W	59200
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134463 8TH FLOOR, MENARA ZECON,	NO.92, LOT 393, SECTION.5, KT	JALAN SATOK,	KUCHING	Υ	93400
406684 11TH FLOOR	YEOH TIONG LAY PLAZA	55 JLN BUKIT BINTANG;KUA	NULL	W	55100
579572 51-21-A MENARA BHL BANK	JALAN SULTAN AHMAD SHAH	PENANG.	NULL	Р	10050
37 LEVEL 18, THE GARDENS NORTH TOWER	MID VALLEY CITY	LINGKARAN SYED PUTRA	KUALA LUN	W	59200
7199 4TH FLOOR, WISMA SESCO,	PETRA JAYA,	NULL	KUCHING	Υ	93673
160032 NO.17C, WISMA LIMBONGAN SETIA	JLN. SG 3/4,TMN SRI GOMBAK	BATU CAVES;SEL	NULL	В	68100
97092 LEVEL P1, MENARA CHOY FOOK ON	1B,JLN YONG SHOOK LIN,SEC 7	PETALING JAYA	NULL	В	46050
195285 LOT 2225,SEC.66	JLN.DERMAGA	PENDING INDUSTRIAL ESTA	NULL	Υ	93450
42138 SUITE 12-A LEVEL 12	MENARA NORTHAM	55 JLN SULTAN AHMAD SH	NULL	Р	10050
230149 WISMA MAH SING	PENTHOUSE	SUITE 1;NO 163;JLN SUNGA	NULL	W	57100
424341 LEV.7, MENARA MILENIUM	JLN. DAMANLELA, PUSAT BDR.D	D'SARA HEIGHTS;K	NULL	W	50490
33113 SUITE 7E, LEVEL 7	MENARA ANSAR	65, JALAN TRUS	JOHOR BAI	·J	80000
408376 LEVEL 8, SYMPHONY HOUSE	BLOCK D13, PUSAT DAGANGAN	JALAN PJU 1A/46	PETALING .	IВ	47301
10550 NO.85 (2ND FLOOR)	JLN BERCHAM, BANDAR BARU 1	NULL	IPOH	А	31400
6113 TKT 5,MENARA PMI	2, JALAN CHANGKAT CEYLON	NULL	KUALA LUN	W	50200
605539 NO: 17, JALAN SEMANGAT	PETALING JAYA	SELANGOR.	NULL	В	46100
11106 17TH FLOOR	MENARA BOUSTEAD	69 JALAN RAJA CHULAN	KUALA LUN	W	50200
229990 LEVEL 33,MENARA DAYABUMI,	JALAN SULTAN HISHAMUDDIN	NULL	KUALA LUN	W	50050
852 55, MEDAN IPOH 1A, MEDAN IPOH	BISTARI,	NULL	IPOH	А	31400
12186 SUITE 3A33,BLOCK A2	LEISURE COMMERCE SQUARE	9 JALAN PJS 8/9	PETALING .	I B	46150
239256 8-3,JLN.SEGAMBUT	KUALA LUMPUR.	NULL	NULL	W	51200
527272 SUITE 2-1	2ND FLR	MENARA PG GARDEN;42A	NULL	Р	10050
3907 LOT 13-01A, LEVEL 13 (EAST WING)	BERJAYA TIMES SQUARE	NO.1, JALAN IMBI	KUALA LUN	W	55100
9210 55, PERSIARAN SELANGOR	SECTION 15	SHAH ALAM;SELANGOR	NULL	В	40200
420049 SUITE 12A	LEVEL 12, MENARA NORTHAM	55 JLN SULTAN AHMAD SH	NULL	Р	10050
616056 LOT 1863,JALAN KOLEJ	SERI KEMBANGAN	SELANGOR DARUL EHSAN	NULL	В	43300
106173 NO.6, JALAN DATUK SULAIMAN	TAMAN TUN DR.ISMAIL	KUALA LUMPUR	NULL	W	60000
516019 LOT 6.08, 6TH FLOOR	PLAZA FIRST NATIONWIDE	NO. 161, JALAN TUN H.S. LE	KUALA LUN	W	50000
359750 203,TKT2,BLK C,DAMANSARA INTAN	1,JLN.SS 20/27	PETALING JAYA;SELANGOR	NULL	В	47400
301735 LEVEL 10, MENARA TSH	NO 8 JALAN SEMANTAN	DAMANSARA HEIGHTS	KUALA LUN	W	50490
340354 LOT 6.05, LEVEL 6, KPMG TOWER	8 FIRST AVENUE	BANDAR UTAMA	PETALING .	I B	47800
88716 LOT 6.05, LEVEL 6	KPMG TOWER, 8 FIRST AVENUE	BANDAR UTAMA	PETALING .	I B	47800
82982 LEVEL 8 SYMPHONY HOUSE	BLOCK D13, PUSAT DAGANGAN	JALAN PJU 1A/46	PETALING .	I B	47301

741883 NO.6 JALAN BANGSAR UTAMA 9	BANGSAR UTAMA	NULL	KUALA LUI	W	59000
503292 SUITE 12-02,	12TH FLOOR MENARA MAA	170, ARGYLL ROAD	GEORGETO	Р	10050
5199 LOT 6.05, LEVEL 6	KPMG TOWER, 8 FIRST AVENUE	BANDAR UTAMA	PETALING J	В	47800
201666 20TH.FLOOR	PLAZA OSK,JALAN AMPANG	KUALA LUMPUR	NULL	W	50450
203352 19,TKT 2,JLN ASTAKA U8/84	BKT JELUTONG BUSINES & TECH	SHAH ALAM	NULL	В	40150
337743 SUITE 7E, LEVEL 7	MENARA ANSAR	65, JALAN TRUS	JOHOR BAH	J	80000
1292 NO.24-3	JALAN TUN SAMBANTHAN 3	NULL	KUALA LUN	W	50470
564838 D12,TINGKAT 1	PLAZA PEKELILING	NO.2 JALAN TUN RAZAK;KU	NULL	W	50400
325935 SUITE 2-1, 2ND FLR.	MENARA PENANG GDN	42A, JLN SULTAN AHMAD S	NULL	Р	10050
183059 SUITE 5.02, 5TH FLOOR	WISMA ACADEMY, NO 4A	JALAN 19/1	PETALING J	В	46300
497913 24TH FLOOR,UBN TOWER	10,JALAN P.RAMLEE	KUALA LUMPUR	NULL	W	50250
11286 IBRACO HOUSE,	NO.898, JALAN WAN ALWI,	TABUAN JAYA,	KUCHING,	Υ	93350
13585 LOT 85, JALAN PORTLAND	TASEK INDUSTRIAL ESTATE	IPOH,PERAK	NULL	А	31400
206596 SUITE 20.03,TKT.20	MENARA MAA	NO.12, JALAN DEWAN BAHA	NULL	W	50460
25882 NO.32 MEDAN SETIA DUA	BUKIT DAMANSARA	KUALA LUMPUR.	NULL	W	50490
259146 25-2,JLN.PJU 1/42A	DATARAN PRIMA	PETALING JAYA;SELANGOR.	NULL	В	47301
631617 SUITE 2-1 2ND FLR	MENARA PENANG GRDN	42A J SUL AHAMAD SHAH;P	NULL	Р	10050
168098 SUITE 7E, LEVEL 7	MENARA ANSAR	65, JALAN TRUS	JOHOR BAH	J	80000
481559 AL 308,LOT 590 & LOT 4196	JLN INDUSTRI U19	KG.BARU SERI SG. BULOH;S	NULL	В	47000
19727 LEVEL 18, THE GARDENS NORTH TOWER	MID VALLEY CITY	LINGKARAN SYED PUTRA	KUALA LUN	W	59200
369519 LOT NO. C-G11 & C-G12	BLOCK C, JALAN PERSIARAN SUF	PALM SPRING@DAMANSAF	PETALING J	В	47810
657527 LEVEL 18, THE GARDENS NORTH TOWER	MID VALLEY CITY	LINGKAKARAN SYED PUTRA	KUALA LUN	W	59200
443169 NO. 7 ( 1ST FLOOR), JALAN PESTA 1/1	TAMAN TUN DR. ISMAIL 1	JALAN BAKRI	MUAR	J	84000
223934 LOT 10, THE HIGHWAY CENTRE	JALAN 51/205	NULL	PETALING J	В	46050
540508 WISMA BASWOOD	LOT 6516,BATU 5 3/4	JALAN KAPAR;KLANG,SELAN	NULL	В	42100
543867 1,JALAN PUTRA PERMAI 1A	TAMAN EQUINE	SERI KEMBANGAN;SELANG	NULL	В	43300
72057 1,JLN.ISTIMEWA 2	TMN.PERINDUSTRIAN DESA CEM	ULU TIRAM, JOHOR.	NULL	J	81800
428915 16A, JALAN ASTAKA U8/83	BUKIT JELUTONG	NULL	SHAH ALAN	В	40150
4069 468-6D, 2ND FLOOR	JALAN IPOH	NULL	KUALA LUN	W	51200
320888 19-0, LEVEL 19	PAVILION TOWER	75, JALAN RAJA CHULAN	KUALA LUN	W	50200
92647 TKT.11,PLAZA YEOH TIONG LAY	55 JLN.BKT.BINTANG	K.LUMPUR.	NULL	W	55100
285072 6TH FLOOR,	MENARA TUN MUSTAPHA,	LIKAS BAY,	ΚΟΤΑ ΚΙΝΑ	Х	88400
32939 LOT 712, BLK 7,	DEMAK LAUT IND. PARK,	NULL	KUCHING	Y	93050

4205 LEVEL 8, F & N POINT	NO. 3, JALAN METRO PUDU 1	FRASER BUSINESS PARK, OF	KUALA LUI	١W	55100
448934 TB 8285 LOT 20C	PERDANA SQUARE COMMERCIA	MILE 3 1/2 JALAN APAS	TAWAU	х	91000
36747 NO. 38, JALAN CHOW KIT	NULL	NULL	KUALA LUI	١W	50350
4887 55 MEDAN IPOH 1A	MEDAN IPOH BISTARI	NULL	IPOH	А	31400
222897 SUITE 18.01	18TH FLOOR	MWE PLAZA;NO.8 LEBUH F	NULL	Р	10200
389769 LEVEL 8, SYMPHONY HOUSE	BLOCK D13, PUSAT DAGANGAN	JALAN PJU 1A/46	PETALING	JB	47301
415726 42,1ST.FLOOR,JALAN MAAROF	BANGSAR BARU	KUALA LUMPUR	NULL	W	59100
742890 51-13-A, MENARA BHL BANK	JALAN SULTAN AHMAD SHAH	NULL	GEORGET	) P	10050
74125 3RD FLOOR NO.17	JALAN IPOH KECIL	KUALA LUMPUR.	NULL	W	50350
415527 SUITE 2-1, 2ND FLOOR	MENARA PENANG GARDEN	42-A, JALAN SULTAN AHMA	GEORGET	) P	10050
584257 LOT 6.05, LEVEL 6 KPMG TOWER	8 FIRST AVENUE, BANDAR UTAM	NULL	PETALING	JB	47800
46426 11,JLN.MAJISTRET U1/26	SEKSYEN U1, HICOM GLENMARI	S.ALAM	NULL	В	40150
298367 BLOCK B, LOT 4 & 5	BANDAR KIM FUNG	MILE 4, JALAN LABUK	SANDAKAN	NX	90000
442371 B-2-9 (2ND FLOOR)	PUSAT PERDAGANGAN KUCHAI	NO 2 JLN 1/127 OFF JALAN	KUALA LUI	١W	58200
333769 SUITE 3.6, LEVEL 3	MENARA PELANGI	NO. 2, JALAN KUNING, TAM	JOHOR BA	۴J	80400
3136 SAPURA @ MINES NO.7, JLN. TASIK	THE MINES RESORT CITY	SERI KEMBANGAN;SEL	NULL	В	43300
3327 SUITE 6.1A,LEVEL 6	MENARA PELANGI	JALAN KUNING, TMN. PELAN	NULL	J	80400
200866 129 JLN.BANGSAR	KUALA LUMPUR	NULL	NULL	W	59200
203430 LEVEL 5, WISMA DRB-HICOM	2,JALAN USAHAWAN U 1/8	SEKSYEN U1;SHAH ALAM	NULL	В	40150
291471 SUITE 1301,13TH FLOOR	CITY PLAZA, JLN TEBRAU	JOHOR BAHRU;JOHOR	NULL	J	80300
592902 WISMA HARBOUR	PARKCITY COMMERCE SQUARE	JLN TUN AHMAD ZAIDI	BINTULU	Y	97000
424773 NO 24-3,	JALAN TUN SAMBANTHAN 3	NULL	KUALA LUI	١W	50470
290601 LOT 13-01A, LEVEL 13 (EAST WING)	BERJAYA TIMES SQUARE	NO 1 JLN IMBI	KUALA LUI	١W	55100
603770 LEVEL 18, THE GARDENS NORTH TOWER	MID VALLEY CITY,	LINGKARAN SYED PUTRA,	KUALA LUI	١W	59200
303962 NO.24-3	JALAN TUN SAMBANTHAN 3	NULL	KUALA LUI	١W	50470
228669 SUITE 5.11 & 5.12,5TH. FLR	MENARA TJB	9,JLN. SYED MOHD. MUFTI;	NULL	J	80000
115609 FSBM PLAZA	3539 JALAN TEKNOKRAT 7	CYBERJAYA;SELANGOR	NULL	В	63000
22703 UNIT NO.203	2ND.FLR.BLOK C	D'SARA INTAN;1 JLN SS 20/	NULL	В	47400
104131 2ND FLR, WISMA IJM	JLN YONG SHOOK LIN	PETALING JAYA	NULL	В	46050
442942 UNIT 07-02, LEVEL 7	MENARA LUXZOR	6B PERSIARAN TROPICANA	NULL	В	47410
283710 PLOT 28, LRG.PERUSAHAAN MAJU 4	PRAI INDUS.ESTATE	NULL	PRAI	Р	13600
662315 312,TINGKAT 3,BLOK C	KELANA SQUARE	17 JALAN SS 7/26	PETALING	JB	47301
540218 LEVEL 18, THE GARDENS NORTH TOWER	MID VALLEY CITY	LINGKARAN SYED PUTRA	KUALA LUI	١W	59200

228933 SUITE 2-1,2ND FLOOR	MENARA PENANG GARDEN	42A JLN SULTAN AHMAD SH	NULL	Р	10050
329687 TINGKAT 11, TOWER BLOCK E	PLAZA PEKELILING	JALAN TUN RAZAK	KUALA LU	NW	50400
524297 SUITE 11.1A LEVEL 11	MENARA WELD	76 JALAN RAJA CHULAN;KU	NULL	W	50200
432768 NO. 6, JALAN BANGSAR UTAMA 9	BANGSAR UTAMA	NULL	KUALA LU	NW	59000
169561 PLO 279, JALAN FIRMA 3	KAWASAN PERINDUSTRIAN TEB	NULL	JOHOR BA	۴J	81100
507785 NO. 11, USJ SENTRAL	JALAN USJ SENTRAL 3	PERSIARAN SUBANG	SUBANG J	ΑB	47600
740838 SUITE 6.1A, LEVEL 6	MENARA PELANGI, JALAN KUNI	TAMAN PELANGI	JOHOR BA	۴J	80400
435649 SUITE 12-A	LEVEL 12, MENARA NORTHAM	JLN SULTAN AHMAD SHAH;	NULL	Р	10050
531086 TINGKAT 2,NO.2 JALAN SRI HARTAMAS 8	SRI HARTAMAS	KUALA LUMPUR	NULL	W	50480
308279 PLOT 30, HILIR SUNGAI KLUANG SATU	BAYAN LEPAS INDUSTRIAL PARK	PHASE 4	BAYAN LEI	р	11900
5067 TKT.20, MENARA 2, FABER TOWERS	JLN DESA BAHAGIA,TMN DESA	OFF JLN. KLANG LAMA	KUALA LU	NW	58100
6716 SUITE 18.05,MWE PLAZA	NO.8,LEBUH FARQUHAR	PENANG	NULL	Р	10200
222357 6TH FLR, BANGUNAN MALAYSIA RE	NO 7 LRG. DUNGUN	DAMANSARA HEIGHTS,K.L	NULL	W	50490
581612 57-G PERSIARAN BAYAN INDAH	BAYAN BAY	NULL	SUNGAI N	II P	11900
5713 846,JALAN RAYA	SUNGEI BAKAP	NULL	SEBERANG	βP	14209
547651 LOT 4.03A,4TH FLR	PLAZA PRIMA	BT. 4 1/2, JLN. KELANG LAN	NULL	W	58200
753588 NO. 87, MUNTRI STREET	NULL	NULL	GEORGET	) P	10200
272144 SUITE 2-1,2ND FLR	MENARA PENANG GARDEN	42A JALAN SULTAN AHAMD	NULL	Р	10050
559747 LOT 1A,LEVEL 1A	PLAZA PERANGSANG	PERSIARAN PERBANDARAN	NULL	В	40000
3926 BGN.SHELL,CHANGKAT SEMANTAN	DAMANSARA HEIGHTS	KUALA LUMPUR	NULL	W	50490
293565 6TH FLOOR, WISMA SIN HEAP LEE	346 JALAN TUN RAZAK	NULL	KUALA LUI	N W	50400
495846 SUITE 2-1,2ND FLOOR	MENARA PENANG GARDEN	42A JALAN SULTAN AHMAD	NULL	Р	10050
302675 308, BLOCK A (TINGKAT 3)	KELANA BUSINESS CENTRE	97 JALAN SS 7/2, KELANA JA	PETALING	JB	47301
88143 TINGKAT 22, MENARA PROMET	JALAN SULTAN ISMAIL	KUALA LUMPUR.	NULL	W	50250
290870 43-0-8,JALAN 1/48A,	SENTUL PERDANA,	BANDAR BARU SENTUL,	KUALA LUI	N W	51000
467709 19-2 MERCU UEM	JALAN STESEN SENTRAL 5	KUALA LUMPUR SENTRAL	KUALA LU	NW	50470
282664 PLOT 125, JLN. PERIND. BKT. MINYAK 5	SIMPANG AMPAT	S.P.T;PENANG.	NULL	Р	14100
4060 KOMPLEKS PEJABAT BEHRANG 2020	JALAN PERSEKUTUAN 1	NULL	TG. MALIN	/ A	35900
572307 35, 1ST FLOOR	JALAN KELISA EMAS 1	TAMAN KELISA EMAS	SEBERANG	βP	13700
622819 SUITE 20.03,20TH.FLR	MENARA MAA	12, JLN DEWAN BAHASA;KU	NULL	W	50460
554790 LOT 13-01A,LEVEL 13 (EASI WING)	BERJAYA TIMES SQUARE	NO.1,JALAN IMBI	KUALA LU	١W	55100
95161 NO. 1 JALAN HALBA SATU 16/16A	SKESYEN 16 KAWASAN PERINDU	SHAH ALAM	SHAH ALA	NB	40000
4920 5TH FLOOR, MENARA PMI	NO. 2 JALAN CHANGKAT CEYLO	NULL	KUALA LU	NW	50200

491485 PLOT 30, HILIR SUNGAI KLUANG SATU	BAYAN LEPAS INDUSTRIAL PARK		BAYAN LEF	D D	11900
-		-			
995199 LEVEL 18, THE GARDENS NORTH TOWER	MID VALLEY CITY	LINGKARAN SYED PUTRA	KUALA LUI	NW	59200
21690 25-5,BLK.H,JALAN PJU 1/37	DATARAN PRIMA	PETALING JAYA;SELANGOR	NULL	В	47301
10039 TOWER 3, AVENUE 5	THE HORIZON, BANGSAR SOUTH	NO. 8, JALAN KERINCHI	KUALA LUI	N W	59200
23370 SUITE 12B, LEVEL 12	MENARA ANSAR	65, JALAN TRUS	JOHOR BA	۴J	80000
633887 LOT 4.100,TINGKAT 4	WISMA CENTRAL	JALAN AMPANG;KUALA LUI	NULL	W	50450
332945 ARAS 9, MENARA BBDB	88 LEBUHRAYA DARULAMAN	ALOR STAR	NULL	К	5100
27676 24TH FLOOR, WISMA ZELAN	NO:1, JALAN TASIK PERMAISURI	BANDAR TUN RAZAK, CHER	KUALA LUI	١W	56000
7573 SUITE 6.1A	LEVEL 6	MENARA PELANGI;JLN KUN	NULL	J	80400
420099 NO.2, JLN APOLLO U5/190	BDR PINGGIRAN SUBANG	SEK.U5,SHAH ALAM;SELAN	NULL	В	40150
323723 NO. 23-01	JALAN PADI EMAS 3/1	BANDAR BARU UDA	JOHOR BA	۴J	81200
17547 LOT 2 & 4,JALAN P/11,SEKSYEN 10	KAW PERINDUSTRIAN BANGI	SELANGOR.	NULL	В	43650
419232 NO.6 JALAN RAWANG	SIBU, SARAWAK	NULL	NULL	Y	96000



Dear company secretary,

#### A SURVEY ON BOARD EFFECTIVENESS

This questionnaire is designed to study the board practices from the perspectives of directors. For your information, I am a PhD student from Universiti Utara Malaysia, conducting a research study on "Board Governance Characteristics, Capital Structure Decisions and Company Performance in Malaysia" and **Board Effectiveness** is one of the elements in my study.

I would appreciate if you could disseminate the attached questionnaires to **four (4)** of your directors. Please refer to the envelopes. I am glad to inform you that this study is supported by MAICSA (Malaysian Institute of Chartered Secretaries and Administraors) and MICG (Malaysian Institute of Corporate Governance). Letter by MAICSA is per attached.

The directors' opinions are important to me. Your co-operation in disseminating this questionnaire is highly appreciated and will contribute to the accomplishment of my study. Thank you.

#### Cordially,

Aza Azlina Md Kassim Phd (Accountancy) Student Universiti Utara Malaysia 03 32806130/ 019 2773308 (email: Aza\_Nana@hotmail.com)

Supervisors:

Assoc. Prof. Dr. Zuaini Ishak Assoc. Prof. Dr. Nor Aziah Abdul Manaf Bangunan Perakaunan, UUM College of Business (COB) Universiti Utara Malaysia 06010 Sintok, Kedah.



Dear Directors,

#### A SURVEY ON BOARD EFFECTIVENESS

This questionnaire is designed to study on board practices at your own board. For your information, I am a member of Malaysian Institute of Accountant and a PhD student from Universiti Utara Malaysia, conducting a research study on "Board Governance Characteristics, Capital Structure Decisions and Company Performance in Malaysia".

Your opinions are important to me. As you are the one who can provide me with a correct picture, I really hope you will respond to the questions honestly. You will be assured of complete confidentiality and the returned questionnaires will be used only for academic purposes.

Your co-operation in answering this questionnaire is highly appreciated. Thank you.

#### Cordially,

Aza Azlina Md Kassim Phd (Accountancy) Student Universiti Utara Malaysia 03 32806130/ 019 2773308 (email: Aza\_Nana@hotmail.com)

Supervisors:

Assoc. Prof. Dr. Zuaini Ishak Assoc. Prof. Dr. Nor Aziah Abdul Manaf Bangunan Perakaunan, UUM College of Business (COB) Universiti Utara Malaysia 06010 Sintok, Kedah. 第C部分: 请在适当的格子内打勾 (√)

1. 请注明您在董事会中所扮演的角色: 独立董事	非独立董事
<b>2. 请注明您在董事会中的职位:</b>	首席 <b>执行官</b>
非执行董事*	执行董事**
其他, <b>请说明</b> * 非执行董事 其他 主席 ** 执行董事 其他 主席 首席执行官	
<b>3. 您在董事会中任职多久</b> 3及以下 3至6年	7至10年
	<b>硕士</b> /博士
学士 5. 年 <b>龄概况</b> 40及以下	其他, <b>请说明</b> 61至70
41至50	71至79
51至60	80及以上
<b>6. 种族</b>	马来人
印度人	其他
调查对象在本问卷中所表达的意见纯属个	╰人观点而不代表其所属的公司之立场。
署名:	
日期:	
公司名称 ( <b>选择性):</b>	

对于您所拨出的时间与所提供的援助,本人感激不尽。 在呈交**问卷之前,请作出检查以免遗漏了任何问题。谢谢。** 

#### LIST OF COMPANIES IN THE SAMPLE

- 1. Pan Malaysia Industries Berhad
- 2. MagniTech Industries Berhad
- 3. Keck Seng (Msia) Berhad
- 4. Sunway City Berhad
- 5. Evergreen Fibreboard Berhad
- 6. IPMUDA Berhad
- 7. Malayan United Industries Berhad
- 8. Furqan Bussiness Organization Berhad
- 9. Rex Industry Berhad
- 10. Haisan Resources Berhad
- 11. Focus Dynamic Berhad
- 12. Petra Perdana Berhad
- 13. Ibraco Berhad
- 14. Biosis Group Berhad
- 15. Carlsberg Brewery Malaysia Berhad
- 16. Dutch Lady Milk Industries Berhad
- 17. Petronas Gas Berhad
- 18. Protasco Berhad
- 19. Inch Kenneth Kajang Rubber Public Ltd Co
- 20. Oriental Food Industries Holdings Berhad
- 21. Eden Inc Berhad
- 22. LBS Bina Group Berhad
- 23. Concrete Engineering Products Berhad
- 24. APM Automotive Holdings Berhad
- 25. Encorp Berhad
- 26. TSM Global Berhad
- 27. Zelan Berhad
- 28. ATIS Corporation Berhad
- 29. CSC Steel Berhad
- 30. FACB Industries Incorporated Berhad
- 31. Proton Holdings Berhad
- 32. POS Malaysia Berhad
- 33. Integrated Logistics Berhad
- 34. Tenaga Nasional Berhad
- 35. Melewar Industrial Group Berhad
- 36. PJI Holdings Berhad
- 37. SEG INternational Berhad
- 38. HeiTech Padu Berhad
- 39. Sycal Ventures Berhad
- 40. Astral Supreme Berhad
- 41. Green Packet Berhad
- 42. Bina Puri Holdings Berhad
- 43. BTM Resources Berhad
- 44. Metal Reclamation Berhad
- 45. Hua Yang Bhd

- 46. DRB-Hicom Berhad
- 47. United U Li Corporation Berhad
- 48. Emico Holdings Berhad
- 49. Boustead Holdings Berhad
- 50. IJM Plantation Berhad
- 51. Tracoma Holdings Berhad
- 52. Perisai Petroleum Teknology Berhad
- 53. Sunchirin Industries (M) Berhad
- 54. MESB Berhad
- 55. KESM Industries Berhad
- 56. Yung Kong Galvanising Industries Berhad
- 57. Hiap Tech Venture Berhad
- 58. JT International Berhad
- 59. IJM Land Berhad
- 60. Oriental Holdings Bhd
- 61. ENG Teknologi Holdings Berhad
- 62. Transocean Holdings Berhad
- 63. Tong Herr Resources Berhad
- 64. SKP Resources Berhad
- 65. Ajinomoto (M) Berhad
- 66. Malaysia Smelting Corporation Berhad
- 67. Seacera Tiles Berhad
- 68. Ramunia Holdings Berhad
- 69. YTL Power International Berhad
- 70. VTI Vintage Berhad
- 71. Kenmark Industrial Co. (M) Berhad
- 72. MHC Plantations Berhad
- 73. KYM Berhad
- 74. Kumpulan Jetson Berhad
- 75. Cheetah Holdings Berhad
- 76. United Malayan Land Berhad
- 77. Genting Malaysia Berhad
- 78. SPK-Sentosa Corporation Berhad
- 79. Farlim Group (M) Berhad
- 80. Jadi Imaging Holdings Berhad
- 81. George Kent (M) Berhad
- 82. LCTH Corporation Berhad
- 83. Yeo Hiap Seng (M) Berhad
- 84. Kawan Food Berhad
- 85. Cocoaland Holdings Berhad
- 86. Milux Corporation Berhad
- 87. United Kotak Berhad
- 88. Dijaya Corporation Berhad
- 89. Bintai Kinden Corporation Berhad
- 90. Top Glove Corporation Berhad

91.	Zecon Berhad
92.	V.S. Industry Berhad
93.	White Horse Berhad
94.	Guiness Anchor Berhad
95.	APP Industries Berhad
96.	Warisan TC Holdings Berhad
97.	Dialog Group Berhad
98.	Fajarbaru Builder Group Berhad
99.	PBA Holdings Berhad
100.	Poly Glass Fibre (M) Berhad
101.	Hai-O Enterprise Berhad
102.	Bina Darulaman Berhad
103.	Petronas Dagangan Berhad
104.	Padini Holdings Berhad
105.	BCB Berhad
106.	Kencana Petroleum Berhad
107.	Sern Kou Resources Berhad
108.	Johan Holdings Berhad
109.	Sumatec Resources Berhad
110.	Jasa Kita Berhad
111.	Unico-Desa Plantations Berhad
112.	Shell Malaysia Berhad
113.	Nestle (M) Berhad
114.	MMC Corporation Berhad
115.	Digi.com Berhad
116.	Asia File Corporation Berhad
117.	DKLS Industries Berhad
118.	UPA Corporation Berhad
119.	Vitrox Corporation Berhad
120.	Wellcall Holdings Berhad
121.	Hunza Properties Berhad
122.	Pan Malaysia Corporation Berhad
123.	Pintaras Jaya Berhad
124.	Johore Tin Berhad
125.	Pharmaniaga Berhad
126.	Uchi Technologies Berhad
127.	SMPC Corporation Berhad
128.	MISC Berhad
129.	Guh Holdings Berhad
130.	Tecnic Group Berhad
131.	A Rank Berhad
132.	Ho Wah Genting Berhad
133	Malaysia Steel Works (KL) Berhad

- 133. Malaysia Steel Works (KL) Berhad
- 134. Landmarks Berhad

- 135. Atlan Holdings Berhad
- 136. Asia Pacific Land Berhad
- 137. KPS Consortium Berhad
- 138. KBES Berhad
- 139. Central Industrial Corporation Berhad
- 140. Suria Capital Holdings Berhad
- 141. Sapuracrest Petroleum Berhad
- 142. Sarawak Consolidated Industries Bhd
- 143. Magna Prima Berhad
- 144. TDM Berhad
- 145. TASCO Berhad
- 146. Ngiu Kee Corporation (M) Berhad
- 147. Chemical Company of Malaysia Bhd
- 148. Analabs Resources Berhad
- 149. Equine Capital Berhad
- 150. Innoprise Plantations Berhad
- 151. Harrisons Holdings (Malaysia) Berhad
- 152. Daibochi Plastic & Packaging Ind. Bhd
- 153. Sino Hua-An International Berhad
- 154. Aturmaju Resources Berhad
- 155. Menang Corporation (M) Berhad
- 156. Huat Lai Resources Berhad
- 157. Mithril Berhad
- 158. RGB International Berhad
- 159. The Nomad Group Berhad
- 160. Muhibbah Engineering (M) Berhad
- 161. Olympia Industries Berhad
- 162. South Malaysia Industries
- 163. Cahya Mata Sarawak Berhad
- 164. Mui Propeties Berhad
- 165. Versatile Creative Berhad
- 166. KUB MALAYSIA Berhad
- 167. Lion Corporation Berhad
- 168. KSL Holdings Berhad
- 169. Amway (M) Holdings Berhad
- 170. Time Dotcom Berhad
- 171. Cymao Holdings Berhad
- 172. Dolomite Corporation Berhad
- 173. Premium Nutrients Berhad
- 174. Favelle Favco Berhad
- 175. Sinotop Holdings Berhad

#### a. Normality: Assumption of Model 1



b. Linearity: Assumption of Model 1

#### Normal P-P Plot of Regression Standardized Residual



### c. Homoscedasticity: Assumption of Model 1



# a. Normality: Assumption of Model 3



#### b. Linearity: Assumption of Model 3





#### c. Homoscedasticity: Assumption of Model 1

Scatterplot



# Appendix L

	Average board size of Malaysian CompaniesNumber of boardNumber ofPercentage (%)			
	members	companies		
4		3	1.7	
5		13	7.4	
6		35	20.0	
7		39	22.3	
8		39	22.3	
9		27	15.4	
10		14	8.0	
11		2	1.1	
12		3	1.7	
Tota	ıl	175	100%	

# Average hoard size of Malaysian Companies