# **CHAPTER 1**

# INTRODUCTION

## **1.0 Introduction**

This research intends to examine does good corporate governance practices leads to better Malaysian Public Listed Companies' performance. Chapter one consists of five sections; 1.1 background of study, 1.2 problem statement, 1.3 research objective, 1.4 research questions and 1.5 significance of study.

## **1.1 Background of Study**

The principles laid down in the Code 2007 was seen to be too general and unclear. Thus to illustrated clearly the corporate governance principles, it was inevitable to apply in the MCCG 2012. In order to be precise. Basically, the research bought to determine the general principles laid down in 2007 by matching the general principle with clearly defined principles laid down in MCCG 2012. The matching is illustrated in table 1.1 below.

Principle	MCCG 2012	Code 2007
1	Establish clear roles and responsibility	Relationship of the board to management
2	Strengthen composition	Appointment to board
3	Reinforce independence	Chairman and CEO
4	Foster Commitment	Nil
5	Uphold integrity in financial reporting	Quality information
6	Recognise and manage risks	Internal control
7	Ensure timely and high quality disclosure	Nil
8	Strengthen relationship between company and shareholders	Shareholder voting

Table 1.1: Comparisons between MCCG 2012 and Code 2007

<u>Sources:</u> Adapted from MCCG (2012). *Report on Corporate Governance, Securities Commission.* 

There were several key amendments made in the MCCG 2012, namely enhance the roles and responsibilities of the board, strengthen the number of independent director in the board, examine director independences, separation of chairman and CEO position, improves the company management framework and internal controls system, improves the standard of company financial reporting standard, and to have the better relationship between company and shareholders.

The MCCG 2012 defined corporate governance as "*The process and* structure used to direct manage the business and affairs of the company towards enhancing business prosperity and corporate accountability with the ultimate objective of realizing long-term shareholder value, whilst taking into account the interest of the stakeholders."

The Cadbury report 1992 defined corporate governance as the method of company management control the company. (as cited in Hanrahan, Ramsey & Stapledon, 2008, p. 145)"

The Enron case in US resulted in an increase of investors' awareness regarding poor corporate governance issues. In Malaysia, corporate governance has become a hot issue or topic for discussion after 1997/1998 financial crisis. Many researchers believe that poor corporate governance has contributed to the financial crisis (Yusoff & Alhaji, 2012). Poor governance practices include high debt ratio (Fraser, Zhang & Derashid, 2006), lack of transparency, accountability and disclosure in company's annual report or financial statement (Mitton, 2002) and poor governance system to protect minority shareholder interest (Claessens, Djankov, Fan & Lang, 1999).

Poor corporate governance had also destroyed investors' confidence to capital markets (Jensen & Meckling, 1976; Daily & Dalton, 1994). This was felt when the Malaysia's stock market or Kuala Lumpur Composite Index fell by 68.58% from 1031.64 in July 1997 to 324.17 in September 1998 (Hassan, 2002). Additionally, the Bank Negara Malaysia annual report also stated that country gross domestic production (GDP) reduced from 45.5% in 2007 to 28.1% in 2008 (Taghizadeh & Saremi, 2013).

Lai (2004) stated that Malaysian regulators must improve the companies' corporate governance practice in order to attract more and more new foreign investors and regain their confidence after the financial crisis 1997.

Hsiang-tsui (2005) mentioned that sound governance is a useful tool which is able to minimize the agency problem in a company. Epps and Cereola (2008) also explained that corporate governance arises because there was lack of transparency and accountability in business environment. In order to achieve sound corporate governance, the society cannot solely rely on strength of regulations. The Corporate Governance Blue Print 2011 stated that regulations, gatekeepers, shareholders and board of directors are the important parties in corporate governance ecosystem. In order to improve corporate governance practices in Malaysia, The Financial Committee on Corporate Governance has formed Minority Shareholder Watchdog Group (MSWG) to protect the minority shareholder interest and established the MCCG 2000. The MCCG 2000 focused on best practices in corporate governance and optimal internal processes to protect shareholder interest. The UK Combine Code was a major referenced in forming the MCCG 2000. The MCCG was revised twice in 2007 and 2012 respectively. The latest Corporate Governance Code in Malaysia, the MCCG 2012 is a key deliverable of the Corporate Governance Blueprint 2011 developed by Securities Commission Malaysia. 8 corporate governance best practices were laid in MCCG 2012.

According to Bursa Malaysia Listing Requirement paragraph 15.1, all Public Listed Company must comply with MCCG. However, other non-listing companies are encouraged to disclose their corporate practices based on MCCG as guidelines in annual report.

However, in accordance with MCCG (2012), "the MCCG 2012 focuses on clarifying the role of the board in providing leadership, enhancing board effectiveness through strengthening its composition and reinforcing its independence".

## **1.2 Problem Statement**

The MCCG was implemented in 2000 and was revised twice in 2007 and 2012. Malaysian Public Listed' Companies performance was expected to improve after the best practices of corporate governance code was implemented (Haniffa & Hudaib, 2006). The purpose of this research seeks investigate the impact of new rules and regulations added to the code 2007 on public listed companies' financial performance for the year 2008 to 2012. Year 2007 onwards was the years after the MCCG was revised. Hence, it is important to examine quantitatively the company performance to make sure the regulations have been done in the right way. In addition, there are

inconsistent findings on good corporate governance practice lead to better performance.

According to Haniffa and Hudaib (2006), poor corporate governance mechanisms had caused a few Malaysian Companies to collapse. In Perwaja Steel Scandal an executive director paid RM76 million to NKK Corporation without the board's approval. Regulator also found out that the company had implemented poor internal control systems and inaccurate accounting records practices (Norlia, Zam & Ibrahim, 2011).

Another corporate governance case that happened more recently where the minority shareholders in Berjaya Assets Bhd questioned why Berjaya Assets Berhad sold Berjaya Times Square below market value. The Berjaya Assets Berhad decided to sell the stake to The Johor Sultan for RM250million or RM1.67per share. According to Bursa Malaysia the net value of assets was RM1.85 per share. This transaction has caused Berjaya Assets Berhad to suffer a loss of RM149.15mil (The Edge 993, 16 Dec 2013).

In Malaysian Public Listed Companies, the normal practice is for companies' daily operations to be run by a management team and supervised by the board of directors. Shareholders are less involved in the management meeting. However, Jensen and Meckling (1976) stated that managers may seek for personal interests, to act against shareholders' interest. This could result in companies' financial performance to fall badly due to the opportunistic behaviour of managers.

CG Watch 2012 Market Rating Report stated that the overall Corporate Governance Score for Malaysia was increased from 52 points to 55 points compare between year 2007 and 2012.

#### **1.3 Research Objectives**

The primary objective of this research is to examine the relationship between corporate governance practices and Malaysian Public Listed Companies'

performance in 2008 to 2012, after the MCCG 2007 was adopted. Malaysian Public Listed Companies' performance is measured by TSR and ROA.

The secondary objectives are:

1) To study the extent to which CEO duality negatively related Malaysian Public Listed Companies' performance.

 To examine the positive effect of independent chairman on Malaysian Public Listed Companies' performance.

 To investigate the positive influences of board composition on Malaysian Public Listed Companies' performance.

4) To review whether board size is related with Malaysian Public Listed Companies' performance.

5) To examine if ownership concentration influences Malaysian Public Listed Companies' performance

6) To investigate if company leverage level influences Malaysian Public Listed Companies' performance.

## **1.4 Research Questions**

General question: Does corporate governance lead to positive performance in the Malaysian listed companies? The research questions to be answer in this project are:

1) Is CEO duality negatively related with Malaysian Public Listed Companies' performance?

2) Whether independent chairman is positively related to Malaysian Public Listed Companies' performance?

3) Is there any positive relationship between board composition and Malaysian Public Listed Companies' performance?

4) Is board size positively related with Malaysian Public Listed Companies' performance?

5) Is there any relationship between ownership concentration and Malaysian Public Listed Companies' performance?

6) Is there any relationship between company leverage level and Malaysian Public Listed Companies' performance?

# 1.5 Significance of Study

This research will be helpful to provide further of insight on the influences of corporate governance practices on Malaysian Public Listed Companies' performance due to inconsistent results found by the past studies (Chiang & Chia, 2005; Chaghadari, 2011; Hussin & Othman, 2012; Suto, 2003; Yermack, 1996).

Although many past studies (Abdullah & Nasir, 2004; Chaghadari, 2011; Hashim & Devi, 2008; Rashid, De Zoysa, Lodh & Rudkin, 2010; Hussin & Othman, 2012; Rahman, & Ali, 2006; Tam & Tan, 2007; Suto, 2003) in corporate governance practices have been conducted in Malaysian perspective but there is little studies done on investigation of the correlation between corporate governance practices and share price returns. This is because, most of the previous study used earning per share, Tobin Q, return of assets (ROA) and return of equity to measure the company performance. Hence, in this study, the company performance is measured by TSR. Share price is used because it shows the confidence level of investors in a particular company. In addition, increase in return of share price leads to shareholders wealth maximization (Ponnu, 2008).

Besides, this research will increase the level of understanding on the impact of corporate governance practices in Malaysian listed companies. Findings of this study will prove the extent to which corporate governance practices influence company performance. The results will be able to create awareness to the management and shareholders of the importance of best corporate governance practices in relation to company performance.

After financial crisis on year 1997 and 1998, Malaysian authority has formed the first corporate governance code or guidelines in year 2000. The code was revised in 2007 and 2012 respectively (MCCG, 2012). The findings of this project may prove whether the authority have done the correct way to increase investor confidence and enhance company performance by implementing good corporate governance practices.

The research also seeks to add to the growing literature on the benefits of corporate governance on company performance.

# **CHAPTER 2**

# LITERATURE REVIEW

#### 2.0 Introduction

This chapter is about the literature of the study. It was being obtained from secondary sources such as books and journals. Chapter 2 is made up of five sections. Section 2.1 presents the relevant theoretical models; Section 2.2 is review of the related literatures; Section 2.3 shows the conceptual framework; Section 2.4 shows the hypothesis development; and section 2.5 is conclusion of chapter 2.

#### 2.1 Relevant Theoretical Model

#### 2.1.1 Agency theory

Figure 2.1: Diagram of Agency Theory



Source: Developed for the research

The primary concern of agency theory is on the relationship between managers and shareholders. Agency relationship is a situation where a person (principal) delegates decision-making power to one or more than one person (agent(s)) to perform some activities on behalf of the principal. The agency problem occurs when principal and agent have different goals to achieve (Jensen & Meckling, 1976). In addition, asymmetric information and incomplete contact also contribute to agency problem between principal and agent(s).

There are 2 problems in agency relationship (Berle, & Means, 1932). The first problem is the conflict of interests and goals between principal and agent(s). Moreover there are challenges for principal in verifying actions of agent(s). The second problem is risk behaviour, where principal and agent may have different attitudes toward risk. In order to solve the problems, the principal may limit the authority delegated to agent(s). To limit the agent(s) opportunistic actions, in the monitoring process, monitoring costs such as appropriate incentives can be provided by the principal to the agent(s). Other than that, incentives may be given to the agent(s) provided that the agent(s) do not carry out any action that harms or breaks the principal's interest. The expenditure incurred in the solving of agency problem is known as agency cost (Fama & Jensen, 1983). From the corporate governance perceptive, in a principal-agent relationship, shareholders or investors are the principal and agents are directors and management team of a company.

According to Modern Corporation, separation of ownership and control (Berle & Means, 1932; Fama & Jensen, 1983) can enable shareholders (those who involved on board and individual shareholders) to monitor internally and externally that the management teams always act in the interests of shareholders rather than acting in their own personal (Walsh & Seward, 1990).

Internally, the shareholders delegate their powers to the board of directors to manage and run the business. In delegating their powers, the proportion of independent directors on board is a vital consideration to the shareholders in order to prevent the board of directors from entering into situations where conflict of interests exist which can harm the shareholders' interest. If the board of directors fails to perform their duties, shareholders have rights to re-elect them. On the other hand, board of directors can change or reward the management team based on their performance. In order to monitor the performance and decision-making of the management team, mechanisms such as audit committee, internal control committee, risk management committee and other committees which formed by a majority of independent non-executive directors play important role. The requirement to have 1/3 of independent directors on board are provided in and MCCG (2012). In addition, the importance of independent directors on board is also being emphasized in the Cadbury Report.

Besides, other than independent directors as a mechanism to protect shareholders, another important internal mechanism which recommended in the Cadbury Report and MCCG (2012) is that the position of CEO and chairman of board should be separated to prevent conflict of interests from occurring within the board.

In Malaysia, there are several external mechanisms such as Bursa Listing Requirement, Companies Act 1965, Capital Market and Services Act 2007, and other regulations set by different enforcement bodies. Stakeholders are eligible to lodge their complaints if the listed companies break the law. Furthermore, the Whistleblower Protection Act 2010 has been enforced in year 2010 to protect the 'blower' who whistleblow any irregularities in a company. Whistleblower Committee has also being set up by Bursa Malaysia to govern the Malaysian listed companies.

#### 2.1.2 Stewardship Theory

Figure 2.2: Diagram of Stewardship Theory



Source: Developed for the research

In stewardship theory, Donaldson and Davis (1991) stated that manager and his management team are believed to act in the best interest and in accordance to fiduciary duty to his principal or shareholder, and the company. Hence, stewardship theory differs from agency theory with respect to the motive company management team.

Stewardship theory argues that practising CEO duality is beneficial to the company performance because, by having the same person leading the company's management team and chairing the board of directors' meeting will help to minimize the asymmetric information, and thereby lead to better performance. Besides, Davis, Schoorman and Donaldson (1997) stated that the stewardship theory focuses on structures that improve company performance rather than emphasizing in monitor and control. In addition, there is no conflict of power between chairman and CEO. Practising CEO duality may lead to consistent and mutual goal which to be achieved between the management team and the directors on board.

In addition, Clarke (2004) explained that there is a contractive opinion hold by stewardship theory with agency theory where stewardship theory suggested that shareholders should appoint majority executive directors on board in order to push speciality and knowledge in the board. This suggestion is not supported by the MCCG 2012.

#### 2.1.3 Stakeholder Theory

#### Figure 2.3: Diagram of Stakeholder Theory



Source: Developed for the research

The role of stakeholders in corporate governance has been emphasized by previous studies (Hill & Thomas, 1992).

From the corporate governance perspective, the management of company should not only concentrate on maximizing the shareholders' wealth but also should protect the rights of other stakeholders. This is known as stakeholder theory. It is an extension of the agency theory which only includes shareholders' interest. In stakeholder theory, the interests of stakeholders other than shareholders' interests are being emphasized.

Freeman (1984) defined stakeholders as any group or individuals who can affect or who are affected by the achievement of the company's objectives. The stakeholders are a group of people who have clear exchangerelationship with the company (Friedman & Miles, 2006). In accordance to Friedman and Miles (2006), stakeholders include customers, employees, local communities, suppliers and distributers, creditors, financial institutions, competitors, government, non-governmental organizations, regulators and shareholders.

March and Simon (1958) explains that each of the stakeholders provide different important resources to a company. For an example, shareholders invest their money to company and demand for maximum return on investment; employees provide their skills and time to company and expect fair compensation and pay as return. Freeman (2004) stated that the stakeholders may take actions against the directors if they fail to perform duties of care.

Freeman (2004) stated stakeholder theory supports the implementations of corporate social responsibility. By having a sound governance, confidence of investors, creditors and financial institutions can be improved. In addition, a better credit ratings which lead to lower cost of investment capital can be achieved by the firms. As a result, firms will have better access to source of both equity and debt financing which serve as cash inflows to run the business. Therefore in this research, the leverage level variable is being examined to find out the extent to which the corporate governance mechanisms influence the company performance. This is a vital factor as in order to have enough cash flows to repay creditors' debt on time, the company debt should be minimized in order to improve company performance (Friedman & Miles, 2006).

#### 2.1.4 Resource Dependence Theory

Figure 2.4: Diagram of Resource Dependency Theory



<u>Source</u>: Developed for the research.

Pettigrew (1992) stated that Resource Dependence Theory assumes that organizations are resource-insufficient, therefore Board of Director and company's management have to acquire and sustain resources from their external environment.

In corporate governance perspective, Resources Dependence Theory focuses on the influences of director on external parties such as government, social, suppliers and other. The duties of Board of Directors are to manage external dependency (Pfeffer & Salancik, 1978), reduce environmental uncertainty (Pfeffer, 1972) and transaction costs associated with the environmental interdependency (Williamson, 1984). Thus, Resources Dependency argues that the more the directors in board, the better it is for company performance because they have high degree of resources power on the external environment.

In order to examine the validity of Resources Dependence Theory, Lawrence and Stapledon (1999) concluded that there is not significant relationship between board demographic and company share price. The Sample size was 70 Public Listed Companies in Australia. The result was confirmed by Muth and Donaldson (1998)'s study. Their samples size 145 companies and period from 1992 to 1994.

## 2.2 Related Literatures Review

#### 2.2.1 Dependent variable – TSR

The percentage of share returns is an important factor in attracting shareholders to invest in a particular company. Maximizing investment return is an ultimate objective of each and every shareholder (Jensen & Meckling, 1976). Harford, Mansi and Maxwell (2008) stated that weak corporate governance is negatively correlated with cash flows holding of a company and also negatively correlated to dividend pay-out policy to shareholders.

If there is any fraudulent activities in the company, shareholders have to face high risk of suffering their investment losses. Thus, good corporate governance is one of the best ways to assure shareholders to receive reasonable return on their investments, as stated by Sheifer and Vishny (1997). This argument is in consistent with Karpoff and Lott (1993)'s findings that a significant substantial negative relationship exists between share value and fraudulent activities. This prove that shareholders wealth will be impacted if there is any fraudulent activity in the company.

#### 2.2.2 Dependent variable - ROA

ROA is one of the popular accounting based measurements to define company performance. It has been applied in many previous company performance studies (Haslindar & Fazilah, 2011; Hussin & Othman 2012; Ramasamy, Ong & Yeung, 2005; Ponnu 2008; Bhagat & Black, 2000). ROA allows us to access how efficient and effective is the management managing company's assets to generate income and improve company performance. (Epps & Cereola, 2008). Previous corporate governance studies show that there is inconsistent relationship between board mechanism and company's ROA (Daily & Dalton, 1992; Guest, 2009). In the study conducted by Herly (2011), after investigating 100 largest listed companies in Indonesia, it was concluded that corporate governance reporting is significantly positively influencing the company's ROA. However, in Malaysia, Ponnu (2008) contradict Herly (2011)'s study by concluding that corporate governance structure is weakly associated company's ROA after examining a total of 100 public listed companies on Bursa Malaysia.

Thus, this research will show the extent to which company performance as measured by ROA is influenced by corporate governance practices.

#### 2.2.3 CEO duality, Independent Chairman and Company Performance

CEO duality arises when the post of CEO and board chairman is held by the same person who in charge of the management and supervisory role of the company. Although CEO duality could result in efficiency in monitoring management due to the decrease in information asymmetry (Amran, 2011) due to less communication and meeting (Haniffa & Cooke, 2002), the MCCG 2012 suggests that there should be a clear functions reserved for the board and management.

In accordance with MCCG (2012), the roles and responsibilities should be clearly set out to ensure a balance of power and authority between the board and management. This is in consistent with the agency theory which requires separation between ownership and control. By having different person holding the post of CEO and board chairman, agency problem can be prevented and lead to an enhancement of firm value (Amran & Che-Ahmad, 2009). It is also to prevent a single person from dominating the others in decision making process which could impair the promotion of fair judgment and reasonable concern.

However, in case which CEO duality exists, strong independent element must be in place and disclosure of duality should be made publicly through the annual report (Hussin & Othman, 2012). Higgs report (2003) suggests that independent chairman is more likely to provide objective opinion and is effective in monitoring CEO performance and in protecting shareholders' interest. This can avoid the CEO from misusing the ultimate decision power for his personal interest (Ponnu, 2008). The agency theory argues that CEO duality will lead to high agency cost and this argument was supported in past study (Yermark, 1996).

#### 2.2.4 Board Composition and Company Performance

Board of directors plays a vital role in a company's operations. The main duty of board of directors is to monitor management teams' performance and to carry independent and objective judgment to the board (Raheja, 2005). However, conflict of interests may arise in the board of directors.

Independent director is a reliable and important tools to minimize agency problem between shareholders and management because they provide check and balance in company important decision making. In accordance to Dunn (1987) and Fama and Jensen (1983), the board which consists of a majority independent director are in better position to supervise and control management decisions. Their independence presences are very vital in the committees in a company. For example, the remuneration committee which consists of a majority of independent director may resolve the agency problem by designing effective incentive contracts for the management team (Fama & Jensen, 1983). Therefore the independency of the board is a significant issue as independent directors is acting as an important element to protect shareholders wealth. This is because, independent directors are in place to supervise and control company activities with the objective of reducing opportunistic managerial behaviour and expropriation of company resources (Fama & Jensen, 1983). Independent directors have more intention to ensure the board effectiveness and protect their reputation (Fama & Jensen, 1983), because they are responsible if they fail to perform their duties. Independent director also has more influence in board decision making.

The importance of board independence is reflected in principle 3 of MCCG (2012) that reinforces independence. To ensure that the independent element can be continually effectively and efficiently playing its role on board, the Principle 3 recommends that the board should undertake assessment of its independent director annually. Nominating Committee should be developed for the purpose of conducting the independence test. When assessing the director independence, the committee and board should go through beyond the independent director's background, economics and family relationship. The criteria of assessment should be disclosed in the annual report and in any notice convening a general meeting for the appointment and reappointment of independent director. Other than that, the period of an independent director serving the board shall not exceed a cumulative of nine years. After a period of a cumulative nine years, independent directors, unless justified by the board.

Other than that, Bursa Malaysia Listing Requirement states "that the board of directors of a company shall consist of at least 2 persons or 1/3 of independent directors." This requirement is to protect board accountability toward shareholders. Independence refers to independence from management and substantial shareholders (MCCG 2012). Under Company Act 1965 director duties, it is stated that directors should act in the proper purpose for the best interest of company. The directors are not allowed to use company property, information, position, business opportunity or engage in competitor business to gain personal interest. Therefore, directors owe a fiduciary duty to company.

#### 2.2.5 Board Size and Company Performance

Past study shows that board size has significant impact on corporate governance practices. Large board have more sources of information, opinions, suggestions, resources and external contracting relationships compare to boards which have smaller size. Hence, larger board size will lead to better company performance (Zahra & Peace, 1989).

Mishra, Randoy and Jensen (2001) argue that smaller board size is more effective than larger board size. There are some disadvantages of having larger board size. Firstly, there are high challenges for chairman to organize a large board meeting. Secondly, larger board size may reduce company performance due to poor communication, ineffective coordination and decision-making process. In addition, larger board size is more difficult to be controlled by the CEO (Lipton & Lorsch, 1992).

The optimal board size is eight or nine directors, whilst Jensen (1993) argues that the optimum board size should be around seven or eight directors. The average board size in Malaysian listed companies is eight directors, consisting of 2 independent directors, 3 non-executive directors and 3 executive directors (Abdullah, 2001; Pricewaterhouse Coopers, 1998). In accordance with Gorriz and Fumas (1996), firms with smaller board size show higher ownership concentration.

#### 2.2.6 Ownership Concentration and Company Performance

The ownership concentration refers to equity or voter power held by shareholders (Uwuigbe, 2013). It is an important mechanism to monitor corporate governance practices in a company (Demsetz & Villalonga, 2001) Substantial shareholders may affect the corporate governance practices in a company. For an example, substantial shareholders monitor the management team discipline and efficiency through their audit committee, remuneration committee, internal control committee, and their incentive package.

The ultimate objective of a company is to maximize shareholder wealth either by capital gain or dividend payment. Agency theory argues that management team may pursue own opportunistic behaviour by focusing on self-interest such as higher remuneration, pay, bonus and so on which impair shareholder benefits. A separation of ownership from management team may cause reduction in firm operating performance or firm value due to different objectives (Jensen & Mecking, 1976). In other words, too lighter ownership concentration may encourage management opportunistic behaviour and hence reduce shareholder wealth.

Agency theory predicts that a higher ownership concentration is positive associated with firm performance. Schleifer and Vishny (1997) argue that large shareholders can benefit the minority shareholders because they have ultimate power to prevent managerial opportunistic behavior (Mitton, 2002). If there are different objectives between controlling shareholders and minority shareholders (Morck, Yeung & Yu, 2000), high level of ownership concentration may create agency conflict between controlling shareholders and minority shareholders.

There are 3 types of ownership structures in a company. The first type of ownership structure is managerial ownership, where directors own the company share and involve in operating and controlling the company. The second type of ownership concentration is block ownership, where the person or entity holds the company share accounted to more than 5% while the third type of ownership concentration is institutional ownership.

Zhuang, Edwards and Capulong (2001) states that largest shareholder in Malaysia holding an average 30.3% of outstanding share among all listed companies in 1998.

In the U.S.A, Boubakri, Cosset and Guedhami (2005) found a strong positive relationship between ownership concentration and company

performance. This means that agency problem can be minimized if the management board holds more percentages of shares in a company. Mitton (2002) stated higher ownership concentration lead to higher share price return. Ownership concentration increase in 10% leads to return of share price increase by 2.6%.

#### 2.2.7 Leverage Level and Company Performance

Leverage is defined as a ratio to measure the company risk (Hall & Weisss, 1967; Pant, 1991; Ramasamy et al., 2005). Depending on the cost of debt, the effect of leverage level may be favorable or unfavorable. When the cost of debt is lower than the company rate of return, the leverage level is favorable. On the other hand, when the company rate of return lower than cost of debt capital, the leverage level is unfavourable. Ofek (1993) stated the company will face a bankruptcy risk if there is a high leverage in the company.

From the corporate governance perspective, Jensen (1986) stated that increase in leverage level leads to low cash flow availability. It means that directors have allocate company excess financial resources to settle the company debt rather than investing in low return project. Hence, Jensen (1986) concluded that company leverage level is positive correlated managerial discretion and thus improve company performance.

Creditors are interested to monitor leverage level in order to ensure that the concerned company is able to repay the debt according to term-loan agreed in contract (Chang & Abu, 2005).

Therefore this study aims to find out the extent to which the sensitivity of leverage influences Malaysian Public Listed Companies.

# 2.3 Review of Relevant Theoretical Models

# 2.3.1 Model 1

Figure 2.5: Model of Good Corporate Governance Practice Contribute to Firms' Financial Performance



<u>Source</u>: Chang, A. A. L., & Abu, S. M. (2005). Can good corporate governance practice contribute to firms' financial performance? Evidence from Malaysian companies. *International Journal of Business Governance and Ethic*, *1*(4), 350-362.

The above model was developed by Chang and Abu (2005). The purpose was to investigate the relationship between corporate governance mechanisms and performance of 120 Malaysian Listed Companies, covering a period of 4 years (1996 to 1999). The company performance is measured by return of equity. In this study, panel data regression, fixe effect and random effect models were applied to test the relationship between corporate governance mechanisms and company performance.

According to the authors, non-executive director, chairman of audit committee, institutional investor and concentration ownership have insignificant relationship with company performance.

However, firm size and CEO duality have statically significant and positive relationship with company performance. According to the authors, a dominant CEO brings a positive influence to company performance. Besides, gearing ratio is significantly negatively related to company performance. Increase in 1% of debt will cause the company's return of equity to drop by 0.13%.

In conclusion, the authors explained that poor corporate governance standards and practices were the reasons why the East Asian Financial Crisis happened. This model provides a better understanding of implementation of corporate governance practices and the impact on company performance.

#### 2.3.2 Model 2

Figure 2.6: Model of Code of Corporate Governance and Firm Performance



Source: Hussin, N., & Othman, R. (2012). Code of corporate governance and firm performance. *British Journal of Economics, Finance and Management Sciences*, 6(2).

The above model was developed by Hussin and Othman (2012). The purpose of this study was to investigate the impact of Malaysian Code of Corporate Governance on Malaysian listed companies. The sample employed in this study was 100 listed companies on Bursa Malaysia. The authors investigated the selected companies from financial year 2007 to 2009.

The findings show that there is a significant positive association between independent chairman and company performance. Independent chairman brings positively influence to company performance through effective monitoring of the management team. The result shows that a high portion of non-executive directors are significantly negatively associated with the company performance. This result was in contradict with agency theory. The other variables (CEO duality, Bsize, AC indep, AC expert, Ac meeting, Dirownership, Top20ownership, Big5 and Debt) do not have significant association with company performance. In this study, company performance was measured by ROA and return of equity.

As a conclusion, the result of this study shows that there are insignificant relationship between most of the good corporate governance practices in related to company performance.

#### 2.3.3 Model 3





<u>Source</u>: Guest, P. M. (2009). The impact of board size on firm performance: Evidence from UK. *The European Journal of Finance*, *15*(4), 385-404.

The above model was developed by Guest (2009). The purpose of this study was to investigate the impact of board size and company performance. The sample investigated was 2,746 listed companies in UK from year 1981 to 2002. Total observation sample is 25,668 companies.

The company performance was measured by ROA, Tobin's Q and TSR. The explanatory or independent variables are board size, debt, firm size, firm age, R&D and monthly stock return over 12 months. The control variables are board structure, diversification, and ownership structure.

The result shows that board size has a strong negative impact on profitability: Tobin's Q and share returns. Debt ratio is significantly negatively related to Tobin's Q.

In conclusion, the result of this study show there is a significant negative relationship between board size and company performance. The result supports the argument that the large board size lead to more conflict, inefficient decision-making, and poor internal communication.

#### 2.3.4 Model 4

Figure 2.8: Model of the Impact of Corporate Board Meeting on Corporate Performance in South Africa



Source: Ntim, C. G., & Osei, K. A. (2011). The impact of corporate board meeting on corporate performance in South Africa, *African Review of Economies and Finance*, 2(2). 83-103

The above model was developed by Ntim and Osei (2011). The purpose of this study was to investigate the impact of corporate board meeting frequency and company performance. The sample was 169 listed companies in Johannesburg Stock Exchange (JSE), South Africa which consisted by 8 non-financial industries. The authors investigated the selected companies from financial year 2002 to 2007.

The company performance was measured by ROA, ROE and TSR. There is 1 independent variable (number of board meeting) and another 7 controls variables are audit firm size (big4), capital expenditure, cross listing, corporate governance committee, gearing ratio, government shareholding, sales growth and firm size.

The authors revealed that number of meetings is significantly positively related with ROA, ROE and TSR.

Besides, CAPEX, gearing ratio and firm size are significantly negatively correlated with company performance. Other control variables such as cross listing, corporate governance committee, government shareholding, and sales growth are in significant positive relation with company performance.

As a conclusion, the result of this study show there is significant relationship between board meeting frequency and company performance. The result supports the agency theory perspective that more number of meeting improve the effectiveness on decision making which then leads to better company performance.

## 2.4 Conceptual Framework

Figure 2.9: Proposed Conceptual Framework of Good Corporate Governance Leads to Better Company Performance



Source: Developed for the research.

The conceptual proposed framework serves as foundation in this study. The model is adopted from the above review theoretical model which was developed by Chang and Abu (2005), Hussin and Othman (2012), Guest (2009) and Ntim and Osei (2011)

This framework developed is based on the entire research objectives and research questions in this study. The independent variables are CEO duality, independent chairman, board composition, ownership concentration, and firm leverage level. The dependent variable is company performance which measured by TSR and ROA.

### 2.5 Hypothesis Development

# 2.5.1 Relationship between CEO Duality, Independent Chairman and Companies' Performance

In Malaysian context, Hussin and Othman (2012) found that there was a significant positive relationship between independent chairman with ROA and return on equity (ROE). Similar result has also been found by Chang and Abu (2005), Razak, Ahmad and Aliahmed (2008) and Chiang and Chia (2005) in Taiwan. Mohamad, Rashid and Shawtari (2012) after investigated 53 GLCs in Bursa Malaysia from year 2003 to 2006, concluded that CEO duality and board meeting are statistically positively related to earning management.

Haslindar and Fazilah (2011) stated that there was significant negative relationship between CEO duality and ROA after studying 290 public listed companies from year 1999- 2005. Tam and Tan (2007) also concluded that CEO duality was significantly and negatively related to ROA by using 150 listed companies in Kuala Lumpur Stock Exchange from 1994-2001 as sample. This was in consistent with Chaghadari (2011). Besides, Gehan and Abdelmoshen (2012) found a significant negative relationship between separation of CEO from the chairman and company earnings per share (EPS). The sample was 43 listed companies in Bahrain from year 2008 to 2010.

Rashid et al. (2010) concluded that there was no significant relationship between CEO duality with return on asset (ROA) and Tobin Q. Hashim and Devi (2008), after investigating 200 non-financial listed companies in Malaysia for the year 2004, also conclude that the separation of CEO and chairman does not affect the level of earnings management activities. The result were consistent with Abdullah and Nasir (2004), Ponnu (2008), Joel and Dondjio (2012) and Rahman and Ali (2006).

The findings from previous studies on the relationship between CEO duality and company performance are inconsistent. In addition, the MCCG 2012 and agency theory suggest that the position of CEO and chairman should not hold by same person. However, the stewardship theory suggests that company performance will be improved by having the same person holding both positions. Thus, the following hypothesis is presented to examine what is the relationship between CEO duality, independent chairman and financial performance in Malaysian Public Listed Companies.

H1<sub>1A</sub>: CEO duality is negatively related to TSR.

H1<sub>1B</sub>: CEO duality is negatively related to ROA.

H1<sub>2A</sub>: Independent board chairman is positively related to TSR.

H1<sub>2B</sub>: Independent board chairman is positively related to ROA.

# 2.5.2 Relationship between Board Composition and Companies' Performance

Schellenger, Wood and Tashakori (1989) explained that number of independent directors on board has positive impact on company performance. Similar result has also been detected by Daily and Dalton (1992) by using 100 fast growing companies in year 1989 as sample. In addition, Ong and Gan (2013) also found the similar result in Malaysian Banking industry. Abbasi, Kalantari and Abbasi (2012) stated board composition was statically positive related with Tobin's Q. The study consisted of 82 company from food industry listed in Tehran Stock Exchange (Iran), period was from 2002-2011. These results were also in consistent with result found by other studies (Gehan & Abdelmoshen, 2012; Haslindar & Fazilah, 2011).

In contradict, Agrawal and Knoeber (1996) found negative relationship between numbers of independent directors on board and company performance by analysing 400 US companies from year 1983-1987. In addition, Hussin and Othman (2012) also claimed that there was a negative relationship between high proportions of Independent non-executive director in board with company performance by using a sample size of 100 public-listed firms listed on Bursa Malaysia for the year 2007 to 2009. They argue that Malaysian independent director was lack of expertise and skills to understand financial report details (Hashim & Devi, 2008; Abdullah & Nasir, 2004; Rahman & Ali, 2006). This explains the insignificant relationship between board independence and discretionary accruals. Chang and Abu (2005), after by investigating 120 public listed companies also found similar results. Saah and Abdullah (2011) also revealed that board composition was statistically negatively related to market value after examining 163 Malaysian listed firms for the period of 2004 to 2006.

Ponnu (2008) applied sample T-test (before and after) to investigate the relationship between corporate governance structure and company performance before and after implementation of MCCG 2000. The sample included 30 larger companies and 70 mid-sized company listed in Bursa Malaysia. The years investigated were year 1999 and 2005. The finding shows that was not significant relationship between board composition and company performance. Chaghadari (2011) also found there was no significant relationship between board compositions with company performance. Taghizadeh and Saremi (2013) also found insignificant relationship between board composition and significant relationship between board compositions with company performance. Taghizadeh and Saremi (2013) also found insignificant relationship between board composition and ROA. The sample size was 150 public listed Malaysian firms listed in the financial year 2008.

The agency theory and MCCG 2012, suggested to add more independent director in board of director to increase the monitor level on management team, however the stewardship theory provided contractive view that board should be form by majority executive director. Thus, the following hypothesis is presented to re-test the above argument and relationship between number of independent directors on board and company performance in Malaysian Public Listed Companies.

H1<sub>3A</sub>: Board composition is positively influences TSR.

H1<sub>3B</sub>: Board composition is positively influences ROA.

#### 2.5.3 Relationship between Board Size and Companies' Performance

Joel and Dondjio (2012) stated that company performance was positively related to board size after analyzing 20 listed companies in Bursa Malaysia the time frame cover from year 2006 to 2010. By using working capital accrual to measure company performance, Rahman and Ali (2006) found that is positive relationship between board size and company's earning management after investigating 97 public listed companies in Malaysia for the year 2002 and 2003. Zainal Abidin, Mustaffa Kamal and Jusoff (2009) also found a positive relationship between board size and company performance. They further explained that large board size increases the skills and idea shared in board meeting. Gehan and Abdelmoshen (2012) and Daily and Dalton (1992) also found similar result.

Kang (2000) found that board size is negatively related with company performance by examining 947 US listed companies which consisted of 35% in New York Stock Exchange, 55% in American Stock Exchange and 10% trade in AMEX. This is consistent with the result found by Yermack (1996) in his empirical study which covered 792 companies form year 1984 to 1991. The finding shows that board size has a negative relationship with profitability, asset utilization, and Tobin's Q. Besides, Rashid et al. (2010) found that board size is statistically significantly and negatively related to ROA after examining a total of 274 listed firms in Dhaka Stock Exchange during 2005 to 2009. Similar result was also found by Carline, Linn and Yadav (2002) in UK context, Mak and Yuanto (2004) in Malaysian and Singapore context. The findings of Mak and Yuanto (2004) of a negative relationship between board size and Tobin Q is consistent with the findings of Haslindar and Fazilah (2011).

Chiang and Chia (2005) stated that there was an insignificant relationship between board size and operating performance based on earning per share, ROA and return on equity. The sample used was 225 high-tech companies listed in Taiwan in 2001. Chaghadari (2011) after studying 30 companies from construction and material industry in Main Board of Bursa Malaysia for the year 2007 also found that there was no significant relationship between board size and company performance. Similar result has also been found in Hashim and Devi (2008)'s study.

Although the number of directors on board is not specified in the MCCG 2012 or any corporate governance guidelines, according to previous studies, there are 2 groups of arguments. The first argument is that by having a larger board size, there will be pool of resources which thereby lead to better company performance. The other group of studies argues that small group is more effective in term of communication and collaboration. Thus, the following hypothesis is presented to test what is the relationship between the board size and Malaysian Public Listed Companies.

H1<sub>4A</sub>: Board size is positively related with TSR.

H1<sub>4B</sub>: Board size is positively related with ROA.

# 2.5.4 Relationship between Ownership Concentration and Companies' Performance

In a recent study done by Ong and Gan (2013) on domestic Malaysian banking industry, it was revealed that ownership concentration has a positive significant relationship with board size because the board size was influenced by the substantial shareholders. This study also pointed out that there was a negative correlation between ownership concentration and Tobin's Q. The sample data was 10 domestic banks from 2001 to year 2010. Total sample observed was 90 units. The result was supported by the findings of Joel and Dondjio (2012)'s study.

In Malaysia context, Sun and Tong (2002) found that company performance has increased and leverage level has significantly reduced after the company went privatisation. The sample size employed was 24 state-owned companies. In addition, the study covered a period of 15 years (1983 to 1997). This result was supported by Boubakri and Cossets (1998)'s findings who investigated 79 new privatised companies from 1980 to 1992. Ramasamy et al. (2005) after conducted his study in plantation industry of Malaysia also found similar result. Gehan and Abdelmoshen (2012) also found similar findings.

In contrast, Demsetz and Villalonga (2001) and Leech and Leahy (1991) reported a negative relationship between ownership concentration and corporate performance when performance was measured by profitability. Chiang and Chia (2005) also concluded that there was a significant negative relationship between ownership concentration and ROE. This was in consistent with a Malaysia study done by Hussin and Othman (2012).

However, insignificant relationship between ownership concentration with ROA and Tobin's Q was found in Tam and Tan (2007)'s study. ROE was found in Chang and Abu (2005)'s study to also have insignificant relationship with ownership concentration. Rahman and Ali (2006)'s study also show similar result. Besides, Demsetz and Villalonga (2001) after studied 223 companies from US market from the period 1976-1980, concluded that there was no statically significant relation between ownership structure and company performance.

In Nigeria, there was insignificant negative relationship between ownership structure and share price (Uwuigbe, 2013). The sample was 15 listed manufacturing and banking in Nigeria listed market. The time frame of the study covered a period of 3 years (year 2007 to year 2009). With respect to the test, Pearson correlation and multiple linear correlation regression were applied in this study.

The agency theory argues that the higher the ownership concentration is, the better the company performance is, because high ownership concentration leads to reduction in different agency cost such as conflict of interest, asymmetric information and managerial opportunistic behaviour. However, the previous studies also show that substantial shareholders or majority shareholders may take advantage on the company and the minority shareholders in order to fulfil their personal interests. Thus, the following hypothesis is presented in order to examine the relationship between the ownership concentration and TSR in Malaysian Public Listed Companies

H1<sub>5A</sub>: Ownership concentration is positively related to TSR.

H1<sub>5B</sub>: Ownership concentration is positively related to ROA.

# 2.5.5 Relationship between Leverage Level and Companies' Performance

Chang and Abu (2005) found that by increasing 1 % in debt, ROE decreased by 0.13% after examining 120 public-listed companies in Malaysia, covering a 4-year-period (1996-1999). In the other words, there was a significant negative relationship between debt and company performance. The findings of Suto (2003) also explained that high leverage lead to poorer company performance after investigated 375 non-financial KLSE (Kuala Lumpur Stock Exchange) listed companies from 1995 to 1999. Harford et al. (2008) also found that there was a negative relationship between company leverage level and company cash flow holding. The sample was 1500 firms being drawn from US market. The time period covered was 1990, 1993, 1995, 1998, 2000, 2002 and 2004. Rashid et al. (2010) also found significant negative relationship between leverage level and ROA. However in the same study, leverage level was significantly positively related to Tobin's Q. In addition, Tam and Tan (2007), after studying 150 listed companies in Kuala Lumpur Stock Exchange from 1994-2001, also concluded that leverage was significantly negatively related to ROA.

However, Hussin and Othman (2012)'s findings contradict the previous studies mentioned above by indicating that debt was found to have positive and significant relationship with ROA and ROE in Malaysia listed firms. In Razak et al. (2008)'s study, 210 companies which comprised 180 non-

government linked companies and 30 government linked companies which covered the period of year 1995 to 2005 were investigated. The findings was that there was a significant positive relationship between company debt and Tobin's Q. However, in the same study done by Razak et al. (2008), there was contradict result when ROA was used to measured company performance. In other words, debt is found to have a negative correlation with ROA. Besides, in another study done by Haslindar and Fazilah (2011)'s study show leverage level is significant positive with ROE.

Other than positive and negative relationship found by the above authors in their previous studies, Ramasamy et al. (2005) found insignificant relationship between leverage level and company performance. The sample size employed was 30 public listed companies in plantation sector from financial year 2000 to 2003. This result was supported by the findins of Chaghadari (2011) and Hashim and Devi (2008).

According to stakeholder theory, the directors owe fiduciary duties to all the stakeholders including creditors and bond holder. Thus, it is the responsibility of the directors to ensure that the company has financial ability to repay the long term, short term loan and the interest on time. Previous studies shows inconsistent result on whether company performance will be affected by leverage level. Thus, the following hypothesis is presented to examine what is the relationship between the leverage level and company performance in Malaysian Public Listed Companies.

H1<sub>6A</sub>: There is significant negative relationship between company leverage level and TSR.

H1<sub>6B</sub>: There is significant negative relationship between company leverage level and ROA.

#### 2.6 Conclusion

In this research, study of corporate governance in relation to performance of Malaysian public-listed companies is focused on six areas which include CEO duality, independent chairman, board composition, board size, ownership concentration and leverage level are selected independent variables. The relationship between the company performance and independent variables are discussed in the hypotheses form.
# **CHAPTER 3**

# METHODOLOGY

## **3.0 Introduction**

This chapter begins by describing the research method used for analysis, how the data was collected, how the sample was selected and what are the analysis techniques were applied.

There are eight sections are research design, data collection method, sampling design, research instrument, construct measurement, data processing and data analysis.

# 3.1 Research Design

The purpose of this research is to investigate the relationship between corporate governance, TSR and ROA in Malaysian Public Listed Companies for the period of 2008 to 2012. The research examine the impact of corporate governance variables on Malaysian Public Listed Companies' performance namely the TSR and ROA. A quantitative methodology was used in conducting this research methodology provides a more objective conclusion high level of reliability of collected data can also analysis be achieved (Alexei, 2002). This research focused on cross sectional and longitudinal as it is a study of a particular phenomenon. The unit of analysis public listed companies in Malaysia. These were chosen as the financial statements are available and reliable due to the mandatory audit (Mathuva, 2010). Data was acquired from Bursa Malaysia and DataStream covering the

period of 2008 to 2012 as they are from the most recent period. Monthly share price returns were converted into yearly average returns. Companies should have a complete data for the observation period. Companies with missing data were eliminated. This research applied both cross sectional and longitudinal analysis. An overall 5-year-relationship between independent variables and dependent variables were examined. Additional analysis were conducted to examine the extent to which corporate governance variables influences Malaysian Public Listed' Companies performance on a yearly basis.

# 3.2 Data Collection Method

# 3.2.1 Secondary Data

Secondary data is used to conduct this research. The data annual reports and share prices were acquired from Bursa Malaysia and DataStream. It is reliable and of a higher-quality data source as all Malaysian Public Listed Companies annual reports are audited. It is also unobtrusive, easy to be accessed, inexpensive and can be gathered more quickly. Documentary secondary data from journals were also being accessed from several databases such as ProQuest Online Resources, Google Scholar, Science Direct, Bursa Malaysia Website and DataStream.

# 3.3 Sampling Design

## 3.3.1 Target Population

Population refers to a whole group of people, events or things which can be the focus of examination for researchers (Sekaran, 2003). The population of this research includes all public listed firms in Malaysia as the financial data are accessible. As there are 921 listed firms in Malaysia in 2012, the target population of this study will be 921 listed companies in Malaysia ("Bursa Malaysia Listing Statistics", 2012).

Table 3.1: The Nature and S	ector of Malay	sian Public Lis	ted Companies
for the Year End 2012			

Sector	Number of companies	Percentages (%)	Accumulate (%)
Mining	1	0.1	0.1
IPC	6	0.6	0.8
Properties	87	9.4	10.2
Finance	38	4.1	14.3
Trading services	194	21	35.3
Technologies	95	10.3	45.6
REIT	16	1.7	47.3
Plantation	41	4.4	51.7
Industrial Products	265	28.7	80.4
Hotel	4	0.4	80.8
Consumer products	134	14.5	95.3
Construction	42	4.5	99.9
Closed-Fund	1	0.1	100
Total	921	100	

Source: Developed for the research

## **3.3.2 Sampling Design and Sampling Location**

In accordance with Sekaran & Bougie (2010), a sampling frame is defined as a complete list of all of the elements in entire population. A sampling frame in this study will be the complete list of public listed companies in Malaysia from which a sample will be drawn. The list is accessible being obtained from the Bursa Malaysia website http://www.bursamalaysia.com/market/listed-companies/list-ofcompanies/main-market.

## **3.3.3 Sampling Element**

In accordance to Saunders, Lewis and Thornhill (2009), sampling elements refer to sampling units which can be selected in a sampling process. In this research, not the entire population is used as it is impractical to survey. Additionally these are budget and time constraints. This regard, a sample size of 200 Malaysian Public Listed Companies is selected.

## **3.3.4 Sampling Technique**

The sampling technique employed in this research was probability sampling as all elements in the entire population have an equal chance of being selected as sample (Sekaran & Bougie, 2010). Additionally, this sampling method's results can be generalized as the population result. It offers the most generalizability. Stratified random sampling was used as accurate and accessible sampling frame is evident and was divisible into relevant strata. The stratified random sample selection was chosen as it had a general representative sample from a significant proportion of the Malaysian Public Listed Companies. In this research, there are 921 units in the population, and we need a sample of 200 is required from sectors comprising of consumer products, industrial products, plantation, technology, trading, properties, financial, mining, IPC, real estate investment trust (REIT) and closed-fund.

## 3.3.5 Sampling Size

According to Sekaran and Bougie (2010), the research objective, extent of precision desired (the confidence interval), amount of variability in population, acceptable risk in making prediction of level of precision (confidence level), cost and time constraints and population's size will affect the decision on sample size. The Rule of Thumb in determining a sample size proposed by Roscoe in 1975 was being employed to ensure a good decision model. Roscoe (1975) stated that sample sizes which are larger than 30 and less than 500 are appropriate for most of the research

being carried out. By referring to this rule, from a population of 921, a sample size of 200 was considered large enough to represent the entire population.

# **3.4 Research Instrument**

Financial statements in annual reports and share prices were used for this study. Sekaran and Bougie (2010) stated that secondary data is the information obtained from sources which already exist. For this research, annual reports were downloaded from Bursa Malaysia's website according to sectors and share prices sourced from DataStream. Gathering secondary data is faster and cheaper than collecting primary data (Zikmund, Babin, Carr & Griffin, 2010).

Microsoft Excel was used to calculate the amount of TSR, ROA and leverage level. These variables were then transferred into Statistical Package for Social Science (SPSS) Version 20 in order to run Descriptive analysis, Pearson regression, and Multiple Linear Regression. To run the Panel Least Square Analysis, the research applied E-Views version 7 software. The Table 3.2 show the sector of samples in this research.

Sector	Number of companies	Percentages (%)	Accumulate (%)
IPC	1	1	1
Properties	17	8.5	9.5
Finance	9	4.5	14
Trading services	41	20	34
Technologies	22	11	45
REIT	2	1	46
Plantation	12	6	52
Industrial Products	55	27.5	79.5
Hotel	2	1	80.5
Consumer products	31	15.5	96
Construction	8	4	100
Total	200	100	

Table 3.2: The Nature and Sector of sample

Source: Developed for the research.

# **3.5 Construct Measurement**

## **3.5.1 Origin of Construct**

In constructing this research 6 independent variables and 2 dependent variable were used. A table of dependent variables is available in Table 3.2. A table of independent variable variables appear in Table 3.3.

Table 3.3: Dependent Variable Table

Dependent Variable	Formula	Adopted from
Total Share Return (TSR)	$\frac{\underline{SP_{n}}\underline{SP_{n-1}}}{SP_{n-1}}$	Guest (2009) Bhagat and Black (2000)
Return of Total Assets (ROA)	<u>Net Income</u> Total Assets	Haslindar and Fazilah (2011) Ntim and Osei (2011)

Source: Developed for the research

Independent Variables	Formula	Adopted from
CEO duality	0= CEO duality, 1= Non-CEO duality	Abdullah and Nasir (2004) Chang (2005) Gehan and Abdelmoshen (2012) Rahman and Ali (2006)
Independent Chairman	0= Non independent chairman, 1= Independent chairman	Al-Dhamari and Ismail (2013)
Board composition	Number of Independent directors	Chang (2005) Gehan and Abdelmoshen (2012)
Board size	Total number of directors	Gehan and Abdelmoshen (2012) Haslindar and Fazilah (2011) Zainal et al. (2009)
Ownership concentration	Highest percentage of share holdings	Chang (2005) Demsetz and Villalonga (2001) Hussin and Othman (2012). Tam and Tan (2007),
Leverage level	<u>Total liabilities</u> Total assets	Hashim and Devi (2008)

Table 3.4: Table of Independent Variables

Source: Developed for the research

## 3.5.2 Scale Measurement

In accordance to Cavana, Delahaye and Sekaran (2003), a scale is used by researchers in distinguishing one variable from another variable. In this research, interval and ratio scale are being used on all of the independent and dependent variables as it represents absolute meaning and the exact amounts can be obtained from the financial reports of companies.

# 3.6 Data Processing

Data processing includes data entry, editing and transforming data (Sekaran & Bougie, 2010).

The first step in data processing is data entry. Data with monthly share return were being transferred to annual returns from Microsoft Excel to SPSS 20, and Eviews7. Each row represents a case which is the name of a company while each column shows the variable. The independent variables data: CEO duality, independent chairman, board composition, board size, ownership concentration, and leverage level, were extracted from yearly audited annual report.

After the data has been transferred it needs to be edited. According to Sekaran and Bougie (2010), data editing is an activity which deals with detecting and amending inconsistent, incorrect and illogical data. If any blank column with no value is discovered, the whole case would be deleted. Any inconsistent or outlier datas was being checked and deleted accordingly. Saunders et al. (2009) stated that if this step is being eliminated, it can lead to incorrect results and hence the conclusions will be wrong.

# 3.7 Data Analysis

## **3.7.1 Descriptive Analysis**

Descriptive analysis was used to describe the characteristics of the variables (Zikmund et al., 2010). Descriptive table was used to describe the maximum, minimum, means and standard deviations for independent variables and also for dependent variable. The frequency table was used to describe the number and percentage of companies that implemented CEO duality and independent chairman.

## 3.7.2 Reliability Analysis

According to Sekaran and Bougie (2010), reliability can be explained by the degree to which values are free from bias. An ANOVA table was used to test the fit of model. If the p-value is less than 0.05, this means that the independent variables in the model is sufficient enough to explain the dependent variables (TSR or ROA).

## **3.7.3 Inferential Analysis**

By using inferential analysis, conclusions of population's characteristics can be examined based on sample data (Zikmund et al., 2010). Tools such as Panel Least Square Analysis, Pearson's Correlation Analysis and Multiple Linear Regression Analysis are applied.

## 3.7.3.1 Panel Least Square Analysis

This research, longitudinal analysis used to measure the relationship between the independent variables and a dependent variable. Separately longitudinal analysis represents a rapidly growing application of multilevel modelling technology. In comparison with ANOVA or other cross sectional analysis, longitudinal analysis provides a more flexible approach because of its ability to handle wide range of data situations (time effect). This analysis provides a stronger way for dealing with causal relationship between variables than cross-sectional analysis. In addition, a fixed effect model is applied in this research to investigate the causes of changes within an entity (Malaysian Public Listed Company) over a period of time (2008 to 2012). The fixed effect model cannot be bias because the analysis has omitted the other predictor, such as gender, religion, political and so on (Granger & Newbold, 1974).

## 3.7.3.2 Pearson Correlation Analysis

A Pearson Correlation analysis was used to measure the directional strength and significance between the six independent variables against two dependent variables. Tests are expected separately between 6 independent variables with TSR and ROA. There were dummy (CEO duality, independent chairman), and ratio (board composition, board size, ownership concentration, leverage level, TSR and ROA) scale of measurement in this research.

Correlation coefficient (r) quantifies the strength of relationship between all variables (Saunders et al., 2009). The ranges of (r) are between -1 and +1. A +1 indicates a perfect positive correlation while -1 represents a perfect negative correlation. (r) equals to 0 when there is no relationship between two variables. (r) ranges between 0.01 to 0.20 indicates a slight relationship, 0.21 to 0.40 indicates small but defined relationship, 0.41 to 0.70 indicates a moderate relationship, 0.71 to 0.90 indicates high relationship. 0.91 to 1.00 represents a very strong relationship. The absolute value represents the strength of association while the sign indicates the direction. The VIF value show in the Pearson Correlation Table also can identify whether there is any multicollinearity problem between independent variables.

## 3.7.3.3 Multiple Regression Analysis

A multiple regression was a multivariate technique used when more than one independent variable is used in explaining the variance in the dependent variable and also in assessing the extent or degree of the relationship between the independent variables and dependent variable (Sekaran & Bougie, 2010).

A multiple regression analysis was used to examine the impact of 6 independent variables on the company performance (TSR and ROA) and the extent to which any variance in company performance can be explained by the six independent variables.

$$\label{eq:TSR} \begin{split} TSR_n &= \beta_0 + \beta_1 \, CEO_n + \beta_2 InpChairman_n + \beta_3 BC_n + \beta_4 BS_n + \beta_5 OC_n + \\ \beta_6 LL_n \end{split}$$

 $ROA_{n} = \beta_{0} + \beta_{1} CEO_{n} + \beta_{2}InpChairman_{n} + \beta_{3}BC_{n} + \beta_{4}BS_{n} + \beta_{5}OC_{n} + \beta_{6}LL_{n}$ 

CEO is CEO duality, InpChairman is independent chairman, BC is board composition; BS is board size; OC is ownership concentration, LL is leverage level, n represent the year.

According to Hosmer and Lemeshow (1989) the minimum sample size for each independent variable is 10 samples. This research has 6 independent variables were applied, therefore the minimum sample size to run an analysis is 60 companies.

# 3.8 Conclusion

This chapter highlighted the research methodology used to conduct this study. In next chapter Descriptive Analysis and Inferential Analysis were performed to analyse the results.

# **CHAPTER 4**

# **RESEARCH RESULTS**

# 4.0 Introduction

The previous chapter described how the research methodology is carried out. This chapter reveals the pattern of the results and the result from analysis of the result which are relevant to the research questions and hypothesis. This chapter consists of 4 parts. The first part is descriptive analysis, following by reliability analysis, inferential analysis and finally a conclusion part.

# 4.1 Descriptive Analysis

## 4.1.1 Independent and Dependent Variables

		TSR		ROA		
Year	Sample	Mean	Standard Deviation	Mean	Standard Deviation	
2008	200	-0.2450	1.54513	0.10478	0.97768	
2009	200	0.51039	0.67666	0.09350	0.94767	
2010	200	0.27669	0.48555	0.16390	0.85285	
2011	200	0.16777	0.58616	0.15043	1.27160	
2012	200	0.14557	0.42431	0.04339	1.23820	
Average	1000	0.17078	0.88226	0.11121	0.11600	

Table 4.0: Descriptive Statistics for TSR and ROA

Source: Developed for the research.

Company performance in this research is measured by TSR and ROA. The formula of TSR is average share price return (annually). The formula of

ROA is total liabilities divided by total assets. The means of TSR for the year 2008, 2009, 2010, 2011 and 2012 are -0.2450, 0.51039, 0.27669, 0.16777 and 0.14557 respectively.

The standard deviations of TSR for the year 2008, 2009, 2010, 2011, 2011 and 2012 are 1.54513, 0.67666, 0.48555, 0.58616 and 0.42431 respectively. The means for ROA for the year 2008 to 2012 are 0.10478, 0.09350, 0.16390, 0.15043, and 0.04339 respectively. The standard deviations of ROA for the year 2008, 2009, 2010, 2011 and 2012 are 0.97768, 0.94767, 0.85285, 1.27160 and 1.23820 respectively.

			Duality	Independent Chairman	
Year	Sample	Yes (%)	No (%)	Yes (%)	No (%)
2008	200	55 (27.5%)	145 (72.5%)	66 (33%)	134 (67%)
2009	200	50 (25%)	150 (75%)	73 (36.5%)	127 (63.5%)
2010	200	54 (27%)	146 (73%)	72 (36%)	128 (64%)
2011	200	53 (26.5%)	147 (73.5%)	73 (36.5%)	127 (63.5%)
2012	200	51(25.5%)	149 (74.5)	81 (59.5%)	119 (40.5%)
Average	1000	263 (26.3%)	737 (73.7%)	365 (36.5%)	635 (63.5%)

Table 4.1: Descriptive Statistic for CEO Duality and Independent Chairman

Source: Developed for the research.

In this research, CEO duality and independent chairman are dummy variables. CEO duality means the same person holds the CEO position and chairman in board of directors. Independent chairman refer to independent non-executive director holding the chairman position in board meeting. The number of Malaysian Public Listed Companies practised non-CEO duality for year 2008, 2009, 2010, 2011 and 2012 are 145, 150, 146,147, and 149. The number of companies appointed independent director as board chairman for year 2008, 2009, 2010, 2011 and 2012 are 66, 73, 72, 73, and 81.

		Board Con	nposition	Board	Size	Owne Concer	ership ntration	Leverag	e Level
Year	Sample	Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.
2008	200	3.330	1.194	7.860	2.124	0.3309	0.1623	0.4031	0.2168
2009	200	3.400	1.253	7.890	2.233	0.3288	0.1568	0.3990	0.2256
2010	200	3.400	1.315	7.740	2.229	0.3296	0.1604	0.3979	0.2230
2011	200	3.420	1.162	7.670	2.072	0.3323	0.1659	0.4009	0.2438
2012	200	3.520	1.138	7.690	2.006	0.3336	0.1681	0.4004	0.2466
Average	1000	3.410	1.213	7.770	2.132	0.3310	0.1625	0.4004	0.2310

Table 4.2: Descriptive Statistic for Board Composition, Board Size, Ownership Concentration and Leverage Level

S.D. = Standard deviation

Source: Developed for the research.

The board composition variable is measured by number of independent directors on the board. The average number of independent directors in the board for the period of 2008 to 2012 is 3. The highest standard deviation is 1.314 in 2010, and the lowest standard deviation is 1.138 in 2012. The board size is refer to total number of directors in board of directors. The average board size for year 2008 to 2012 is 8. The highest standard deviation is 2.233 in 2009, and the lowest standard deviation is 2.006 in 2012. The ownership concentration is derived by the highest direct shareholding. The averages of ownership concentration for the year 2008, 2009, 2010, 2011 and 2012 are 33.09%, 32.88%, 32.96% 33.23% and 33.36%. The highest standard deviation is 1.681 in 2012, and the lowest standard deviation is 0.1568 in 2009. The leverage level of companies is measured by total liability divided by total assets. The average leverage level for the year 2008, 2009, 2010, 2011 and 2012 are 40.31%, 39.90%, 39.79%, 40.09% and 40.04%. The highest standard deviation is 2.466 in 2012, and the lowest standard deviation is 0.2168 in 2008.

# 4.2 Panel Least Square Analysis

Panel Least Square Analysis is the analysis to repeated test the strength and relationship between independent and dependent variable with change over the time.

## 4.2.1 TSR

Table 4.3: Reliability Test for TSR

R-squared	Adjusted R- squared	F-statistic	Sig.
0.004209	-0.001808	0.699488	0.650103

Source: Developed for the research.

Table 4.3 shows that in the overall 5 years, the 6 independent variables only explain 0.18% of the TSR. The p-value is 0.6501 which is higher than 0.05. This mean that the independent variables for this research are not fit to explain TSR. The F-statistic is 0.699488.

Table 4.4: Panel Least Square Analysis for TSR

Variable	Coefficient	Std. Error	t-Statistic	Sig.
(Constant)	0.394652	0.129334	3.05142	0.0023
CEO Duality	0.009413	0.070271	0.133954	0.8935
Independent Chairman	-0.009864	0.063912	-0.154343	0.8774
Board composition	0.001871	0.029329	0.063781	0.9492
Board Size	-0.01798	0.01657	-1.0851	0.2781
Ownership Concentration	-0.086186	0.174859	-0.492888	0.6222
Leverage Level	-0.163337	0.123658	-1.32087	0.1868

Source: Developed for the research.

The Panel Least Square analysis for TSR shows that for the overall 5 years, the 6 independent variables are not significant in affecting the Malaysian Public Listed Companies performance. The regression equation is formed by using "Coefficient" column. The equation is as below:

TSR = -0.39465 + 0.009413Ceo Duality - 0.009864 Independent Chairman + 0.001871 Board Composition - 0.01798 Board Size - 0.086186 Ownership concentration - 0.163337 Leverage Level.

The result shows no significant relationship between 6 independent variables with TSR. The P-value or probability for each independent variable is more than 0.05.

This research also finds that CEO duality and board composition bring about a positive effect to the company while independent chairman, board size, ownership concentration, and leverage level are negatively affected TSR.

## 4.2.2 ROA

Table 4.5: Reliability Test for ROA

R-squared	Adjusted R- squared	F-statistic	Sig.
0.70901	0.63388	9.437137	0.00

Source: Developed for the research.

When investigating on a 5 years basis, it was found that the 6 independent variables are able to explain 63.338% of the ROA. The p-value is 0.00 which is lower than 0.05. This means that the independent variables in the research are fit to explain the ROA. The F-statistic is 9.437137.

Variable	Coefficient	Std. Error	t-Statistic	Sig.
(Constant)	0.230034	0.32071	0.717265	0.4734
CEO Duality	0.012014	0.210468	0.057081	0.9545
Independent Chairman	-0.011699	0.161196	-0.072578	0.9422
Board composition	0.07848	0.049229	1.594194	0.1113
Board Size	-0.035433	0.033616	-1.054061	0.2922
Ownership				
Concentration	0.120831	0.433981	0.278424	0.7808
Leverage Level	-0.389611	0.256975	-1.516141	0.1299

Table 4.6: Panel Least Square Analysis for ROA

Source: Developed for the research.

However in the Panel Least Square analysis for ROA, it shows that for the overall 5 years, the 6 independent variables do not significantly affect the Malaysian Public Listed Companies' performance. The equation is formed as below:

ROA = 0230034 + 0.012014 CEO Duality - 0.011699 Independent Chairman + 0.7848 Board Composition - 0.035433 Board Size + 0.120831 Ownership concentration - 0.3899611 Leverage Level.

The result shows there are no significant relationships between 6 independent variables with ROA as the P-value or probability for each independent variable is more than 0.05.

In conclusion, CEO duality, board composition and ownership concentration are positively related to ROA while independent chairman, board size and leverage level have negative impact on ROA. The research finds more positive relationship in the ROA measurement as compared to the TSR.

# 4.3 Reliability Test

A reliability test is performed to test the degree to which an experiment or evaluation performed give consistent results each time it is employed.

## 4.3.1 Reliability Test for 2008

Model		DF	Mean Square	F	Sig.
TSR	Regression	6	2.042		
	Residual	193	2.398	0.851	0.532
	Total	199			
	Regression	6	1.722		
ROA	Residual	193	0.872	1.973	0.071
	Total	199			

#### Table 4.7: Anova Results (2008)

Predictors: CEO duality, Independent chairman, Board Composition, Board Size, Ownership Concentration and Leverage Level:

Dependent Variables: TSR and ROA.

Source: Developed for the research.

According to table above, the P-value for model TSR and ROA is 0.532 and 0.071 respectively which are more than 0.05. Thus the F statistic equal to 0.851 (TSR) and 1.973 (ROA) are insignificant. This is not a good model to describe the relationship between company performance and independent variables. The predictors cannot significantly explaining the variances in the company performance.

#### 4.3.2 Reliability Test for 2009

#### Table 4.8: Anova Results (2009)

Model		DF	Mean Square	F	Sig.	
	Regression	6	0.886			
TSR	Residual	193	0.445	1.992	0.069	
	Total	199				
	Regression	6	1.437			
ROA	Residual	193	0.705	2.037	0.063	
	Total	199				

Predictors: CEO duality, Independent chairman, Board Composition, Board Size, Ownership Concentration and

Leverage Level:

Dependent Variables: TSR and ROA.

Source: Developed for the research.

According to table 4.8, the P-value for model TSR and ROA is 0.069 and 0.063 respectively which are more than 0.05. The F statistic equal to 1.992 (TSR) and 2.037 (ROA) are insignificant. This is not a good model to describe the relationship between company performance and independent variables. The predictors cannot significantly explaining the variances in the company performance for 2009.

## 4.3.3 Reliability Test for 2010

Model		DF	Mean Square	F	Sig.
	Regression	6	0.224		0.460
TSR	Residual	193	0.236	0.95	
	Total	199			
	Regression	6	4.938		
ROA	Residual	193	1.514	3.262	0.004
	Total	199			

Table 4.9: Anova Results (2010)

Predictors: CEO duality, Independent chairman, Board Composition, Board Size, Ownership Concentration and Leverage Level:

Dependent Variables: TSR and ROA.

Source: Developed for the research.

According to table 4.9, the P-value for model TSR is 0.460. The F statistic of 0.95 is not significant. This is not a good model to describe the relationship between TSR and independent variables. TSR is not able significantly explain the variances in the company performance. However, the P-value for model ROA is 0.004. The P-value is less than 0.05, The F statistic of 3.262 (ROA) is significant. This is a good model to describe the relationship between ROA and independent variables. Thus the independent variables can significantly explaining the variances in the ROA

## 4.3.4 Reliability Test for 2011

Model		DF	Mean Square	F	Sig.
	Regression	6	0.191		
TSR	Residual	193	0.348	0.549	0.771
	Total	199			
	Regression	6	3.73		
ROA	Residual	193	1.465	2.546	0.021
	Total	199			

## Table 4.10: Anova Results (2011)

Predictors: CEO duality, Independent chairman, Board Composition, Board Size, Ownership Concentration and Leverage Level: Dependent Variables: TSR and ROA.

Source: Developed for the research.

According to table 4.10, the P-value for model TSR is 0.771 and P-value is more than 0.05. Thus the F statistic of 0.549 is not significant. This is not a good model to describe the relationship between TSR and the independent variables. TSR is not able to significantly explain the variances in the company performance. The P-value for model ROA is 0.021. The P-value is less than 0.05, thus the F statistic of 2.546 (ROA) is significant. This is a good model to describe the relationship between ROA and independent variables. Thus the independent variables can significantly explain the variances in the ROA.

## 4.3.5 Reliability Test for 2012

Model		DF	Mean Square	F	Sig.
	Regression	6	0.102		0.761
TSR	Residual	193	0.182	0.56	
	Total	199			
	Regression	6	0.074		
ROA	Residual	193	0.012	6.349	0.000
	Total	199			

### Table 4.11: Anova Results (2012)

Predictors: CEO duality, Independent chairman, Board Composition, Board Size, Ownership Concentration and Leverage Level:

Dependent Variables: TSR and ROA.

Source: Developed for the research.

According to table 4.11, the P-value for model TSR is 0.761 which is more than 0.05.The F statistic of 0.56 is not significant. This is not a good model to describe the relationship between TSR and independent variables. TSR is not able to significantly explain the variances in the company performance. However the P-value for model ROA is 0.000. The P-value is less than 0.05, thus the F statistic of 6.349 (ROA) is significant. This is a good model to describe the relationship between ROA and independent variables. The independent variables are to significantly explain the variances in the ROA.

# 4.4 Pearson Regression Analysis

Pearson regression analysis is used to measure the strength of the association (linear relationship) between two variables, however it only concerned with strength of the relationship.

## 4.4.1 Year 2008

Table 4.12: Pearson Correlation Results (2008)

		CEO	IndepCh	BC	BS	OC	LL
TSR	Pearson Correlation	0.051	-0.030	-0.046	-0.043	0.021	-0.133
	Sig. (2- tailed)	0.471	0.674	0.522	0.545	0.763	0.06
ROA	Pearson Correlation	0.049	-0.040	0.161*	0.049	-0.028	0.163*
	Sig. (2- tailed)	0.491	0.571	0.023*	0.491	0.694	0.021*

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

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

CEO is CEO duality, IndepCh is independent chairman, BC is board composition, BS is board size, OC is Ownership concentration, LL is leverage level

Source: Developed for the research.

Referring to Table 4.12, it reveals that the 6 independent variables are not statistically associated with TSR because the P-value is more than 0.05. CEO duality and ownership concentration is positive associated with TSR. The independent chairman, board composition, ownership concentration, and leverage level are negatively associated with TSR.

The board composition variable has 0.161 correlation with ROA. This indicates a slightly positive association between board composition and ROA. This word means that when board composition is high, ROA is also high. The relationship between board composition and ROA is also significant because the P-value of board composition is 0.023 which is less than 0.05.

Leverage level variable has a 0.163 correlation with ROA. This indicates positive association between Malaysian Public Listed Companies' leverage level and ROA. When leverage level is high, ROA is also high. There also is a significant relationship between leverage level and ROA because the P-value is 0.021 which is less than 0.05.

## 4.4.2 Year 2009

		CEO	IndepCh	BC	BS	OC	LL
TSR	Pearson Correlation	-0.173*	-0.024	-0.062	-0.109	-0.131	0.000
	Sig. (2- tailed)	0.014	0.731	0.381	0.124	0.065	0.998
ROA	Pearson Correlation	0.043	-0.027	0.187**	0.082	0.000	0.182**
	Sig. (2- tailed)	0.545	0.702	0.008**	0.246	0.997	0.010**

Table 4.13: Pearson Correlation Results (2009)

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

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

CEO is CEO duality, IndepCh is independent chairman, BC is board composition, BS is board size, OC is Ownership concentration, LL is leverage level

Source: Developed for the research.

Referring to Table 4.13 it reveals that CEO duality variable has a -0.173 correlation with TSR. This indicates that CEO duality is negative associated with TSR. When there is a same person to hold a CEO and chairman position, the TSR will be higher. Additional, there is a significant relationship between CEO duality and TSR. It is because the p-value is 0.014 which is less than 0.05.

The independent chairman, board composition, board size, and ownership concentration are negative associated with TSR. The leverage level is positive associated with TSR.

The board composition variable has 0.187 correlation with ROA. This indicated that slightly positive associated between board composition and ROA. Thus, when board composition is high, ROA is also high. Besides the relationship between board composition and ROA is significant because the P-value of board composition is 0.008 which is less than 0.05.

The leverage level variable has 0.182 correlation with ROA. This indicates a positive association between companies' leverage level and ROA. This word mean that when leverage level is high, ROA is also high. There also is a significant relationship between leverage level and ROA because the P-value is 0.010 which is less than 0.05.

The CEO duality, board size, and board composition are positive associated with ROA. The independent chairman variable is negative associated with ROA.

### 4.4.3 Year 2010

		CEO	IndepCh	BC	BS	OC	LL
TSR	Pearson Correlation	-0.038	-0.094	-0.008	-0.082	-0.027	-0.085
	Sig. (2- tailed)	0.592	0.187	0.908	0.247	0.703	0.231
ROA	Pearson Correlation	0.061	0.026	0.237**	0.130	0.017	0.221**
	Sig. (2- tailed)	0.388	0.716	0.001**	0.066	0.815	0.002**

Table 4.14: Pearson Correlation Results (2010)

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

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

CEO is CEO duality, IndepCh is independent chairman, BC is board composition, BS is board size, OC is Ownership concentration, LL is leverage level

Source: Developed for the research.

Referring to Table 4.14 it reveals that 6 independent variables namely, CEO duality, independent chairman, board composition, board size,

ownership concentration and leverage level is not significant negative associated with TSR because the P-value is more than 0.05.

The board composition variable has 0.237 correlation with ROA. This indicates a slightly positive association between board composition and ROA. Thus, when board composition is high, ROA is also high. Besides the relationship between board composition and ROA is significant because the P-value of board composition is 0.001 which is less than 0.05.

The leverage level variable has 0.221 correlation with ROA. This indicates a positive association between companies' leverage level and ROA. This word mean that when leverage level is high, ROA is also high. There also is a significant relationship between leverage level and ROA because the P-value is 0.002 less than 0.05.

The P-value for CEO duality, independent chairman in board, board size, and board composition are more than 0.05. Thus, the 4 independent variables are not statistically positive associated with ROA.

### 4.4.4 Year 2011

		CEO	IndepCh	BC	BS	OC	LL
TSR	Pearson Correlation	0.015	0.065	-0.009	0.019	-0.016	0.095
	Sig. (2- tailed)	0.831	0.363	0.904	0.789	0.818	0.181
ROA	Pearson Correlation	0.051	0.023	.240**	0.127	0.013	.151*
	Sig. (2- tailed)	0.475	0.749	.001**	0.073	0.856	.033*

Table 4.15: Pearson Correlation Results (2011)

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

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

CEO is CEO duality, IndepCh is independent chairman, BC is board composition, BS is board size, OC is Ownership concentration, LL is leverage level

Source: Developed for the research.

Referring to Table 4.15 it reveals that all the independent variables are not significant associated with TSR. The CEO duality, independent chairman, board size and leverage level are positive related with TSR. However, the board composition and ownership concentration are negative not significant with TSR.

The board composition variable has 0.240 correlation with ROA. This indicates a slightly positive associated between board composition and ROA. Thus, when board composition is high, ROA is also high. Besides the relationship between board composition and ROA is significant because the P-value of board composition is 0.001 which is less than 0.05.

The leverage level variable has 0.151 correlation with ROA. This indicates a positive association between companies leverage level and ROA. This word mean that when leverage level is high, ROA is also high. There also is a significant relationship between leverage level and ROA because the P-value is 0.033 which is less than 0.05.

The P-values for CEO duality, independent chairman, board size, and ownership concentration are more than 0.05. Thus, they are not significant positive associated with ROA.

## 4.4.5 Year 2012

		CEO	IndepCh	BC	BS	OC	LL
TSR	Pearson Correlation	0.012	0.087	-0.071	-0.073	-0.032	-0.041
	Sig. (2- tailed)	0.87	0.22	0.315	0.305	0.655	0.563
ROA	Pearson Correlation	0.076	0.091	0.028	0.299**	0.156*	-0.118
	Sig. (2- tailed)	0.282	0.201	0.691	0.000**	0.027*	0.095

Table 4.16: Pearson Correlation Results (2012)

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

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

CEO is CEO duality, IndepCh is independent chairman, BC is board composition, BS is board size, OC is Ownership concentration, LL is leverage level

Source: Developed for the research.

Referring to Table 4.16 it reveals that P- values for 6 independent variables is more than 0.05. Therefore, they are not significant associated with TSR. CEO duality, and independent chairman are positively associated with TSR. The board composition, board size, and leverage level are negatively associated with TSR.

The board size variable has 0.299 correlation with ROA. This indicates a slightly positive association between board composition and ROA. This word means that when board size is large, ROA is also high. Besides the relationship between board size and ROA is significant because the P-value of board composition is 0.000 which is less than 0.05.

The ownership concentration variable has 0.156 correlation with ROA. This indicates that positive association between companies' ownership concentration and ROA. Thus, when ownership concentration is high, ROA is also high. There also is a significant relationship between ownership concentration and ROA because the P-value is 0.027 which is less than 0.05.

The CEO duality, independent chairman, and board composition are positively not significant associated with ROA. Additional, the leverage level is negatively not significant with ROA.

# 4.5 Multiple Linear Regression Analysis

Multiple Linear Regression Analysis is used to predict the value of a dependent variable based on the value of at least one independent variable and explain the impact of changes in an independent variable on the dependent variable.

# 4.5.1 Year 2008

Table 4.17: Model Summary (2008)

Model	R	R Square	Adjusted R Square
TSR	0.161	0.026	-0.005
ROA	0.240	0.058	0.029

Source: Developed for the research.

Model summary table shows that the correlation coefficients (R) for model TSR is 0.161, and the R Square is 0.026, which indicated 6 independent variables explain 2.6% of the variability of the TSR. The adjusted R-square is -0.005.

The correlation coefficients for model ROA is 0.240, and the R Square is 0.058, which indicate 6 independent variable explain 5.8% of the variability of the ROA. The adjusted R-square is 0.029.

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		В	Std. Error	Beta		
T S	(Constant)	0.184	0.522		0.352	0.725
S R	CEO Duality	0.297	0.268	0.086	1.109	0.269
	Independent Chairman	-0.182	0.256	-0.055	-0.709	0.479
	Board composition	-0.006	0.119	-0.005	-0.054	0.957
	Board Size	-0.030	0.066	-0.041	-0.458	0.647
	Ownership Concentration	0.143	0.688	0.015	0.208	0.836
	Leverage Level	-0.931	0.513	-0.131	-1.814	0.071

Table 4.18: TSR Multiple Linear Correlation Result (2008)

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

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

Source: Developed for the research.

The regression equation is formed by using "B" column. The equation is as below:

TSR= 0.184+0.297 CEO Duality – 0.182 Independent Chairman – 0.006 Board Composition – 0.030 Board Size +0.143 Ownership concentration -0.0931 Leverage Level

TSR correlation table shows that all independent variables are not statistically significant with TSR because the P-value is more than 0.05. Thus, this research does not have enough evidence to reject null hypothesis H0.

There is a positive influence between CEO duality, and ownership concentration with TSR. Independent chairman, board composition, board size, and leverage level displays a negative relationship with TSR.

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		В	Std. Error	Beta		
R	(Constant)	-0.410	0.315		-1.304	0.194
A	CEO Duality	0.126	0.162	0.060	0.779	0.437
	Independent Chairman	-0.201	0.154	-0.100	-1.305	0.193
	Board composition	0.159	0.072	0.200	2.212	0.028*
	Board Size	-0.038	0.040	-0.085	-0.954	0.341
	Ownership Concentration	0.034	0.415	0.006	0.082	0.934
	Leverage Level	0.617	0.310	0.141	1.993	0.048*

## Table 4.19: ROA Multiple Linear Correlation Result (2008)

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

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

Source: Developed for the research.

The regression equation is formed by using "B" column. The equation is as below:

ROA= -0.41 +0.126 CEO Duality – 0.201 Independent Chairman + 0.159 Board Composition – 0.038 Board Size +0.034 Ownership concentration + 0.617 Leverage Level

The P-value for board composition variable is 0.028 which is less than 0.05. This indicated that board composition variable is statistically positive significant with ROA. Therefore, this research have enough evidence to reject null hypothesis,  $HO_{3B}$ . The t-statistic for board composition variable is 2.212. The B value is 0.159, this mean that for every single unit increase in board composition, ROA will go up by 0.159 unit, provided that other variables remain unchanged.

The P-value for leverage level variable is 0.048 which is less than 0.05. This indicated that leverage level variable is statistically positive significant with ROA. Therefore, this research have enough evidence to reject null hypothesis,  $HO_{6B}$ . The t-statistic is 0.141. The B value is 0.617, this mean that for every 0.617 unit increase in leverage level, ROA will go up by 1 unit, provided that other variables remain unchanged.

The P-values for other 4 independent variables namely CEO duality, independent chairman, board size, and ownership concentration are more than 0.05. Thus, there is a positive influence between CEO duality, and ownership concentration with ROA. Independent chairman and board size displays a negative relationship with ROA.

## 4.5.2 Year 2009

Table 4.20: Model Summary (2009)

Model	R	R Square	Adjusted R Square
TSR	0.241	.058	.029
ROA	0.244	.060	.030

Source: Developed for the research.

Model summary table shows that the correlation coefficients (R) for model TSR is 0.241, and the R Square is 0.058, which indicated 6 independent variables explain 5.8% of the variability of the TSR. The adjusted R-square is 0.029.

The correlation coefficients for model ROA is 0.244, and the R Square is 0.060, which indicate 6 independent variable explain 6% of the variability of the ROA. The adjusted R-square is 0.030.

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		В	Std. Error	Beta		
T	(Constant)	1.064	0.216		4.925	0
S R	CEO Duality	-0.302	0.120	-0.194	-2.525	0.012*
	Independent Chairman	0.070	0.108	0.050	0.645	0.52
	Board composition	-0.010	0.05	-0.018	-0.197	0.844
	Board Size	-0.021	0.027	-0.069	-0.759	0.449
	Ownership Concentration	-0.576	0.308	-0.133	-1.872	0.063
	Leverage Level	0.086	0.218	0.029	0.395	0.693

### Table 4.21: TSR Multiple Linear Correlation Results (2009)

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

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

Source: Developed for the research.

The regression equation is formed by using "B" column. The equation is as below:

TSR= 1.064 - 0.302 CEO Duality +0.070 Independent Chairman - 0.010 Board Composition - 0.021 Board Size - 0.576 Ownership concentration + 0.086 Leverage Level

The t-statistic for board composition variable is -2.525. The B value is -0.302, this mean that for every single unit decrease in CEO duality, ROA will go up by 0.302 units, provided that other variables remain unchanged. The P-value for CEO duality variable is 0.012 which is less than 0.05. This indicates a CEO duality variable is statistically negative significant with ROA. Therefore, this research have enough evidence to reject null hypothesis,  $H0_{1A}$ .

The P-value for other 5 independent variables are more than 0.05. There is a positive influence between independent chairman, and leverage level

variables with TSR. The board composition, board size, and ownership concentration displays a negatively affected with TSR.

There is a positive influence between CEO duality, and ownership concentration with TSR. Independent chairman, board composition, board size, and leverage level displays a negative relationship with TSR.

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		В	Std. Error	Beta		
R	(Constant)	-0.434	0.272		-1.597	0.112
A	CEO Duality	0.083	0.151	0.042	0.550	0.583
	Independent Chairman	-0.120	0.136	-0.068	-0.881	0.379
	Board composition	0.126	0.062	0.185	2.022	0.045*
	Board Size	-0.021	0.034	-0.055	-0.612	0.541
	Ownership Concentration	0.098	0.387	0.018	0.253	0.800
	Leverage Level	0.536	0.274	0.142	1.956	0.052

## Table 4.22: ROA Multiple Linear Correlation Results (2009)

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

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

Source: Developed for the research.

The regression equation is formed by using "B" column. The equation is as below:

ROA= -0.434 +0.083 CEO Duality – 0.120 Independent Chairman + 0.126 Board Composition – 0.021 Board Size +0.098 Ownership concentration + 0.536 Leverage Level

The t-statistic for board composition variable is 2.002. The B value is 0.126, mean that for every 0.126 unit increase in board composition, ROA will go

up by 1 units, provided that other variables remain unchanged. The P-value for board composition variable is 0.045 which is less than 0.05. This indicated that board composition variable is statistically positive significant with ROA. Thus, this research has enough evidence to reject null hypothesis  $HO_{3B}$ .

The other 5 independent variables are not significant related with ROA because their P-value is more than 0.05. There is a positive influence between CEO duality, ownership concentration, and leverage level with ROA. The independent chairman, and board size displays a negatively insignificant relationship with ROA.

## 4.5.3 Year 2010

Table 4.23: Model Summary (2010)

Model	R	R Square	Adjusted R
			Square
TSR	0.169	0.029	-0.002
ROA	0.303	0.092	0.064

Source: Developed for the research.

Model summary table shows that the correlation coefficients (R) for model TSR is 0.169, and the R Square is 0.029, which indicated 6 independent variables explain 2.9% of the variability of the TSR. The adjusted R-square is -0.002.

The correlation coefficients for model ROA is 0.303, and the R Square is 0.092, which indicate 6 independent variable explain 9.2% of the variability of the ROA. The adjusted R-square is 0.064.

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		В	Std. Error	Beta		
T	(Constant)	0.505	0.155		3.256	0.001
S R	CEO Duality	0.018	0.086	0.016	0.204	0.838
	Independent Chairman	-0.112	0.080	-0.111	-1.402	0.163
	Board composition	0.040	0.035	0.107	1.142	0.255
	Board Size	-0.033	0.020	-0.150	-1.603	0.111
	Ownership Concentration	-0.029	0.218	-0.009	-0.131	0.896
	Leverage Level	-0.185	0.158	-0.085	-1.175	0.241

Table 4.24: TSR Multiple Linear Correlation Results (2010)

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

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

Source: Developed for the research.

The regression equation is formed by using "B" column. The equation is as below:

TSR= 0.505 +0.018 CEO Duality - 0.112 Independent Chairman + 0.040 Board Composition - 0.033 Board Size - 0.029 Ownership concentration - 0.185 Leverage Level

TSR correlation table shows that all independent variables are not statistically significant with TSR because the P-value is more than 0.05. Thus, this research does not have enough evidence to reject null hypothesis, H0.

The CEO duality, and board composition are positive not significant influence with TSR. The independent chairman, board size, ownership concentration, and leverage level are not significant negative influence with TSR.

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		В	Std. Error	Beta		
R	(Constant)	-0.980	0.393		-2.494	0.013
A	Ceo Duality	0.067	0.217	0.024	0.310	0.757
	Independent Chairman	-0.056	0.202	-0.021	-0.276	0.783
	Board composition	0.219	0.088	0.226	2.489	0.014*
	Board Size	-0.018	0.052	-0.032	-0.349	0.728
	Ownership Concentration	0.268	0.551	0.034	0.486	0.628
	Leverage Level	1.057	0.399	0.185	2.649	0.009**

Table 4.25: ROA Multiple Linear Correlation Results (2010)

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

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

Source: Developed for the research.

The regression equation is formed by using "B" column. The equation is as below:

ROA= -0.980 + 0.067 CEO Duality – 0.056 Independent Chairman + 0.219 Board Composition – 0.018 Board Size +0.268 Ownership concentration + 1.057 Leverage Level

The P-value for board composition variable is 0.014 less than 0.05. This indicated that board composition variable is statistically positive significant with ROA. Therefore, the research has enough evidence to reject H0. The t-statistic for board composition variable is 2.489. The B value is 0.219, this mean that every single unit increase in board composition, ROA will go up by 0.219 unit, provided that other variables remain unchanged. Thus, this research have enough evidence to reject null hypothesis, H0<sub>3B</sub>.

The P-value for leverage level variable is 0.009 which is less than 0.05. This indicated that leverage level variable is statistically positive significant with
ROA. Therefore, the research has enough evidence to reject H0. The tstatistic is 0.2649. The B value is 1.057, this mean that every single unit increase in leverage level, ROA will go up by 1.057 unit, provided that other variables remain unchanged. Thus, the research has enough evidence to reject null hypothesis,  $HO_{6B}$ .

The other 4 independent variables are not significant related with ROA, their P-value is more than 0.05. There is a positive influence between CEO duality and ownership concentration with ROA. The independent chairman, and board size displays a negative relationship with ROA.

#### 4.5.4 Year 2011

Table 4.26: Model Summary (2011)

Model	R	R Square	Adjusted R
			Square
TSR	0.129	0.017	-0.014
ROA	0.271	0.073	0.045

Source: Developed for the research.

Model summary table shows that the correlation coefficients (R) for model TSR is 0.129, and the R Square is 0.017, which indicated 6 independent variables explain 1.7% of the variability of the TSR. The adjusted R-square is -0.014.

The correlation coefficients for model ROA is 0.271, and the R Square is 0.073, which indicate 6 independent variable explain 7.3% of the variability of the ROA. The adjusted R-square is 0.045.

Model		Unstand Coeff	dardized icients	Standardized Coefficients	t	Sig.
		В	Std. Error	Beta		
T S	(Constant)	0.072	0.192		0.374	.709
R	CEO Duality	-0.045	0.106	-0.034	-0.428	.669
	Independent Chairman	0.100	0.096	0.083	1.045	.297
	Board composition	-0.029	0.045	-0.058	-0.658	.511
	Board Size	0.016	0.025	0.058	0.656	.512
	Ownership Concentration	-0.099	0.256	-0.028	-0.388	.698
	Leverage Level	0.250	0.176	0.104	1.424	.156

Table 4.27: TSR Multiple Linear Correlation Results (2011)

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

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

Source: Developed for the research.

The regression equation is formed by using "B" column. The equation is as below:

TSR= 0.072 - 0.045 CEO Duality + 0.100 Independent Chairman - 0.029 Board Composition + 0.016 Board Size - 0.099 Ownership concentration + 0.250 Leverage Level

TSR correlation table shows that all independent variables are not statistically significant with TSR because the P-value is more than 0.05. Thus, the research have enough evidence to reject null hypothesis,  $H_0$ .

The CEO duality, board composition, and ownership concentration are positively related with TSR. However, board composition, and ownership concentration are negative related with TSR.

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		В	Std. Error	Beta		
R	(Constant)	-0.918	0.394		-2.331	0.021
A	CEO Duality	-0.009	0.218	-0.003	-0.040	0.968
	Independent Chairman	-0.028	0.197	-0.011	-0.141	0.888
	Board composition	0.247	0.092	0.232	2.698	0.008**
	Board Size	-0.004	0.051	-0.007	-0.082	0.934
	Ownership Concentration	0.055	0.525	0.007	0.104	0.917
	Leverage Level	0.633	0.360	0.125	1.757	0.081

Table 4.28: ROA Multiple Linear Correlation Results (2011)

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

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

Source: Developed for the research.

The regression equation is formed by using "B" column. The equation is as below:

ROA= -0.918 - 0.009 CEO Duality – 0.028 Independent Chairman + 0.247 Board Composition – 0.004 Board Size +0.055 Ownership concentration + 0.633 Leverage Level

The P-value for board composition variable is 0.008 which is less than 0.05. This indicated that board composition variable is statistically positive significant with ROA. Therefore, the research has enough evidence to reject null hypothesis,  $HO_{3B}$ . The t-statistic for board composition variable is 2.698. The B value is 0.247, this mean that every single unit increase in board composition, ROA will go up by 0.247 unit, provided that other variables remain unchanged.

The other 5 independent variables are not significant with ROA. There is a positive influence between ownership concentration and leverage level with ROA. CEO duality, independent chairman, and board size displays a negative relationship with ROA.

### 4.5.5 Year 2012

Table 4.29: Model summary (2012)

Model	R	R Square	Adjusted R
			Square
TSR	0.131	0.017	-0.013
ROA	0.406	0.165	0.139

Source: Developed for the research.

Model summary table shows that the correlation coefficients (R) for model TSR is 0.131, and the R Square is 0.017, which indicated 6 independent variables explain 1.7% of the variability of the TSR. The adjusted R-square is -0.013.

The correlation coefficients for model ROA is 0.406, and the R Square is 0.165, which indicate 6 independent variable explain 16.5% of the variability of the ROA. The adjusted R-square is 0.139.

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
-		В	Std. Error	Beta		
TSR	(Constant)	0.291	0.143		2.033	0.043
	CEO Duality	-0.020	0.079	-0.021	-0.257	0.797
	Independent Chairman	0.090	0.070	0.104	1.288	0.199
	Board composition	-0.023	0.033	-0.062	-0.699	0.485
	Board Size	-0.006	0.019	-0.030	-0.342	0.732
	Ownerships Concentration	-0.059	0.183	-0.023	-0.322	0.748
	Leverage Level	-0.040	0.129	-0.023	-0.314	0.754

Table 4.30: TSR Multiple Linear Correlation Results (2012)

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

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

Source: Developed for the research.

The regression equation is formed by using "B" column. The equation is as below:

TSR= 0.291 - 0.020 Ceo Duality + 0.090 Independent Chairman - 0.023 Board Composition - 0.006 Board Size - 0.059 Ownership concentration -0.40 Leverage Level

TSR correlation table shows that all independent variables are not statistically significant with TSR because the P-value is more than 0.05. Thus, this research have enough evidence to reject  $H_0$ .

There is a positive influence between independent chairman variable with TSR. CEO duality, board composition, board size, ownership concentration, and leverage level displays a negative relationship with TSR.

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
			Std. Error	Beta		
R	(Constant)	-0.091	0.036		-2.520	0.013
A	CEO Duality	0.022	0.020	0.083	1.098	0.274
	Independent Chairman	0.023	0.018	0.098	1.313	0.191
	Board composition	-0.019	0.008	-0.191	-2.337	0.020*
	Board Size	0.023	0.005	0.404	5.000	.000**
	Ownership Concentration	0.074	0.046	0.108	1.612	0.109
	Leverage Level	-0.069	0.032	-0.146	-2.113	0.036*

Table 4.31: ROA Multiple Linear Correlation Results (2012)

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

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

Source: Developed for the research.

The regression equation is formed by using "B" column. The equation is as below:

ROA= -0.091 + 0.022 CEO Duality + 0.023 Independent Chairman - 0.019 Board Composition + 0.023 Board Size +0.074 Ownership concentration - 0.069 Leverage Level

The P-value for board composition variable is 0.020 which is less than 0.05. This indicated that board composition variable is statistically positive significant with ROA.

Therefore, the research has enough evidence to reject null hypothesis,  $H0_{3B}$ . The t-statistic for board composition variable is -0.191. The B value is -0.019, this mean that every single unit decrease in board composition, ROA will go up by 0.019 unit, provided that other variables remain unchanged. The P-value for board size variable is 0.000 which is less than 0.05. This indicated that board size variable is statistically positive significant with ROA. Therefore, the research has enough evidence to reject null hypothesis,  $HO_{4B}$ . The t-statistic for board size variable is 5.00. The B value is 0.23, this mean that every single increase in board size, ROA will go up by 0.23 unit, provided that other variables remain unchanged.

The P-value for leverage level variable is 0.036 which is less than 0.05. This indicated that leverage level variable is statistically positive significant with ROA. Therefore, the research has enough evidence to reject  $H0_{6B}$ . The t-statistic is -0.2113. The B value is -0.069, this mean that every 1 unit decrease in leverage level, ROA will go up by 0.069 unit, provided that other variables remain unchanged.

## 4.6 Multicollinearity Test

Collinearity (or multicollinearity) is the undesirable situation where the correlations among the independent variables are strong. The collinearity problem can be detect by SPSS. If the Variance Inflation Factor (VIF) that measures multicollinearity in the model is greater than 5, one of these variables must be removed from the regression model.

### Table 4.32: Multicollinearity Result

Voor	20	)08	2009		2010		2011		2012	
1 eai	Tol	VIF								
CEO Duality	0.84	1.20	0.83	1.21	0.82	1.23	0.79	1.26	0.76	1.31
Independent Chairman	0.83	1.21	0.82	1.22	0.81	1.24	0.81	1.23	0.78	1.28
Board composition	0.60	1.67	0.58	1.72	0.57	1.76	0.65	1.54	0.65	1.54
Board Size	0.62	1.62	0.60	1.67	0.58	1.74	0.65	1.54	0.66	1.51
Ownership Concentration	0.97	1.04	0.96	1.04	0.97	1.03	0.97	1.03	0.97	1.04
Leverage Level	0.97	1.03	0.93	1.08	0.96	1.04	0.95	1.05	0.91	1.10

Tol: Tolerance

Source: Developed for the research.

Table 4.32 shows that leverage level (2008) has the highest tolerance value 0.97, followed by ownership concentration (2012) is 0.97, CEO duality (2008) is 0.84, independent chairman (2008) 0.83 and board composition (2012) 0.65. Low tolerance values shows a good collinearity.

The variance inflation factor value (VIF) below 5 indicates good collinearity. The highest VIF in this study is board composition (2010) 1.76, following by board size (2010) is 1.74, independent chairman (2012) is 1.28, CEO duality (2012) is 1.31, leverage level (2012) is 1.10 and lastly is ownership concentration (2009) 1.04.

## 4.7 Conclusion

All of the analysis result are described and hypothesis are tested in this chapter. The next chapter will be carried out on the discussion and interpretation of the result, implication, limitation and recommendation for future research.

## **CHAPTER 5**

# **DISCUSSION AND CONCLUSION**

### 5.0 Introduction

A hypothesis testing, statistics analysis (descriptive, reliability, Pearson regression and multiple linear regression), major findings and managerial implications, limitations of research, future recommendations and conclusion are discussed in this chapter.

## 5.1 Hypothesis Testing

				TSR		
	2008	2009	2010	2011	2012	Overall 5
	Sig	Sig	Sig	Sig	Sig	years
(Constant)	0.725	0.000	0.001	0.709	0.043	0.0023
CEO Duality	0.269	0.012*	0.838	0.669	0.797	0.8935
Independent Chairman	0.479	0.520	0.163	0.297	0.199	0.8774
Board composition	0.957	0.844	0.255	0.511	0.485	0.9492
Board Size	0.647	0.449	0.111	0.512	0.732	0.2781
Ownership concentration	0.836	0.063	0.896	0.698	0.748	0.6222
Leverage Level	0.071	0.693	0.241	0.156	0.754	0.1868

Table 5.1: Hypothesis Testing Summary of TSR Results

Source: Developed for the research.

		ROA								
	2008	2009	2010	2011	2012	Overall 5				
	Sig	Sig	Sig	Sig	Sig	years				
(Constant)	0.194	0.112	0.013	0.021	0.013	0.4734				
CEO Duality	0.437	0.583	0.757	0.968	0.274	0.9545				
Independent Chairman	0.193	0.379	0.783	0.888	0.191	0.9422				
Board composition	0.028*	0.045*	0.014*	0.008**	0.020*	0.1113				
BoardSize	0.341	0.541	0.728	0.934	0.00**	0.2922				
Ownership concentration	0.934	0.800	0.628	0.917	0.109	0.7808				
LeverageLevel	0.048*	0.052	0.009**	0.081	0.036*	0.1299				

Table 5.2: Hypothesis Testing Summary of ROA Results

Source: Developed for the research.

## Table 5.3: Summary of Hypothesis Tests

Pagaarah Quastians	Desearch Hypothesis	Result					
Research Questions	Research Hypothesis	Overall	2008	2009	2010	2011	2012
Is CEO duality negatively related with company performance for the Malaysian listed companies?	H1 <sub>1A</sub> : CEO duality is negatively related to TSR.	R	R	А	R	R	R
	H1 <sub>1B</sub> : CEO duality is negatively related to ROA.	R	R	R	R	R	R
Is independent board chairman positively related to company	H1 <sub>2A</sub> : Independent board chairman is positively related to TSR.	R	R	R	R	R	R
performance for the Malaysian listed companies?	H1 <sub>2B</sub> : Independent board chairman is positively related to ROA.	R	R	R	R	R	R
Is there any positive relationship between board composition and company performance for the Malaysian listed companies?	H1 <sub>3A</sub> : Board composition is positively influencing TSR.	R	R	R	R	R	R

	H1 <sub>3B</sub> : Board composition is positively influencing ROA.	R	A	R	A	A	A
Is board size positively	H1 <sub>4A</sub> : Board size is positively related with TSR.	R	R	R	R	R	R
listed companies' performance?	H1 <sub>4B</sub> : Board size is positively related with ROA.	R	R	R	R	R	А
Is there any positive relationship between ownership	H1 <sub>5A</sub> : Ownership concentration is positively related to TSR.	R	R	R	R	R	R
concentration and company performance for the Malaysian listed companies?	H1 <sub>5B</sub> : Ownership concentration is positively related to ROA.	R	R	R	R	R	R
Is there any negative relationship between company leverage	H1 <sub>6A</sub> : There is significant negative relationship between company leverage level and TSR.	R	R	R	R	R	R
performance for the Malaysian listed companies?	H1 <sub>6B</sub> : There is significant negative relationship between company leverage level and ROA.	R	A	R	A	R	A

A= Accept, R= Reject

Source: Developed for the research.

### <u>Hypothesis 1</u>

H1<sub>1</sub>A: CEO duality is negatively related to TSR

H1<sub>1</sub>B: CEO duality is negatively related to ROA.

Results of Pearson Correlation analysis for association shows that there is no significant evidence to support hypothesis H11A and H11B. This result was supported by the results generated by Multiple Linear Regression, and Panel Least Square analysis. Thus, the research finds not enough evidence to reject

null hypothesis H01A and null hypothesis H01B. It can be concluded that the profitability in Malaysian Listed Company is not significantly related to CEO duality practice. Although there is not significant relationship between CEO duality and company performance, from the descriptive analysis, it is found that number of firms which comply with MCCG 2012 to practice non-CEO duality slightly increased to 75% in 2012 from 2008. The finding is consistent with previous studies (Rashid et al., 2010, Hashim & Devi, 2008, Abdullah & Nasir, 2004)

### <u>Hypothesis 2</u>

H1<sub>2A</sub>: Independent board chairman is positively related to TSR.

H1<sub>2B</sub>: Independent board chairman is positively related to ROA.

Findings from the Panel Least Square analysis does not support the  $H1_{2A}$  and  $H1_{2B}$ . There is not enough evidence to reject null hypothesis of  $H0_{2A}$  and null hypothesis  $H0_{2B}$ . It can be concluded therefore that an independent board chairman is not statistically related to company performance. This finding is consistent with previous (Ponnu 2008, Joel & Dondjio, 2012, and Rahman & Ali, 2006).

### Hypothesis 3

H1<sub>3A</sub>: Board composition is positively influencing TSR.

H1<sub>3B</sub>: Board composition is positively influencing ROA.

Results of the Panel Least Square analysis does not supporting the  $H1_{3A}$  and  $H1_{3A}$ . There is not enough evidence to reject null hypothesis  $H0_{3A}$  and null hypothesis  $H0_{3A}$ . It can then be concluded that board composition is not significantly related with company performance. This finding is consistent with Chaghadari (2011), Ponnu (2008), and Taghizadeh and Saremi (2013) studies.

### <u>Hypothesis 4</u>

H1<sub>4A</sub>: Board size is positively related to TSR.

H1<sub>4B</sub>: Board size is positively related with ROA.

 $H1_{4A}$  and  $H1_{4B}$  cannot be supported when applying the Panel Least Square analysis. Not enough evidence is raised to reject the null hypothesis  $H0_{4A}$ and  $H0_{4B}$ . The conclusion therefore is board size is not significantly related with company performance. This finding is consistent with Chiang and Chia (2005), Chaghadari (2011) Hashim and Devi (2008)'s studies.

## <u>Hypothesis 5</u>

H1<sub>5A</sub>: Ownership concentration is positively related to TSR.

H1<sub>5B</sub>: ownership concentration is positively related to ROA.

The result of Pearson Regression analysis and Multiple Linear Regression cannot support the hypothesis  $H1_{5A}$  and hypothesis  $H1_{5B}$ . The study does not have enough evidence to reject the null hypothesis  $H0_{5A}$  and null hypothesis  $H0_{5B}$ . It can be concluded that ownership concentration is insignificantly related to company performance. The finding consistent with previous studies Tam and Tan (2007), Chang and Abu (2005), Rahman and Ali (2006), Demsetz and Villalonga (2001), Uwuigbe (2013).

## <u>Hypothesis 6</u>

 $H1_{6A}$ : There is significant negative relationship between company leverage level and TSR.

H1<sub>6B</sub>: There is significant negative relationship between company leverage level and ROA.

The result of Panel Least Square analysis does not support the hypothesis  $H1_{6A}$  and  $H1_{6B}$ . The analysis does not provide enough evidence to reject null hypothesis  $H0_{6A}$  and null hypothesis  $H0_{6B}$ . The conclusion is therefore no

significant relationship exist between company leverage level and company performance. The finding is consistent with previous studies Chaghadari (2011), Hashim and Devi (2008), and Ramasamy et al. (2005).

### 5.2 Summary of Test

#### **5.2.1 Descriptive analysis**

The descriptive analysis shows the main features of the data collection such as mean and standard deviation of sample companies for the observation period. Trends between Corporate Governance practices and Malaysian Public Listed Companies performance can be identified through descriptive test and frequency test.

### 5.2.1.1 Dependent Variables

The descriptive statistics in this study show the extent to which Corporate Governance practices of Malaysian Public Listed Companies influences company performance. The market-based measure of firm performance, TSR, shows a significant increase during the observation period, which experienced an increase in average share return from -24% and to 14.5%. The accounting based measurement, ROA, shows a significant decrease from average assets return, from 10% in 2008 to 4.3% in 2012. The increase in TSR indicates that investors have become more confident in the Malaysian share market recovering from the financial meltdown in 2008.

#### 5.1.1.2 Independent Variables

The descriptive analysis of CEO duality reports that 27.5% of the listed companies practised CEO duality in 2008. This has decreased from 27.5% to 25.5% in 2012. It indicates that almost 75% of listed companies practiced separate positions for 2 main key positions in the board of directors and comply with recommendation put forward by the MCCG and the CG Blue Print Malaysia in the years observed. This finding is consistent with CG

Watch Reporting 2012 that reported that 75% of listed companies practiced non-CEO duality.

There is a favourable result in the descriptive analysis for the independent chairman. The results shows that only 33% chairman were independent in 2008. This percentage of independent chairman increased to 59.5% in 2012. The analysis showed that the Malaysian Public Listed Companies recognized the importance of the position of the chairperson in board of directors to be held by independent non-executive director in order to ensure fairness, accountability and transparency in board meetings.

The analysis of board composition reports that the average number of independent non-executive directors was 3 persons in 2008. The number of independent directors remained 3 persons in 2012. In the years observed, no observation followed the MCCG recommendations which encourage companies to appoint more independent non-executive directors to monitor executive directors' decision-making process and to maximize shareholders wealth, especially in minority shareholders protection. For board size, ownership concentration and leverage level, the descriptive analysis showed no significant movements from 2008 to 2012.

### 5.2.2 Reliability Test

Reliability test is the analysis use to test the degree to which sample in research produces a consistent results. An ANOVA test was the reliability tool applied for this research.

The ANOVA test shows that independent variables are significantly related to ROA in 2010 (P-value = 0.004, F-statistic = 3,262), 2011(P-value = 0.021, F-statistic = 2.546), and 2012 (P-value = 0.000, F-statistic = 6.349). However, there is not significant fit model for TSR.

#### **5.2.3 Inferential Analysis**

Inferential analysis is the analysis use to test the hypothesis. If the P-value of the test less than Alphard (0.05), then the null hypothesis will be reject. 2 types of inferential analysis were applied in this research. The strength of association is shown in the results of the statistical analysis from Pearson correlation while Multiple Linear Regression analysis provides evidence to support the relationship between Corporate Governance practices and Malaysian Public Listed Companies performance.

### 5.2.3.1 Panel Least Squares Analysis (Overall 5 years analysis)

The Panel Least Squares analysis provides evidence on an overall 5 years basis to provide evidence to support the relationship between Corporate Governance practices and performance of Malaysian Public Listed Companies.

The Panel Least Squares analysis shows that Corporate Governance practices were not significant in affecting Malaysian Public Listed Companies performance during the 5 year period.

In the following part, this research applied the multiple linear regression to examine the extent to which Corporate Governance practice influences Malaysian Public Listed Companies in yearly basis from 2008 to 2012.

#### 5.2.3.2 Pearson Regression Analysis (yearly basis analysis)

- TSR
  - > CEO duality is negative significant associated to TSR in 2009
  - Independent chairman, board composition, board size, ownership concentration and leverage level are not significantly associated to TSR during the observation period.
- ROA
  - The CEO duality and independent chairman does not significantly affected ROA during the observation period.

- The board composition has a significantly positive relationship with ROA in 2008, 2009, 2010 and 2011.
- The board size is significantly positively associated with ROA in 2012
- The ownership concentration is significantly positively associated with ROA in 2012.
- There is strong positive association between leverage level and ROA in 2008, 2009, 2010 and 2011.

The Person Regression analysis shows that there is a negative significant association between CEO duality and TSR in 2009 (p-value = 0.014, below 0.05), correlation amount is -1.73. For the other 4 observation years (2008, 2010, 2011 and 2012), the analysis did not suggest any significant association. There is not enough evidence to suggest that CEO duality is significantly associated with TSR. In using ROA as the performance proxy, there is also no significant association between CEO duality and ROA during the observation period.

The Person Regression analysis shows that there is a no significant association between independent chairman and company performance for both TSR and ROA. It is not evident enough to conclude that independent chairman is not statically associated with TSR and ROA.

Using TSR as a measurement for company performance, the result shows that the board composition does not significant influence company performance. However when ROA is used as company performance indicator, the analysis reports that board composition is positively related to ROA in 2008 (P-value = 0.023, correlation = 0.161), 2009 (P-value = 0.008, correlation = 0.187), 2010 (P-value = 0.001, correlation = 0.237) and 2011 (P-value = 0.001, correlation = 0.240). It is statistically evidenced to conclude that board composition has a positive influence on company performance. However, the analysis also shows that board composition is not statistically associated with company market value (TSR).

The board size is not significantly associated with TSR for the period under observation. The p-value for 5 years is more than 0.05. With regards to the ROA, board size is significantly positively associated with ROA in 2012 (Table 4.12) as the p-value is 0.00 and is below 0.05 with a Pearson correlation of 0.156. Based on the 5 years observation between board size and company performance, there is enough evidence to conclude that company performance measured either by market based nor operational proxy, is not significant enough to be influenced by board size.

In term of ownership concentration, the Pearson Regression analysis shows that ownership concentration is not statistically related to TSR and ROA in the period of observation. With the exception of 2012, the analysis reports ownership concentration being positively associated with ROA. The P-value is 0.027 which below alpha value 0.05 and person correlation is 0.299.

For leverage level, the Pearson Regression analysis shows that company leverage level is weakly associated with company market based performance proxy, TSR from 2008 to 2012. When ROA is used as performance indicator, the analysis shows that there is strong positive association between leverage level and ROA, in 2008 (P-value = 0.021, correlation = 0.163), 2009 (P-value = 0.010, correlation = 0.182), 2010 (p-value = 0.02, correlation = 0.221), and 2011 (p-value = 0.33, correlation = 0.033). Overall, this research concluded that, although leverage level is insignificant associated with TSR, leverage level is statistically associated with TSR.

#### 5.2.3.3 Multiple Linear Regression Analysis

Multiple Linear Regression analysis provides evidence in cross sectional results (a year on year analysis) to support the relationship between Corporate Governance practices and performance of Malaysian Public Listed Companies.

The multiple linear regression analysis result supports the outcome in Pearson Regression that CEO duality is statistically significant and negatively associated with TSR in 2009. The p-value is 0.012 and t-statistic is -2.525. The analysis also states there is no significant relationship between CEO duality and ROA.

There are also consistent results from Multiple Linear Regression analysis which states the independent chairman is insignificant related with TSR and ROA.

In respect to board composition, the Multiple Linear Regression analysis also supports the Pearson regression result. For TSR, there is no significant relationship with board composition. For ROA, the analysis shows that there is a statistically positive relationship with board composition in 2008 (p-value = 0.028, t-statistic = 2.212), 2009 (p-value = 0.045, t-statistic = 2.022), 2010 (p-value = 0.014, t-statistic = 2.489) and 2011 (p-value = 0.014, t-statistic = 2.489). However, in 2012 the analysis shows there is a negative significant relationship among them (p-value = 0.020, t-statistics = -2.337). Thus, it can be concluded that board composition is not significantly related to TSR. In addition, the board composition is statistically positively related to ROA.

For the board size, the Multiple Regression analysis reports that board size is positive significant relationship with ROA in 2012. The P-value is 0.00 and t-statistic is 5.00. In observation years 2008, 2009, 2010 and 2011, the analysis shows that there is no significant relationship between board size and company performance. Overall, there is enough evidence to suggest that board size does not significantly affect company performance (TSR and ROA).

In terms of ownership concentration, the Multiple Linear Regression analysis reports that there is no significant relationship between ownership concentration with TSR and ROA in all the years observed. The study has enough evidence to conclude that ownership concentration does not significant in predicting the variation in company performance.

With respect to the leverage level, the Multiple Linear Regression analysis reveals no significant relationship with company market based performance

(TSR), from 2008 to 2012. The analysis, however, reports that there are mixed result between leverage level and ROA. The leverage level is significantly negatively related to ROA in 2008 and 2012. However, there exists a positive relationship between leverage level and company performance in 2010 (p-value= 0.009, t-statistic = 2.649).

## **5.3 Discussion on Findings**

In the overall analysis, the findings show that the Corporate Governance variables used in this study namely CEO duality, independent chairman, board composition, board size and ownership concentration do not statistically affect Malaysian Public Listed Companies performance. These findings will be discussed in detail in the next few paragraphs. The findings of this research is explained based on ROA as dependent variable as the reliability test show 63% of ROA can be explained by 6 independents variables, while the independent variables only explain 0.18% of TSR.

Findings show that CEO duality is not statistically significant at 5% level but has a positive relationship between CEO duality on company performance. The result indicates that by having separate persons holding the CEO position and Board Chairman, improved performance can be achieved. Fama and Jensen (1983) stated that CEO duality would reduce the effectiveness of Board of Directors in monitoring top management's performance. Ehikioya (2009) found that CEO duality would affect company financial performance. The role of the Board of Directors is to monitor the companies' management team performance. When CEO duality is practiced, the independent director may have no chance to question management's execution or decisions, resulting in reduced company performance. A separation of CEO duality would provide an extra opportunity for shareholders to voice their opinion in general meetings to the chairman as an independent person from a management team. The results found conforms with the study done by Rashid et al. (2010) who reported slightly positive related between CEO duality and company performance but is contrary with Hussin and Othman (2012) who reported that CEO duality positively affects company performance. Rechner and Dalton (1991) stated that when the chairman's position is held by executive directors, the decision-making process will be shorten and improve financial performance. This result is contradictive with the first finding in this research. The independent chairman may underperform due to inefficiency performance and not familiar with company long term development strategic.

The research findings show that board composition is not statistically significant at 5% level but has a positive relationship with company performance. This indicates that the higher the number of independent directors, the better the company performance. This result is consistent with the recommendations provided in MCCG. In addition, by having more independent directors on board, the opportunistic behaviour conducted by directors can be minimised (Fama & Jensen, 1983). At the same time, company resources can be allocated more fairly (Fama & Jensen, 1983). As a result, company can have more available funds for the purpose of investing in more profitable projects with the objective of maximizing returns. Mak and Kusnadi (2005) stated that by strengthening the board independency, company financial performance can be enhanced. In addition, John and Senbet (1998) stated that the independent directors on board are more reliable in representing shareholders' interests and are able to protect shareholders' interests by objecting to company strategy or policy which may harm the shareholders' interests (Laing & Weir, 1999). The independent directors will also enhance the quality of decision-making by bringing more new ideas and neutral suggestions in the board meetings (Lawel, 2012). Lastly, Fama (1980) pointed out that the most crucial question is that how can the executives directors monitor their performance themselves.

Obeua (2006) stated that the proportion of independent director on board is negatively associated with company non-financial reporting fraud and thereby leads to better company performance.

Ramasamy et al. (2005) conducted his study on the plantation industry of Malaysia and also found similar results. Ramasamy et al. (2005)'s findings was consistent with the findings in Daily and Dalton (1992) who used 100 fast-growing companies in year 1989 as sample. Ong and Gan (2013) also found a similar result in Malaysian Banking industry. Abbasi et al. (2012) stated that board composition is statistically positively related to company financial performance after studying 82 companies from food industry listed in Tehran Stock Exchange (Iran).

The results also show that board size is not statistically significant at 5% level but has a negative impact on the company performance. This indicates that a smaller board size is more effective than larger board in term of communication, discussion and decision-making process (Mishra et al., 2001). A small board size is able to bring an extra value to company in various ways such as reducing the conflict of interests and agency problem (Jensen, 1993).

Yermack (1996) also stated that smaller board size will lead to a better company performance. The result in this research is similar to Chiang and Chia (2005) which reported that there is no significant relationship between board size with ROA after investigating 225 high tech companies in Taiwan. In a Malaysian context, Chaghadari (2011) also reported that no significant relationship was found between board size and company performance after examining 30 Malaysian listed companies from the construction and material industry. However, Hermalin and Weisbach (2003) explained that although the board size is negatively related with company performance, the optimal number of board size still depends on the company size, industry and characteristic such as the degree of complexity of environment where the company operates and the degree of complexity of information which flows in the board may require a larger board in order to play the monitoring roles effectively (Yermack, 1996). Yermack (1996) also explained that in the case of small and medium enterprises, only a board with smaller size is required in order to reach the objective of optimizing the company performance (Yermark, 1996).

The result shows that ownership concentration is not statistically significant at 5% level but has a positive relationship with company performance. This indicates the more the shares held by a single shareholder; the better the company performance (Gehan & Abdelmoshen, 2012). This indicates that a lower ownership concentration leads to lower company profitability (Sorensen, 2007). This is because, low ownership concentration may create more agency costs for a company where shareholders do not have enough voting powers to remove incompatible and underperforming directors (Chen, et al., 2012). Institutional shareholder will be more concerned on internal Corporate Governance in order to secure their return on investment (Sekhar, 2012) while minority shareholders show more emphasize in short-term gains rather than focus on company long-term growth. In contrast, Bennedsen and Wolfenzon (2000) stated that the high ownership concentration means less controlling shareholders in a company, thus reducing the agency problem, conflict of interest and thereby improving the company performance. The result is supported by the findings found in the study done by Tam and Tan (2007) which reported that ownership concentration is positively related to ROA after examining 150 listed companies in Kuala Lumpur Stock Exchange. In a recent study, Uwuigbe (2013) also reported a similar result after investigating 15 listed manufacturing and banking companies in Nigeria Listed Market.

The result show leverage level is statically negative significant at 5% level on company performance. This indicates that a higher leverage level leads to poorer company performance (Suto, 2003). This is because company have to pay the high interest rate for their liabilities. This finding contradicts with the agency theory assumption, which states that high debt will restrain managerial opportunistic behaviour. Suto (2003) concluded that leverage level is significantly negatively related to company performance after investigating 375 non-financial KLSE listed companies from 1995 to 1999. Rashid et al. (2010) also found significant negative relationship between leverage level and ROA. Harford et al. (2008) also found that there is a negative relationship between company leverage level and company financial position. Tan and Tam (2007), after studying 150 listed companies in Kuala Lumpur Stock Exchange from 1994-2001, also concluded that leverage is significantly negatively related to ROA. The result is supported by McConnell and Servaes (1995)'s finding. They concluded that high debt company may forego the potential investment thus leading to low company performance, after investigate 1,173 US listed companies in 1976, and 1,903 US listed companies in 1986.

In conclusion, this research extends the literature in Corporate Governance through a study on Malaysian Public Listed Companies. The study has contributed by making an investigation into company performance in nine sectors on Bursa Malaysia. The Commission of Company Malaysia (CCM), Bursa Malaysia, the Ministry of Finance and other regulatory bodies may be interested to find out the effects of Corporate Governance practices (CEO duality, independent chairman in BOD, board composition, board size, ownership concentration and leverage level) on Malaysian Public Listed Companies performance. This research also would assist researchers and practitioners improve their understanding on the relationship between internal Corporate Governance practices and company performance in a Malaysian context and contributed to the existing Corporate Governance literature review. This research study results may useful and provide the important characteristics on Corporate Governance for those managers who want to draw their company Corporate Governance policies.

## 5.4 Limitations in Research

The results obtained in this research may not be generally applied into overall context of Malaysia due to some limitations.

First, this research study only focused on the use of ROA and TSR as proxies for financial performance.

Secondly, this research study did not consider political, economy change, inflation, GDP growth, and other external factors that may have had a significant impact on company performance.

Finally, this research study only focuses on short time frame, from 2008 to 2012, and only focuses on Malaysian public listed companies.

Fourthly, this methodology in the research only focuses on data which is available in annual reports and share prices from Bursa Malaysia

## **5.5 Recommendations in Future Research**

From the limitations suggested above, future researchers could further their studies and investigation from different performance measurements, for example, earning per share (EPS), dividend pay-out, total net asset, capital employed, working capital and other performance proxies.

Further studies could also be conducted focusing on external factors which may affect Corporate Governance practices, such as political issues, changes in public policy, global economic issues, amendments in new Governance Acts and so on.

The period of study up to 10 or 20 years can be employed in future research. The sample observed can be diversified into small and medium enterprises to investigate the extent to which Corporate Governance impacts company performance.

Finally, further research should consider both quantitative and qualitative analysis such as interviews with the top management, directors, shareholders and regulators in their studies to grind out more comprehensive results.

## **5.6 Conclusion**

Last but not least, although the Board of Directors' structure is a crucial part in a company, the research findings are consistent with the results in previous study which highlights that Corporate Governance practices are not statistically significantly affecting Malaysian Listed Companies performance. Besides Corporate Governance practices, company performance may be affected by various external and internal factors in volatile business environment.

The panel data analysis in this research reveals that TSR and ROA are not significantly affected by the 6 independent variables. However, based on year-to-year testing, certain Corporate Governance variables were found to have a significant influence on Malaysian Public Listed Companies' performance. It can be suggested that the company Board of Directors should enhance the board structure according to MCCG 2007 and later enhanced with the recommendations of MCCG 2012 in order to lead to a better company performance.

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## APPENDIXES

## Appendix A

## The Summary of Corporate Governance Study in Malaysian Context

Name (Year)	Tittle	Variable / Test	Sample	Results
Abdullah and Nasir (2004) Chaghadari	Accrual Management and the Independence of the Board of Directors and Audit Committee	Test: Pearson CorrelationDV: Accrual accountIV: Board Composition and AuditCommittee CompositionTest: Pearson Correlation andMatrix Induction	100 Non-Financial Listed CompaniesPeriod: 199830 Companies From	Insignificant relationship between internal corporate governance practices with company accrual effective CEO duality is statically negative with
(2011)	and Firm Performance	Multiple Linear Regression DV: ROA and ROE IV: Number of INED, CEO Duality, Ownership Concentration, Board Size, Firm Size and Leverage	Construction and Material Industry in Main Board of Bursa Malaysia. Period: 2007	ROA and ROE
Chang and Abu (2005)	Can Good Corporate Governance Practice Contribute to Firms' Financial Performance? Evidence from Malaysian	Test: Cross-Sectional and Time- Series Data, Panel Data, Regression Techniques OLS (Fixed and Random Effect)	20 Public-Listed Companies in Malaysia. Period: 1996-1999	Firm size and CEO duality have positively statically significant relationship with ROE

	Companies	DV: ROA and ROE IV: Number Of Non-Executive Director In Board, Independent Chairman In Audit Committee, CEO Duality, Institutional Investors, Gearing Ratio, Concentration Ownership and Firm Size		
Hashim and Devi (2008)	Board Independence, CEO Duality and Accrual Management: Malaysia Perceptive	Test: Multivariate Regression Analysis DV: Total Accrual Account IV: Board Composition, CEO Duality, Board Size, Number Of Board Meeting, Firm Size, Leverage Level, Cash Flow, and Changes in Net Income	200 Non-Financial Listed Companies Period: 2004	CEO duality and board composition are statically negative significant relationship with company income increase earning manipulation
Haslindar and Fazilah (2011)	Corporate Governance Mechanism and Performance of Public Listed Family Ownership in Malaysia	Test: Pearson Correlation Regression And Regression With Fixed Effect Model DV: Tobin's Q, ROA and ROE IV: Leverage Level, Firm Size, Firm Age, Board Size, Outsider	290 Public Listed Companies Period: 1999- 2005.	Leverage level, Firm Age and CEO duality are negative significant relation with ROA Firm leverage, firm age, outside direcotr and CEO duality are positive relation to ROE

		Director and CEO Duality		Board size is negative related to ROE
Hussin and Othman (2012)	Code of Corporate Governance and Firm Performance	Test: Pearson Correlation and Linear Regression Analysis DV: ROA and ROE IV: NED, Indep, Chair, CEO duality, Board size, ACindep, ACexpert, ACmeeting. CV: Top Twenty, Directorship, Size, Big 4 and Debt.	Top 100 Constituent Firms Comprised in the FTSE Bursa Malaysia Index as of 2009, Period: 2007 to 2009.	<ul> <li>IndepChair, top twenty and debt were positively significant with ROA.</li> <li>NED, BSize, Acsize, and director ownership were negatively significant with ROA</li> <li>IndepChair, Top Twenty and Debt were positively significant with ROE.</li> <li>NED, board size and Acsize were negatively significant with ROE</li> </ul>
Joel and Dondjio (2012)	The Impact of Corporate Governance Mechanism and Corporate Performance: A Study of Listed Companies in Malaysia.	Test: Pearson regression and multiple linear regression. DV: EPS IVs: Board size, board composition, audit committee, CEO status, and ownership concentration	20 Listed Companies in Bursa Malaysia, Period: 2006 to 2010	Company performance is positively related to board size and higher proportion of director ownership
Kassim, Ishak and Manaf (2013)	Board Effectiveness and Company Performance: Assessing the Mediating Roles of Capital Structure	Test: Regression Analysis (Primary Data) DV: ROE IV: Board's Risk Oversight, CEO	175 Listed Companies Time : 2009	Leverage level is significant negatively related to ROE.

	Decision	Performance, INED Performance, Accessibility of Information, Company Size and Age. CV: Leverage Level		
Mak and Yuanto (2004)	Size Really Matters: Further Evidence on the Negative Relationship Between Board Size and Firm Value	Test: Pearson Correlation DV: Tobin'Q IV: Firm Size, Leverage, Ratio Of Total Assets, Financial Variables, Board Variables, Ownership Variables and Board Size	271 Companies Are Listed in Singapore Stock Exchange and 279 Companies Listed in KLSE Period: 1999-2000	Negative relationship between board size and Tobin Q
Mohamad, Rashid and Shawtari (2012)	Corporate Governance and Earnings Management in Malaysian Government Linked Companies	Test : Pearson Correlation Analysis and MLR DV: Earning Management IV: Board Composition, Board Size, Board Meeting, Board Multiple Directorship and Audit Committee CV: Firm Size and Leverage	53 GLCs in Bursa Malaysia Time: 2003 and 3006	CEO duality and board meeting are statically positive related to earning management
Ong and Gan (2013)	Do Family-Owned Banks Perform Better? A Study	Test: Pearson Correlation and Linear Regression Analysis	10 Malaysian Domestic Bank	Board size is negatively significant with Tobin's

	of Malaysian Banking Industry	DV: Tobin's, ROA and ROE IV: Family Business Status, Board Composition And Board Size	Period: 2001 to 2010	
Ponnu (2008)	Corporate Governance Structures and the Performance of Malaysian Public Listed Companies	Test: Sample T-Test (Before and After) DVs: ROA and ROE IVs: CEO Duality and Board Composition	100 Bursa Malaysia Companies, 30 Large Companies, 70 Mid-Sized Companies Period:1999 and 2005	There is no significant relationship between corporate governance structure and company performance
Ponnu and Ramthandin (2008)	Governance and Performance: Publicity Listed Companies in Malaysia	Test: Correlation Analysis DV: Financial Performance, Stock Price and ROE IV: Corporate Governance Index / Score	100 Listed Companies Period: 2005 to 2006	Total corporate governance score is significant positively with ROE
Rahman and Ali (2006)	Board, Audit Committee, Culture and Earning Management: Malaysian Evidence	Test: Cross Sectional Study, Pearson Regression and Multiple Linear Regression DV: Working Capital Accrual (Earning Management) IV: CEO Duality, Board Composition, Board Size, Audit	97 Listed Companies in Bursa Malaysia Period: 2002 and 2003	Earning management is positively related to board size

Ramasamy, Ong and Yeung (2005)	Firm Size, Ownership, and Performance in the Malaysian Palm Oil Industry	Committee Composition and Ownership Concentration Test: Regression Analysis DV : ROA IV: Firm Size, Firm Ownership,	30 Public Listed Companied In Plantation Sector	The result showed insignificant relationship between leverage level and company performance
		Capacity Intensity, Price, Leverage, Skill, Age and Growth Rate	Period: 2000 and 2003	
Razak, Ahmad and Aliahmed (2008)	Government Ownership and Performance: An Analysis of Listed Companies in Malaysia.	Test : Panel Regression, Tobin's Q (Fixed Effect) DVs: Tobin's Q and ROA IV: Non-Duality, Agency Cost, Growth and Profitability	210 Companies: 30 GLS, 180 non GLCs Period: 1995-2005	Non-duality, AC growth and profitability are positively significant with ROA and Tobin's Q Debt ratio is negative with ROA but positive with Tobin's Q
Suto (2003)	Capital Structure and Investment Behaviour of Malaysian Firms in The 1990s: A Study of Corporate Governance Before Crisis	Test: OLS, Cross Sectional and Panel Data Analysis DV: Leverage Level IV: Bank, Internal Funds, Non- Debt Tax Shield. Collateral Value, Corporate Size, Business Risk and	375 non-financial KLSE (Kuala Lumpur Stock Exchange) Listed Companies Period: 1995-1999	High leverage lead to poorer company performance

		Industry Effect		
Taghizadeh and Saremi (2013)	Board of Directors and Firm Performances: Evidence from Malaysian Public Listed Firm	Test: Pearson regression DV: ROA and ROE IV: Board Meeting, Board Composition, Female Director (BOD, Audit Committee and Remuneration Committee)	150 Public Listed Companies Period: 2008	Board meeting, board composition, and female director in BOD are negative significant related with ROE Board meeting is negative significant associated with ROA
Tam and Tan (2007)	Ownership, Governance And Firm Performance	Test: Pearson, and Multiple Regression DV: ROA and Tobin's Q IV: CEO Duality, Ownership Concentration, Debt Ratio, Firm Characteristic, Firm Size, Firm Age and Ownership Structure	150 Listed Company From Bursa Malaysia Period:1994- 2001	CEO duality is statically negative positive with ROA
Wahab, How, & Verhoeven (2008)	Corporate Governance and Institutional Investors: Evidence from Malaysia	<ul> <li>Test: Pearson And Spearman Rank and MLR Correlation</li> <li>DV: Institutional Ownership</li> <li>IV: Corporate Governance Score or Index</li> <li>CV: Firm Performance, Politic,</li> </ul>	434 Listed Companies Period: 1999-2002	The finding is weak positive relationship between post-reform corporate governance. This show that institutional ownership can minimize agency problem in corporate

		Dividend Yield, Number Of Financial Analysts, Liquidity and Firm Risk		
Yusoff and	Corporate Governance	Test: Spearmen's Correlation	813 Listed Companies	CEO duality and board size are positively
Alhaji (2012)	and Firm Performance of	Matrix.	Bursa Malaysia (Main	significant with ROE.
	Listed Companies		Market)	
	Malaysia.	DV: EPS and ROE	Davia 1, 2000 (c. 2011	
		IV: Board Size, Proportion Of	Period: 2009 to 2011.	Proportion of independent directors and
		Independent Directors and CEO		board size are positive and significant with
		Duality		EPS
		-		
Zainal Abidin,	Board Structure and	Test: Pearson Regression	13% of Listed Company	The result found positive relationship
Mustaffa	Corporate Performance in	DVs: Value Added (VA) Efficiency	In Bursa Malaysia	between board size and company
Kamal and	Malaysia.	DVS. Value Added (VA) Efficiency	Pariod: 2003	performance because large board size
Jusoff (2009)		IVs: Board Size, Ownership	renou. 2005	increases the skills and idea shared in board
		Concentration, Board Composition		meeting
		And CEO Duality. Cvs: ROA,		
		Leverage, Dividend Yield, R & D		
		Sensitivity and Firm Size		

# The Summary of Corporate Governance Study in Non-Malaysian Context

Abbasi,	Impact of Corporate	Test: Generalized Lease Square	82 Company Form	All the independent variables and leverage
Kalantari and	Governance Mechanism of	(GLS)	Tehran Stock	level are positively significant with Tobin's
Abbasi (2012)	Firm Value: Evidence From The Food Industry of Iran	Dv: Tobin's Q IV: Ownership Concentration, Institutional Ownership, CEO Duality and Board' Independence CVs: Leverage and Firm Size	Exchange (Iran) Period:2002-2011	Q Firm size is statically negative related with Tobin's Q
Agawal and Knoeber (1996)	Firm Performance and Mechanisms to Control Agency Problems Between Managers and Shareholders	Test: OLS regression DV: Tobin's Q IV: Ownership Structure And Concentration, CEO Duality, Debt Ratio, Firm Size, Stock Return, Industry Nature, Board Composition, Number Of Director, Tenure As CEO and CEO Age	400 (Started With 800 US Firms) US Companies Year Period: 1983-1987	Study found negative relationship between number of independent director in board and company performance
Bhagat and Black (2000)	Board Independence and Long-Term Firm Performance	Test: OLS Regression, Simultaneous Equations(3SLS) DVs: Tobin's Q, ROA and TSR	928 Large US Public Companies Period: 1988-1990,	Board independence was found to be significant negatively related to all performance

		IV: Board Composition, Board Size, Ceo Ownership, INED, Firm Size, Outside 5% Blockholder and Industry Control	1991-1993	
Boubakri and Cossets (1998)	The Financial And Operating Performance of Newly- Privatised Firms: Evidence from Developing Countries	Test OLS regression Dv: Profitability IV: Operating Efficiency, Capital Investment, Output, Employment, Leverage and Dividend Policy	<ul><li>79 Companies From</li><li>21 Developing</li><li>Countries</li><li>Period: 1980 to 1992</li></ul>	Leverage level is significant related with company performance
Chiang and Chia (2005)	An Empirical Study of Corporate Governance and Corporate Performance	Test: MLR DVs: ROA, ROE and EPS IV: Board Composition, CEO Duality and Ownership Structure. CV: Information Transparency	225 high-tech companies listed in Taiwan Period: 2001	CEO duality is statically positive relation with company performance Insignificant relationship between board size and operating performance based on EPS
Demsetz and Villalonga (2001)	Ownership Structure and Corporate Performance	Test: Regression Analysis Dv: Tobin's Q IV: Ownership Structure Cvs: Firm Performance, Market Risk Of Stock, Firm Specific Risk,	223 Companies From US Market Period: 1976-1980	No statically significant relation between ownership structure and company performance

		Firm Size, and Debt Value		
Daily and Dalton (1992)	The Relationship between Governance Structure and Corporate Performance in Entrepreneurial Firms	Test: Correlation Analysis DV: ROA and Tobin's Q IV: CEO Duality, Board Composition, Firm Size And Firm Nature	100 Fast Growing Companies (US) Period: 1989	Board composition, firm size and board size are positive related with company performance
Guest (2009)	The Impact of Board Size on Firm Performance: Evidence from UK	OLS, Fixed effect, GMM DVs: ROA, Tobin's Q and Share Return IVs: Board Size, Firm Age, Firm Size, R&D, Board Composition and Board Ownership	2746 UK Public Listed Firms Period: 1981-2002	board size has a strong negative impact on profitability: Tobin's Q and share returns
Gehan and Abdelmoshen (2012)	The Association between Internal Governance Mechanism and Corporate Value: Evidence from Bahrain.	Test: Pearson Correlation Ordinary Least Square (OLS) Regression Analysis DV: Tobin's Q, ROA and EPS IV: Board Size, Non-Executive Directors, CEO/Chairman Duality, First Shareholder, Second Shareholder, Third Shareholder,	A Total Of 135 Observation. The Sample Is 43 Listed Companies in Bahrain. Period: 2008 to 2010	Board size and third shareholder, are negatively significant with Tobin's Q. Firm leverage and firm age were positively significant with Tobin's Q CEO and chairman duality, firm leverage are negatively significant with ROA Firm listing was positively significant with ROA

		Firm Size, Leverage, Firm Listing and Firm Size		Board size, CEO and Chairman duality, first shareholder, firm listing were positively significant with EPS. Outside directors and firm size were negatively significant with EPS
Herly (2011)	Corporate Governance and Firm Performance: Evidence from Indonesia.	Test: Panel Data Regression Analysis DVs: ROA and Tobin's Q IVs: CEO Tenure CVs: Firm Size, Firm Age, Leverage and Corporate Governance Reporting	100 Largest Companies Listed In Indonesia Period: 2005-2007	Corporate governance reporting is positively significant with ROA Corporate governance reporting is negative significant with Tobin's Q CEO tenure is negative significant with Tobin's Q
Harford, Mansi and Maxwell (2008)	Corporate Governance and Firm Cash Holding in the US	Test: MLR and Pearson Correlation. DV: Cash Holding IV: Index of Antitakeover Provision, Ownership Concentration, Pay Sensitivity, and Board Structure. CV: Firm Size, Leverage, Market To Book, Cash Flow, R&D,	The Sample Was 1,500 Firms Being Drawn From US Market. Period: 1990, 1993, 1995, 1998, 2000, 2002 and 2004	Negative relationship between company leverage level and company cash flow holding

		CAPEX, and Dividend Payout		
Lawal (2012)	Board Dynamic and Corporate Performance: Review of Literature, and Empirical Challenges	Test: Qualitative Analysis. DV: Company Performance. IV: Board Composition, Board Size, CEO Duality and Board Diversity	Previous Corporate Governance Literature	Corporate governance researchers have consistently also relied on some sought of methodologies and performance measures, not taking into account the fact that the situation which necessitated the use of such approaches in previous empirical studies might have gone obsolete. Thus, no longer have the efficacy required to track appropriately the variable to be predicted
Ntim and Osei (2011)	The Impact of Corporate Board Meeting on Corporate Performance in South Africa	Multiple Linear Regression OLS (Fixed Effect Analyses) Dvs: Tobin's Q, ROA, TSR IV: Board Meeting CV: Audit firm size, CAPEX, Cross Listing, CG committee, Gearing, Government Ownership, Growth and Firm Size	169 Listed Companies In South Africa. Period: 2002-2007	Gearing and board meeting frequency are significant positive relation with ROA and TSR
Obeua (2006)	Corporate Governance and Non-Financial Reporting Fraud	Test : Logistic Regression DV: Non-financial Reporting	166 Companies Listed Companies In US	Non-financial fraud is negatively related with board composition, CEO duality

		Fraud IVs: Board Composition, CEO Duality, Board Size, Tenure of	Period: 1991-2000	Positive with board size, and CEO tenure.
Rashid, De Zoysa, Lodh and Rudkin (2012)	Board Composition and Firm Performance: Evidence from Bangladesh	Test: Correlation Matrix and Linear Regression Analysis DVs: ROA, and Tobin's Q IVs: Board Composition CV: Ownership Concentration, CEO Duality, Firm Debt, Firm Size, Firm Age and Firm Growth	274 listed firms in the Dhaka Stock Exchange Period: 2005 to 2009	Board size, and debt ratio are positive relation to Tobin's Q Firm size and firm age positive with ROA and Tobin's Q. CEO duality, board size, and debt ratio are statically negative with Tobin's Q
Uwuigbe (2013)	Corporate Governance and Share Price: Evidence From Listed Firms in Nigeria	Test: Regression Analysis DV: Share Price IV: Ownership Concentration, Audit Committee And Eps	30 Listed Companies in Nigeria. Period: 2007 to 2009	Audit committee is statically positive significance with share price
Yammeesri (2003)	Corporate Governance: Ownership Structure and Firm Performance- Evidence	Test: Univariate Analysis and Multivariate Regression	243 Non-Financial Forms Listed on The Stock Exchange	Firm risk, debt ratio and firm size are significant related to managerial family ownership company performance

from Thailand	DV: TSR, ROA and Sales-assets	Thailand	Managerial family ownership lead to better
IV: Ownership Structure CV: Firm Risk, Earning-Price Securities, Firm Size and Firm Age		Period:1993-1996, 1998-2000	company performance
Higher Market Valuation of	Test: OLS and Fixed Effect	792 Companies US	Board size has negative relationship with
Companies with a Small	Regression	Listed Companies	profitability, asset utilization, and Tobin's
Board of Directors	DV: Tobin's Q	Period: 1984 to 1991	Q
	IV: Board Size, Board		
	Composition, Compensation And		
	and Stock Ownership		
_	from Thailand Higher Market Valuation of Companies with a Small Board of Directors	from ThailandDV: TSR, ROA and Sales-assetsIV: Ownership StructureCV: Firm Risk, Earning-Price Of Securities, Firm Size and Firm AgeHigher Market Valuation of Companies with a Small Board of DirectorsTest: OLS and Fixed Effect Regression DV: Tobin's QIV: Board Size, Board Composition, Compensation And Turnover, Governance Structure and Stock Ownership	from ThailandDV: TSR, ROA and Sales-assetsThailandIV: Ownership StructureIV: Ownership StructurePeriod:1993-1996, 1998-2000CV: Firm Risk, Earning-Price Of Securities, Firm Size and Firm AgePeriod: 1993-1996, 1998-2000Higher Market Valuation of Companies with a Small Board of DirectorsTest: OLS and Fixed Effect Regression792 Companies US Listed CompaniesDV: Tobin's QIV: Board Size, Board Composition, Compensation And Turnover, Governance Structure and Stock OwnershipPeriod: 1984 to 1991

DV = Dependent Variable, IV= Independent Variable, and CV=Control Variable.

Page **124** of **146** 

## **Appendix B Eviews7 Outputs for Panel Least Square Analysis**

Dependent Variable: Total Share Return Method: Panel Least Squares Date: 04/02/14 Time: 15:07 Sample: 2008 2012 Cross-sections included: 200 Total panel (balanced) observations: 1000

Variable	Coefficient	Std. Error	t-Statistic	Prob.
Constant CEO Duality Independent Chairman Board Composition Ownership Concentration Leverage Level Board Size	0.394652 0.009413 -0.009864 0.001871 -0.086186 -0.163337 -0.017980	0.129334 0.070271 0.063912 0.029329 0.174859 0.123658 0.016570	3.051420 0.133954 -0.154343 0.063781 -0.492888 -1.320870 -1.085100	0.0023 0.8935 0.8774 0.9492 0.6222 0.1868 0.2781
R-squared Adjusted R-squared S.E. of regression Sum squared resid Log likelihood Durbin-Watson stat	0.004209 -0.001808 0.883060 774.3363 -1291.064 1.714623	Mean dep S.D. deper Akaike in Schwarz c F-statistic Prob(F-sta	0.016570 -1.085100 Mean dependent var S.D. dependent var Akaike info criterion Schwarz criterion F-statistic Prob(F-statistic)	

Dependent Variable: ROA Method: Panel Least Squares Date: 04/02/14 Time: 15:16 Sample: 2008 2012 Cross-sections included: 200 Total panel (balanced) observations: 1000

Variable	Coefficient	Std. Error	t-Statistic	Prob.
Constant	0.230034	0.320710	0.717265	0.4734
CEO Duality	0.012014	0.210468	0.057081	0.9545
Independent Chairman	-0.011699	0.161196	-0.072578	0.9422
Board Composition	0.078480	0.049229	1.594194	0.1113
Ownership Concentration	0.120831	0.433981	0.278424	0.7808
Leverage Level	-0.389611	0.256975	-1.516141	0.1299
Board Size	-0.035433	0.033616	-1.054061	0.2922

Effects Specification

Cross-section fixed (dummy variables)

R-squared	0.709010	Mean dependent var	0.111230
Adjusted R-squared	0.633880	S.D. dependent var	0.977687
S.E. of regression	0.591577	Akaike info criterion	1.969279
Sum squared resid	277.8711	Schwarz criterion	2.980277
Log likelihood	-778.6396	F-statistic	9.437137
Durbin-Watson stat	1.875681	Prob(F-statistic)	0.000000

## Appendix C SPSS Outputs for Multiple Linear Regression Analysis

### <u>Year 2008</u>

Model Summary								
Model R R Square		Adjusted R	Std. Error of the					
			Square	Estimate				
TSR	.161ª	.026	005	1.5486118				

a. Predictors: (Constant), LeverageLevel2008, Independent

Chairman2008, BoardSize2008, Ownership Concentration 2008,

CeoDuality2008, Board Composition2008

	ANOVAª									
Model		Sum of Squares	df	Mean Square	F	Sig.				
	Regression	12.251	6	2.042	.851	.532 <sup>b</sup>				
TSR	Residual	462.852	193	2.398						
	Total	475.103	199							

a. Dependent Variable: TSR2008

b. Predictors: (Constant), LeverageLevel2008, Independent Chairman2008, BoardSize2008,

Ownership Concentration 2008, CeoDuality2008 Board Composition20082008

	Coefficients <sup>a</sup>									
Model		Unstandardize	d Coefficients	Standardized Coefficients	t	Sig.	Collinearity	Statistics		
		В	Std. Error	Beta			Tolerance	VIF		
	(Constant)	.184	.522		.352	.725				
	CeoDuality2008	.297	.268	.086	1.109	.269	.836	1.196		
	Independent Chairman2008	182	.256	055	709	.479	.828	1.207		
TSR	Board Composition2008	006	.119	005	054	.957	.598	1.672		
	BoardSize2008	030	.066	041	458	.647	.619	1.616		
	Ownership Concentration 2008	.143	.688	.015	.208	.836	.967	1.035		
	LeverageLevel2008	931	.513	131	-1.814	.071	.973	1.028		

Model Summary								
Model R R Squ		R Square	Adjusted R	Std. Error of the				
			Square	Estimate				
ROA	.240ª	.058	.029	.9340653				

a. Predictors: (Constant), LeverageLevel2008, Independent

Chairman2008, BoardSize2008, Ownership Concentration 2008,

CeoDuality2008, Board Composition 2008

	ANOVAª								
Model		Sum of Squares	df	Mean Square	F	Sig.			
	Regression	10.330	6	1.722	1.973	.071 <sup>b</sup>			
ROA	Residual	168.388	193	.872					
	Total	178.719	199						

b. Predictors: (Constant), LeverageLevel2008, Independent Chairman2008, BoardSize2008,

Ownership Concentration 2008, CeoDuality2008 Board Composition2008

_	Coefficients <sup>a</sup>										
Model		Unstandardize	d Coefficients	Standardized Coefficients	t	Sig.	Collinearity	Statistics			
		В	Std. Error	Beta			Tolerance	VIF			
	(Constant)	410	.315		-1.304	.194					
	CeoDuality2008	.126	.162	.060	.779	.437	.836	1.196			
	Independent Chairman2008	201	.154	100	-1.305	.193	.828	1.207			
ROA	Board Composition2008	.159	.072	.200	2.212	.028	.598	1.672			
	BoardSize2008	038	.040	085	954	.341	.619	1.616			
	Ownership Concentration 2008	.034	.415	.006	.082	.934	.967	1.035			
	LeverageLevel2008	.617	.310	.141	1.993	.048	.973	1.028			

	Model Summary								
Model	R	R Square	Adjusted R	Std. Error of the					
			Square	Estimate					
TSR	.241ª	.058	.029	.6667668					

a. Predictors: (Constant), LeverageLevel2009, Ownership Concentration2009, Independent Chairman2009, BoardSize2009, CeoDuality2009,Board Composition 2009.

### Year 2009

	ANOVAª										
Model		Sum of Squares	df	Mean Square	F	Sig.					
	Regression	5.313	6	.886	1.992	.069 <sup>b</sup>					
TSR	Residual	85.804	193	.445							
	Total	91.117	199								

a. Dependent Variable: TSR2009

b. Predictors: (Constant), LeverageLevel2009, Ownership Concentration 2009, Independent

Chairman2009, BoardSize2009, CeoDuality2009, Board Composition 2009.

	Coefficients <sup>a</sup>									
Model		Unstandardize	ed Coefficients	Standardized Coefficients	t	Sig.	Collinearity	Statistics		
		В	Std. Error	Beta			Tolerance	VIF		
	(Constant)	1.064	.216		4.925	.000				
	CeoDuality2009	302	.120	194	-2.525	.012	.829	1.206		
	Independent Chairman2009	.070	.108	.050	.645	.520	.822	1.216		
TSR	Board Composition 2009	010	.050	018	197	.844	.581	1.721		
	Board Size2009	021	.027	069	759	.449	.597	1.674		
	Ownership Concentration 2009	576	.308	133	-1.872	.063	.960	1.042		
	Leverage Level2009	.086	.218	.029	.395	.693	.927	1.079		

	Model Summary								
Model	R R Square		Adjusted R	Std. Error of the					
			Square	Estimate					
TSR	.244ª	.060	.030	.8398259					

a. Predictors: (Constant), LeverageLevel2009, Ownership Concentration2009, Independent Chairman2009, BoardSize2009, CeoDuality2009,Board Composition 2009

	ANOVAª									
Model		Sum of Squares	df	Mean Square	F	Sig.				
	Regression	8.621	6	1.437	2.037	.063 <sup>b</sup>				
ROA	Residual	136.124	193	.705						
	Total	144.745	199							

b. Predictors: (Constant), LeverageLevel2009, Ownership Concentration 2009, Independent

Chairman2009, BoardSize2009, CeoDuality2009, Board Composition 2009

	Coefficients										
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity	<sup>v</sup> Statistics			
		В	Std. Error	Beta			Tolerance	VIF			
	(Constant)	434	.272		-1.597	.112					
	CeoDuality2009	.083	.151	.042	.550	.583	.829	1.206			
	Independent Chairman2009	120	.136	068	881	.379	.822	1.216			
ROA	Board Composition 2009	.126	.062	.185	2.022	.045	.581	1.721			
	BoardSize2009	021	.034	055	612	.541	.597	1.674			
	Ownership Concentration 2009	.098	.387	.018	.253	.800	.960	1.042			
	LeverageLevel2009	.536	.274	.142	1.956	.052	.927	1.079			

officientes

a. Dependent Variable: ROA2009

### <u>Year 2010</u>

TSR

	Model Summary							
lodel	R	R Square	Adjusted R	Std. Error of the				
			Square	Estimate				

a. Predictors: (Constant), LeverageLevel2010, Ownership Concentration

2010, Independent Chairman2010, BoardSize2010, CeoDuality2010,

.029

Board Composition 2010.

.169<sup>a</sup>

ANOVA<sup>a</sup>

-.002

.4859228

Model		Sum of Squares	df	Mean Square	F	Sig.
	Regression	1.346	6	.224	.950	.460 <sup>b</sup>
TSR	Residual	45.571	193	.236		
	Total	46.918	199			

a. Dependent Variable: TSR2010

b. Predictors: (Constant), LeverageLevel2010, Ownership Concentration 2010, Independent

Chairman2010, BoardSize2010, CeoDuality2010, Board Composition 2010

	Coefficients <sup>a</sup>									
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics			
		В	Std. Error	Beta			Tolerance	VIF		
	(Constant)	.505	.155		3.256	.001				
	CeoDuality2010	.018	.086	.016	.204	.838	.815	1.226		
	Independent Chairman2010	112	.080	111	-1.402	.163	.809	1.236		
TSR	Board Composition 2010	.040	.035	.107	1.142	.255	.568	1.760		
	BoardSize2010	033	.020	150	-1.603	.111	.575	1.740		
	Ownership Concentration 2010	029	.218	009	131	.896	.971	1.030		
	LeverageLevel2010	185	.158	085	-1.175	.241	.961	1.041		

	Model Summary								
Model	Model R R Sq		Adjusted R	Std. Error of the					
			Square	Estimate					
TSR	.303 <sup>a</sup>	.092	.064	1.2304187					

a. Predictors: (Constant), LeverageLevel2010, Ownership Concentration
2010, Independent Chairman2010, BoardSize2010, CeoDuality2010,
Board Composition 2010

	ANOVAª									
Model		Sum of Squares	df	Mean Square	F	Sig.				
	Regression	29.627	6	4.938	3.262	.004 <sup>b</sup>				
ROA	Residual	292.189	193	1.514						
	Total	321.816	199							

b. Predictors: (Constant), LeverageLevel2010, Ownership Concentration 2010, Independent

Chairman2010, BoardSize2010, CeoDuality2010, Board Composition 2010

	Coencients-									
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity	Statistics		
		В	Std. Error	Beta			Tolerance	VIF		
	(Constant)	980	.393		-2.494	.013				
	CeoDuality2010	.067	.217	.024	.310	.757	.815	1.226		
	Independent Chairman2010	056	.202	021	276	.783	.809	1.236		
ROA	Board Composition 2010	.219	.088	.226	2.489	.014	.568	1.760		
	BoardSize2010	018	.052	032	349	.728	.575	1.740		
	Ownership Concentration 2010	.268	.551	.034	.486	.628	.971	1.030		
	LeverageLevel2010	1.057	.399	.185	2.649	.009	.961	1.041		

Coofficientes

a. Dependent Variable: ROA2010

### <u>Year 2011</u>

Model Summary									
Model	R	R Square	Adjusted R	Std. Error of the					
			Square	Estimate					
TSR	.129ª .017		014	.5901974					

a. Predictors: (Constant), LeverageLevel2011, BoardSize2011,

Independent Chairman2011, Ownership Concentration 2011,

CeoDuality2011, Board Composition 2011

ANOVAª									
Model		Sum of Squares df Mean S		Mean Square	Square F				
	Regression	1.147	6	.191	.549	.771 <sup>b</sup>			
TSR	Residual	67.228	193	.348					
	Total	68.375	199						

a. Dependent Variable: TSR2011

b. Predictors: (Constant), LeverageLevel2011, BoardSize2011, Independent Chairman2011,

Ownership Concentration 2011, CeoDuality2011, Board Composition 2011

	Coefficients										
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity	Statistics			
		В	Std. Error	Beta			Tolerance	VIF			
	(Constant)	.072	.192		.374	.709					
	CeoDuality2011	045	.106	034	428	.669	.792	1.262			
	Independent Chairman2011	.100	.096	.083	1.045	.297	.813	1.229			
TSR	Board Composition 2011	029	.045	058	658	.511	.650	1.538			
	BoardSize2011	.016	.025	.058	.656	.512	.651	1.536			
	Ownership Concentration 2011	099	.256	028	388	.698	.970	1.031			
	LeverageLevel2011	.250	.176	.104	1.424	.156	.953	1.050			

	Model Summary									
Model	R	R Square	Adjusted R	Std. Error of the						
			Square	Estimate						
TSR	.271ª	.073	.045	1.2103382						

a. Predictors: (Constant), LeverageLevel2011, BoardSize2011,

Independent Chairman2011, Ownership Concentration 2011,

CeoDuality2011, Board Composition 2011

	ANOVAª									
Model		Sum of Squares	df	Mean Square	F	Sig.				
	Regression	22.378	6	3.730	2.546	.021 <sup>b</sup>				
ROA	Residual	282.729	193	1.465						
	Total	305.107	199							

b. Predictors: (Constant), LeverageLevel2011, BoardSize2011, Independent Chairman2011,

Ownership Concentration 2011, CeoDuality2011, Board Composition 2011

	Coemcients									
Model		Unstandardized Coefficients		Standardized t Coefficients		Sig. Collinearity Statist		Statistics		
		В	Std. Error	Beta			Tolerance	VIF		
	(Constant)	918	.394		-2.331	.021				
	CeoDuality2011	009	.218	003	040	.968	.792	1.262		
	Independent Chairman2011	028	.197	011	141	.888	.813	1.229		
ROA	Board Composition 2011	.247	.092	.232	2.698	.008	.650	1.538		
	BoardSize2011	004	.051	007	082	.934	.651	1.536		
	Ownership Concentration 2011	.055	.525	.007	.104	.917	.970	1.031		
	LeverageLevel2011	.633	.360	.125	1.757	.081	.953	1.050		

**Coefficients**<sup>a</sup>

a. Dependent Variable: ROA2011

### <u>Year 2012</u>

Model Summary									
Model	R	R Square	Adjusted R	Std. Error of the					
			Square	Estimate					
TSR	.131ª	.017	013	.4271597					

a. Predictors: (Constant), LeverageLevel2012, Independent
Chairman2012, Ownership Concentration 2012, BoardSize2012,
CeoDuality2012, BOARD COMPOSITION2012

	ANOVAª									
Model		Sum of Squares	df	Mean Square	F	Sig.				
	Regression	.614	6	.102	.560	.761 <sup>b</sup>				
TSR	Residual	35.216	193	.182						
	Total	35.829	199							

a. Dependent Variable: TSR2012

b. Predictors: (Constant), LeverageLevel2012, Independent Chairman2012, Ownership Concentration

2012, BoardSize2012, CeoDuality2012, Board Composition 2012

	Coefficients <sup>a</sup>										
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity	Statistics			
		В	Std. Error	Beta			Tolerance	VIF			
	(Constant)	.291	.143		2.033	.043					
	CeoDuality2012	020	.079	021	257	.797	.762	1.312			
	Independent Chairman2012	.090	.070	.104	1.288	.199	.784	1.276			
TSR	Board Composition 2012	023	.033	062	699	.485	.648	1.543			
	BoardSize2012	006	.019	030	342	.732	.663	1.509			
	Ownership Concentration 2012	059	.183	023	322	.748	.966	1.035			
	LeverageLevel2012	040	.129	023	314	.754	.909	1.100			

	Model Summary									
Model	R	R Square	Adjusted R	Std. Error of the						
			Square	Estimate						
ROA	.406ª	.165	.139	.1076492						

a. Predictors: (Constant), LeverageLevel2012, Independent

Chairman2012, Ownership Concentration 2012, BoardSize2012,

CeoDuality2012, Board Composition 2012

	ANOVAª									
Model		Sum of Squares	df	Mean Square	F	Sig.				
	Regression	.441	6	.074	6.349	.000 <sup>b</sup>				
ROA	Residual	2.237	193	.012						
	Total	2.678	199							

b. Predictors: (Constant), LeverageLevel2012, Independent Chairman2012, Ownership Concentration

2012, BoardSize2012, CeoDuality2012, Board Composition 2012

	Coefficients <sup>a</sup>										
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics				
		В	Std. Error	Beta			Tolerance	VIF			
	(Constant)	091	.036		-2.520	.013					
	CeoDuality2012	.022	.020	.083	1.098	.274	.762	1.312			
	Independent Chairman2012	.023	.018	.098	1.313	.191	.784	1.276			
ROA	Board Composition 2012	019	.008	191	-2.337	.020	.648	1.543			
	BoardSize2012	.023	.005	.404	5.000	.000	.663	1.509			
	Ownership Concentration 2012	.074	.046	.108	1.612	.109	.966	1.035			
	LeverageLevel2012	069	.032	146	-2.113	.036	.909	1.100			

a. Dependent Variable: ROA2012

Correlations										
		CeoDualit	Independent	Board	Board Size	Ownership	Leverage Level	TSR2008	ROA2008	
		y2008	Chairman	Composition	2008	Concentration	2008			
			2008	2008		2008				
TSR2008	Pearson Correlation	.051	030	046	043	.021	133	1	.019	
	Sig. (2-tailed)	.471	.674	.522	.545	.763	.060		.786	
	Ν	200	200	200	200	200	200	200	200	
ROA2008	Pearson Correlation	.049	040	.161*	.049	028	.163*	.019	1	
	Sig. (2-tailed)	.491	.571	.023	.491	.694	.021	.786	u	
	Ν	200	200	200	200	200	200	200	200	

## **Appendix D: SPSS Outputs for Pearson Regression Analysis**

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

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

Correlations										
		CeoDualit	Independent	Board	Board Size	Ownership	Leverage Level	TSR2009	ROA2009	
		y2009	Chairman	Composition	2009	Concentration	2009			
			2009	2009		2009				
TSR2009	Pearson Correlation	173*	024	062	109	131	.000	1	023	
	Sig. (2-tailed)	.014	.731	.381	.124	.065	.998		.741	
	Ν	200	200	200	200	200	200	200	200	
ROA2009	Pearson Correlation	.043	027	.187**	.082	.000	.182**	023	1	
	Sig. (2-tailed)	.545	.702	.008	.246	.997	.010	.741		
	Ν	200	200	200	200	200	200	200	200	

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

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

Correlations										
		CeoDualit	Independent	Board	Board Size	Ownership	Leverage	TSR2010	ROA2010	
		y2010	Chairman	Composition	2010	Concentration	Level 2010			
			2010	2010		2010				
TSR2010	Pearson Correlation	038	094	008	082	027	085	1	001	
	Sig. (2-tailed)	.592	.187	.908	.247	.703	.231		.988	
	Ν	200	200	200	200	200	200	200	200	
ROA2010	Pearson Correlation	.061	.026	.237**	.130	.017	.221**	001	1	
	Sig. (2-tailed)	.388	.716	.001	.066	.815	.002	.988		
	Ν	200	200	200	200	200	200	200	200	

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

\*. Correlation is significant at the 0.05 level (2-tailed).
Correlations											
		CeoDualit	Independent	Board	Board Size	Ownership	Leverage Level	TSR2011	ROA2011		
		y2011	Chairman	Composition	2011	Concentration	2011				
			2011	2011		2011					
	Ν	200	200	200	200	200	200	200	200		
TSR2011	Pearson Correlation	.015	.065	009	.019	016	.095	1	017		
	Sig. (2-tailed)	.831	.363	.904	.789	.818	.181		.815		
	Ν	200	200	200	200	200	200	200	200		
ROA2011	Pearson Correlation	.051	.023	.240**	.127	.013	.151*	017	1		
	Sig. (2-tailed)	.475	.749	.001	.073	.856	.033	.815			
	Ν	200	200	200	200	200	200	200	200		

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

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

Correlations											
		CeoDuality	Independent	Board	Board Size	Ownership	Leverage	TSR2012	ROA2012		
		2012	Chairman	Composition	2012	Concentration	Level 2012				
			2012	2012		2012					
TSR2012	Pearson Correlation	.012	.087	071	073	032	041	1	.160*		
	Sig. (2-tailed)	.870	.220	.315	.305	.655	.563		.023		
	Ν	200	200	200	200	200	200	200	200		
ROA2012	Pearson Correlation	.076	.091	.028	.299**	.156*	118	.160*	1		
	Sig. (2-tailed)	.282	.201	.691	.000	.027	.095	.023			
	Ν	200	200	200	200	200	200	200	200		

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

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