

THE INFLUENCE OF  
OWNERSHIP STRUCTURE AND  
BOARD STRUCTURE ON  
MALAYSIA COMPANIES DIVIDEND PAYOUT RATE

BY

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We hereby declare that:

(1) This undergraduate research project is the end result of our own work and that due acknowledgement has been given in the references to ALL sources of information be they printed, electronic, or personal.

(2) No portion of this research project has been submitted in support of any application for any other degree or qualification of this or any other university, or other institutes of learning.

(3) Equal contribution has been made by each group member in completing the research project.

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**LIST OF ABBREVIATIONS**

BS	Board Size
CASE	Cairo & Alexandria Stock Exchange
CCM	Companies Commission of Malaysia
CEO	Chief Executive Officer
CEODUAL	CEO duality
CLRM	Classical Linear Regression Model
DO	Director Ownership
DPR	Dividend Payout Ratio
DW	Durbin-Watson
ECM	Error Components Model
EPF	Employees Provident Fund
ESO	Employee Stock Option Scheme
ESOP	Employee Stock Option Plans
EViews	Electronic Views
FEM	Fixed Effects Model

GLC	Government-Linked Companies
GLIC	Federal Government-Linked Investment Companies
GLS	General Least Square
INED	Independent Non-Executive Director
IPO	Initial Public Offering
JB	Jarque Bera
KNB	Khazanah Nasional Bhd
KWAP	Kumpulan Wang Amanah Pencen
KWSP	Kumpulan Wang Simpanan Pekerja
LOG_MCAP	Log Market Capitalization
LSDV	Least-Squares Dummy Variable
LTAT	Lembaga Tabung Angkatan Tentera
LTH	Lembaga Tabung Haji
LV	Leverage
MCCG	Malaysia Code on Corporate Governance
MIDA	Malaysia Investment Development Authority



MKD	Menteri Kewangan Diperbadankan
MSWG	Minority Shareholder Watchdog Group
N	the number of cross-sectional units
NASDAQ	National Association of Securities Dealers Automated Quotations
NPV	Net present value
NYSE	New York Stock Exchange
OC	Ownership Concentration
PDF	probability density function
PNB	Permodalan Nasional Berhad
REM	Random Effects Model
ROE	Return on Equity
S&P500	Standard and Poor's 500
SC	Securities Commission of Malaysia
SOCSSO	Social Security Organization
T	the number of time series data
WLS	Weighted Least Square

## **PREFACE**

This research paper is submitted as a part of the requirement to fulfill for the Bachelor of Finance (Hons) course. The title chosen for this research project is “The Influence of Ownership Structure and Board Structure on Malaysia Companies Dividend Payout Rate”.

Every country have different dividend policy, Countries in Asia such as Malaysia, Singapore, Australia tend to payout high amount of dividend (MSWG, 2010). The dividend decision of a company is to decide how much of their earning they are planning to payout to their shareholders as dividends and how much to be retained for future investment and expansion.

It is reported that dividend payout throughout the world has been experiencing a declining trend (Fatemi & Bildik, 2012). Malaysia firms are still paying out large amount of dividends as compare to other countries but they are still in line with the global downtrend. Furthermore, there are much mix signals if whether a firm should or should not payout dividend, leaving no consensus among researchers. This leaves the Dividend Puzzle (Black, 1996) remains open. Thus, the dividend puzzle drives this research to study on the factors such as corporate governance variables in influencing the Malaysian firm’s dividend payout decision.

**ABSTRACT**

This thesis aims to study on the influence of ownership structure and board structure on FTSE Bursa Malaysia Top 100 Index firms' dividend payout from year 2008 to 2012. Ownership concentration and director ownership are classified as ownership structure variables while board independence, board size and CEO duality classified as board structure variables. This thesis has chosen 76 companies after filtering the 100 sample companies with criterion: i) Non-bank company ii) Listed more than three years on Bursa Malaysia. This research used panel random effects model (REM) to study on three types of samples which are full observations, partial models-high directors' ownership and low directors' ownership as the latter is used to study the effects of corporate governance variables on the dividend payout under different directors' ownership context. Under full data model, director ownership is found to have a significant positive relationship with dividend payout ratio. On the other hand, CEO duality is found to have a significant negative relationship with dividend payout ratio while ownership concentration and board independence both shows a significant negative relationship with dividend payout ratio. Furthermore, under partial data models, CEO duality is found to have a significant negative relationship with dividend payout ratio when director ownership is low while ownership concentration and board independence both shows a significant negative relationship with dividend payout ratio when director ownership is high.

## **CHAPTER 1: RESEARCH OVERVIEW**

### **1.0 Introduction**

This research investigates on the influence of Malaysian firms' ownership structure and board structure on their dividend payout ratio.

### **1.1 Research Background**

#### **1.1.1 Introduction to Dividend**

Dividend policy differs across nations and legal systems. There are many Asian markets such as Malaysia, Singapore, Thailand and Australia paying higher dividend nowadays (MSWG, 2010). The firm's dividend decisions include retaining part of the net earnings for future investment's financing while the rest are distributed as dividends to shareholders. Conversely, unprofitable, over-gearing, and cash-strapped firms are expected to be in no position to pay dividends (MSWG, 2010).

In Malaysia, there are no specific rules in governing a firm's dividend distribution policy (Chan & Devi, 2009). Therefore, firms are free to decide how much dividends they should distribute to its shareholders. Currently, there is only one legal constraint in Malaysia affecting a firm's dividend policy imposed by the legislature - Section 365 (1), The Companies Act 1965. It states that "No dividend shall be payable to the shareholders by any company except out of profit or

pursuant to Section 60.” The section 60 outlines on the application of share premium account’s cash. In layman terms, Section 365 (1) expresses that dividends should be distributed to shareholders if the firm is in earning position (Chan & Devi, 2009). However, section 365 only specifies that dividends should be distributed from the company’s profits but does not indicate that the profits should be distributed from current profit or accumulated profit (Subramaniam & Susela, 2011). This creates a vague scope of the distributable “profit” to the company’s shareholders. Literally, this vague scope has created loopholes for Malaysia companies to payout dividends from unrealized profits; which could create void in the Malaysia Companies Acts and lead to corporate governance concern on the source of Malaysian companies’ dividend distribution (Chan & Devi, 2009).

### **1.1.2 Global Dividend Trend**

Nowadays, firm’s declining propensity to pay out dividends is becoming a worldwide trend as found by various studies after analyzing on many firms’ dividend payout. Fama and French (2001) proved that there was a significant fall in the propensity to pay dividends by US firms even after controlling the firms’ characteristics. Subsequent studies like Salas and Chahyadi (2006) have found a fall in the propensity to pay dividend with the magnitude at almost 34% as compared to 46% by Fama and French (2001); Denis and Osobov (2005) reported a declining propensity to pay out dividend in Canada, UK, Japan, Germany and France which was consistent with the US’s trends. Furthermore, Fatemi and Bildik (2012) found worldwide evidences which showed a significant global decline in the propensity to pay dividends and the aggregate dividend payout ratios over the year have fallen significantly including Malaysia in their 33 sample countries.

**Table 1.1: Average Proportion (%) of Dividend Payers (1985-2006)**

<b>Years</b>	<b>Malaysia</b>	<b>Hong Kong</b>	<b>United Kingdom</b>	<b>Australia</b>	<b>United States</b>
<b>1985</b>	92	95	99	96	74
<b>1986</b>	93	96	96	96	71
<b>1987</b>	88	97	94	90	68
<b>1988</b>	89	97	95	85	65
<b>1989</b>	88	95	94	77	65
<b>1990</b>	87	88	93	75	63
<b>1991</b>	89	91	88	71	57
<b>1992</b>	90	90	85	68	54
<b>1993</b>	91	91	86	71	51
<b>1994</b>	92	95	84	73	40
<b>1995</b>	92	90	87	71	37
<b>1996</b>	91	82	82	69	34
<b>1997</b>	90	77	76	73	32
<b>1998</b>	79	71	76	63	29
<b>1999</b>	69	57	74	54	27
<b>2000</b>	67	51	64	40	25
<b>2001</b>	69	48	58	31	24
<b>2002</b>	66	45	55	29	23
<b>2003</b>	62	48	53	31	24
<b>2004</b>	60	50	50	29	26
<b>2005</b>	62	55	46	30	28
<b>2006</b>	63	57	43	29	28

Source: Fatemi and Bildik (2012)

Table 1.1 shows 22 years trend of firms' inclination to pay dividends in five countries from year 1985 to year 2006. By comparing the dividend trends among the five countries above, United States and Australia declined the most. In short, listed companies from countries including Malaysia presented in the table above showed a declining trend in their propensity to distribute out dividends at international level as stated in Fatemi and Bildik (2012) study.

Many researches (e.g., Fama & French, 2000; Denis & Osobov, 2005; Salas & Chahyadi, 2006; Denis & Osobov, 2008) discovered that a firm's changing characteristics like firm sizes are the determinants for firm propensity to pay

dividends. In Baker and Wurgler (2004) study, they found that catering theory in which firms paid dividends based on investors' sentiment and the shift in investors' preferences from dividends to capital gain explained the declining propensity in paying dividends. While Kuo, Philips and Zhang (2013)'s research learned that risk factors, liquidity and firm's life cycle played a role in causing the firms' trend of falling propensity to pay dividend. Despite researches have reported the empirical evidences on decreasing firms' propensity to pay dividends, there were no consensus among the researchers.

Although researchers (e.g., Salas & Chahyadi, 2006; Denis & Osobov, 2008; Kuo, et al, 2013) have studied on this phenomenon about firms' shifting dividend policy behavior, the dividend puzzle raised by Black (1996) remains open and further research and analysis are crucial to be carried on. Therefore, these events have driven this thesis to study on the corporate governance's influence on firms' dividend policy.

### **1.1.3 Forms of Ownership structure**

Ownership structure is relatively varied across countries (Chen & Yu, 2012). Firms in developed countries such as the United States have widely dispersed ownership structure. On the contrary, the institutional environment in Malaysia is quite similar among East Asian countries such as Indonesia, Thailand, Singapore and Korea (Sulong & Nor, 2008). Furthermore, corporate ownership structure has significant effect on a firm's dividend payout policy. Hence, ownership structure is playing a significant role in determining the controlling shareholders' incentives to protect their own interest by expropriating the minority shareholders interest (Khan, 2006).

La Porta, Lopez-De-Silances, Shleifer and Vishny (2000) summarized that firms' dividend policies are used to address agency problems between corporate insiders

and outside shareholders (mainly the minority shareholders). The firms' failure in disgorging the cash profits will lead to diversion, finally hurting the outside shareholders' interest. The controlling shareholders who are mainly large shareholders and managers can generally be viewed as insiders within a corporation. Initially, dividend policy was first to mitigate agency problem between manager and the shareholders. The shareholder ownership concentration's issue and expropriation on the minority shareholders later raised the agency problem between controlling shareholders and minority shareholders. This explained that controlling shareholders or large shareholders who are also part of the firm's top management are endowed with the power to control the firm based on their interest, example the firm's excess cash flow right that may not match with the minority shareholders' interest (Shleifer & Vishny, 1997; La Porta, et al, 1999).

Moreover, control rights over a firm can be enhanced through pyramid structure, cross-holdings, and deviations from one-share-one-vote rules (Claessens, Djankov, Fan and Lang, 1999). Thus, mismatch in shareholders' interest and advancing in firms' control rights might allow the major shareholders to expropriate the minority shareholders. According to Faccio, Lang and Young (2001) these phenomena are salient both in Europe and Asia, but happen to be intensified in Asia region; which means Asian firms' large shareholders have higher propensity to limit the firm dividend distributions which are associated with severe large shareholders - minority shareholders conflicts.



### **1.1.3.1 Family Ownership**

In family-controlled firms, ownership is mainly concentrated in the hands of families (Shleifer & Vishny, 1997). Family owned firms have benefits in direct monitoring and is efficient in reducing agency problem as shares are concentrated in the hands of managers who have special family relations with other decision managers that allow agency problems to be controlled without the separation of the management and decisions control (Amran & Ahmad, 2010a). Furthermore, this concept is further support by Fama and Jensen (1983b) which family involvement in both ownership and management can diminish the problem of managers' exploitative behavior towards the principal. While there is evidence being revealed that agency costs are minimized when shares are concentrated in few owners and these owners do all the decision process which can be very time-efficient.

Turning this research's focal point towards Malaysian firms, they are generally classified as highly concentrated ownership structure (Claessens, Djankov and Lang, 1999; Sehat & Rahman, 2005; Ramli, 2010). Majority of the Malaysian firms that are controlled by families - the top 15 families - contribute 76.2% of the firms' control concentration as the Malaysia's gross domestic product. Besides, about 70% of the listed Malaysian firms are owned by families which have a positive influence towards the firm's performance (Claessens, et al, 1999). Nevertheless, better performance by family controlled firms do not represent that they have a good dividend policy in taking care of the minority shareholders' interest (Amran & Ahmad, 2009; Amran & Ahmad, 2010b; Ibrahim & Samad, 2010). Examples of famous family businesses in Malaysia are Kuok Group under Robert Kuok, Hong Leong Group under Tan Sri Quek Leng Chan, Berjaya Group under Tan Sri Vincent Tan, YTL Group under Tan Sri Yeoh Tiong Lay.

**Table 1.2: Top 10 Richest Man in Malaysia 2014 List**

<b>Rank</b>	<b>Name</b>	<b>Net Wealth as of March 2013 (US\$ Mil)</b>	<b>Flagship</b>
1	Robert Kuok Hock Nien	11,500	Kerry Group/Kuok Group*
2	Ananda Krishnan	11,300	Usaha Tegas
3	Lim Kok Thay & Family	6,500	Genting Group *
4	Quek Leng Chan	6,400	Hong Leong Group*
5	Teh Hong Piow	5,600	Public Bank
6	Lee Shin Cheng	4,300	IOI Group*
7	Syed Mokhtar Albukhary	3,100	Albukhary Foundation
8	Yeoh Tiong Lay	2,700	YTL Group*
9	Tiong Hiew King	1,800	Rimbunan Hijau Group*
10	Vincent Tan	1,600	Berjaya Group*

Notes: Family Firms\*

Sources: Forbes (2014), <http://www.forbes.com/malaysia-billionaires/list/> (27 February 2014);

Ibrahim and Samad (2010)

Table 1.2 shows top ten richest men in Malaysia as at 2013. Unsurprisingly, seven out of the ten richest Malaysian businessmen are from family controlled firm. Mr. Robert Kuok – the wealthiest businessman in Malaysia, top the list with net worth of US\$11,500 million representing his family owned business – the Kuok Group. The number 10<sup>th</sup> rank is Vincent Tan representing his family owned business - Berjaya Group also name Berjaya Corporation Berhad, which is a listed company on Bursa Malaysia main market with net wealth of US\$1,600 million.

Likewise, other large shareholders' presence could serve as a monitoring role in limiting the controlling shareholders' opportunistic behavior such as the controlling family's expropriation behavior (Faccio, et al, 2001). Ramli (2010)

further elaborate this phenomena with Malaysian firms, which the presence of the substantial second or other large shareholders such as institutional shareholders in the firms would encourage higher dividend payout.

### **1.1.3.2 Institutional Ownership**

According to Davis and Steil (2001), institutional investors can be defined as specialized financial institutions which manage savings or deposits collectively on behalf of small investors to achieve a specific objective with regards to acceptable risk, return maximization, and maturity of claims. They are professional decision makers who are skilled in evaluating and analyzing the firm's performance and monitoring the management (Han, Lee & Suk, 1999). Besides, their existence is able to minimize agency problems through monitoring the management (Graves & Waddock, 1990). Therefore, institutional ownership's presence in a firm has significant impact on minimizing a firm's agency costs, as a result on dividend policy. In addition, institutional ownership has implication on the firm's taxation costs. According to Miller and Scholes (1982), institutional investors prefer dividends rather than capital gains under the United States tax system as dividends are exempted from taxation for institutions.

According to Wahab, How and Verhoeven (2007), the total institutional shareholdings in Malaysia represent about 13% of Bursa Malaysia's total market capitalization as at 2003; the percentages are higher compared to most nations in the same region. Kumpulan Wang Simpanan Pekerja (KWSP) or Employees Provident Fund (EPF), Lembaga Tabung Angkatan Tentera (LTAT) or Army Saving Board, Lembaga Tabung Haji (LTH) or Pilgrimage Saving Board, Social Security Organization (SOCSO) and Permodalan Nasional Berhad (PNB) or National Equity Board are the five largest institutional investors and Minority

Shareholder Watchdog Group (MSWG)<sup>1</sup> members. Their shareholding stood about 70% out of the total shareholdings in firms listed on Bursa Malaysia's Main Board. With rising institutional investors' involvement in the equity market, they have emerged as an important force in corporate monitoring and serving as a mechanism to protect the minority shareholder's interests from expropriation by controlling shareholders (Daily, Dalton & Cannella, 2003).

**Table 1.3 Malaysia's Public Listed Companies with the Most Numbers of Institutional Shareholders**

<b>Ranking</b>	<b>Companies</b>	<b>No. of Institutional Shareholders</b>
1	CIMB Groups Holdings Berhad	287
2	Malayan Banking Berhad	275
3	Axiata Group Berhad	238
4	Tenaga Nasional Berhad	230
5	Genting Berhad	224
6	Gamuda Berhad	192
7	Genting Malaysia Berhad	189
8	Sime Darby Berhad	188
9	AMMB Holdings Berhad	172
10	UMW Holdings Berhad	169

Source: Bloomberg (cited from The Busy Weekly, 2013)

As Shown in Table 1.3, CIMB topped the list with 287 institutional investors as its shareholders. While UMW ranked at number 10 in the list with 169 institutional investors as its shareholders. This ranking indicates that institutional investors' are playing crucial roles and bearing responsibilities in ensuring a firm's corporate governance sanctity while playing as influential shareholders in Malaysian firms.

Institutional investors' status, functions and responsibilities are recognized and further functions are recommended in the Malaysia Code of Corporate Governance or MCCG (2000). Besides, they are exhorted to take up the leadership roles in promoting good governance by exercising responsible ownership as

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<sup>1</sup> MSWG function as the think tank and resource center; effective check and balance mechanism on behalf of the minority shareholders and corporate governance matters through shareholder activism (Hashim & Devi, 2012; MSWG, 2010).

suggested in the Corporate Governance Blue Print 2011 due to the significant stake held by them. They too are professional investors who act on behalf of beneficiaries such as pension fund members or individual savers. For instance, EPF Malaysia is obligated to declare dividend at a minimum of 2.5% annually to the fund participants as required under section 27, Employee Provident Fund Act 1991. However, the historical EPF dividend rates were always above the obligated level. Thus, for EPF to maintain such high dividend rates, they will require and demand high dividend income from their invested companies. In short, with their role and responsibilities as suggested by the MCCG and the blueprint; to take care of their beneficiaries' interest; and holding large stake in the stock market, their demands and behaviors will affect public listed firm's dividend payout policy.

**Table 1.4: Dividend Rates by Employee Provident Fund Malaysia (1952-2013)**

<b>Year</b>	<b>Per Annum (%)</b>	<b>Year</b>	<b>Per Annum (%)</b>
1952 – 1959	2.50	1997 – 1998	6.70
1960 – 1962	4.00	1999	6.84
1963	5.00	2000	6.00
1964	5.25	2001	5.00
1965 – 1967	5.50	2002	4.25
1968 – 1970	5.75	2003	4.50
1971	5.80	2004	4.75
1972 – 1973	5.85	2005	5.00
1974 – 1975	6.60	2006	5.15
1976 – 1978	7.00	2007	5.80
1979	7.25	2008	4.50
1980 – 1982	8.00	2009	5.65
1983 – 1987	8.50	2010	5.80
1988 – 1994	8.00	2011	6.00
1995	7.50	2012	6.15
1996	7.70	2013	6.35

Source: Employees Provident Fund, <http://www.kwsp.gov.my/portal/en/web/kwsp/about-epf/investment-highlights/dividend-rates> (retrieved on 10 March 2014)

Table 1.4 shows actual dividend rates paid by the EPF for 62 years since 1952. EPF started to pay its first obligated 2.5% dividend in year 1952 after one year of establishment in year 1951. EPF continuously paid out dividend to depositors every year, exceeding the fund's obligated minimum 2.5% rate, since 1960 at 4% until the latest pay out in 2013 at 6.35% rate.

### **1.1.3.3 Government Ownership**

Besides playing the role as institutional investors, Employees Provident Fund, Army Saving Board, Pilgrimage Saving Board and National Equity Board mentioned above are also playing the role as part of the Federal Government-Linked Investment Companies (GLICs). The other members are Khazanah Nasional Bhd (KNB), Kumpulan Wang Amanah Pencen (KWAP) or The Retirement Fund and Menteri Kewangan Diperbadankan (MKD) or Minister of finance Inc. They act as the Malaysian government's investment arms that allocate government funds to the Government-Linked Companies (GLCs) in which Malaysian government has direct control stake in those firms (Lau & Tong, 2008). This means that the Malaysian government has an influence on the appointments of board's members and senior management positions as well as making major decisions such as dividend policy for the firms. Furthermore, government-controlled institutions or GLCs have been retaining about 49.5% shares in listed companies as stated in the Eight Malaysia Plan (2001). As at year 2009, GLCs have dominated about 49% of the Bursa Malaysia market capitalization (Zin & Sulaiman, 2011).

Besides, Government ownership within a firm does enhance the firm's value (Lau & Tong, 2008). In addition, Malaysian government-linked companies generally perform better than non-government-linked companies (Razak, Ahmad and Aliahmed, 2011). However, this does not guarantee that government-linked companies adopt a good dividend policy in enhancing shareholders value.

### **1.1.3.4 Managerial Ownership**

According to Jensen and Meckling (1976), misalignment of incentives between managers and shareholders will lead to agency problems. However, agency problems can be reduced with managerial ownership as managers who own a significant portion of the company shares bear the decision's consequences and benefits of their actions made which may destroy and create firm value. Conversely, for managers who only own negligible portion of company shares, they will have greater incentives to seek personal private benefits instead of maximizing firm values for other shareholders. Thus, with increase shares held by managers, it can help to align the interests between the managers and company's shareholders.

Manager-owner with shareholdings is quite common among public listed companies in Malaysia. There are about 85% of Malaysian listed companies which have manager-owner at the 20% cutoff of control rights (Claessens, et al, 1999). Managerial ownership can be granted through either Employee Stock Option Scheme (ESOs) or Employee Stock Option Plans (ESOPs). However, ESOs appeared to be more popular than ESOPs due to the centralized government managed retirement fund for example Employees Provident Fund (EPF). ESOs are increasingly popular among Malaysian public listed firms which are being used as part of the compensation or incentive packages for their employees. An ESO is the granting of options usually in-the-money call options for free to the employees to purchase the company stake; it may lead to realignment of interest of a company's stakeholders such as between shareholders and managers (Bacha, Mohd Zain, Mhd Rasid and Mohamad, 2009).

For instance, Genting Berhad had Executive Share Option Scheme approved by the company shareholders during its Extraordinary General Meeting on 21 February 2002. This share options were issued by Genting Berhad as well by the group's subsidiaries as shared-based compensation to their eligible executives and

directors (Genting Berhad, Annual Report 2012). Moreover, this scheme allows eligible employees to participate in the future growth of Genting Berhad, meanwhile aligning the goal and interest between managers and shareholders.

Managers who owned substantial firm's shares are able to directly influence the firm's decisions in utilizing the free cash flows to produce long term returns in benefiting the shareholders (Warfield, Wild and Wild, 1995). In short, managerial ownership grants the manager the power to influence the firm's important decisions including the firm's dividend policy.

#### **1.1.3.5 Foreign Ownership**

Many countries have allowed foreigners to invest in their stock markets since the late 1980s. As a result, foreign investors are becoming important and influential in stock markets these days (Ko, Kim and Cho, 2007). Foreign ownership is a type of ownership whereby the firms have certain percentage of foreign investors, either individual or institutional, who invested in the domestic market. They also play a vital role in monitoring the firm's management especially those from countries with strong corporate governance mechanisms and legal expertise and experiences in monitoring the firm's management (Dahlquist & Robertson, 2001; Benfratello & Sembenelli, 2006).

Jeon, Lee and Moffett (2011) stated that foreign investors, especially foreign institutions, would prefer firms to pay high dividends. When they hold substantial shares, these foreign investors will lead the firms to increase their dividend payout. This is due to their information disadvantages in trading domestic stocks compared to local investors.

Turning this thesis's view to Malaysia, prior to year 2009, a firm is seeking to be publicly listed on Bursa Malaysia stock exchange was required to reserve at least



30% of her initial public offering (IPO) for the Bumiputra's purchase. In 2009, Malaysian government had reduced the Bumiputra ownership requirements for new listing foreign owned firms from 30% to 12.5% and removed ownership limits for 27 non-controversial services sub-sectors with no equity conditions imposed. Starting from 2009, 18 services sub-sector and 27 liberalized sectors were further liberalized to allow up to 100% foreign equity participation in phases in 2011 (MIDA, 2012). While foreign equity limits on banking sectors are 70% for Islamic banks and 30% for conventional banks; in insurance sectors, foreign ownership limits had raised from 49% to 70%. These implementations are part of the Tenth Malaysia Plan 2011-2015 in liberalizing the foreign shareholdings in selected Malaysian business sectors.

As found by Samad (2002), the foreign ownership was generally low in Malaysian public listed firms which comprised only 5.01% as at year 2002. Thus, the foreign investors were expected to react like minority shareholders concerning the expropriation issues which might lead them to demand higher dividend payout.

#### **1.1.4 Board Structure**

Firms' board structures vary across countries. Within the United States of America (U.S.A) firms' board, majorities are outside directors and only a minority of insiders involved in the board. However, Italy, United Kingdom, and France boards' characteristics appeared to be different from the U.S.A, where majorities are inside directors while only a minority of outsiders participated in the board (Noe, Gillette & Rebello, 2008). In Germany and Austria, most boards have imposed a two-tiered board structure with an insider managerial board and an outsider supervisory board (Steger & Hartz, 2005).

In the beginning of 21st century, the board is to be blamed in the event of spectacular corporate fraud cases which would result in the major firms' collapse

such as Enron Corporation and WorldCom. The board had failed to perform their due diligence in one of the corporate governance mechanisms - oversight function. Rezaee, Olibe and Mimmier (2003) argued that the country's poor corporate governance practices and lack of financial system's transparency had eroded the public confidence. Thus, various corporate governance reforms are made up to improve the board's functions and reliability and to build up public confidence.

Nowadays, the growing numbers of regulation requirements show the importance of corporate governance. In the U.S.A, both New York Stock Exchange (NYSE) and National Association of Securities Dealers Automated Quotations (NASDAQ) have imposed new rules which mandated board independence (Noe, et al, 2008). In Germany, the federal government launched two commissions to examine and to suggest improvements on the corporate governance practices. Suggestions include the functioning of the two-tiered corporate boards which are pervasive in Germany (Steger & Hartz, 2005). While Malaysia had launched Malaysia Code on Corporate Governance (MCCG) to identify a framework for corporate governance practices (Securities Commission Malaysia, 2012). In United Kingdom, British government had commissioned a new study on corporate governance practices about the board independence and suggested that at least half of the directors within the board are independent directors (The Economist, 2003).

Moving the thesis' view to Malaysia board structure, Asian financial crisis 1998 had exposed poor corporate governance practices in Malaysia (Wahab, How, & Verhoeven, 2007). Thus, the MCCG 2000 was first launched to build a framework for best practices in corporate governance. It has marked a significant highlight in Malaysia corporate governance reform. In 2007, the code was adjusted to strengthen the board of director's role and responsibilities, audit committee and the internal audit functions. Later, the MCCG 2012 was established in consistency with the Malaysia Corporate Governance Blueprint 2011.

The MCCG 2012 replaced the 2007 code, which set out the board's principles and precise recommendations on the board's structures and processes. These suggestions are the requirements for Malaysian companies to implement in order to create best practice governance in their business dealings. The MCCG 2012 focuses on clarifying the role and responsibilities of the board, improving board effectiveness through strengthening its composition amid reinforcing its independence and also encouraging disclosure policies (Securities Commission of Malaysia, 2012).

### **1.1.5 Board Roles and Responsibilities**

The boards of directors' members are elected by and to act on behalf of shareholders (Securities Commission Malaysia, 2012). Directors play important roles in maintaining the effectiveness of corporate governance, mainly in public listed companies (Fauzi1 & Locke, 2012).

According to MCCG 2012:

- i. The board and management's roles and responsibilities should be clearly set out and understood. It is essential that the board and management have a comprehensive understanding of their roles and possess the necessary skills and competence in fulfilling their responsibilities effectively. This is to ensure the accountability between the board and the management.
- ii. The board's role and responsibilities should be stated in clear and precise manner in order for the board's members to achieve both their fiduciary and leadership functions. There are six specific board's responsibilities:
  - a) The board should oversee the company management in order to ensure the firms' businesses are properly managed.

- b) The board must identify the company's risks and adopt the proper systems in monitoring and managing risks.
  - c) The board should ensure that the management has taken into account all appropriate considerations in establishing the strategic plan for the company as well monitoring the implementation of the strategic plan by the management. This is to ensure that the company not only operates successfully but also sustains long term growth.
  - d) The board should ensure appointed and potential senior management candidates are preeminent enough. Besides, assuring the potential candidates to have sufficient exposure with related training for the orderly succession of current senior management in future.
  - e) The board should ensure that the company has a well developed and implemented investor relations policy. This policy should take into account the exploitation of stakeholder's feedbacks which is essential and serve as guidelines in the company business decision making.
  - f) The board should constantly assess the adequacy and the integrity of the company's management information and internal control system. This is to ensure the soundness of the reporting's framework on the internal control and regulatory compliance.
- iii. The board should encourage ethical behavior through a code of conduct during the business dealings process. They have to ensure the appropriate internal systems are being implemented in order to integrate ethical conduct into the firm's corporate culture.

- iv. The board should have procedures in allowing its members access to information and advices. The management should provide accurate and complete information to the board consistently as to enable the board to effectively performing its duties.
  
- v. The board should regularly consult the company secretary on procedural and regulatory requirement. Thus, appointment of qualified and competent company secretary is essential in supporting the board to perform its responsibilities and duties.
  
- vi. Boards should adopt a formal charter that set out their strategic goal and outlines their roles and responsibilities. They need to set up key values, principles and ethos of the company before the board constructs a board charter as these details are crucial in developing the firm's policies and strategies. Thus, the board should formalise, periodically evaluate and publish the board charter on the corporate website. The charter will serve as source references and primary induction literature which offers insight to potential board members as well as the senior management of the company.

In Malaysia, the board owes a fiduciary function to the company under common law which the term – fiduciary, drawn from the Latin means ‘trust’. Hence, each individual director should act in good faith, care, diligence, without self-interest, and act on the behalf of the company and its shareholders. According to section 132 of Companies Act, “A director shall at all-time act honestly and use reasonable diligence in the discharge of the duties of his office”. Officer defined by Companies Act include any director, secretary or employee. It does not differentiate between executive and non-executive directors and assume that all directors are obligated with the same duties (Securities Commission Malaysia, 2012).

### **1.1.6 Board Independence**

Boards are viewed to be active, responsible and fiduciary in exercising their oversight responsibilities (Securities Commission Malaysia, 2011). Thus, the independent judgment of the board is essential for a company. According to Sulong and Nor (2008), an independent director is the one who is capable in carrying out his or her duties, free from any business and independent from the management. They are deemed to be integral component of internal control and monitoring mechanism.

According to the Listing Requirement by Bursa Malaysia Securities Berhad, person appointed as independent directors must fulfill the Listing Requirements<sup>2</sup>. There must be sufficient number of independent directors in each board. The best practices of code recommended that at least two or one third of the board members should be independent directors. This is to ensure the effectiveness of the independent directors in preserving the objective in board decisions. Independent directors have benefits in monitoring board activities and controlling the management opportunistic behavior (Abidin, Kamal & Jusoff, 2009). The requirement on the number of independent directors is consistent with the rule and requirement set by other Asian countries (Securities Commission Malaysia, 2011).

**Table 1.5: The Independent Directors Proportion Requirements on  
Companies' Board in Asia**

<b>Country</b>	<b>Exchange Rules/Requirements</b>
Singapore	At least two independent directors
Hong Kong	At least three independent directors
India	At least one-third independent directors
Thailand	At least one-third and no less than three
Malaysia	At least two or one-third independent directors

Source: Asian Corporate Governance Association (2010)

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<sup>2</sup> Refer to paragraph 1.01 and Practice Note 13 of Bursa Malaysia Listing Requirement.

Table 1.5 shows that the number of independent directors requirements in Asian companies. This table shows that Indian and Thailand regulators propose at least one-third of the independent directors to be on the board. In Hong Kong, there must be at least three independent board directors. Singapore requires at least two independent directors in the company board. Lastly, Malaysia's best practice of code recommended at least two or one third of the board must be independent members.

Dahya, Dimitrov and McConnell (2008) observed that the current trend of global movement is more toward a majority independent composition. For example, in U.K. the Combined Code recommends that at least half of the board must be independent directors. While Australia also suggests that a majority of independent director should be in the board (Securities Commission Malaysia, 2011). This is because there is assumption that outside directors will be able to make better decisions and improve monitoring mechanism.

According to the Corporate Governance Blue Print 2011, more than 40% of the companies have exceeded the minimum requirements set by Bursa Malaysia. There are 22.72% out of 40% have a majority of independent directors on their boards. There is no approach to determine the ideal number of independent directors in the board. Therefore, the 'one-third independent board directors' is maintained as minimum requirement. The boards are encouraged to determine the ideal independent requirement which brings benefits to the firm's shareholders.

#### **1.1.6.1 Tenure of Independent Directors**

Board tenure is an important criterion in determining the directors' quality. There are benefits and risks in the length of director tenure. Buchanan (1974) said that longer term of director participation will improve the organizational commitment, competence and credibility in the market which lead to company goals'

achievement. On the other hand, long tenure may prejudice a director's independent ability and act in the best of the company. Long director tenure may also fail to keep up with changes to the business, defend decisions and policies they supported in the past and lack of new insights to the company's challenges (Canavan, Jones & Potter, 2004). Hence, there is no specific tenure length recommended for a director's optimum tenure.

According to Canavan, et al. (2004), current average independent director's tenure is nine years. Other jurisdictions (U.S.A and U.K.) also imposed tenure limits on independent directors with an average tenure of nine years (Securities Commission Malaysia, 2011). However, Bill (2009) found that under India's companies, India has imposed a shorter tenure limit of six years on independent directors to serve on the company's board. This is due to long tenure may lead to independence impairment.

In Malaysia, the requirement on length of director tenure should not be more than a cumulative term of nine years. Once an independent director completed his or her nine years terms, they may continue to serve on board but in the position of non-independent director. Moreover, the board must seek shareholders' consent in the event to retain him/herself as independent director after serving for nine years. In such situation, the board needs to provide strong validation to the shareholders in the general meeting (Securities Commission Malaysia, 2012).

**Table 1.6: The SC Survey on Malaysian Public Listed Firm's Boards 2009  
Tenure of Independent Non-Executive Directors (INEDs)**

<b>Tenure</b>	<b>No. of Companies</b>		<b>Total</b>
	<b>Main Market</b>	<b>Ace Market</b>	
INEDs serving more than 9 years	350	4	354
INEDs serving less than 9 years	482	113	595
Total	832	117	949

Source: Securities Commission Malaysia (2011)



Table 1.6 shows that there are 62.70% of independent directors who work on the board for less than nine years. About 37.30% of companies had independent directors serving on their boards for more than nine years. The SC survey also revealed that the average length of director's service across all companies was approximately six years.

Given all the risks of tenure on directors' independence and the majority of company's practices as well as current trend, a cumulative term of up to nine years should be imposed on independent directors (Securities Commission Malaysia, 2011).

### **1.1.7 Board Size**

Board size is known to be associated with firm characteristics. There are no specific requirements for a firm's board size to fit all the firms due to individual firm's different characteristics. An optimal board size needs to accommodate the specific growth, monitoring and management characteristics of the company (Boone, Casares Field, Karpoff, and Raheja, 2007).

Fama & Jensen (1983a) proposed that board size should be in line with the firm size. It implies that how a firm is organized depends on the range and complexity of its production process. Larger firms will lead to larger and more hierarchical organization. When a firm launched a new product line, the company will seek new board members to help oversee manager's performance. In short, board services grow as the firm size grows.

The complexity of firms' operation can affect the board composition. Larger board size provides more monitoring resources which improves corporate performance (Goodstein, Gautam and Boeker, 1994). On the other hand, large board size may also lead to poor group communication and decision making.

Judge & Zeithaml (1992) found that board members are less likely to involve in strategy decision making with large board size. In addition, larger corporate boards lead to a rise in agency problems. The board will be less efficient in solving agency problems among board members (Bennedsen, Kongsted, & Nielsen, 2008). Therefore, larger firms demand more outside directors to take part in their board (Anderson, Bates, Bizjak & Lemmon, 2000). Eventually, more independent directors' involvement can be effective in monitoring manager's performance and reduce agency problems (Coles, Daniel, & Naveen, 2008).

In Malaysia, board sizes are different among companies. It depends on the firms' features such as the nature of the business, company size and the board culture (Securities Commission Malaysia, 2011). The MCCG (2012) does not specify the number of directors in a firm's board. Instead, it proposes that the board need to examine their size. They have to take into consideration of the impact of number upon its effectiveness in decision making while defining the optimum range. Based on the Securities Commission Malaysia Survey on Malaysian Boards (2009), the average board size in FBMK KLCI's Main Market Companies is seven, while ACE Market is six on average.

### **1.1.8 Separation of the Role of the Chairman and the CEO**

According to Coombes & Wong (2004), companies in U.S.A and U.K. are often recognized to have the world's best corporate governance system. However, they have different views on the separation of the chairman's and CEO's roles. A majority of U.K. companies prefer to separate the role, while majority of the U.S.A companies follow the duality system in which an executive director who performs two roles as chairman as well as a CEO of a firm. There are advantages to both models. Combining the role could concentrate power in a single person and also creates unity of command at the top of the firm. It is supported by stewardship theory (Elsayed, 2007). However, separation of the role will enhance

the board's effectiveness in its monitoring mechanism as well as creating strong governance in the company. It is explained by agency theory about separation of the role would help in avoiding entrenchment (Jensen & Meckling, 1976).

Many researchers (Levy, 1993; Dahya, Lonie & Power, 1996; Coombes & Wong, 2004) strongly support the separation of the chairman and CEO functions. Sulong & Nor (2008)'s study stated that the role of the chairman and CEO are different but support each other. The chairman focuses on the responsibility of oversight in the board and to ensure the board members are able to take part in the board functions. The chairman is as well responsible in monitoring and evaluating the performance of the CEO and the management team. While CEO's function is to focus on day-to-day company operation as well as implement strategies to enhance the company growth. This approach is significant for corporate performance while promote accountability.

In Malaysia, the principle of the division of responsibilities between chairman and CEO is to ensure the balance of the power and authority (Securities Commission Malaysia, 2011). The best practices of the code (Securities Commission Malaysia, 2012) recommend that the chairman and CEO positions should be held by different persons. Separation of the chairman and CEO allow them to focus on their individual responsibilities and enhance corporate performance.

**Table 1.7: Securities Commission Malaysia Survey on Malaysian Public  
Listed Firm's Board (2009)  
Separation of the Chairman and CEO**

<b>Status</b>	<b>No. of Companies</b>		<b>Total</b>
	<b>Main Market</b>	<b>Ace Market</b>	
Separated	609	79	688
Non- separated	223	38	261
Total	832	117	949

Source: Securities Commission Malaysia (2009)

Table 1.7 shows that there are 72.50% of the Malaysian companies had separated chairman and CEO roles. About 27.50% of the companies had non-separation of board and operation functions in Malaysia. Among the 72.50% of the Malaysia companies, there are approximately 15% of those companies have strong family presence and direct family relationship between chairman and CEO. This created ambiguous relationship. If combining the role in a single person, this will empower the person with extra authority which may create conflict of interest. The separation of board structure would give a perception that the chairman is not competent in exercising his/her independent judgment. Thus, to reduce the possibilities of this event to occur, the position of chairman and CEO should be separated and the chairman must be a non-executive one (Securities Commission Malaysia, 2012). In case the chairman is not an independent director, the board must include a majority of independent directors (Securities Commission Malaysia, 2012).

## **1.2 Problem Statement**

Majority of the Malaysian firms are controlled by families (Claessens, et al, 1999; Abdul Rahman, 2006). Based on the thesis's view and Table 1.2, family members of the family business such as YTL Corporation Berhad generally sit as part of the board of directors and top management which as well have substantial shares holdings in the company. Their ownership in the firm serves as one of the mechanisms which help to enhance family firm performance as family firms usually have better performance (Amran & Ahmad, 2010b). The family members in the firms may as well affect the firm dividend policy. Moreover, family firms do have different corporate governance practices than non-family firms (Amran & Ahmad, 2009). This shows that Malaysia's concentrated ownership structure and diverse corporate governance practices between family and non-family firms may influence on the firm's behavior to react differently on a firm's dividend payout decision. Thus, the need to analyze and assess on the impact of ownership

structure on Malaysian firm's dividends payout as well as their relationships is crucial.

According to Goodstein, et al. (1994) and Kiel and Nicholsan (2003), larger board size provides more monitoring resources which is able to enhance the firm's performance. This might be larger board size has representation of people with diverse backgrounds and knowledge (Bozec & Dia, 2007). However, small board size is more effective in limiting directors to shirk as this makes the monitoring on each member to be easier and decision can be made quickly (Haniffa & Hudaib, 2006). Furthermore, Sulong and Nor (2008)'s study found that a firm with smaller board size is in a better position to cope with the firm's dividend decisions. Both large and small boards have shown their respective advantages. Nonetheless, it does not signify that the board size will influence the board decision making on dividend payout policy which maximizes the shareholders returns. Hence, the need to understand and evaluate the board size's impact on dividends payout as well as their relationship has never been more critical.

According to Sharma (2011), independent director's representation on the board has significant impact on the firm's propensity to payout dividend. However, this creates doubt to the researcher on the true independence of these directors as the Chief Executive Officer usually has a significant influence to decide who will be inserted to the board during the appointment of a director and the one who is appointed to the board is commonly the one who is known by the firm's top management as well (Abdullah & Nasir, 2004). Apart from that, Malaysian companies are said to be very closely held and mostly are family controlled which explained that it is hard to find outside directors who are truly independent from the company's insiders influence (Claessens, et al, 2000; Abdullah & Nasir, 2004). This might cause independent directors to fail their oversight function which must be free from any business and independent from the management when performing their duties in decision making and monitoring function. Undeniably,

the evaluation and study of the board independence's impact on dividends payout as well as their relationship is said to be essential.

## **1.3 Research Objectives**

### **1.3.1 General Objective**

To examine and study on the factors which will impact on the firm's dividend policy.

### **1.3.2 Specific Objectives**

- i. To examine the relationship between ownership concentration and firm's dividend payout ratio.
- ii. To examine the relationship between director ownership and firm's dividend payout ratio.
- iii. To examine the relationship between boards of directors' size and firm's dividend payout ratio.
- iv. To examine the relationship between boards of directors' independence and firm's dividend payout ratio.
- v. To examine the relationship between Chief Executive Director (CEO) duality and firm's dividend payout ratio.

## 1.4 Research Question

- i. Is there any significant relationship between ownership concentration and firm's dividend payout ratio?
- ii. Is there any significant relationship between director ownership and firm's dividend payout ratio?
- iii. Is there any significant relationship between boards of directors' size and firm's dividend payout ratio?
- iv. Is there any significant relationship between boards of directors' independence and dividend payout ratio?
- v. Is there any significant relationship between CEO duality and dividend payout ratio?

## 1.5 Hypotheses of the Study

$H_1$ : There is a relationship between ownership concentration and firm's dividend payout ratio.

$H_2$ : There is a relationship between director ownership and firm's dividend payout ratio.

$H_3$ : There is a relationship between board size and firm's dividend payout ratio.

$H_4$ : There is a relationship between board independence and firm's dividend payout ratio.

$H_5$ : There is a relationship between CEO duality and firm's dividend payout ratio.

## **1.6 Significance of Study**

Firstly, this research will serve as a guideline for policy makers and regulators notably the Malaysian Government, Securities Commission of Malaysia (SC), and Companies Commission of Malaysia (CCM). For them to build up a more reliable and effective corporate governance's legislation, rules and guidelines to be followed and adopted by Malaysian firms such as improving the MCCG 2012 principles and requirements by SC. Thus, this will create a favorable Malaysian investment environment to the local as well as foreign investors to invest in.

Furthermore, Malaysian companies will get to have a clearer picture and closer look on the interaction between the company ownership concentration and board formation between the dividend payout ratios. Besides, they will get to understand their corporate governance quality's status quo. Thus, allowing them to reassess and enhance their corporate governance system if deficiencies or loopholes such as busy or 'over-boarded' directors which brings adverse effect towards the company's corporate governance quality (Cashman, Gillan & Jun, 2012), are detected based on this research's results. Hence, companies are able to best serve the shareholders' interest especially the minority ones.

Besides, this research will provide guidance to investors especially those who favors on current income such as dividends (Shefrin & Statman, 1984), to have better and clearer pictures on the interaction between the level of ownership concentration and the diversity of board composition will affect the firm's dividend payout behavior. In short, investors are able to make use of this research in assisting their decision making on screening and selecting the best suit stocks in building their portfolio.

Lastly, past researchers have found mixed results on the influence of ownership structure (e.g. Chen, Cheung, Stouraitis and Wong, 2005; Khan, 2006; Ramli, 2010) and board structure (e.g. Subramaniam & Susela ,2011; Gill & Obradovich,



2012; Alias, Rahim, Nor and Yaacob, 2013) on the firm dividend payout. Thus, this research will provide academicians a better and thorough understanding on the interaction between Malaysian firms' ownership structure and board structure on the dividend payout and their relationship. They may make further effort into this research to contribute more details about Malaysian firms' dividend policy.

## **1.7 Chapter Outlay**

### **Chapter 1**

In this chapter, an overview on the dividend policy, types of ownership structure and board structure is presented. Introduction, research background, research objectives, research questions with general and specific objectives, the research's hypothesis, significant study, chapter outlay and conclusion which study on the influence of ownership structure and board structure on Malaysian firms' dividend policy.

### **Chapter 2**

This chapter will further elaborate on the relationship between independent variables and dependent variables based on the past studies. Chapter 2 includes the introduction, review of the literature, review of the theoretical models, proposed theoretical framework, hypotheses development and conclusion.

### **Chapter 3**

This chapter illustrates the research process including data collection method and analysis method. Chapter 3 includes the introduction, research design, data collection methods which include secondary data, sampling design, research

instrument, construct measurement, data processing, data analysis and conclusion of this chapter.

#### **Chapter 4**

Information collected from the secondary data and pattern of the results will then be analyzed in this chapter along with further explanations.

#### **Chapter 5**

In this chapter, the research's major findings, policy implications, limitations as well as recommendations for future research will be presented.

### **1.8 Conclusion**

An overview on the dividend policy, types of ownership structure and board structure is presented as well as the problem statement, objectives, research question, study's hypothesis, significant of study and chapter layout are also being covered in chapter 1. However, the answer of these research questions will be conducted in the next chapter's literature review. This thesis will further the research of theoretical and actual framework in chapter 2.

## **Chapter 2: Literature Review**

### **2.0 Introduction**

This chapter discusses on literature review based on past researches. Clear indications on the results from journals related to this study are presented. Besides, the theoretical framework, and hypothesis are presented in a sequential manner to examine the relationship between the dependent variable (dividend payout ratio), main independent variables (Ownership Concentration, Managerial/Director Ownership, Board size, Board Independence and CEO Duality) and control independent variables (Return on Equity, Leverage, and Firm Size). Thus, with the previous studied models as a benchmark, this research is able to formulate a new proposed conceptual framework for this study.

### **2.1 Review of Literature**

#### **2.1.1 Dividend and Ownership Concentration**

Ownership concentration refer to the number or portion of voting shares owned by individual investors or large block shareholders – the major shareholders, who are holding at least 5% of equity ownership of a firm (Bursa Malaysia Securities Berhad).

Harada and Nguyen (2011) found that Japanese firms with concentrated ownership pay lower dividends. The research was based on 1431 firms listed on the Tokyo Stock Exchange over a 13-year period (1995-2007) by adopting Tobit

regression model. However, 'concentrated ownership' firms are less sensitive to profitability and leverage which are the key factors in determining a firm's dividend payout level. These findings highlighted the expropriation on minority shareholders' issues which have led to conflicts between major and minority shareholders. Similarly, Kozul and Orsag (2012) research reported that there was a negative and significant relationship between ownership concentration and dividend payout in Australia, Finland and Japan out of the eight countries (other countries in the study are France, Netherland, Poland, United States and United Kingdom).

Similarly, Khan (2006) had studied on panel data of 330 large industrial firms listed on the United Kingdom's London Stock Exchange for the period from 1985-1997. By using top 5 largest shareholders representing as ownership concentration and found a nonlinear negative relationship between ownership concentration and dividend payout. This means that when shareholdings by top 5 largest shareholders rises beyond 9.6%, a firm's dividend payout will reduce. In addition, the author discovered that ownership composition is an important factor in affecting dividend payout. When a firm's insurance companies' shareholdings increase, this will lead to a rise in dividend payout which signify positive relationship. Yet, a negative relationship is observed when a firm's individual shareholdings increase.

However, contradictory results were obtained by other researchers like Al-Shubiri, Al Taleb and Al Zoued (2012) and Ramli (2010). In Al-Shuburi et al. (2012) research on 56 public listed Jordanian industrial firms which discovered that the increasing ownership concentration on the top 5 shareholders have led to the rise of dividend payout level. This can be explained by the existence of multiple large shareholders will reduce expropriation scenario in the firm and play a positive role in corporate control. Indeed, alternative or second substantial shareholder in the company will increase the magnitude of the firm to have larger dividend payout (Ramli, 2010). By using random-effect Tobit regression to analyze the panel data

of 1225 observations (245 companies within a time period of 5 years), the author discovered that the higher ownership concentration level in terms of the largest shareholders' holding, leading them to distribute returns to all shareholders instead for their private benefits. This indicated a positive relationship between dividend and ownership concentration.

Interestingly, Chen, et al. (2005) study on 412 samples of public listed Hong Kong firms for 4 years from 1995 to 1998 by using cut off points to the ownership concentration in piecewise linear specification of 10%, 35% and 50%. They revealed that in small capitalization family-controlled firms with up to 10% shares outstanding concentrated on the family posed a significant relationship with dividend payout. While ownership concentration between 10% and 35% in the family will lead to a significant positive relationship with the firm's dividend payout which means higher ownership concentrations lead to more dividends payout. This outcome suggested that controlling shareholders in small market cap companies may use dividend payouts as a way to extract resources out of the firms controlled by them. This is because dividends make up a disproportionately large part of the income they can derive from the company. This indicated that firms' with different levels of ownership concentration will behave differently on the firm's dividend policy.

Based on the review above, this research expects a negative relationship between ownership concentration and dividend payout.

### **2.1.2 Dividend and Managerial/Director Ownership**

The historical studies (e.g. Jensen, Solberg and Zorn, 1992; Eckbo & Verma, 1994; Farinha , 2003; Ullah, Fida and Khan, 2012; Al-Gharaibeh, Zurigat and Al-Harabsheh, 2013) reported that there are mixed results between dividend and managerial ownership. Jensen et al. (1992) studied on the interaction between

insider (manager) ownership and firm's financial decisions on debt and dividend policy. The result revealed that insider ownership negatively influenced dividend policy. More shares accumulated in the hands of managers will dampen the firm's dividend payout which explained that dividend's benefits are lower in minimizing agency costs for firms with higher insider ownership. Consistently, Eckbo and Verma (1994) reported negative relationship existed in Canadian companies during 1976 to 1988 by adopting voting rights as the representation of managerial ownership in a firm. The author found that as the voting power of owner-managers increases, cash dividends decrease. It is always near to zero when owner-managers have absolute voting control.

Recent study by Ullah, et al. (2012) also found a similar result by examining the impact of the ownership structure's impact on Iran firm's dividend policy of 70 firms selected from 2003 to 2010 using 'stepwise multiple regression' model. Therefore, higher managerial ownership will lead to lower dividend payment. The author reported that an increase in the managerial share ownership will function as an internal governance mechanism in disciplining the firm manager's opportunistic behavior and to align their interest with that of the shareholders.

Conversely, Al-Gharaibeh et al. (2013) documented two different outcomes in the two models adopted. A consistent negative relationship between dividend and managerial ownership was found by using the Partial Adjustment Model. However, analyzing with Full Adjustment Model, Jordanian firm's managerial ownership appeared to positively impact on the dividend payment after learning on the 35 continuous listed firms on Amman Stock Exchange for 5 years (2005-2010). It showed that Jordanian firms did not adopt dividends as a mechanism in minimizing the agency costs between managers and shareholders.

Intriguingly, Farinha (2003) obtained a significant U-shaped relationship between dividend payout ratios and insider ownership. The study conducted was based on a large sample size of 1302 firms listed on the

London Stock Exchange by using a single-equation cross-sectional regression model in 2 distinct periods ‘1987 to 1991’ and ‘1992 to 1996’. The alignment of interests between shareholders and managers caused the increase of insider ownership levels made dividends less needed for monitoring purposes, but up to a certain point only. Certainly, companies will feel the need to compensate potential managerial entrenchment with increased dividend payouts to shareholders after reaching a critical level of managerial holdings.

Based on the review above, the research expected a negative relationship between managerial ownership and dividend payout. The more managerial holdings will diminish the firm dividend payout as managers prefer to retain earnings instead of distribute out as dividends to shareholders (Jensen, 1986). They wanted to use the resources in growing the firm as well as for their personal benefits.

### **2.1.3 Dividend and Board Independence**

The board independence is measured by the proportion or percentages of the independent directors on the company’s board. In Mansourinia, Emamgholipour, Rekabdarkolei and Hozoori (2013)’s research paper, it had studied on panel data comprised of 140 companies listed on Tehran Stock Exchange from Iran within time range of 2006 to 2010 which had pooled 700 observations. They adopted multivariable regression model as the statistical research model. The result showed that board independence had no statistical significant relationship with firm dividend policies which was contrary to their expectation. This indicated that existence of outside directors among firm’s board members had no effect on the

firm non-cash or cash dividend payout. It can be supported by past research from Abdelsalam, El-Masary and Elsegeini (2008). They studied on pooled cross-sectional data of the 50 most active companies listed on Cairo & Alexandria Stock Exchange (CASE) in Egypt for 3 years from 2003 to 2005 which had pooled 150 observations. From the research, it was found that there was no significant association between board independence and dividend payout ratio of a firm.

Besides, Subramaniam and Susela (2011) found that there was a negative correlation between board independence and dividend payout but their relationship appeared to be insignificant. They had made a study on 300 highest market capitalized firms in Bursa Malaysia for 3 years from 2004 to 2006 with a total sample size of 409 companies by adopting ordinary least square as the statistical research model. However, by adding the growth opportunities as the interaction factors between board independence, they found a positive significant relationship between dividend payout and board independence. This indicates that high growth firms with high proportion of independent directors within the board payout more dividends.

Surprisingly, Chen et al. (2005)'s study on the corporate governance effect on dividend policy by building up three panel regression model with different samples – whole sample of Panel (A), small market capitalization of Panel (B) and large capitalization of Panel (C), they have found insignificant relationship between dividend and board independence in the whole 412 samples. For large cap firms, with majority independent directors' representation on the board led to higher dividend yield; this indicated that a positive correlation existed. The same relationship appeared on small cap firms as well where greater proportion of independent directors had led to more dividend payout ratio or dividend yield.

Sharma's (2011) reported that greater number of independent director's representation on the board led to significant positive propensity to pay dividends. A positive relationship was also shown in share repurchases and cash dividends.



Besides, independent director's characteristics play an important role in determining the firm's dividend payout as part of the result. The author's results indicated that independent director's tenure, form of compensation and business of the independent directors are important determinants of the firm's dividend policy. Indeed, according to Fama and Jensen (1983b) argument, independent directors are in a better position to perform critical decision control function which will mitigate agency problems. This is because the independent directors face strong incentives such as to develop reputation in decision control expertise, in exercising their judgment independently and free from management influence.

Thus, this thesis expected a positive relationship between board independence and dividend payout in which the greater the number of outside directors sitting on the board, dividend payout of the company will increase.

#### **2.1.4 Dividend and Board Size**

Firstly, board size has no or little impact on the firm's dividend payout (Abdelsalam, El-Masary and Elsegeini , 2008; Subramaniam & Susela , 2011; Arshad, Akram, Amjad and Usman, 2013). However, in Malaysia, the growth opportunities acting as the interaction factors between board size, a positive significant relationship between the board size and dividend policy variables was found (Subramaniam & Susela, 2011). This indicated that high growth firms with high proportion of independent directors within the board, dividend payout will be higher. Similarly, in Abdelsalam, et al. (2008), they studied on Egyptian firms and found positive correlation between board size and firms' dividend payout but appeared to be insignificant. Arshad, et al. (2013) also found board size had no significant impact on dividend policy after studying on 12 Iranian listed companies.

Alias, et al. (2013) studied on 361 samples of non-financial Malaysian public listed companies for the time period of 6 years from 2002 to 2007 by adopting the fixed effect regression model for the panel data. They discovered that larger board size would dampen the firm's dividend payment which indicated a negative relationship - contrary to Abdelsalam, et al. (2008) and Subramaniam and Susela's (2011) results – an insignificant relationship.

Against the above research (e.g. Abdelsalam, El-Masary and Elsegeini , 2008; Subramaniam & Susela , 2011; Arshad, et al, 2013), Mansourinia, et al. (2013) discovered that there existed a positive relationship between board size and dividend payout. This signified that greater number of members in the board of directors, the company could pursue more dividend payout policy. Besides, Chang and Dutta (2012) discovered that large board size would pay higher dividends among all dividend paying listed companies on the Toronto Stock Exchange for 8 years (1997-2004). Even so, there existed argument that larger board size reflected weaker governance practice as larger boards were deemed to be less effective (Sulong & Nor, 2008). However, the author's findings also supported that weaker corporate governance tends to distribute higher dividends. Moreover, Bokpin (2011) studied on Ghana's 23 public listed companies for 6 years (2002-2007) and found a positive relationship between board size and dividend payout by adopting fixed effects method.

In Gill and Obradovich (2012)'s research, it found a likewise result as researches (e.g. Bokpin, 2011; Chang & Dutta, 2012; Mansourinia, et al, 2013) of the above in which board size appeared to be positively correlated to dividend payout and appeared to have the identical result after holding the two variables - firm size and financial leverage, to be constant.

Thus, the research expected a positive correlation between board size and dividend, that is as board members increase, dividend payout increases as well.

### **2.1.5 Dividend and CEO Duality**

CEO duality happens when both positions - Chairman of the board and Chief Executive Officer, are held under the same person (Rechner & Dalton, 1991).

Asamoah (2011) studied on 15 companies listed on the Ghana Stock Exchange for 5 years (2003-2007) suggested that when CEO doubled as the board's chairman will influence the board decision to not pay dividend. This signified that less or no dividends will be paid out which can be explained that CEO duality afforded the CEO a greater influence on the decision making and final outcome by the board of directors. This granted the CEO as an agent with the opportunity to use the firm's free cash flow to indulge in opportunistic behavior which is detrimental to the shareholders interest.

By studying on 1056 Chinese listed firms in Shanghai and Shenzhen stock markets, Chen, Lin and Kim (2011) found similar results where company is less likely to pay out dividends when the CEO holds dual roles as a Chairman as well in the firm. This indicated that there is lower possibility for firms to make cash dividend policy when CEO duality exists. In the case of Malaysia, the presence of duality role by CEO will also dampen the dividend payout (Alias, et al, 2013).

Surprisingly, CEO duality presence in Iran and Canadian firms appeared to have no influence on the companies' dividend policy. However, in the United States' case, Gill and Obradovich (2012) found CEO duality in American firms have a positive impact on dividend payout decision. Other than the overall samples of 296 firms being studied, they also studied on the manufacturing and services sectors by building up another 2 models and as well arrived at the same outcome.

In short, the research generally expected a negative relationship between dividend and CEO duality. The existence of CEO duality will dampen firms' behavior in paying out higher dividend.

### **2.1.6 Dividend and Firm Performance**

Firm performance is usually measured based on a firm's profitability. Aivazian, Booth and Clearly (2003) studied on the similarity of dividend behavior between emerging markets and United States' public listed firms reported that profitability in terms of return on equity (ROE) positively affect firms' dividend payment. This indicated that high ROE means high dividend payment. Additionally, Amidu and Abor (2006) study also reported a positive relationship between dividend payout ratio and profitability after researching on 22 firms listed on Ghana Stock Exchange during 1998 to 2003. This explained that highly profitable firms tend to declare and pay high dividend which led to higher payout ratio. Similar results were also reported by Arshad, Akram, Amjad and Usman (2013).

To the contrary, Gupta and Banga (2010) studied on 150 companies listed on the India's Bombay Stock Exchange for 7 years found that there was significant negative relationship between dividend payment and firm performance. The negative result was consistent with (e.g. Kania & Bacon, 2005; Mehta, 2012; Aurangzeb & Dilawer, 2012; Ardestani, Rasid, Basiruddin and Mehri, 2013). This indicated that the higher the profitability of the company, they prefer to payout less dividends. The negative relationship appeared in Ardestani, et al. (2013)'s study, it can also be explained by Rozeff (1982)'s study that profitable firms prefer to invest the free cash flows in future growth projects as they are exposed to more growth opportunities.

After reviewing past literature, this research expects a negative relationship between firm performance and dividend. Increase in a firm's profitability leads to the firm's less dividend payment.

### **2.1.7 Dividend and Leverage**

There is a negative relationship between dividend and leverage, meaning lesser dividend payout when a firm has a higher leverage as found by previous studies (e.g. Rozeff, 1982; Jensen, Solberg and Zorn, 1992; Al-Malkawi, 2008). Rozeff (1982) studied on 1000 firms stated that firms with high financial leverage tend to payout less dividends in order to minimize transaction costs associated with external financing. Moreover, some debt covenants do hold restrictions on dividend payments. Jensen et al. (1992) studied on two cross-sectional data from different time points with 1197 sample firms in total and suggested that the negative relationship can be explained that firms with fixed financial costs are unwilling to commit simultaneously by distributing more dividends. Consistently, Harada and Nguyen (2011) also found that leverage has a negative impact on Japanese firms' dividend payout.

Unsurprisingly, similar cases were discovered in Malaysian firms (Al-Twajjry, 2007; Ramli, 2011; Alias, et al, 2013). The relationship between leverage and dividend payout ratio from Al-Twajjry (2007) research on 300 randomly selected public listed firms in Malaysia appeared to be typically negative but only appeared to be significant sometimes. Aside from the relationship, Alias et al. (2013) further revealed that the existence of CEO duality in a firm weakened the negative effect of debt on dividend payment while large number of independent directors strengthened their negative relationship. The authors explained that for the same person holding the position as Chairman and CEO allowed the person to have greater understanding and knowledge of the firm and enabled the firm to balance the needs to adjust for financing decisions that involved capital structure choice and dividend payment.

However, Ardestani, et al. (2013) studied on panel data of 62 dividend paying industrial product sector firms from Bursa Malaysia for 3 years period by using Ordinary Least square model, it had found no significant negative relationship between dividend and leverage. Alternatively, they studied on the debt's characteristics - debt maturity in another model with dividend and the result appeared to be negatively significant. It was explained by the authors that the higher (longer) the debt maturity gets, the lower the level of free cash flows would become; thus, managers prefer to cut on dividend payouts in order to maintain the fund resources within the company as the firm's financing needs rise.

Conversely, Al-Taleb (2012) selected 60 industrial firms listed on Jordanian's Amman Stock Exchange during 2007 to 2011 and examined their dividend policy. Interestingly, the author found a positive relationship between leverage and dividend which explained that Jordanian firms with high leverage also tend to have high dividend payment. In Ghana, Fumey and Doku (2013)'s study achieved the same result on leverage and dividend as Al-Taleb (2012) after researching on 33 listed firms on Ghana Stock Exchange during 2004 to 2009 for 6 years with the statistical model of 3 Stage Least Square.

Therefore, this thesis expected a negative relationship between leverage and dividend payout. That is when the firm's debt increases, there will be less dividend payment.

### **2.1.8 Dividend and Firm Size**

From the past studies (e.g. Redding, 1997; Rafique, 2012; Malik, Gul, Khan, Rehman and Khan, 2013; Adjaoud & Ben-amar, 2010), size does matter in affecting the company's dividend payout policy. For instance, Redding (1997)

studied on 1958 American companies for the period of 1992 to 1993 and found that those large corporations were more likely to pay out cash dividends. This indicated the existence of a positive relationship between the dividend payout and firm size. However, the author reported that this result did not strongly explain that large firms were likely to pay large amount of dividends but suggested that the model used on examining the relationship between size and dividend had its strongest contribution in explaining the decision of whether the firm would decide to pay dividends. Furthermore, Rafique (2012) reported that firm size had a positive relationship with dividend payout after studying on 53 non- financial listed companies in the KSE100 Index for 6 years period (2005-2010) by adopting Multivariate Regression Analysis.

Furthermore, supported by Malik, et al. (2013) who had studied on 100 financial and non-financial firms listed on the Karachi Stock Exchange of Iran for the period of 3 years (2007-2009) found that larger firm size would increase the company's probability in paying out dividends after analyzing the data via probit Model. Another research by Arshad, et al. (2013), also found a positive relationship between firm size and dividend decision after studying Iran's public listed firms from 2007 to 2011 for 5 years.

Moreover, Adjaoud and Ben-amar (2010) found that firm size was positively correlated to the dividend payout ratio after researching on 714 firms listed on the Toronto Stock Exchange for 4 years from year 2002 to 2005. This result indicated that larger firms may be less reliant on internal funds in financing their positive Net Present Value (NPV), investment projects and they are able to pay higher dividends to their shareholders as compared to smaller firms because they have a better access to external financing.

Conversely, Farinha (2003)'s study on 1302 United Kingdom public listed firms observed a significant negative relationship between firm size and dividend payout for the time period of 1991 to 1996. This showed that firms with bigger

size tend to payout less dividends. The similar result was found by Kowalewski, Stesyuk, Talavera (2007) and Ullah, et al. (2012). As explained by Ullah et. al (2012), negative correlation was observed between dividend and firm size as reduced retained cash will affect the firm manager's plan to invest in different projects to increase the firm size after (and if) the firm had paid more dividend.

Therefore, the above researches typically expected a positive relationship between dividend and firm size after reviewing the former studies from various researchers (Redding, 1997; Rafique, 2012; Malik, et al, 2013; Adjaoud & Ben-amar, 2010). As firm size increase, a firm tends to pay more dividends.

## **2.2 Review of Relevant Theoretical Models**

### **2.2.1 Agency Theory**

Jensen and Meckling (1976) defined agency relationship as a contract which one or more persons - the principal, engaged with another person - the agent. The principal assigns the agent to perform some services on their behalf by delegating part of the decision making authority to the agent. From the corporate view, agency problem arises between the corporate insiders (agent), for instance managers and controlling shareholders, and outside investors (principal), such as minority shareholders when there is misalignment of interest between the principal and the agent. The insiders, who control corporate assets, are able to exploit these assets for a range of purposes in yielding their personal benefits which is viewed as a detrimental conduct towards the outside investors' interest (La Porta, et al, 2000).

In Faccio, et al. (2001), the author raised the issue of agency problem between minority shareholders and controlling shareholders which is related to the firm's ownership structure and concentration. The author described that dividend policy



holds a basic role in limiting insider expropriation as dividends removed corporate wealth from insider control and return the wealth to outside investors. However, among Asian countries including Malaysia, when there are multiple large shareholders or when ownership is concentrated over the hand of a few or several parties, dividend rates are lower as compared to European countries. This suggested that expropriation on minority shareholders in Asian countries happened more frequently compared to Europe. This suggests that a firm's dividend payout behavior signified the minority shareholder's expropriation or agency problem level, where ownership concentration is playing an important role in determining the dividend payout regardless of the firm's located region.

Furthermore, there are two different agency problems discovered by La Porta et al. (2000). Firstly, the outcome model in the study shows that dividend is paid because minority shareholders pressured corporate insiders to distribute cash due to better legal protection on shareholders. On the other hand, the substitute model indicates that dividend is a substitute for effective legal protection. This enables firms in weak legal environments to establish reputations via dividend payout to best serve the investors' interest as corporate insiders are interested in external financing via equity issuance in the future.

Besides, the board rules – those rules relating to board composition, structure, fiduciary duties and powers can be utilized in addressing the agency issue which may arise not only between management and the shareholders, but also between majority shareholders and minority shareholders, and between controllers of the company (majority shareholders or managers) and non-shareholder stakeholders (Davies, 2000). Thus, the current firm's board of directors plays a significant role in maximizing shareholder value based on board rules which are set to focus in mitigating the agency problem.

In short, the interaction between dividend policy, corporate governance variables, and agency theory is worthwhile for this thesis to conduct further research.

### 2.2.2 Dividend Signaling Theory

Miller and Modigliani (1961) study shows that in perfect capital markets dividend policy has no influence to share price, holding firm's investment policy fixed. However, in real world, perfect market is hardly to achieve. The existence of tax, transaction costs, leverage and information asymmetries has made irrelevant proposition does not hold. Nevertheless, they explicitly implied that dividend could transmit future cash flows signal to investors when market is in imperfection state. According to Miller and Modigliani, a change in dividend is often followed by a change in market price as in real world context. Investors are likely to interpret a change in dividends as a change in management view of future earnings expectation for the company. This view is also supported by Bhattacharya (1979) and Miller and Rock (1985) referred this phenomenon as signaling theory. Referring to their research, a company dividend announcement will convey information about company's future earnings. This will signal on increase (decrease) in dividend payout would bring future cash flow increase (decrease); following with the signal to reflect on the company's share price to move upward (downward). Hence, this phenomenon gives positive relationship between dividend and share value.

Lintner (1956) discovered that company only increases dividends when company earnings are permanently in increase trend. This author shows that change in earning would affect dividend payout; and manager seldom change the dividend policy in order to accomplish target dividend ratio. Fama and Babiak (1968) research is in line with Lintner (1956) viewpoint. Some researcher (Miller and Modigliani, 1961; Bhattacharya, 1979; Miller and Rock, 1985) stated that companies used change in dividends to convey information on firm's future performance to public investor. Conversely, scholars like Lintner (1956) and Fama

and Babiak (1968) argued that companies infrequently change in dividend despite of the company earning. Guttman, Kadan and Kandel (2010) explained that sticky dividend was due to the concern of companies in maintaining higher dividends in future; and negative views on dividend decrease which associated with a drop in share value. Based on the claim of companies that reluctant to change dividends, an increase in dividend signals favorable expectation on the company's future prospects will associate with an increase on share price. While a decrease in dividends signals negative view on company future performance as well as a drop in share value. Thus, this suggests that firm's dividend payout signified the firm future prospect, which corporate managers play an important role in determining the dividend payout.

Under dividend signaling theory, there are two different hypothesis - free cash flow hypothesis and maturity hypothesis. Free cash flow hypothesis is being defined as cash flow left after the company had invested in all profitable investment opportunities. This theory predicts that manager endowed free cash flow would invest in low or negative return projects instead of paying out the free cash flow as dividends to the company's shareholders; which might affect the firm's stock price to respond negatively (Jensen, 1986). However, maturity hypothesis describes that increment on dividend's payout signal that firm is losing its investment opportunities. Firm enters into the maturity stage indicates that they are less risky and stable; thus signals fewer investment opportunities and decrease in future earnings growth (Grullon, Michaely and Swaminathan, 2002). Hence, corporate manager is playing a significant role in deciding the firm dividend payout, which convey different information or signals to public investors.

## 2.3 Proposed Theoretical Framework

Figure 2.1 Theoretical Framework

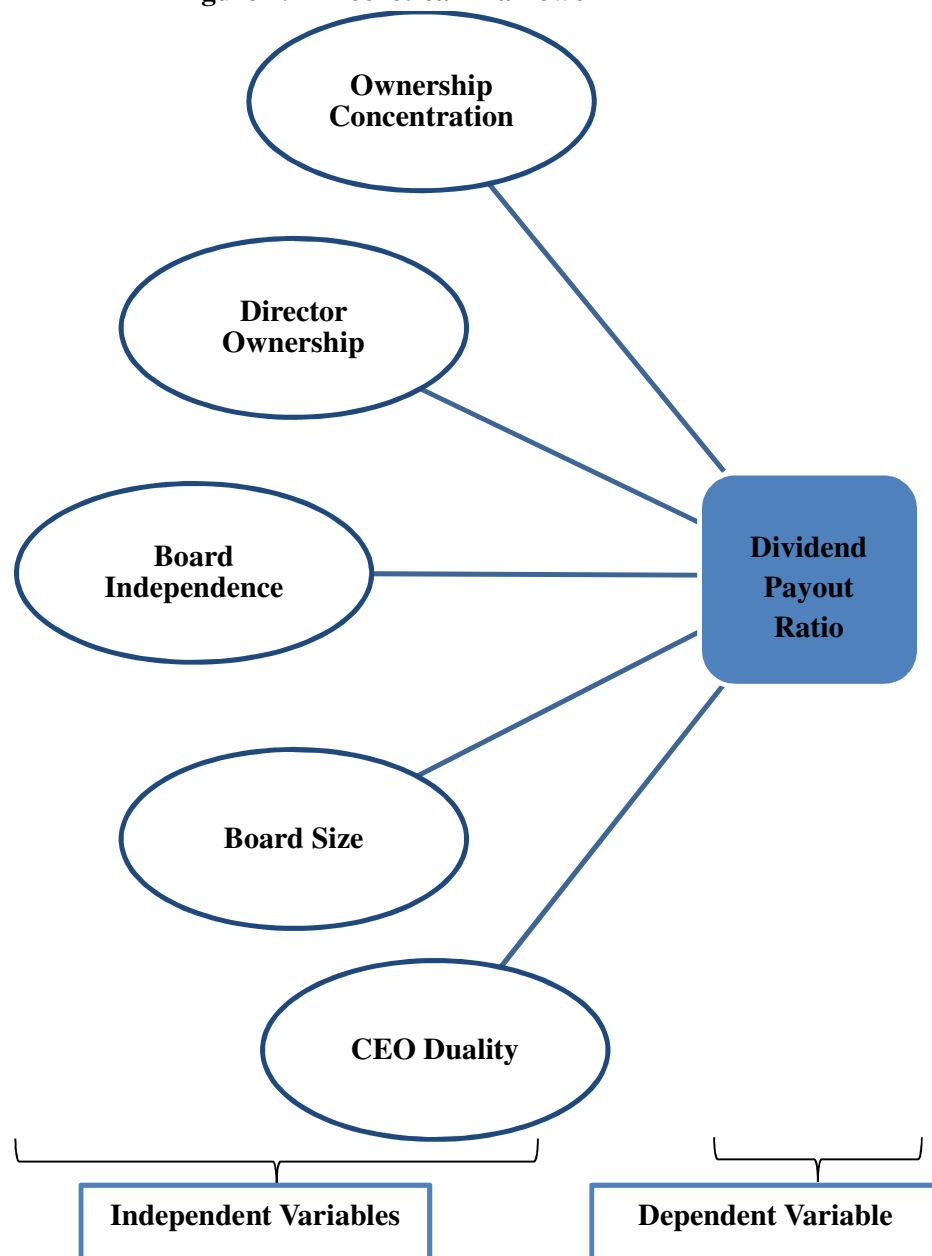


Figure 2.1: Outlines this research's theoretical framework which is in line with the research objective to study on the influence of corporate governance on Malaysian firms' dividend payout ratio from year 2008 to 2012.

## **2.4 Hypothesis Development**

### **2.4.1 Dividend and Ownership Concentration**

According to Ramli (2011) and Al-Shubiri, et al. (2012), the higher ownership concentration level in terms of the largest shareholder's holding, leading them to distribute more dividends to all shareholders instead for private benefits. This signified a positive relationship between dividend payout and ownership concentration.

$H_1$  = There is a positive relationship between dividend payout ratio and ownership concentration.

### **2.4.2 Dividend and Managerial/Director Ownership**

Eckbo and Verma (1994) and Ullah, et al. (2012) found that higher managerial ownership leads to lower dividend payment. This indicated a negative relationship between the dividend payout and managerial ownership.

$H_2$  = There is a negative relationship between dividend payout ratio and director ownership.

### **2.4.3 Dividend and Board Independence**

Based on Chen, et al. (2005) and Sharma's (2011), these authors suggested that greater number of independent director's representation on the board would lead to significant positive propensity to pay dividends which means a greater propensity for firms to payout dividends. This indicated a positive relationship between dividend and board independence.

$H_3$  = There is a positive relationship between dividend payout ratio and board independence.

#### **2.4.4 Dividend and Board Size**

Chang and Dutta (2012) and Mansourinia, et al. (2013) discovered that there existed a positive relationship between board size and dividend payout. This signified that greater number of board members in the board; the company pursues more dividend payout policy.

$H_4$ = There is a positive relationship between dividend payout ratio and board size.

#### **2.4.5 Dividend and CEO Duality**

When CEO of the company is also playing the role as the board's chairman, the possibility for firms to make cash dividend policy is lower (Asamoah, 2011; Chen, Chuan & Kim, 2011). This showed a negative relationship between CEO duality and dividend payout ratio.

$H_5$  = There is a negative relationship between dividend payout ratio and CEO duality.

## 2.5 Conclusion

This chapter has highlighted and compared the previous researchers' empirical results with different outcomes; and outlined the related theoretical model – agency theory. The explanatory power of independent variables (corporate governance variable) to dependent variable (dividend payout ratio) had been stated and determined. The expected sign of the variables had been shown depending on the data's nature adopted from the equity market. Proceeding to the later chapter, methods to conduct this research will be discussed in further detail.

## **Chapter 3: Methodology**

### **3.0 Introduction**

In this chapter, the methodology employed under this research will be presented. A total of two main corporate governance factors – ownership structure and board governance, are examined to study the effect on dividend payout of Malaysia firm; and three control variables – leverage, firm size and firm performance. There are a total of 500 annual observations for the variables from the year 2008 to 2012. The data are collected from two main sources – OSK188 Database and company's annual reports. Subsequently, the observations are filtered and sub-divided into high director's ownership (more than 30% directors' ownership) and low director's ownership (lower than 30% directors' ownership) in this research (Farinha, 2003). This is to determine the effects of corporate governance variables on the dividend payout under different directors' ownership context. Thus, three types of samples (full observations, high directors' ownership and low directors' ownership) will be adopted to study on the effects of the explanatory variables on dividend policy. This research's statistical results are obtained via the statistical software – EViews 6.

### **3.1 Research Design**

This paper employs quantitative research which is the findings that present in a numerical form in order to explain a phenomenon. It seeks to study the relationship between the independent and dependent variables in a statistical method. In this study, Random Effects Model (REM) is used to study the



relationship between corporate governance factors and dividend payout of the firm. REM is adopted for this research as this model has a lower variance as compared to Fixed Effects Model (FEM). EViews 6 software is used as a tool to assist and execute this quantitative research.

### **3.2 Data Collection Method**

This research adopts secondary data obtained from two major sources – OSK188 Database and company’ annual reports. With these data collected, they are structured into the form of panel data. These variables consist of total 500 observations. In this study, secondary data is adopted as it provides more accurate estimation which leads to higher reliable research outcomes. Furthermore, it is cheaper and less time consuming compare to primary data. The corporate governance related variables including ownership concentration, director ownership, board independence, board size, and CEO duality are extracted manually from annual reports available in Bursa Malaysia official website. On the other hand, financial measurements and ratios – dividend payout ratio, leverage, firm size and firm performance, are extracted from OSK188 database which is available from OSK trading client account.

**Table 3.1 Variables' Descriptions & Sources**

<b>Variables</b>	<b>Proxy</b>	<b>Explanation</b>	<b>Units of Measurement</b>	<b>Source</b>
Dividend Payout Ratio	DPR	100 public listed companies under FBM100	Percent (%)	OSK188 Database
Ownership Concentration	OC	Herfindahl Index of the top 5 highest shareholding for the firm	Index	Annual Report
Directors' Ownership	DO	Sum of direct and indirect shareholding of all directors in the firm (excluding double counting)	Percent (%)	Annual Report
Board Independence	IND	Number of independent directors divided by number of executive directors in the firm	Ratio	Annual Report
Board Size	BS	Number of board members in the firm	People	Annual Report
CEO Duality	CEODUAL	Chief executive officer or managing director holds position as the chairperson of the board of director	Dummy (1,0)	Annual Report
Leverage	LV	Firm's total liability divided by total shareholders' funds	Ratio	OSK188 Database
Firm Performance	ROE	Firm's net profit divided by total shareholders' funds	Percent (%)	OSK188 Database
Firm Size	MCAP	Log of firm's market capitalization as at 14	Log (MCAP)	OSK188 Database

### 3.3 Sample Design

#### 3.3.1 Target Population-Malaysia

The setting of this research is targeted on the Malaysia Stock Market. The 100 component stocks of FTSE Bursa Malaysia Top 100 Index (FBMT 100) are used to study the relationship between corporate governance and dividend payout ratio. FTSE Bursa Malaysia Top 100 Index is a combination of FTSE Bursa Malaysia KLCI Index (30 companies) and FTSE Bursa Malaysia Mid 70 Index (70 companies) which consists a total of Malaysia 100 top market capitalization public listed firm. Indeed, large firms are the ones that are more likely to pay out dividends. However, it is not certain that large firms will distribute out a large amount of dividends to their shareholders (Redding, 1997). Thus, this drives this research to adopt large firms in the FTSE Bursa Malaysia Top 100 Index as study samples.

Besides, this index provides a widest coverage of public listed firm in Malaysia as it has the highest market capitalization as per 14 November 2013 in term of FTSE Bursa Malaysia Index Series and more representatives for the large market capitalization firms in Malaysia. In short, this enables the research to capture as much market share for Malaysia stock market as possible in a single index.

### **3.3.2 Sampling Technique**

#### **3.3.2.1 Sampling Size**

This research covers the period annually from the year 2008 to 2012. There are 500 observations have been introduced for each variables. The 100 component stocks listed under Bursa Malaysia's FBMT100 are presented in Appendix 1 (provided by FTSE International Limited).

### **3.4 Data Processing**

Firstly, these data are collected from two sources which are the annual report available in the Bursa Malaysia official website and OSK188 database. There are five corporate governance variables namely ownership concentration, directors' ownership, board independence, board size, CEO duality are retrieved and computed based on the raw data available in the company's annual report while the constant variables are directly extracted from the OSK188 Database. Subsequently, the data collected will be rearranged in the panel data collection framework.

Firstly, the data collected will go through the first level of filtration process by excluding companies from the Banking, financial and Real Estate Investment Trust sectors and with incomplete data. The first level filtration process arrives at samples of 76 companies with total observations of 380. Later, these 76 companies are further filtered and sub-divided into low director's ownership samples of 51 companies with 255 total observations and high director's

ownership samples of 25 companies with 125 total observations. Afterwards, these filtered data will be analyzed by using EViews 6. Lastly, the results generated will be interpreted.

**Table 3.2 Data Filtration**

<b>First Level of Filtration Process</b>	
<b>Before First Level of Filtration Process</b>	
Number of Companies	100
Number of Observations	500
<b>After First Level of Filtration Process</b>	
Number of Companies	76
Number of Observations	380

<b>Second Level of Filtration Process</b>		
<b>Before Second Level of Filtration Process</b>		
Number of Companies	76	
Total Number of Observations	380	
<b>After Second Level of Filtration Process</b>		
	<b>Low Director Ownership</b>	<b>High Director Ownership</b>
Number of Companies	51	25
Total Number of Observations	255	125

### **3.5 Data Analysis**

In this research, the objective is to examine the effects of five corporate governance variables – ownership concentration, director ownership, board independence, board size and CEO duality, and the control variables – leverage,

firm's performance and firm size, on the dividend policy from FBMT 100 during the year 2008 to 2012. This research employs EViews 6 software to conduct the estimated panel data regression model and diagnostic check for econometric problems. This research's regression models consists of both full model and partial model as stated as followed:

### **Full Model**

$$DPR = B_0 + B_1OC_{it} + B_2DO_{it} + B_3IND_{it} + B_4BS_{it} + B_5CEODUAL_{it} + B_6LV_{it} + B_7LOG\_MCAP_{it} + B_8ROE_{it} + u_{it}$$

### **Partial Model**

#### **Low Director Ownership Model**

$$DPR = B_0 + B_1OC_{it} + D_0 + B_3IND_{it} + B_4BS_{it} + B_5CEODUAL_{it} + B_6LV_{it} + B_7LOG\_MCAP_{it} + B_8ROE_{it} + u_{it}$$

#### **High Director Ownership Model**

$$DPR = B_0 + B_1OC_{it} + D_1 + B_2IND_{it} + B_3BS_{it} + B_4CEODUAL_{it} + B_5LV_{it} + B_6LOG\_MCAP_{it} + B_7ROE_{it} + u_{it}$$

$DPR$  = Dividend Payout Ratio

$B_0$  = Intercept for the regression model

$B_1, B_2, B_3, B_4, B_5, B_6, B_7, B_8$  = Partial regression coefficients

$OC$  = Ownership Concentration

*DO* = Director Ownership

*IND* = Board Independence

*BS* = Board Size

*CEODUAL* = CEO Duality

*LV* = Leverage Ratio

*LOG\_MCAP* = log Market Capitalization

*ROE* = Return on Equity

$D_0$  = Dummy variables for director ownership less than 30% of the total shares outstanding

$D_1$  = Dummy variables for director ownership more than 30% of the total shares outstanding

### **3.5.1 Econometrics Model**

#### **3.5.1.1 Panel Data**

Panel data is defined as data sets consist of numbers of observations in each sampling unit. It can be generated by combining time-series observations across different cross-sectional (variables) including countries, states, regions, firms, or randomly sampled individuals or households (Baltagi, 2005). In short, panel data

takes into account both space and time dimensions (Gujarati & Porter, 2009). According to Baltagi (2005), the benefits of panel data are stated as below:

1. As panel data is related to individuals, firms, states, countries, and so on. Across time, there is a possibility that heterogeneity exist among these variables. Panel data estimation enables it to capture such effects by allowing subject-specific factor (variation).
2. Panel data provides more detailed information (large number of data point), more variability, less likely for correlation to exist among the variables, higher degree of freedom and thus enhancing the accuracy of econometric estimates.
3. By studying the repeated cross section of data, panel data are more suitable to study the dynamics of change.
4. Panel data is able to better identify and measure effects that usually fail to be detected in pure cross-section or pure time series data.
5. Panel data is able to study more complicated behavioral models. For instance, technical efficiency is better studied and modeled with panels. Also, panels able to impose fewer restrictions on a distributed lag model as compared to the restriction put on pure time series data.
6. Micro panel data collected on individuals, firms and households is able to measure the data more accurately as compare to comparable variables measured at the macro level. This method enables to eliminate or reduced the aggregation biases.
7. Macro panel data has a longer time series along without the problem of nonstandard distributions typical of unit roots tests in time-series analysis.



### 3.5.1.1.1 Fixed Effect Model

Fixed effects model is a model that takes into account the “individuality” of each subject by allowing the point of intercept to vary for each subject but still assume that the slope coefficients are constant across subjects. Each subject’s intercept does not differ over time (time invariant) while assuming that the coefficients of the regressors constant across subject or over time. According to Gujarati and Porter (2009), there are several possibilities based on the assumptions made about the intercept, the slope coefficient, and the error term.

1. Assume that the intercept and slope coefficients are constant across time and space and the error term captures differences over time and individuals. This is known as pooled regression. However, despite its simplicity, by using this highly restricted assumptions, the regression may distort the true picture of the relationship between dependent and independent variable
2. The slope coefficients are constant but the intercept varies over individuals. This is known as fixed effects model (FEM) or the least-squares dummy variable (LSDV) model. By using differential intercept dummies, intercept are able to be carry between the test subjects. It can be written as followed:

$$Y_{it} = \alpha_1 + \alpha_2 D_{2i} + \alpha_3 D_{3i} + \alpha_4 D_{4i} + \beta_2 X_{2it} + \beta_3 X_{3it} + u_{it} \quad (3.1)$$

This regression model involved 4 test subjects, where  $D_{2i}=1$  if the observation belongs to test subject 1, 0 otherwise;  $D_{3i}=1$  if the observation belongs to test subject 2, 0 otherwise; and  $D_{4i}=1$  if the observation belongs to test subject 3, 0 otherwise. To avoid dummy variable trap,

test subject '4' (can be others) is used as a comparison subject. Another method is to drop the common intercept in equation above and introducing '4' dummy variables also can be used to avoid dummy variable trap.

Similar in capturing the individual effect, the time effect such as technological changes, government regulatory alteration and external effects can be captured by using time dummies.

3. The slope coefficients are constant but the intercept varies over individuals and time. This is done by combining test subjects dummies and time dummies regression models to generate a regression that capture both effects.
  
4. All coefficients (the intercept as well as slope coefficients) vary over individuals. In this case, the intercepts and the slope coefficients are vary for all individual, or cross-section units. This can be done by using interactive, or differential, slope dummy variables to capture the differences in slope coefficients. Following the example 2 given above which involves 4 test subjects, this research increase each of the test subject dummies with each of the X variables, resulting an additional 6 more variables in example 2.

$$Y_{it} = \alpha_1 + \alpha_2 D_{2i} + \alpha_3 D_{3i} + \alpha_4 D_{4i} + \beta_2 X_{2it} + \beta_3 X_{3it} + \gamma_1 (D_{2i} X_{2it}) + \gamma_2 (D_{2i} X_{3i} + \gamma_3 (D_{3i} X_{2it}) + \gamma_4 (D_{3i} X_{3it}) + \gamma_5 (D_{4i} X_{2it}) + \gamma_6 (D_{4i} X_{3it}) + u_{it} \quad (3.2)$$

$\gamma$ 's are the differential slope coefficients while  $\alpha_2$ ,  $\alpha_3$ , and  $\alpha_4$  are the differential intercepts. If one or more of the  $\gamma$  coefficient are statistically

significant, it shown that one or more slope coefficients are different from the base group.

5. The intercept as well as slope coefficients vary over individuals and time.

### **3.5.1.1.2 Random Effects Model**

In the Random Effects Model (REM), the individual-specific effect is a random variable that has no correlation with the explanatory variables (Schmidheiny, 2013). According to Gujarati and Porter (2009), it is also known as error components model (ECM). Below shown a model as an introduction of ECM:

$$Y_{it} = \beta_{1i} + \beta_2 X_{2it} + \beta_3 X_{3it} + u_{it} \quad (3.3)$$

In this case, this research assumes that it is a random variable with a mean value of  $\beta_1$ . It is expressed as:

$$\beta_{1i} = \beta_1 + \varepsilon_i \quad i = 1, 2, \dots, N \quad (3.4)$$

Where  $\varepsilon_i$  is a random error term with a mean value of zero and variance is in  $\sigma^2_\varepsilon$  symbol.

With this, it is shown that 4 test subjects in our sample are a small sample from a larger population in which they have a same mean value for the intercept ( $=\beta_1$ ) and each test subjects differences in the intercept values of each test subjects are captured in the error term  $\varepsilon_i$ . By substituting (3.4) into (3.3),

$$\begin{aligned} Y_{it} &= \beta_1 + \beta_2 X_{2it} + \beta_3 X_{3it} + \varepsilon_i + u_{it} \\ &= \beta_1 + \beta_2 X_{2it} + \beta_3 X_{3it} + w_{it} \end{aligned} \quad (3.5)$$

Where

$$w_{it} = \varepsilon_i + u_{it} \quad (3.6)$$

$w_{it}$  is known as the composite error term which is derive from two components,  $\varepsilon_i$ , is the individual specific error component and  $u_{it}$ , is the combination of time series and cross section error component.

There are several characteristics exhibited by both methods listed as below:

1. Big difference are not expected in the values of the parameters generated using FEM and ECM when T (the number of time series data) is large and N (the number of cross-sectional units) is small. Thus in this case, computational ease is preferred and FEM may be more preferable.
2. If N is large while T is small, the estimates generated by the two methods can vary largely. This is because in ECM,  $\beta_{1i} = \beta_1 + \varepsilon_i$ , where  $\varepsilon_i$  represents cross-sectional random component, while in FEM  $\beta_{1i}$  is treated as fixed and not random. In the latter case, statistical inference is conditional on the observed cross-sectional units in the sample. This is appropriate if it is believed that the individual, or cross-sectional, units in our sample are not randomly draw from a larger sample. FEM is appropriate in such situation. Conversely, ECM is appropriate when the cross-sectional units in the sample are randomly draw, for which statistical inference is unconditional.
3. ECM estimators are biased when the individual error component,  $\varepsilon_i$  and one or more regressors are correlated, whereas those estimated from FEM are unbiased.

4. ECM estimators are more efficient than FEM estimators in the case that  $N$  is large and  $T$  is small with the assumptions underlying ECM hold.

### 3.5.1.2 Hypothesis Testing for Model Selection

#### 3.5.1.2.1 Poolability Test

According to Park (2011), the Poolability test, here Likelihood Ratio Test, examines if panel data are poolable so that the slopes of regressors are the same across individual entities or time periods (Baltagi, 2005). If the null hypothesis of Poolability test is rejected, individual subjects may have their own slopes of regressors and then fixed and/or random effects are no longer appealing. Instead, you may try random coefficient model or hierarchical regression model.

Null hypothesis:	$B_{ik}=B_k$ for $1 \dots ith$ group and $1 \dots kth$ regressor
Alternative Hypothesis:	$B_{ik} \neq B_k$ for $1 \dots ith$ group and $1 \dots kth$ regressor
Decision rule:	Reject $H_0$ if the probability value is less than the significant level which is 10% or otherwise do not reject the $H_0$ .

#### 3.5.1.2.2 Hausman Test

According to Hill, Griffiths and Lim (2008), Hausman test is used to compare the coefficient estimates of the random effects model and fixed effects model. The main concept under this test is that both model estimators are consistent when correlation between  $u_i$  and the explanatory variables does not exist. Thus, both estimators should converge to the real parameter values in large samples. This explains that in large samples both models estimates should be alike. Conversely,

if correlation between  $u_i$  and the explanatory variables does exist, this will result an inconsistency in random effects estimator while fixed effects estimators stays consistent. This result in random effects estimators do no converge to true parameter values in a large sample while fixed effects estimators do.

Null Hypothesis:  $u_i$  is uncorrelated with any of the explanatory variables

Alternative Hypothesis:  $u_i$  is correlated with any of the explanatory variables

Decision rule: Reject  $H_0$  if the probability value is less than the significant level which is 10% or otherwise do not reject the  $H_0$ .

T-statistic: 
$$t = \frac{b_{FE,k} - b_{RE,k}}{[se(b_{FE,k})^2 - se(b_{RE,k})^2]^{\frac{1}{2}}}$$

Let  $B_k$ =True parameter,  $b_{FE, k}$ =Fixed effects estimate,  $b_{RE, k}$  =Random effects estimate

Based on the explanation above, rejecting null hypothesis implies that this research should choose fixed effects model as estimators of random effects model will be inconsistent. However if null hypothesis is not rejected, given that both model estimators should be consistent, we will choose random effects model due to the random effects estimator will have smaller variance than the fixed effects estimator in large sample size.

## **3.6 Variables Specification**

### **3.6.1 Dependent Variable**

$$\text{Dividend payout ratio} = \frac{\text{Dividend per Share}}{\text{Net Profit per Share}} \times 100\%$$

The company's dividend payout ratio (DPR) acts as the dependent variable in this research's model. DPR is represented by the company's cash dividend divided by its cash flow as the main dividend payout measurement (Faccio, et al, 2001). This ratio is between dividend payout against the company's earning (Dividend/earnings) whereby the earnings are measured in after taxes and interest but before any extreme cases. In short, the dividend payout ratio provides an idea of how well earnings support the dividend payments.

### **3.6.2 Independent Variables**

There are five main Independent variables included in this paper's model namely ownership concentration, director ownership, board size, board independence and CEO Duality.

#### **3.6.2.1 Ownership Concentration**

$$\text{Ownership Concentration} = \sum(\text{Top 5 Shareholder Percentage})^2$$

Ownership concentration is the total sum of square of the percentage of a company's shares own by the top 5 shareholders. This variable identifies how much of the company equity is owned by the top 5 largest shareholders. The larger the firm's ordinary equity owned by the top 5 shareholders, they will have more control on the firm (Giroud & Mueller, 2010).

This paper found that agency problem of a company may not necessary arise from the conflict of interest between corporate managers and shareholders but also between controlling shareholders and minority shareholders. When controlling shareholders are private persons, managers, board of directors and families, they

are often unambiguously in control of the company (Maury & Pajuste, 2005). Their results indicate that private investors in general tend to be associated with higher dividend payouts rather than with lower dividends. However, Angeldorff and Novikov (1999) argue that privately controlled firms behave differently by paying lower dividends in Swedish firms.

Maury and Pajuste (2005) found that concentrated control is negatively related to the dividend-to-earnings ratio. Their result holds for alternative specifications of concentration control, including votes held by the largest, the three largest shareholders, and the controlling shareholder with a majority stake in the company. This significant negative coefficient indicates that a higher concentration of voting rights is associated with lower dividend payouts.

### **3.6.2.2 Directors ownership**

$$\text{Director Ownership} = \sum(\text{Percentage Owned by Directors both Direct and Indirect})$$

Director ownership is the total sum of percentage of the company own by directors both directly and indirectly. Henry (2011) and Schulze, Lubatkin and Dino (2003) states that controlling ownership in family firms can give employed family members and directors incentive to free-ride on the controlling owner's equity where as high number of outside shareholders in widely held public firms have incentive to promote investment and growth- oriented risk-taking.

### **3.6.2.3 Board size**

$$\text{Board size} = \text{Total Number of Directors of a Company}$$



The board size of the company is calculated by summing up the total number of directors of a company (Sulong & Nor, 2008). There were mix signals between the interaction term of dividend payout and the board size of a company. Initially, board size was to have a positive relationship with a company's dividend policy; whereby when the company will naturally pursue higher payout policy when there is a larger board size (Mansourinia, et al, 2013). However, this was not the case with Sulong and Nor (2008), they argue that firm with smaller board size were in better position to cope with firms dividend decision than firms with larger board size due to better and efficient supervision of the managers.

#### **3.6.2.4 Board Independence**

$$\text{Board Independence} = \frac{\text{No. of Independent Director}}{\text{No. of Executive Director}}$$

This research divides the total numbers of independent directors with the total number of executive directors in a firm to represent board independence (Sharma, 2011). Through this method, this research is able to identify if said the company has a higher or lower concentration of outside or inside directors. Fama and Jensen (1983b) argue that independent (outside) directors have better incentive to monitor the firm's management as they need to protect their reputations as a effective and independent decision makers. This statement is further strengthen by Brickley and James (1987) research. The author found that the presence of outside directors tends to minimize managerial consumption of perquisites. Besides, outside directors have the responsibility of advocating shareholders' interests (Rosenstein & Wyatt, 1990; Byrd & Hickman, 1992). However, Mansourinia et al. (2013) found that there were no significant relationship between independent board and the dividend policy.

### **3.6.2.5 Chief Executive Officer (CEO) Duality**

*CEO Duality = If the Chief Executive Officer of the company also holds the chairman position of the board. It is set as '1' if it is true to that, or '0' if otherwise*

The last major variable of this research is the CEO duality. Dummy variable system is used to identify if the CEO of the company who also holds the chairman position of the board (Chen, et al, 2005). It is set as '1' if it is true that the CEO of the company who also holds the chairman position of the board or '0' if otherwise. Companies with large boards, high proportion of independent and female directors as well as CEO duality are actually willing to pay higher dividend to their shareholders. However, this result is contradicts to Mansourinia et al. (2013) studies; they stated that there is no significant relationship between CEO duality and dividend policy which indicates that the existence of CEO as the chairman of the board hold by similar person does not affect the dividend payout of a company.

### **3.6.3 Control Variables**

This thesis has also included control variables into the three models as stated in section 3.5 and is also adopted in Murekefu and Ouma (2012) study. These variables have also been known to affect a firm's dividend payout. These control variables are listed in the following pages.

### 3.6.3.1 Leverage

$$\text{Leverage} = \frac{\text{Total Liability}}{\text{Total Shareholders Funds}}$$

Leverage was controlled on the expectation that firms with high leverage would tend to have large investments and thus higher earnings growth. It was found that there are negative results when comparing a company debt ratio to its dividend per share. Asif, Rasool & Kamal (2011) found a negative relationship between dividend payout and financial leverage variable. This thesis kept this variable under the control group due to the influences it has on the policy of dividend distribution. Terms set by creditors may also have influences on the dividend distribution.

### 3.6.3.2 Return on equity (ROE)

$$\text{ROE} = \frac{\text{Net Profit}}{\text{Total Shareholder Funds}} \times 100\%$$

Kania and Bacon (2005) studies used ROE as a proxy for the company's profitability and found that it does significantly affected the company's dividend payout ratio. Higher return on equity, the great the firms retain earning for reinvestment, resulting in low dividend payout.

### 3.6.3.3 Market capitalization

$$\text{Market Cap} = \text{Log}(\text{Closing Price} \times \text{Number of outstanding share})$$

Su and Vo (2010) found that as the firm size gets larger, its liquidity position is adversely affected which then leads to limitation in growth possibilities. Moreover, Scott and Martin (1975) study indicates that firm size does affect firms' dividend policy. The market capitalization is used in capturing the value of the firm which plays an important role in the decision of the dividend policy. Sheikh and Wang (2011) measured firm size via the natural log of a company's sales which is opposed to this research's firm's size measurement.

### **3.7 Diagnostic Checking**

Econometric problem will always be found in the research work. Therefore, this research has conducted various types of test including multicollinearity, heteroscedasticity, and autocorrelation test to diagnose check these problem in the panel data models adopted. Besides, this study is also running the normality test.

#### **3.7.1 Normality Test**

Normality test must be fulfilled before this research proceed on to multicollinearity, heteroscedasticity and autocorrelation test as the normality test is to check whether the error terms are normally distributed or not as according to Gujarati and Porter (2009). Under the Central Limit Theorem, there are certain assumptions which need to be fulfilled. Firstly, the distribution of the sum tends to be normally distributed if there is huge number of explanatory variables and identically distributed random variables. Furthermore, though the number of variables is not very big or the variables are not strictly independent, but their sum



multicollinearity problem into perfect, serious, non-serious and no multicollinearity problem of a model.

There are several reasons of the happening of multicollinearity such as the addition of polynomial term in the model, data collection method, or duplicated proxy variable. The dependent variable will be affected and lead to multicollinearity problem. As the standard error is getting larger, the multicollinearity problem will get serious and lead to insignificant results. Besides, the insignificant *t*-statistics will further lead the *t*-statistics value to become smaller and lead to multicollinearity problem. Occurrence of multicollinearity problem in the model has violated the Classical Linear Regression Model (CLRM) assumption (Gujarrati & Porter, 2009).

According to Gujarati and Porter (2009), the researcher may use the correlation coefficient (*r*) to detect multicollinearity. Thus, this thesis is using *r* to test the statistical result providing there are high pair-wise correlation coefficients (Pen, 2011; Wang, Xie, Chen, Yang and Yang, 2013). The decision rule is when *r* is more than 0.8, it represents that there is muticollinearity; while *r* is less than 0.8 it represents that it is no serious muticollinearity (Gujarati & Porter, 2009).

In case there is serious multicollinearity, this thesis will redesign the econometric model or include a larger sample size. However, if there is no serious multiconllinearity problem within the model, this thesis will then proceed further to the autocorrelation test.

### **3.7.3 Autocorrelation**

According to Gujarati and Porter (2009), autocorrelation is defined as the correlation or relationship between the number of observations ordered in time and the error term in the two periods. Generally, autocorrelation problem will

occur in time series data. This is because the nature of time series data could easily cause the model's error terms in the past to be correlated with the current error terms (Mizon, 1995).

Autocorrelation often will cause the variance of error term to not reach the optimal level. This will lead the  $P$ -value of  $t$  and  $F$  statistic for independent variable to be biased; and then leading to misleading results. For instance, wrong functional form will lead the variance of estimators to be overestimated or underestimated, it will cause the important variables to become insignificant or the irrelevant variables become significant.

Gujarati and Porter (2009) mentioned that Durbin-Watson test (Durbin & Watson, 1950) can use to detect autocorrelation problem. This research adopts this test to estimate the regression result because Durbin-Watson test is most suitable for autocorrelation (Jeong & Chung, 2001). Durbin –Watson test is used for detecting the series correlation or determined whether the continuous related to the regression residuals independent each other.

As a benchmark, Durbin-Watson statistics with value between 1.5 and 2.5 imply that no autocorrelation problem exist within the regression model (Aga & Salfakli, 2007; Vogt & Johnson, 2011). In order to determine the existence of autocorrelation problem, this study expecting that when  $d$ -value is within the range of 1.5 to 2.5, there is no autocorrelation problem. Lastly, hypothesis of Durbin-Watson test is shown as below:

H <sub>0</sub> :	There is no autocorrelation.
H <sub>1</sub> :	There is a problem of autocorrelation
Decision Rule:	Do not reject H <sub>0</sub> , when the $d$ value is between 1.5 and 2.5. Otherwise, reject H <sub>0</sub> .

### 3.7.4 Heteroscedasticity

Heteroscedasticity problem happens when there is unequal of spread or the error terms are not constant. Eventually, the *F*-test and *T*-test statistics values will be biased; *P*-value and confidence interval for the independent variable will be imprecise. Thus, this study is able to obtain the results of the estimated parameter but the estimation results will not be accurate. Thus, this model is considered to be inefficient (Antonakis & Dietz, 2011). However, heteroscedasticity problem will normally occur in cross-sectional data (Gujarati & Porter, 2009).

In short, the nature of data and model specification errors are the two major causes of heteroscedasticity problem. The nature of data problem occurs when there is outlier or missing data or both incidents happen in the same time. Besides, heteroscedasticity occur because of the distribution of dependent and independent variables are not normally distributed. The model specification occurs when there is omitted independent variable and lead to high error of estimated model. (Gujarati & Porter, 2009).

According to Gujarati and Porter (2009), several ways can be used to detect the heteroscedasticity problem. For instance, Park test, Glejser test, White test and ARCH test.

There are two methods to solve the heteroscedasticity in this case, namely Weighted Least Square (WLS) or General Least Square (GLS). The main different of GLS and WLS is the variance of error term. Variance of error term for GLS will eventually become constant with value to one after the adjustment while variance of error term for WLS will become constant. By increasing the sample size, this research will be able to reduce the impacts of missing value and the impact of the outlier in the estimated results. If the sample size is large enough, the dependent and independent variables will tend to be normal. Thus, error term will be



normally distributed and the heteroscedasticity problem can be minimized (Gujarati & Porter, 2009).

Furthermore, White's Heteroscedasticity-consistent Variances and Standard Error can be used to correct standard error of OLS estimators and conduct statistical inference based on this standard error (Gujarati & Porter, 2009).

In this research, the panel regression model's results will be adjusted for White's heteroscedasticity consistent covariance estimator (White, 1980) to correct for the heteroscedasticity bias by adopting White's cross-section coefficient covariance method.

### **3.8 Conclusion**

The corporate governance variables and the control variables are mainly obtained from the company's annual reports and OSK188 database. Subsequently, the data collected are filtered into three sets of yearly observations (2008-2012) with the full data model – 380; low director ownership model – 255; and high director ownership model – 125. These models will go through two empirical tests - the Poolability Test and the Hausman Test to determine the suitable type of panel data model to be employed in this study. EViews 6 software is employed to conduct the estimated panel data regression model and diagnostic check for econometric problems. This research's empirical results will be discussed in the following chapter.

## **CHAPTER 4: DATA ANALYSIS**

### **4.0 Introduction**

This chapter outlines the panel data analysis on the 76 public listed firms which are comprised in the FTSE Bursa Malaysia Top 100 Index for time periods of 5 years from year 2008 to year 2012. This research adopts panel's random effect regression method to analyze the data in identifying which independent variables is significantly affecting the dependent variable - dividend payout ratio (DPR) in Malaysia. On top of that, relationship between the independent variables and the dependent variable are also presented in this section. Within this chapter, data analysis would be carried out so as to fulfill the objectives and hypothesis which was stated in Chapter 1 and Chapter 2 respectively.

### **4.1 Descriptive Analysis**

This section will review on the main variables and follow by the control variables. The descriptive statistics for this research's variables is presented in Table 4.1. Based on 76 companies from FTSE Bursa Malaysia Top 100 Index, this research obtained an average of 16.86% of dividend payout ratio (DPR) which is lower than the 29.14% average value reported by Ramli (2010) using 245 companies listed on Bursa Malaysia over the period of 2002 to 2006 as samples. Similarly, Subramaniam and Susela (2011) study on Malaysian public listed firms from 2004 to 2006 reported 33.79% average value which is higher as compare to this thesis's

result. The result obtained is as well lower as compare to Germany and United states average value which is 34.5% and 39.3% respectively (Gurgler & Yurtoglu, 2003; Fama & French, 2001). In short, this result is in line with the dividend disappearing phenomenon which has been mentioned in chapter 1 which this phenomenon has become a global trend among dividend payers including Malaysia companies to pay out fewer dividends (Fatemi & Bildik, 2012).

Furthermore, the average percentage of concentrated ownership, OC, measures by the Herfindahl Index 5, is 18.21% with 82.90% being the highest. This indicates that ownership in majority of the top 100 Malaysian listed firms is less concentrated. However, Sulong and Nor (2010) using the same measurement on ownership concentration found a higher average value of 31.8% among 403 Malaysian companies between the years 2002 to 2005. Besides, Tam and Tan (2007) reported a higher average value of 43% on ownership concentration among top 150 Malaysian companies listed on the FTSE Bursa Malaysia during the year 2000. However, they adopted a different measurement unit on the ownership concentration by using the percentage of an ultimate owner's shareholding as a proxy to represent ownership concentration.

Moreover, this thesis reported that the average (median) director ownership (DO) of the top 100 market capitalization Malaysian companies is 19.88% (2.77 %) with 75.92% being the highest value. As compare to past studies Alias and Nor (2004) using 121 Malaysian public listed companies revealed an average value of 21.18% on director equity ownership with a maximum at 83.46 %; Sulong and Nor (2010) findings with an average of 7.6 % of managerial ownership among Malaysian firms between years 2002 to 2005 with 78.3 % as the highest value. From the maximum value result obtained by this thesis and past researches, this signifies a dilution phenomenon in insider ownership as refer to the trend (approximately 15 years – 1997 to 2012) as stated. This might due to Securities Commission Malaysia endeavors in corporate governance reform - with the integration of Malaysia Code of Corporate Governance (MCCG) into Bursa

Malaysia Listing rules since 2001 and the issuance of Corporate Governance Blueprint 2011.

In term of board independence, on average, the number of independent directors is two times greater than the non-independent directors within the board. The median of the board independence is two times, with the maximum being eight times and the minimum 0.33 times greater than the non-independent director. This indicates that top 100 market capitalization firms in this research's sample do fulfill the Bursa Malaysia Listing requirements paragraph 15.02 (1) which mandate the listed company to ensure that the board of directors have at least 2 members or 1/3 of the board of directors, whichever is the higher, are independent directors.

For board size, BS, this research reported on average nine directors on the board which is in line with Lipton and Lorsch (1992) preferable board size of eight to ten persons on the board. This suggest that by limiting board size in smaller number, the board will tend to perform effectively in decision making which is further supported by Sulong and Nor (2008). Haniffa and Hudaib (2006) indicate the average board size consists of eight members among 347 public listed Malaysian companies in years 1996 to 2000. Likewise, Sulong and Nor (2008) result revealed that Malaysian listed companies have on average eight directors on the board for the time period of 2002 and 2005. Besides, the research's result is also consistent with the average number of eight members in the board as reported by Abidin, et al. (2009).

In addition, the SC Survey on Malaysian Boards 2009 found that 27.5 % of 949 firms being reviewed appear to have unseparated role of Chairman and CEO. However, in this study, it shows that on average 15.20% of the thesis's sample firms appear to have a duality role or on average 84.8% of the sample firms appear to have no duality role existed. In addition, Sulong and Nor (2010) found that on average 29.4% of the 403 sample Malaysian firms have a duality role during the time period of 2002 to 2005. The result discovered might pointed out an

indication which there is an improvement of board's role in governance and in line with the recommendation by Malaysian Code of Corporate Governance (2012) and Corporate Governance Blue Print 2011 on the separation of position Chairman and CEO.

Lastly, turning this section view to the control variables; the average leverage ratio is 1.45 with median 0.891. While the average market capitalization value (MCAP), proxy for firm size in the sample period is RM 6519 million which is closes to the median at RM6450 million. Return on equity (ROE) variable, proxy for firm performance has an average of 17.20 % and with a median of 12.77 %.

**Table 4.1 Summary Descriptive Statistics of All Variables**

<b>Sample Firms: N = 76</b> <b>No. of Obs. = 380</b>	<b>Mean</b>	<b>Median</b>	<b>Max</b>	<b>Min</b>	<b>Std. Dev</b>	<b>Skewness</b>	<b>Kurtosis</b>
<b>DPR</b>	16.8637	0.649	192.3	0	29.9047	2.11002	8.01406
<b>OC</b>	0.18214	0.15545	0.82895	0.00577	0.15234	1.06188	3.56933
<b>DO</b>	19.8791	3.23	75.92	0	24.0147	0.79689	2.19466
<b>IND</b>	2.22942	1.5	8	0.33	1.72254	1.24874	3.97309
<b>BS</b>	8.7194	8	14	5	2.00122	0.67171	2.7248
<b>CEODUAL</b>	0.15522	0	1	0	0.36266	1.90422	4.62605
<b>LV</b>	1.44913	0.891	31.079	0.034	2.53564	7.0182	67.6025
<b>LOG_MCAP</b>	6.5194	6.45025	8.24018	5.1133	0.60443	0.27763	2.56492
<b>ROE</b>	17.194	12.769	199.542	0	22.4592	5.25451	35.6533

Notes: 1. \* denotes dummy variable. 2. The sample firms' panel data runs for five years period, from years 2008 to 2012. N= 76 firms. No. of panel data observations for five years = 380. 3. DPR = Dividend payout ratio; OC = Ownership Concentration; DO = Director Ownership; BS = Board size; IND = Board independence; CEODUAL = CEO duality; LV = Leverage; LOG\_MCAP = Log market capitalization; ROE = Return on equity.

## 4.2 Scale Measurement

### 4.2.1 Poolability Test

**Table 4.2 Result of Likelihood Ratio Test**

<b>Models</b>	<b>Cross-Section Chi Square</b>	<b>Decision</b>
Full Data Model	491.6702***	Proceed to Hausman Test
Low Director Ownership Model	334.8293***	Proceed to Hausman Test
High Director Ownership Model	78.8767***	Proceed to Hausman Test

Notes: \*\*\* significant at 1%; \*\*significant at 5%; \*significant at 10%.

The likelihood test is to investigate whether the regression model is a pooled OLS model or the fixed effect model at the first place. The full data model, low director ownership model and high director ownership's cross-section chi square value of 491.6702, 334.8293 and 78.8767 respectively are significant at 1% significance level. In other words, this thesis rejects the null hypothesis ( $H_0$ ) which represent that there is no common intercept on the entire company samples. The following action is to carry out further confirmation in selecting either fixed effect models or Random Effects Model as the best suit model for this research's data.

## 4.2.2 Hausman Test

**Table 4.3 Result of Hausman Test**

Models	Chi-Square Statistics	Decision
Full Data Model	3.8953	Random Effect Model
Low Director Ownership Model	4.5861	Random Effect Model
High Director Ownership Model	7.2173	Random Effect Model

Notes: \*\*\* significant at 1%; \*\*significant at 5%; \*significant at 10%.

Hausman Test is used to determine whether the model is either Fixed Effects Model or Random Effects Model. Based on the result Hausman Test, the full data model, lower director ownership model and high director ownership's cross-section chi square value is 3.8953, 4.5861 and 7.2173 respectively which is more than the significance level of 10%. This indicates that the model is a Random Effects Model which is consistent and efficient. Hence, this research does not reject the hypothesis  $H_0$ .



### 4.2.3 Normality Test

**Table 4.4 Result of Normality Test**

<b>Models</b>	<b>Jarque-Bera</b>	<b>Decision</b>
Full Data Model	621.3407***	Non-Normality
Low Director Ownership Model	127.2679***	Non-Normality
High Director Ownership Model	1054.964***	Non-Normality

Notes: \*\*\* significant at 1%; \*\*significant at 5%; \*significant at 10%.

Jarque-Bera is used to test the normality of the error terms. Based on the normality test's result, the full data model, lower director ownership model and high director ownership's Jarque-Bera value for the normality test are 621.3407, 127.2679 and 1054.964 respectively which are insignificant at 1% significance level. This indicates that the standard errors of these models are not normally distributed. Thus, the null hypothesis is being rejected.

However, based on the theory of Central Limit Theorem, if one research consists of the sample size that is more than 100 observations, the sample tends to be normally distributed (Gujarati & Porter, 2009). The sample size of this study consists of 380 observations which have fulfilled the assumption of Central Limit Theorem. Thus, this model is normally distributed.

#### 4.2.4 Multicollinearity

**Table 4.5 Correlation Matrix for the Variables**

**Table 4.5.1 Full Data Model**

	<b>DPR</b>	<b>OC</b>	<b>DO</b>	<b>IND</b>	<b>BS</b>	<b>CEODUAL</b>	<b>LV</b>	<b>LOG_MCAP</b>	<b>ROE</b>
<b>DPR</b>	1								
<b>OC</b>	0.0774	1							
<b>DO</b>	0.026527	-0.360674	1						
<b>IND</b>	0.073912	0.265935	-0.4844	1					
<b>BS</b>	0.14256	-0.100894	0.04592	0.09784	1				
<b>CEODUAL</b>	-0.10066	-0.202778	0.25671	-0.2061	-0.0058	1			
<b>LV</b>	-0.07656	0.204381	-0.1067	0.1497	0.05047	-0.0716	1		
<b>LOG_MCAP</b>	0.160692	0.148934	-0.3634	0.23881	0.18402	0.10117	-0.0387	1	
<b>ROE</b>	-0.09988	0.06025	-0.0206	-0.0769	-0.0903	-0.0185	0.09592	0.105403	1

Table 4.5.2 Low Director Ownership Model

	DPR	OC	IND	BS	CEODUAL	LV	LOG_MCAP	ROE
DPR	1							
OC	0.117049	1						
IND	0.189279	0.224559	1					
BS	0.145494	-0.20597	0.236789	1				
CEODUAL	-0.16924	-0.26773	-0.23608	-0.10215	1			
LV	-0.11882	0.200321	0.128729	-0.01579	-0.114317	1		
LOG_MCAP	0.277828	0.020716	0.157459	0.199055	0.12035	-0.15354	1	
ROE	-0.11065	0.015536	-0.12518	-0.07696	-0.045572	0.105694	0.114017	1

Table 4.5.3 High Director Ownership Model

	DPR	OC	IND	BS	CEODUAL	LV	LOG_MCAP	ROE
DPR	1							
OC	-0.01422	1						
IND	-0.27614	-0.21556	1					
BS	0.096096	0.163186	-0.46826	1				
CEODUAL	-0.00141	0.067101	0.09662	0.110715	1			
LV	0.158337	0.059041	0.084399	0.387469	0.161194	1		
LOG_MCAP	-0.02337	0.195666	0.120429	0.151723	0.251755	0.34474	1	
ROE	-0.03205	0.271501	0.056611	-0.23951	0.15673	-0.13384	0.02829	1

This study use pair-wise test correlation coefficient to detect the multicollinearity problem. From the result of the multicollinearity test, the highest correlation coefficient is the pairing between DO and IND, while the lowest pairing is between BS and CEODUAL which are 48.44% and 0.58% respectively. This result indicates that the full data model does not have serious multicollinearity problem as the highest of 48.44% does not exceed 80%. Moreover, both partial models are too free from serious multicollinearity problem as the results shown are abide to the rules stated previously - correlation coefficient does not exceed 80%.

#### **4.2.5 Autocorrelation**

**Table 4.6 Result of Autocorrelation**

<b>Models</b>	<b>Durbin-Watson</b>	<b>First order Durbin-Watson</b>	<b>Decision</b>
Full Data Model	1.3943	1.6692*	No Autocorrelation
Low Director Ownership Model	1.5292*	-	No Autocorrelation
High Director Ownership Model	2.0887*	-	No Autocorrelation

Notes: Decision making basis\*

The autocorrelation is to test the relationship of the error term in the model and to know whether the error term is constant. Based on the result of Durbin-Watson (DW) test, the DW value of 1.3943 indicates that there is tendency of negative autocorrelation problem in the full data model. However, this result fall on the inconclusive area; thus, the thesis has proceeded with the first order autocorrelation test. The first order Durbin-Watson value obtained is 1.6692. In short, the full data model, lower director ownership model and high director ownership's are free from the autocorrelation problem as the 1.6692, 1.5292 and 2.0887 are falls within the range of value of 1.50 to 2.50 as according to Aga and

Safakli (2007) and Vogt and Johnson (2011) which indicates no autocorrelation problem exist.

## 4.3 Inferential Analysis

### 4.3.1 R-Squares

Table 4.7:  $R^2$  Coefficient

Model	R	$R^2$
Full Data Model	0.1875	0.0352
Low Director Ownership Model	0.3345	0.1119
High Director Ownership Model	0.2661	0.0708

Based on the Table 4.7 above, R is used to measure the degree of correlation between the dependent variable – dividend payout ratio; and independent variables – ownership concentration, director ownership, board independence, board size, CEO duality, leverage, firm size and firm performance; which is known as the correlation coefficient. Its value ranges between -1 and 1, where -1 indicates that a specific independent variable has a strong negative relationship with the dependent variable; while having a strong positive relationship if it has a coefficient of 1. Table above shows that full model, low director ownership model and high director ownership model with R value of 0.1875, 0.3345 and 0.2661 respectively shows that there is a low correlation between the dependent variable and the independent variables.

$R^2$  is later use to measure the degree of variation in the dependent variable can be explained by the dependent variable. It ranges between 1% to 100%, the lower the  $R^2$  of a model indicates that variation in dependent variable is less likely due to changes in the independent variable vice versa. However, if  $R^2$  equals to zero, it means that none of the variation in dependent variable can be explained with the variation in independent variable. The full data model with  $R^2$  estimate value of 0.0352 indicating that only 3.52% of variation in dependent variable can be explain by variation in ownership concentration, director ownership, independency, board size, CEO duality, market capitalization , leverage, and the return on equity.

For low director ownership model with  $R^2$  estimate value of 0.1119 indicating that only 11.19% of variation in dependent variable can be explain by variation in ownership concentration, director ownership, independency, board size, CEO duality, market capitalization, leverage, and the return on equity. Following with the high director ownership model with  $R^2$  estimate value of 0.0708 indicating that only 7.08% of variation in dependent variable can be explain by variation in ownership concentration, director ownership, independency, board size, CEO duality, market capitalization, leverage, and the return on equity.

### **4.3.2 Empirical Result**

#### **4.3.2.1 Full Data Model**

Table 4.8 below reports the regression results using panel random effect estimation incorporating types of ownership structure and board governance on dividend payout ratio.

Referring to Table 4.8, the ownership concentration (OC) estimated coefficient of 1.3789 appears to be positive on dividend payout policy but the result is insignificant. This shows that companies from the FBMT 100 Index with concentration of ownership on the hand of large shareholders do not have power in influencing the company's dividend payout policy. Hence, hypothesis  $H_1$  is being rejected.

Furthermore, the director ownership (DO) shows significant positive relationship towards dividend payout ratio at 5% confidence level; with coefficient 0.1153 can be explained that 1% increase in the director ownership the company's dividend payout will increase by 0.1153%. This shows that whoever holding a director position in companies from the FBMT 100 Index and owning the company common shares where he or she is serving with a directorship are in a better position to influence the company in paying out more dividends. Thus, this research rejects the hypothesis  $H_2$ .

Moreover, for board governance variables; board independence (IND) shows positive relationship with dividend payout ratio. Yet, the result shows an insignificant relationship with coefficient of 1.5170. This shows that existence of independent directors on the board of FBMT 100 Index's firms have no influence on the firm's dividend payout ratio. Therefore, hypothesis  $H_3$  is being rejected.

Besides, board size (BS) shows an insignificant positive relationship with dividend payout ratio with coefficient of 0.6003. This implies that regardless of the company's board size, it appears to have no influence on the firm's dividend payout ratio. In short, the result of board independence and board size indicates that the directors fail to perform its fiduciary duties in protecting the minority shareholders wealth. Hence, hypothesis  $H_4$  is being rejected.

For CEO duality (CEODUAL), with coefficient of -8.4678 shows an insignificant negative relationship with dividend policy. This indicates that the company CEO playing as well the company Chairman does not have influence on the company's dividend payout ratio. As a result, this thesis rejects the hypothesis  $H_5$ .

Moving on to discuss the control variables, firm's leverage level (LV) has a negative relationship with dividend payout ratio and appear to be insignificant with -0.4250. Firm size (LOG\_MCAP) appears to be significant at 1% confidence level with coefficient 7.7173 and have a positive relationship with dividend payout ratio. This indicates that companies with a larger market capitalization are willing to distribute more dividends to shareholders. Likewise, firm performance (ROE) too shows a significant relationship with dividend payout ratio with coefficient value -0.1893 which reveal a negative relationship between firm performance and dividend payout ratio. The negative relationship signifies firms with high profit margin are unwilling to distribute more dividends to shareholders and might retain the cash earned for future expansion or for the benefits of majority shareholders.



**Table 4.8 Regression results for REM estimation (dependent variable = DPR)**

Independent Variables	Dependent Variable: Dividend Payout Ratio (DPR)
	Coefficient
Constant	-39.7744*** (11.89345)
<b>Ownership Structure:</b>	
OC	1.378877 (5.994773)
DO	0.115276** (0.050184)
<b>Board Governance:</b>	
IND	1.516967 (1.363791)
BS	0.600275 (1.040517)
CEODUAL	-8.467763 (7.429228)
<b>Control Variables:</b>	
LV	-0.42497 (0.370798)
LOG_MCAP	7.717302*** (1.899811)
ROE	-0.189278** (0.091861)
<b>R-squared</b>	0.03516
<b>Adjusted R-squared</b>	0.011483
<b>F-statistic</b>	1.484972
<b>Poolability-statistic</b>	491.67018***
<b>Hausman-statistic</b>	3.89528
<b>Durbin-Watson stat</b>	1.394266

Notes: 1. The reported results are adjusted for White's heteroscedasticity consistent covariance estimator (White, 1980) to correct for heteroscedasticity; 2. The asterisks \*\*\*, \*\*, and \* denotes significant at 1 per cent ( $p < 0.01$ ), 5 per cent ( $p < 0.05$ ), and 10 per cent ( $p < 0.1$ ) confidence levels, respectively; 3. Figures in parentheses are standard errors; 4. The sample firms panel data runs for five years period, from years 2008 to 2012. N= 76 firms. No. of panel data observations for five years = 380. 5. DPR = Dividend payout ratio; OC = Ownership Concentration; DO = Director Ownership; BS = Board size; IND = Board independence; CEODUAL = CEO duality; LV = Leverage; LOG\_MCAP = Log market capitalization; ROE = Return on equity.

#### 4.3.2.2 Partial Model

Table 4.9 below reports the regression results using panel random effect estimation incorporating types of ownership structure and board governance on dividend payout ratio in two diverse contexts – low director ownership and high director ownership.

Referring to Table 4.9, the ownership concentration (OC) shows insignificant positive relationship towards dividend payout ratio with estimated coefficient of 3.0413 for company with low director ownership. In contrast, ownership concentration plays a significant role with negative influence towards the company payout ratio at 1% confidence levels; with coefficient value of -34.1781. This shows that companies from the FBM100 Index with concentration of ownership on the hand of large shareholders do have power in influencing the company's dividend payout policy when director ownership is above 30% of the company shareholdings; as Malaysian firms are very closely held and mostly are family controlled (Claessens, et al, 2000) which the large shareholders are expected to sit on the board and playing an influential role in affecting board dividend payout decision. Thus, hypothesis  $H_1$  is being rejected

Moving to the board governance variable - board independence (IND), this variable shows a positive relationship with dividend payout ratio. Yet, the result shows an insignificant relationship with coefficient of 0.8886 when low director ownership appear within a firm. Contrarily, board independence has significant negative relationship with the dividend payout ratio at 1% confidence level; showing a coefficient of -8.8574 when director ownership is above 30% of the company total shareholdings. This shows that existence of independent directors in top 100 market capitalization Malaysian firms fail to perform its fiduciary duties in protecting the minority shareholders' interest. Therefore, hypothesis  $H_3$  is being rejected.

Moreover, board size (BS) appears to be insignificant in both high and low director ownership context. This board size does not influence a company dividend payout decision. Although, the top 100 market capitalization Malaysian firms meet the preferable board size as suggested Lipton and Lorsch (1992) but fail to achieve efficient board performance in dividend payout decision making. In short, hypothesis  $H_4$  is being rejected.

For CEO duality (CEODUAL), with coefficient of -6.0123 shows a significant negative relationship with dividend payout policy at 1% confidence level in low director ownership context. This indicates that the company CEO or managing director is being installed as the company Chairman has strong influence on the company's board decision making in dividend matters when director ownership is below 30%. Interestingly, CEO duality shows an insignificant positive relationship with dividend payout ratio with coefficient of 4.1736 when director ownership within a firm is high. As a result, this thesis accepts the hypothesis  $H_5$  in low director ownership context but reject it in high director ownership context.

Additionally, firm's leverage level (LV) appears to be insignificant in both models. While, firm size (LOG\_MCAP) has a significant positive relationship with dividend payout ratio at confidence level of 1% and has coefficient of 13.5315 in low director ownership context. This indicates that companies with a larger market capitalization and low director ownership are willing to distribute more dividends to shareholders. Likewise, firm size has a positive relationship in high director ownership context but the result appears to be insignificant.

Lastly, firm performance (ROE) has a significant negative influence on dividend payout ratio at confidence level of 5% with coefficient value -0.0328 when director ownership is low. This indicates that in low director ownership context, directors in the firms with high profit margin are unwilling to distribute the profits to shareholders as dividends and might retain the cash earned for future expansion

or insiders' benefits. However, dividend payout ratio and firm performance shows an insignificant negative relationship in high director ownership context.

**Table 4.9 Regression results for REM estimation (dependent variable = DPR)**

Independent Variables	Dependent Variable: Dividend Payout Ratio (DPR)	
	Low Director Ownership	High Director Ownership
	Model 1	Model 2
<b>Constant</b>	-88.86881*** (16.12761)	36.03183* (20.48851)
<b>Ownership Structure:</b> <b>OC</b>	3.0413 (6.731203)	-34.17812*** (12.26464)
<b>Board Governance:</b> <b>IND</b>	0.888616 (0.807328)	-8.857396*** (2.559651)
<b>BS</b>	1.572685 (0.963767)	-1.641659 (2.165136)
<b>CEODUAL</b>	-6.012322*** (1.344624)	4.173597 (4.853822)
<b>Control Variables:</b> <b>LV</b>	-0.34685 (0.450242)	2.346944 (4.138647)
<b>LOG_MCAP</b>	13.53153*** (2.944397)	1.587964 (1.306344)
<b>ROE</b>	-0.03283** (0.015964)	-0.236135 (0.239711)
<b>R-squared</b>	0.111873	0.070824
<b>Adjusted R-squared</b>	0.083614	0.008879
<b>F-statistic</b>	3.958895	1.143332
<b>Poolability-statistic</b>	334.829267***	78.876705***
<b>Hausman-statistic</b>	4.586123	7.217285
<b>Durbin-Watson stat</b>	1.529164	2.088746

Notes: 1. The reported results are adjusted for White's heteroscedasticity consistent covariance estimator (White 1980) to correct for heteroscedasticity; 2. The asterisks \*\*\*, \*\*, and \* denotes significant at 1 per cent (p<0.01), 5 per cent (p<0.05), and 10 per cent (p<0.1) confidence levels, respectively; 3. Figures in parentheses are standard errors; 4. The sample firms panel data runs for five years period, from years 2008 to 2012. N= 76 firms. No. of panel data observations for five years = 380. 5. DPR = Dividend payout ratio; OC = Ownership Concentration; DO = Director Ownership; BS = Board size; IND = Board independence; CEODUAL = CEO duality; LV = Leverage; LOG\_MCAP = Log market capitalization; ROE = Return on equity.

## **4.4 Conclusion**

This chapter outlines the descriptive analysis on variables (ownership structure; board governance; and control variables- leverage, firm performance and firm size); the scale of measurement – listed out the diagnosis checking on the data accuracy and relevancy; and inferential analysis presents the empirical result from the panel data models –full, high director ownership and low director ownership. In the following chapter, this research will discuss about findings, implication of study, limitation and recommendations for future research. Chapter 5 will outline in this sequence with the research summary and the major findings as the opening. Implications of the study and limitations will further the chapter discussion. Lastly, recommendations for future researchers will be suggested.

## **CHAPTER 5: DISCUSSION, CONCLUSION AND IMPLICATIONS**

### **5.0 Introduction**

This chapter outlines the conclusion of this research's objectives and questions that laid out in chapter 1. The main objective of this study is to study on the corporate governance factors in influencing firms' dividend payout ratio. Firstly, the summary of this research major finding that listed in chapter 4 is shown in section 5.1 and further by discussion on the major findings with points of view from previous researchers and this research analysis. Furthermore, practical policy implications in the following section will act as recommendations to policy makers, practitioners, investors and academicians. Moreover, limitations on this research will be presented along with the recommendations for future researchers in refining this study. Lastly, the conclusion for chapter 5 will stand as an ending for this thesis.

## 5.1 Summary of Statistical Analyses

Table 5.1 Summary of Major Findings

Hypothesis of the Study	Decision		
	Full*	Low**	High***
$H_1$ : There is a positive relationship between dividend payout ratio and ownership concentration.	Reject	Reject	Reject
$H_2$ : There is a negative relationship between dividend payout ratio and director ownership.	Reject	-	-
$H_3$ : There is a positive relationship between dividend payout ratio and board independence	Reject	Reject	Reject
$H_4$ : There is a positive relationship between dividend payout ratio and board size.	Reject	Reject	Reject
$H_5$ : There is a negative relationship between dividend payout ratio and CEO duality.	Reject	Do not Reject	Reject

Notes: 1.\* Full data model; \*\* Low director ownership model; \*\*\* High director ownership model.

Table 5.1: Outlines this research's major findings for the full data model; and partial model – low director ownership and high director ownership models.



## 5.2 Discussions of Major Findings

### 5.2.1 Dividend Payout Ratio and Ownership Concentration

Referring to the regression result in Table 4.7, ownership concentration indicates an insignificant positive relationship toward firm's dividend payout ratio in low directors' ownership. This research expects that there is insufficient on alignment of interests between shareholders and directors which the company's directors pursue their own interests such as higher remunerations which is generally based on their reputation (Clarke, Conyon, and Peck, 1998). Thus, regardless of ownership concentration, directors will influence the major shareholders to pay out the dividends in order to reduce the likelihood of any misuse of funds by management which would in turn positively affect their reputations. This might effectively replaces major shareholders from being a significant factor in influencing the dividend payout. This can be explained by the directors' remuneration based on reputation overweight the return from low or even no interests in the company ownership.

Similarly to the low directors' ownership model, ownership concentration shows an insignificant positive relationship towards dividend payout ratio of FTSE Bursa Malaysia Top 100 Index's companies in the full data model. Since the low directors' ownership outweighs the high directors' ownership in number of observations, this might explains the results in full model skew toward to the result as similar in the partial model of low directors' ownership.

Conversely, ownership concentration presents a significant negative impact towards firm's dividend payout ratio when director ownership is high. This result is consistent with Harada and Nguyen (2011), Kozul and Orsag (2012) and Khan (2006) researches. Shleifer and Vishny (1997) suggest that large shareholders

prefer to produce private benefits of control which are not enjoyed by minority shareholders. Therefore, they expropriate the minority shareholders through tunneling - transferring the assets and profits out of the firm such as self-dealing transactions in benefiting themselves rather than dividend payout (Johnson, La Porta, Lopez-de-Silanes and Shleifer, 2000). Thus, this study suspects that an expropriation on minority shareholders by largest shareholders might occur in FTSE Bursa Malaysia Top 100 Index's companies. This can be done by restraining the resources (paying fewer dividends) to be extracted out from the firm as the board of directors' decision.

This significant negative result between ownership concentration and dividend payout ratio when the directors' ownership is high is not in line with the agency theory as higher directors' ownership should align the interest between managers and shareholders. Thus, lower dividend payout might leads to the further misuse of fund by the management and the directors in the company.

### **5.2.2 Dividend Payout Ratio and Director Ownership**

This research's result on director ownership and dividend payout ratio shows a significant positive relationship which is contradict with Jensen, et al. (1992), Eckbo and Verma (1994), Ullah, et al. (2012). As director ownership increase, agency conflict between shareholders and director is expected to arise due to expropriation which is similar to the case of majority shareholders-minority shareholders conflict. Thus, this result suggest that director-owner with increasing director shareholdings view paying out dividends as a way to compensate the shareholders for agency costs arise from their entrenchment with large shareholdings (Farinha, 2003). This rationale is further supported by Fenn and Liang (2001) research stated that firms with

managerial ownership will tend to payout more dividends when there is a potential severe agency problem exists in the firm. In short, director-owner payout more dividend as to mitigate potential agency problem arises between themselves and the minority shareholders.

Alternatively, this result suggest that when a company from the FTSE Bursa Malaysia Top 100 Index tend to payout more dividend to the shareholders, this will deliver a signal to the public that this company might be facing agency problem arises within its organization. Thus, adopting dividend as a corporate governance tool to compensate the shareholders for the agency costs incurred. In short, this research indicates that the relationship between dividend payout ratio and director Ownership is in line with the agency theory and the dividend signaling theory mentioned in chapter 2.

### **5.2.3 Dividend Payout Ratio and Board Independence**

Referring to the regression result in Table 4.7, board independence shows an insignificant positive relationship towards dividend payout ratio of FTSE Bursa Malaysia Top 100 Index's companies. This result is on par with the study conducted by Abdelsalam, et al. (2008), Subramaniam and Susela (2011) and Mansourinia, et al. (2013). Based on the result, this research suspects that there might have the existence of the 'overboard' issue<sup>3</sup> or busy independent directors

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<sup>3</sup> This issue has been raised by Datuk Shireen Muhiudeen on Malaysia firms in local English newspaper, The Star, April 2013.

who hold multiple directorships in different companies on the board as suggested by Fich and Shivdasani (2006) and Cashman, et al. (2012). These authors found busy directors appear to be ineffective in large firm of S&P 500 and Forbes 500 companies respectively which is consistent with this research's sample firms with top 100 market capitalization companies. In short, occurrence of busy or 'over-boarded' directors has led to overstretched directors to perform their monitoring roles ineffectively on any board they sit which is detrimental to the corporate governance quality; and the appointment of independent directors might be merely an obligation for the firms to fulfill the Bursa Malaysia Listing Requirements and MCGG (2012) recommendations only.

Moving to the extended model with low director ownership, the insignificant relationship between board independence and dividend payout ratio indicates a likewise result as the full data model which busy directors is also suspected as the rationale behind of this occurrence. Conversely, board independence presents a significant negative impact towards firm's dividend payout ratio when director ownership is high. This is because independent directors are likely to be influenced by owner directors - who might know them before their appointment, in paying out fewer dividends (Abdullah & Nasir, 2004), to align with owner directors' interest which is detrimental towards minority shareholder interest. To sum things up, the blurred lines of true independent directors triggered a negative relationship between board independence and dividend payout ratio which is contradict to Fama and Jensen (1983b) and Sharma (2011) results.

Lastly, independent director in a top 100 market capitalization's firm with high director ownership making an unfavorable dividend payout decision or paying out less dividends signals that the director-owner might cast their shadow in influencing the independent director's dividend payout decision. This action will lead to the rise of agency issue between the manager (directors) and the principal (shareholders). Therefore, this research shows a consistent outcome on dividend

payout ratio and board independence with the dividend signaling theory but inconsistent with the agency theory.

#### **5.2.4 Dividend Payout Ratio and Board Size**

Through this research, board size is insignificant when deciding dividend policy. This indicates that board size has no impact on the firm's dividend payout ratio. This result is consistent with Abdelsalam, et al. (2008) Subramaniam & Susela (2011) and Arshad, et al. (2013) results. Therefore, this research expects that the board has given up their control to the corporate managers who may later benefit themselves. This implies that the board has neglected its responsibility to the company's stakeholder (Abidin, et al, 2009). This might mean that the board of directors has given their power over to the managers. Thus, making the board size to become irrelevant and the managers become the one who decide on the company actions such as the dividend payout decision.

When a company inside Malaysia's Top 100 Index's companies has a low director ownership, it could be possible that the firm's managers have shares in the company and are paid in dividend; this may then result in an agency problem as the managers might manipulate the dividend policy to benefit themselves resulting in an increase in dividend payout. Thus, this explains that manager entrenchment has caused the board size to have insignificant positive relationship between dividend payout during low director ownership.

On the other hand, firm with a high director ownership shows an insignificant negative relationship between board size and dividend payout. Harada and

Nguyen (2011) indicate that when directors own large portions of the company via family holding or holding company, they have the power to expropriate the minority shareholders. The size of the board becomes irrelevant as the one who owns larger portion of the firm share at last dictates the firm dividend policy. Thus, this further proves that expropriation on minority shareholders by largest shareholders might occur in FTSE Bursa Malaysia Top 100 Index's companies. Lastly, board size failure in affecting the company's dividend pay-out indicates that there might be serious agency problem arises between the shareholders and the manager which is not in line with the agency theory and the dividend signaling theory.

### **5.2.5 Dividend Payout Ratio and CEO Duality**

CEO duality shows an insignificant negative relationship toward firm's dividend payout ratio in the full model. This result might be due to the effective corporate governance mechanism which reduces the influence of lack of supervision role caused by CEO duality.

An insignificant positive result is also generated under the extended model with high directors' ownership. This study suspects a similar rationale as full model which is the effective corporate governance mechanism-directors' with high ownership in the company can acts as a good monitoring system which moderates the potential biasness caused by CEO duality (Kim, Hussam, Kim and Lee, 2008).

Conversely, the extended model with low directors' ownership shows a significant negative relationship with dividends payout ratio which is consistent with Asamoah (2011), Chen, Lin and Kim (2011) and Alias, et al. (2012) studies. This might indicate that supervision role of the board is reduced and there is this

possibility that harm to the rights of shareholders and interested parties by restraining the resources to be extracted out of the firm (Mansourinia, et al, 2013).

The significant result suggests that the potential conflict of interest arises when the dual position of the CEO and chairperson is holding by one person. As different role requires by each of these two positions, the lack of independency in the decision making process might lead to a harmful decision towards the investors. Thus, this outcome is not in line with the agency theory and dividend signaling theory.

### **5.3 Implication of the Study**

Practically, this research provides an insight on corporate governance practices in influencing dividend payout ratio for policy makers and regulators, Malaysia firms, investors and academicians. Firm's ownership structure and board structure act as key variables in influencing dividend payout ratio.

Firstly, this research provides guidelines for policy makers and regulators to set better rules or revise their existing regulations. In view of the fact that when director ownership is high, independent directors' existence on the board of top 100 market capitalization Malaysian firms fails to perform its fiduciary duties in protecting the minority shareholders' interest. Existence of high director ownership in the company along with increasing of board independence will lead to a decrease in company's dividend policy payout. Hence, policy maker such as Malaysian Government, Securities Commission of Malaysia (SC) and Companies Commission of Malaysia (CCM) should take this issue seriously to reassess and revise current policy on board of directors' independence, roles and responsibilities. Policy makers should emphasize on implementing stringent policies in overcoming this issue especially for large market capitalization

Malaysian companies. Such measure will build up a more reliable and effective corporate governance's legislation to restrain opportunistic behavior by Malaysian firms in exploiting shareholders' interest. Thus, improved corporate governance in Malaysia will ultimately create a favorable investment environment for investors especially the foreign one to invest in.

Furthermore, firm performances which turn out to be significant but negatively related to dividend payout ratio for Malaysian large capitalization firms. Increase in firm performance leads to drop in dividend payout. They tend to invest free cash flow into projects which will provide them to expose to greater growth opportunities (Ardestani, et al, 2013). However, large market capitalization firms retaining good profit margin will also fetch a negative perception to investors which expropriation on shareholder's wealth might happening within these companies. Thus, this will allow Minority Shareholder Watchdog Group (MSWG) as a custodian to better perform its monitoring role in overseeing Malaysian large capitalization firms' corporate governance practices as to instill discipline of good governance into Malaysian market by intervening into this issue.

Besides, this study also gives Malaysian firms have better pictures on how the director ownership influences company dividend policy via this research's outcomes. It was proven that director ownership has power in influencing firm's dividend payout policy. In Malaysia, firms adopt dividend policy as one of the mechanisms to diminish the agency cost arises from conflict between manager (directors) and principal (shareholders). This occurrence is due to weak alignment of interest between manager and shareholders. Hence, increase in director ownership will lead firms to payout more dividend as monitoring purpose. This event signals Malaysian public listed corporations that increase in director ownership will need them to compensate shareholders with high dividend payout for agency costs arises from entrenchment by large director shareholdings. Hence,



this result serve as a guideline for Malaysian companies in monitoring their directors and mitigating agency issue arises within the firm.

Additionally, large market capitalization Malaysian companies with ownership concentrated on the hand of large shareholders do have power in influencing the company's dividend payout policy when high director ownership in firm. According to Claessens, et al. (2000), Malaysian firms are very closely held and mostly are family controlled. Therefore, large shareholders are expected to sit on the board and playing an influential role in affecting the board dividend payout decision. This research suspects that large shareholders prefer to produce private benefits of control which are not enjoyed by minority shareholders. Therefore, Malaysian firms should revise their corporate governance practices particularly on this aspect to best serve the shareholders' interest especially the minority ones in order to attract investors to invest in.

On the other hand, this thesis discovered that firm size is playing a significant role in influencing firm's dividend payout ratio. When the Malaysia firm size increases, the dividend payout for shareholders is higher. The reason might be companies are more focus towards in using external funds to finance their positive NPV investment opportunities rather rely on internal financing. Thus, company has more funds can be distribute out as dividend to shareholders. Therefore, investors who are emphasizing on current income should adopt market capitalization as criteria in equity investment among FBMT 100's firms; which might deliver higher dividends and add value to their portfolio.

Lastly, academicians might have clear picture on the nexus between Malaysian firms (FBMT 100) ownership structure and board structure in influencing the firms' dividend payout. Thus, they may put further effort into this research to contribute more details about Malaysian firms' dividend policy.

## 5.4 Limitations of the Study

To the best extend of the study conducted in this research, there are several limitations exist in this thesis. This research adopted the EViews 6 software for econometrics diagnostic checking which the autocorrelation problem can only be tested by the first order or the lagged one panel data. In addition, the Durbin-Watson test is also the only autocorrelation test that can be conducted via EViews 6 for this research.

Besides, this research's has excluded the Real Estate Invest Trusts (REITs) and banking sector companies from its observations due to the difference regulations applied in these two sectors with the other sectors in FTSE Bursa Malaysia Top 100 Index. However, these excluded companies may contribute a significant effect to the FTSE Bursa Malaysia Top 100 Index's companies on dividend payout study.

Besides, this research adopted board size as one of the independent variable for the dividend payout. However, this thesis uses the board size sample as a whole without narrowing down the differential of the board size composition. Based on Farrell and Hersch (2005), women in the board will tend to lead the firm towards better performance, which indicates that women play an important role in influencing the board towards better decision making.

## 5.5 Recommendations for Future Research

EViews 6 is the main software this thesis employed to conduct the econometric test such as diagnostic checking. In order to have a robust result, future researchers are recommended to re-run the related study by using other statistic

software. For instance, researchers may conduct the autocorrelation diagnostic checking via the Maximum Likelihood (LM) test in STATA to test and detect the autocorrelation problems. A double confirmation or robustness check will enhance the model's outcome and contributes to future study on dividend payout.

This research adopts FTSE Bursa Malaysia Top 100 Index's companies that paying out dividends as the sample observations. Thus, future researches may study on the other index group in the Malaysia public listed equity market such as FTSE Bursa Malaysia Small Cap Index -this index covers small market capitalization firms. This is because there do have small market capitalization's companies such as Hua Yang Berhad, Hektar REIT and OSK Property Holdings Berhad that are paying out a good stream of dividends to the shareholders.

Furthermore, this research recommends future researchers to research on the dividend payout behavior in different Malaysian industry sectors. This is because there are companies among these sectors consistently distributing out a stable stream of dividends to the shareholders such as Real Estate Investment Trust (REITs) paying out an average of 127.1% dividends, consumer sector paying out an average of 68.3% dividends, and construction sector paying out an average of 51.5% dividends to their shareholders between the year 2004 to 2008 (MSWG, 2010).

Besides, this thesis recommends future researchers to make a cross-border study by comparing the dividend payout behavior between two nations. For example, combine study on the public listed companies from Malaysia and the United States dividend paying behaviors. This enables future study to have a better insight on whether geographical factors will affect the dividend payout to be different.

Besides, future researchers may specifically focus on the study of financial sectors and REITs as this research has excluded these two special groups from the samples due to different rules and regulations like Financial Services Act 2013 and Guidelines on Real Estate Investment Trusts (2011) imposed by Bank Negara Malaysia and SC respectively towards these sectors' firms as compared to the ordinary listed companies. In addition, their financial reporting standard and rules is also different from normal conventional businesses. Thus, future researchers are suggested to study on these two specific groups of businesses' dividend payout behavior.

Apart from that, the financial crisis may convey impacts towards the dividend payout behaviors which are not under this research's scope of study. Therefore, future researchers may investigate the structural changes before and after the crisis on the listed company dividend payout policy by including the financial crisis variables into their statistical model.

Lastly, independent director's characteristics such as director's tenure and busy directors do play as important determinants in influencing the firm's dividend payout policy (Sharma, 2011). However, this research did not covered independent directors characteristics as it is beyond the study scope of this research. In short, future researchers are encourage to further study on the independent director's characteristics instead of limiting their study onto board independence only.

## **5.6 Conclusion**

Throughout this research, this study has proved that corporate governance variables – ownership structure and board governance, playing important roles in influencing the FTSE Bursa Malaysia Top 100 Index's companies' dividend

payout ratio in low director ownership and high director ownership context as well the full model. Few limitations of this study are spotted; and recommendations for future researchers are being suggested. As the conclusion, this research's objectives had been reasonably achieved as the relationship between corporate governance factors and dividend payout ratio are managed to examine.

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## APPENDICES

### Appendix 1: FTSE Bursa Malaysia Top 100 Index

	Local Market Code	Constituent Name	Price	Shares in Issue	Weighting	Mkt Cap (Malaysia Ringgit) before Investability Weight	Mkt Cap (Malaysia Ringgit) after Investability Weight	% Wt FTSE Bursa Malaysia Top 100 Index
1	1066	RHB Capital	8.59	2.50E+09	28.00%	21309.7566	5966.73186	0.93%
2	3786	Malaysia Airline System	0.31	1.70E+10	30.00%	5180.07464	1554.02239	0.24%
3	4162	British American Tobacco (Malaysia)	60.6	2.90E+08	50.00%	17303.118	8651.559	1.34%
4	5112	TH Plantations	1.84	8.70E+08	29.00%	1608.12167	466.35529	0.07%
5	5113	Rimbunana Sawit	0.82	1.30E+09	33.00%	1072.97405	354.08144	0.05%
6	5138	Hap Seng Plantations Holdings	2.71	8.00E+08	30.00%	2168	650.4	0.10%
7	5139	AEON Credit Service (M) Berhad	16.86	1.40E+08	38.00%	2427.84	922.5792	0.14%

**The Influence of Ownership Structure and Board Structure on Malaysia Companies Dividend Payout Rate**

<b>8</b>	6888	Axiata Group Bhd	6.82	8.40E+09	59.00%	57595.9534	33981.6125	5.27%
<b>9</b>	5168	Hartalega Holdings Bhd	6.34	7.30E+08	44.00%	4608.77424	2027.86067	0.31%
<b>10</b>	5141	Dayang Enterprise Holdings Bhd	4.81	5.50E+08	34.00%	2645.5	899.47	0.14%
<b>11</b>	5148	UEM Sunrise	3.07	4.30E+09	35.00%	13271.7789	4645.1226	0.72%
<b>12</b>	6012	Maxis Bhd	6.85	7.50E+09	35.00%	51375	17981.25	2.79%
<b>13</b>	5158	TA Global Bhd	0.305	4.80E+09	21.00%	1456.26207	305.81504	0.05%
<b>14</b>	5161	JCY International Bhd	0.705	2.00E+09	26.00%	1441.6263	374.82284	0.06%
<b>15</b>	5180	CapitaMalls Malaysia Trust	1.64	1.80E+09	52.00%	2899.58265	1507.78298	0.23%
<b>16</b>	5186	Malaysia Marine and Heavy Engineering Holdings Bhd	3.88	1.60E+09	25.00%	6208	1552	0.24%
<b>17</b>	5183	PETRONAS Chemicals Group Bhd	6.61	8.00E+09	36.00%	52880	19036.8	2.96%
<b>18</b>	5200	UOA Development	2.31	1.30E+09	33.00%	2935.53645	968.72703	0.15%
<b>19</b>	5210	Bumi Armada	3.99	2.90E+09	46.00%	11684.5618	5374.89842	0.83%



**The Influence of Ownership Structure and Board Structure on Malaysia Companies Dividend Payout Rate**

<b>20</b>	5211	Sunway	3.23	1.70E+09	34.00%	5566.39863	1892.57553	0.29%
<b>21</b>	5212	Pavilion Real Estate Investment Trust	1.43	3.00E+09	30.00%	4290	1287	0.20%
<b>22</b>	5209	Gas Malaysia	3.32	1.30E+09	26.00%	4262.88	1108.3488	0.17%
<b>23</b>	5222	Felda Global Ventures Holdings	4.53	3.60E+09	51.00%	16526.1263	8428.32441	1.31%
<b>24</b>	5225	IHH Healthcare	3.96	8.10E+09	34.00%	31906.0378	10848.0528	1.68%
<b>25</b>	5227	IGB Real Estate Investment Trust	1.32	3.40E+09	48.00%	4488	2154.24	0.33%
<b>26</b>	6399	Astro Malaysia Holdings	3.04	5.20E+09	30.00%	15799.792	4739.9376	0.74%
<b>27</b>	9679	WCT Holdings	2.49	1.10E+09	73.00%	2719.53069	1985.2574	0.31%
<b>28</b>	5218	SapuraKencana Petroleum	4.12	6.00E+09	61.00%	24687.679	15059.4842	2.34%
<b>29</b>	5131	Zhulian	3.13	4.60E+08	26.00%	1439.8	374.348	0.06%
<b>30</b>	2771	Boustead Holdings	5.26	1.00E+09	40.00%	5392.30535	2156.92214	0.33%
<b>31</b>	3182	Genting	10.06	3.70E+09	60.00%	37164.0544	22298.4326	3.46%
<b>32</b>	1597	IGB	2.45	1.50E+09	66.00%	3648.98835	2408.33231	0.37%

**The Influence of Ownership Structure and Board Structure on Malaysia Companies Dividend Payout Rate**

<b>33</b>	2445	Kuala Lumpur Kepong	21.86	1.10E+09	50.00%	23363.3996	11681.6998	1.81%
<b>34</b>	1155	Malayan Banking	10.4	8.40E+09	51.00%	87777.3035	44766.4248	6.95%
<b>35</b>	3794	Lafarge Malaysia	10.28	8.50E+08	50.00%	8734.86871	4367.43436	0.68%
<b>36</b>	2194	MMC	2.7	3.00E+09	28.00%	8221.65784	2302.0642	0.36%
<b>37</b>	3859	Magnum	3.72	1.40E+09	53.00%	5348.42499	2834.66525	0.44%
<b>38</b>	4065	PPB Group	14.46	1.20E+09	50.00%	17142.3276	8571.1638	1.33%
<b>39</b>	4197	Sime Darby Bhd	9.5	6.00E+09	52.00%	56980.8874	29630.0615	4.60%
<b>40</b>	1082	Hong Leong Financial	14.7	1.10E+09	20.00%	15475.6865	3095.1373	0.48%
<b>41</b>	1961	IOI	5.6	6.40E+09	58.00%	35915.7624	20831.1422	3.23%
<b>42</b>	3395	Berjaya Corp	0.585	4.30E+09	64.00%	2489.7318	1593.42835	0.25%
<b>43</b>	4715	Genting Malaysia BHD	4	5.90E+09	50.00%	23741.204	11870.602	1.84%
<b>44</b>	4863	Telekom Malaysia	5.39	3.60E+09	71.00%	19282.1967	13690.3596	2.13%
<b>45</b>	5347	Tenaga Nasional	8.65	5.60E+09	56.00%	48407.4402	27108.1665	4.21%
<b>46</b>	3336	IJM	5.73	1.40E+09	88.00%	7872.6189	6927.90463	1.08%
<b>47</b>	1015	AMMB Holdings	7.65	3.00E+09	58.00%	23058.5141	13373.9382	2.08%

**The Influence of Ownership Structure and Board Structure on Malaysia Companies Dividend Payout Rate**

<b>48</b>	1562	Berjaya Sports Toto	4.27	1.40E+09	61.00%	5768.8981	3519.02784	0.55%
<b>49</b>	1651	Malaysian Resources	1.56	1.40E+09	58.00%	2162.238	1254.09804	0.19%
<b>50</b>	1023	CIMB Group Holdings	8.32	7.60E+09	64.00%	63363.8757	40552.8805	6.30%
<b>51</b>	3905	Mulpha International	0.415	2.40E+09	63.00%	977.70396	615.9535	0.10%
<b>52</b>	1619	DRB-Hicom	2.67	1.90E+09	45.00%	5161.74293	2322.78432	0.36%
<b>53</b>	5819	Hong Leong Bank	14.16	1.90E+09	32.00%	26849.1781	8591.73701	1.33%
<b>54</b>	4588	UMW Holdings	14.54	1.20E+09	57.00%	16898.4248	9632.10215	1.50%
<b>55</b>	4677	YTL Corp	1.65	1.10E+10	50.00%	17717.2686	8858.63428	1.38%
<b>56</b>	6033	Petronas Gas	21.04	2.00E+09	40.00%	41632.5213	16653.0085	2.59%
<b>57</b>	6742	YTL Power International	1.65	7.30E+09	45.00%	12015.2967	5406.88352	0.84%
<b>58</b>	6947	Digi.com	4.64	7.80E+09	48.00%	36076	17316.48	2.69%
<b>59</b>	5014	Malaysia Airports	6.55	1.20E+09	50.00%	7925.5	3962.75	0.62%
<b>60</b>	6866	Padiberas Nasion	3.58	4.70E+08	24.00%	1684.03737	404.16897	0.06%
<b>61</b>	5657	Parkson Holdings	3.79	1.10E+09	54.00%	4144.78285	2238.18274	0.35%

**The Influence of Ownership Structure and Board Structure on Malaysia Companies Dividend Payout Rate**

<b>62</b>	2291	Genting Plantations BHD	10.14	7.60E+08	45.00%	7694.70858	3462.61886	0.54%
<b>63</b>	7052	Padini Holdings	1.89	6.50E+08	56.00%	1235.115	691.6644	0.11%
<b>64</b>	5258	Bimb Holdings	4.02	1.10E+09	35.00%	4288.49538	1500.97338	0.23%
<b>65</b>	2836	Carlsberg Brewery Malaysia	14.78	3.10E+08	50.00%	4522.85736	2261.42868	0.35%
<b>66</b>	5012	Ta Ann Holdings	4.03	3.70E+08	46.00%	1494.42523	687.43561	0.11%
<b>67</b>	7084	QI Resources Bhd	3.37	8.30E+08	40.00%	2803.84	1121.536	0.17%
<b>68</b>	7277	Dialog Group	2.87	2.40E+09	75.00%	6905.05065	5178.78799	0.80%
<b>69</b>	7106	Supermax Corp	2.01	6.80E+08	62.00%	1362.80629	844.9399	0.13%
<b>70</b>	3026	Dutch Lady Milk Industries	46.7	6.40E+07	28.00%	2988.8	836.864	0.13%
<b>71</b>	3034	Hap Seng Consolidated	1.95	2.20E+09	27.00%	4263.39615	1151.11696	0.18%
<b>72</b>	5215	IJM Land Bhd	2.87	1.40E+09	27.00%	4087.23209	1103.55266	0.17%
<b>73</b>	5031	Time Dotcom Stk	3.9	5.70E+08	53.00%	2231.07492	1182.46971	0.18%
<b>74</b>	3417	Eastern & Orient	1.97	1.10E+09	64.00%	2230.40683	1427.46037	0.22%
<b>75</b>	5401	Tropicana	1.93	7.90E+08	65.00%	1530.65791	994.92764	0.15%
<b>76</b>	5878	KPJ Healthcare	6.68	6.50E+08	56.00%	4334.08357	2427.0868	0.38%

**The Influence of Ownership Structure and Board Structure on Malaysia Companies Dividend Payout Rate**

<b>77</b>	2003	Kulim Malaysia	3.54	1.30E+09	44.00%	4568.48058	2010.13145	0.31%
<b>78</b>	7153	Kossan Rubber	5.68	3.20E+08	50.00%	1816.08885	908.04442	0.14%
<b>79</b>	5983	MBM Resources	3.68	3.90E+08	46.00%	1425.895	655.9117	0.10%
<b>80</b>	1171	Malaysia Building Society	2.98	1.60E+09	26.00%	4863.66169	1264.55204	0.20%
<b>81</b>	2488	Alliance Financial Group	5.55	1.50E+09	71.00%	8591.9883	6100.31169	0.95%
<b>82</b>	5053	OSK Holdings	1.71	9.60E+08	65.00%	1642.85458	1067.85548	0.17%
<b>83</b>	5681	Petronas Dagangan Bhd	26.46	9.90E+08	30.00%	26286.7928	7886.03785	1.22%
<b>84</b>	4502	Media Prima	2.69	1.10E+09	100.00%	2895.5698	2895.5698	0.45%
<b>85</b>	8664	SP Setia	3.36	2.50E+09	25.00%	8261.27317	2065.31829	0.32%
<b>86</b>	9059	Tsh Resources	2.4	8.40E+08	53.00%	2018.9976	1070.06873	0.17%
<b>87</b>	2054	Tdm Berhad	0.78	1.50E+09	40.00%	1150.12404	460.04962	0.07%
<b>88</b>	4634	POS Malaysia	4.78	5.40E+08	68.00%	2565.60764	1744.6132	0.27%
<b>89</b>	5398	Gamuda	4.92	2.20E+09	89.00%	10968.6362	9762.08622	1.52%
<b>90</b>	7113	Top Glove Corp	6.11	6.10E+08	66.00%	3754.3021	2477.83939	0.38%
<b>91</b>	8583	Mah Sing Group	2.39	1.30E+09	66.00%	3216.14524	2122.65586	0.33%
<b>92</b>	3816	MISC	5.25	4.50E+09	33.00%	23434.9138	7733.52155	1.20%
<b>93</b>	1295	Public Bank BHD	16.96	3.50E+09	80.00%	59901.4622	47921.1697	7.44%
<b>94</b>	5077	Malaysian Bulk Carriers	1.66	1.00E+09	30.00%	1660	498	0.08%

**The Influence of Ownership Structure and Board Structure on Malaysia Companies Dividend Payout Rate**

<b>95</b>	5085	Mudajaya Group	2.58	5.50E+08	50.00%	1414.66044	707.33022	0.11%
<b>96</b>	47	Perisai Petroleum Teknologi	1.57	9.40E+08	56.00%	1470.95325	823.73382	0.13%
<b>97</b>	5235SS	KLCC PROP & KLCC REITS - STAPLED SC	6.51	1.80E+09	25.00%	11752.7184	2938.17959	0.46%
<b>98</b>	5090	Media Chinese International	1.15	1.70E+09	50.00%	1939.11878	969.55939	0.15%
<b>99</b>	5099	AirAsia	3.22	2.80E+09	75.00%	8879.27423	6659.45567	1.03%
<b>100</b>	1818	Bursa Malaysia	7.69	5.30E+08	65.00%	4086.46062	2656.1994	0.41%

Source: FTSE International Limited (Received on 15 July 2013 from FTSE Client Services)