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University of Southern Queensland

**REMUNERATION, REMUNERATION COMMITTEE, INSTITUTIONAL
INVESTOR AND PERFORMANCE IN FAMILY FIRMS: EVIDENCE
FROM MALAYSIA PUBLIC LISTED COMPANIES**

A Dissertation Submitted by

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ABSTRACT

The Malaysian Code on Corporate Governance (MCCG) is part of the Bursa Malaysia Listing Rules to ensure good governance in the capital market. This study investigates two important elements of MCCG; directors' remuneration and the characteristics of remuneration committees which give recommendations on directors' pay. However, the proposal needs to be monitored by either a non-executive or an institutional investor, or both, especially in family firms.

According to the structure of a family firm, the same person is often on the board of directors and the remuneration committee. This thesis examines the relationship between remuneration and performance in family firms, represented by the remuneration committee and the institutional investors for 537 Bursa Malaysia listed firms from 2007 to 2009.

This study finds evidence to support the hypothesis that directors' remuneration has a significant and positive relationship with firm performance. However, this study did not find evidence that family firms influence the relationship between remuneration and performance. Also, the study finds that the presence of institutional investors is positively related to firm performance. However, there is no evidence showing that institutional investors influence the relationship between remuneration and performance in family firms.

With regards to the remuneration committee, this study finds that family firms' connections with remuneration committees has a negative relationship. Also, the study finds that the relationship between remuneration committees and remuneration is significantly negatively affected in family firms. This shows that the relationship between the remuneration committee and remuneration is dependent on the family firms. Furthermore, there is no evidence that institutional investors effectively monitor remuneration committees during remuneration in family firms. Thus, this study suggests that the relationship between remuneration committees and the remuneration directors of family firms does not depend on the institutional investor role.

Certification of Dissertation

I certify that the ideas contained in this dissertation are entirely my own, except where otherwise acknowledged. I also certify that the works is original and not been submitted for any other award.

Signature of Candidate

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ENDORSEMENT

Signature of Supervisor

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LIST OF ACRONYMS AND ABBREVIATIONS

AFC	Asian Financial Crisis
AGMs	Annual General Meetings
ASN	Amanah Saham nasional
ASM	Amanah Saham Malaysia
ASG	Amanah Saham Gemilang
ASB	Amanah Saham Bumiputra
AS 1Malaysia	Amanah Saham Didik and Amanah Saham 1Malaysia
CEO	Chief Executive of Officer
CMP	Capital Market MasterPlan
EGMs	Extraordinary General Meetings
EPF	Employees Provident Fund,
FCCG	Finance Committee on Corporate Governance
IPOs	Initial Public Offerings
KLSE	Kuala Lumpur Stock Exchange
LTAT	Lembaga Tabung Angkatan Tentera
LTH	Lembaga Tabung Haji
MCCG	Malaysia Code on Corporate Governance
MESDAQ	Malaysia Exchange of Securities Dealing and Automated Quotation
MSWG	Minority Shareholder Watchdog Group
PNB	Permodalan Nasional Berhad

PERKESO	Pertubuhan Keselamatan Social
PERNAMA	Perbadanan Perwira Niaga Malaysia
PPHM	Perbadanan Perwira Harta Malaysia
PERHEBAT	Perbadanan Hal Ehwal Bekas Angkatan Tentera
PLCs`	Public listed Companies
PN14	Practice Note No 14
PN17	Practice Note No 17
ROA	Return on Asset
ROE	Return on Equity
VIF	Variance Inflation Factor

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PUBLICATION

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CHAPTER 1 INTRODUCTION

1.1 Research Aim and Motivation

The financial crisis that occurred during the period of time from the end of June 1997 to the end of August 1998 was triggered in Thailand and mostly affected the countries of Malaysia, Indonesia, South Korea, and the Philippines. In Malaysia, the higher interest rates and credit contraction created by the crisis affected output and corporate profitability, which was reflected in the fall in equity prices. The Kuala Lumpur Composite Index declined by 72% during the crisis. This created awareness in the government of the weakness of domestic policies such as the large current account deficits, weaknesses in the domestic financial system, and poor governance.

However, the situation was different in 2008 and 2009, as the subprime crisis that hit the United States did not badly affect developing countries like Malaysia. This is probably due to developing countries' good growth and policies, having learned their lesson from the 1997-1998 financial crisis. In Malaysia, the Malaysia Code of Corporate Governance (MCCG) was established in 2000 and revised in 2007, to introduce regulations via corporate governance for best practices. Naude (2009, p. 9) explains that developing-country banks have not been directly impacted as badly. Most developing-country banks were only marginally exposed to the US subprime crisis and so a direct impact on their banking systems was largely avoided.

There are some aspects, such as fairness, transparency, accountability, and responsibility, in organizational operations in Malaysia for which standards of governance are lacking and must be developed. Further, corporate governance has been actively promoted in the corporate sector for improvement. Implementation of the MCCG increased stock prices by an average of 4.8% (Abdul Wahab et al. 2007). In fact, poor corporate governance is a reason put forward for poor performance of firms (Chen et al. 2007). The MCCG (2012, p. 4) provides a definition of corporate governance as follows:

“[C]orporate governance is the process and structure used to direct and manage the business and affairs of the company towards enhancing business prosperity and corporate accountability with the ultimate objective of realising long-term shareholder value, whilst taking into account the interests of other stakeholders.”

Corporate governance provides guidance for boards of directors to help them achieve firms' objectives. Furthermore, it might enhance confidence among shareholders to invest more money in firms by helping them feel that their interests will be protected. One part of the governance structure is remuneration linked to performance. Thus, the promise of better remuneration drives motivation among directors to enhance firm performance. Another aspect concerns the role of the remuneration committee in providing the remuneration proposal. This proposal needs to be monitored by an internal monitor (who is not an executive) an institutional investor, or both.

The general tasks of boards of director are to run a business and provide advice to management relating to the executive remuneration and to protect shareholder investment. Better remuneration is able to motivate boards of director to fulfil firm objectives. Existing literature examines the executive remuneration impact to the firm performance (Barkema & Gomez-Mejia 1998; Bartholomeusz & Tanewski 2006; Cheng & Firth 2006; Croci et al. 2010). Fama and Jensen (1983) explain that the effective incentives provided on executive tend to mitigate the agency problem and enhance firm performance. Similar views are expressed by Lazear (2000) and Murphy (1999). Furthermore, Hassan et al's. (2003) study of Malaysia firms pre-and during Asian financial crisis (i.e. 1996 to 1998) reports a weak relation between director remuneration and performance (though it is positive).

Remuneration committees need to justify the best criteria in remuneration setting in order to generate optimal contracts which could be offered to boards of directors to increase shareholder wealth (Leone et al. 2006; Shaw & Zhang 2010). Committee members need to propose a suitable reward such as salary, bonuses, fees (Abdul Wahab & Abdul Rahman 2009; Carter & Zamora 2009; Craighead, J. A. et al. 2004; Hartzell & Starks 2003) and stock options (Hartzell & Starks 2003; Murphy 1999) to be part of remuneration components and link with the board of director abilities (i.e. skills, knowledge and experience). As a result this will enable board of directors to be motivated to achieve firm objectives (Carter & Zamora 2009). Providing suitable salary is significant motivation for boards of directors to achieve firm objectives. The remuneration committee plays an important role in the determination

of executives' pay (Main & Johnston 1992; O'Reilly et al. 1988; Singh & Harianto 1989).

Family firms tend to keep the senior positions although they may not be talented or qualified to run a business due to increased personal interest. Moores and Craig (2008) note that family firms prefer to keep top management for family members rather than hiring qualified outsiders. Non-executives have less power to argue or oppose actions taken by family members because family appoints them. Family groups in committees actively can influence the committee decision making to benefit them. This fact influences family group divergences from maximizing profit towards increasing personal wealth; this trend does not follow the MCCG's revised 2007 suggestion. Therefore the agency problem becomes serious between majority shareholders and minority shareholders (Jiang & Peng 2010; Young et al. 2008). As a result, remuneration becomes a subject of expropriation in family firms and there is an inability to enhance firm performance.

Agency theory argues that dissimilar interests between managers and shareholders probably increase agency problems. For example, agency theory argues that the board of directors has private interests other than increasing shareholder wealth (Fama & Jensen 1983; Jensen & Meckling 1976). Furthermore, directors have intentions to pursue private benefits and to extract additional rents (Bebchuk & Fried 2005; Bebchuk & Neeman 2009; Jensen et al. 2005). Expropriation via remuneration often occurs in family firms, which are dominated by a board of

directors and a majority shareholder who are members (Cheng & Firth 2006; Claessens et al. 2000). Further, agency problems are serious in family firms when a conflict arises between the majority and minority shareholder (Jiang & Peng 2010; Young et al. 2008). Therefore, the institutional investor plays an important monitoring role to ensure that the minority shareholder wealth is protected (Abdul Wahab & Abdul Rahman 2009; Andreas et al. 2010; Croci et al. 2010; Hartzell & Starks 2003).

1.2 Research Question

The research question is: What are the relationships among the remuneration committee, director remuneration, ownership structure, and performance in family firms among Malaysian publicly-listed companies? To answer this primary question, this study has five research objectives.

First, this study examines the relationship between director remuneration and firm performance. Dissimilar interest between the board of directors and shareholders will possibly bring a firm towards financial crisis. Therefore, it is necessary for managers and shareholders to have aligned interests, which enables long term success. This is consistent with agency theory and the idea that providing suitable remuneration possibly aligns the different interests of the boards of directors and shareholders (Andreas et al. 2012) or between majority and minority shareholders (Jiang & Peng 2010; Young et al. 2008).

Second, this study examines the relationship between director remuneration and firm performance in family-owned companies. The larger family-owned firms have evolved from traditional family-owned firms (Rahman & Ali 2006). Therefore, the family-owned firms incorporate for long term success and to hand over the firm down to the next generation (Anderson & Reeb 2003; Miller et al. 2007). Prior research shows that family ownership is an advantage for increasing firm performance. For example, Miller et al. (2007) indicates that performance of family-owned firms is better than that of non-family firms. Family ownership leads to closer monitoring, purposeful increases in performance, similar objectives such as maximization of profits among shareholders, quicker decision-making, and stronger organizational culture arising from family values, which are all factors that can strongly influence the success of firms (Martinez et al. 2007).

Family ownership is unique due to the power and control in the hands of the family group (Bertrand & Schoar 2006). In family-owned firms, family members hold the top management positions (Moore & Craig 2008), such as membership in the board of directors (Anderson & Reeb 2003; Chen & Lee 2008); the positions of CEO or Chairman; membership on the remuneration committee (Bender 2007; Lee 2009, Sun et al. 2009) and either one of the family members or a group of members as the majority shareholder (Peng & Jiang 2010; Young et al. 2008). As result, family members are possibly awarded with higher remuneration without links to performance and can benefit by, for example, paying themselves excessive salaries and dividends; giving top executive positions and board seats to family members regardless of competency; and transferring company shares to their own accounts at discount prices (Wiwattanakantang 2001). As documented by previous studies,

(Anderson & Reeb 2003; Chen & Lee 2008) family groups can have the intention to expropriate wealth from other shareholders via excessive remuneration. Therefore, to curb such expropriation of wealth by family members, monitoring by an institutional investor is recommended.

Third, this study examines the relationship between director remuneration and performance being moderated institutional investor in family firm. Institutional investors are representative of minority shareholders (MSWG 2006) and they play very important roles such as monitoring firm activities to ensure director remuneration is linked with performance, skills, knowledge, and experience. This shows that the presence of an institutional investor can lead to better performance.

Increases in private benefits may increase agency problems between majority and minority shareholders in family firm, according to agency theory. The implication for minority shareholders is a probability that wealth will slightly decrease, influenced by the pursuit of personal benefits for family members, who are not focused on firm performance. Family firm increases blockholding to curb monitoring by institutional investors. As a result, institutional investors are less able to effectively monitor and prevent expropriation via remuneration from minority shareholder wealth. Remuneration increases among family members are less common in the presence of an independent remuneration committee.

Fourth, this study examines the relationship between the presence of remuneration committee and director remuneration in family firms. The practices of governance mechanisms in the 2002 MCCG, are related to the issues of the composition of boards, boards of director, director remuneration, board committees, and board mandates and activities. The MCCG claims, under best practices in corporate governance, that regulation of board remuneration is one of the effective aspects of corporate governance that should reflect the responsibility and commitment of executive as well as non-executive directors. Furthermore, boards should appoint remuneration committees consisting wholly or mainly of non-executive directors to recommend remuneration of the executive directors in all forms, drawing from outside advice as necessary. This recommendation was added to the 2007 revision of the MCCG.

Effective incentives designed by remuneration committees are intended to attract and retain competent executives to contribute their skills, expertise, and knowledge to enhance performance (Bebchuk & Fried 2003). The MCCG (2007, p 7) explains that:

“Levels of remuneration should be sufficient to attract and retain the directors needed to run the company [s]uccessful. The component parts of remuneration should be structured so as to link rewards to corporate and individual performance (executive directors) and the level of remuneration should reflect the experience and level of responsibilities (non-executives directors)”.

The statement shows that, by integrating remuneration with both corporate and individual performance firms may be able to mitigate the agency problem and enhance performance, consistent with agency theory (Fama and Jensen 1983).

The agency problem becomes an issue with family ownership due to the uniqueness of family firms and tendencies for expropriation via excessive remuneration to increase personal wealth. Remuneration committees are recommended by governance best practices to design better links between director remuneration and performance. However, this is often difficult in family firms due to influences of the family members on committee members, which leads to increased remuneration for private interest. Further, non-family members on remuneration committees lack independence and power to influence decision-making by boards of directors composed largely of family members. This shows that ineffective internal monitoring can provide opportunities for family members to increase personal interests via excessive remuneration.

The agency problem tends to increase between majority and minority shareholders (Jiang & Peng 2010; Young et al. 2008). Therefore, remuneration becomes a subject for many researchers due to its significant impact on firm performance (Barontini et al. 2010; Croci et al. 2010; Shaw & Zhang 2010) and the role it plays in expropriation in family firms (Anderson & Reeb 2003; Basu et al. 2007; Cheung et al. 2005; Jiang & Peng 2010; Young et al. 2008). However, fewer studies have focused on expropriation via remuneration committee in family firms.

Finally, this study examines the existence of remuneration committee effect director remuneration and whether this relationship may become stronger (weaker) in the presence of institutional investor in family firm.. The minority shareholder is aware

that its investment can be misused by the family group for personal benefit. Therefore, institutional investors are responsible for monitoring and protecting minority shareholder wealth (Dong & Ozkan 2008). Monitoring by institutional investors ensures that remuneration is not simply based on family membership but is based on performance (Abdul Wahab & Abdul Rahman 2009; Hartzell & Starks 2003). In order to increase the effectiveness of institutional investors, firms should allow them to increase their holdings (Claessens et al. 2002) as well as the number of institutional investors (Cornett, M. et al. 2007; Sias et al. 2001) monitoring firm activities.

Although institutional investor enable to participate in remuneration structure throughout number of institutional investor but decision making is still under board of director power.

In Malaysia, the Minority Shareholder Watchdog Group (MSWG) plays a role in monitoring publicly listed companies by reviewing Annual General Meetings (AGMs) and Extraordinary General Meetings (EGMs). One of the MSWG objectives highlighted in its annual report “is to influence the decision making process in Public Listed Companies (PLCs) as the leader for minority shareholder”

(vii). The MSWG annual report (2010, p. 9) notes that:

“Coverage of companies under the MSWG’s portfolio increase by 16% to 214 companies, up from 185 in 2009. Monitored companies comprised about 20% of the total number of companies listed on Bursa Malaysia, and included small, medium and large cap stocks representing about 85% of the market capitalization (sic) of Malaysian-listed companies at end of 2010. MSWG’s representatives attended 243 AGMs/EGMs in 2010”.

In 2003, the Bursa Malaysia indicated that 13% of total market capitalization comes from institutional shareholding (Abdul Wahab et al. 2007). This suggests that the institutional investor has a significant role in Malaysian companies. Furthermore, in Malaysia, there are five large public institutional investors and members of Minority Shareholder Watchdog Group (MSWG). The founders of MSWG are: *the Armed Forces Fund Board (LTAT)*; *National Equity Corporation (PNB)*; *Social Security Organisation (SOCSO)*; *Pilgrimage Board (LTH)*; and *Employee Provident Fund (EPF)*. Therefore, the founding organizations comprise almost three-quarters of the institutional shareholdings of the Main Market in Bursa Malaysia (Abdul Wahab et al. 2007).

1.3 Summary of Research Findings

This study is based on a final sample of 537 firms listed on Bursa Malaysia from 2007 to 2009. For each firm, several corporate governance indices such as remuneration and remuneration committees based on MCCG were computed. As expected, this study finds that director remuneration is positively related to firm performance, consistent with past studies (Kaplan 1994; Leone et al. 2006; Murphy 1985; Shaw & Zhang 2010). Further analysis shows that this relationship is driven by motivation of boards of directors to utilize their skills, knowledge and experience to enhance performance.

This study finds evidence that family firm status is positively related to performance. However, this study does not find evidence that the family firm

influences the relationship between remuneration and performance. This suggests that the relationship between remuneration and performance is not influenced by family firm. Further analysis shows that the positive relationship between family firm and remuneration is strengthened only for direct shareholding. This demonstrates the direct control and power of family members in decision-making regarding remuneration.

This study finds evidence that institutional investors are positively related to firm performance. However, there is no evidence that the institutional investors influence the relationship between remuneration and performance in family firms. This suggests that the relationship between remuneration and performance in family firm is not depending on institutional investor role. Further analysis shows that PNB is positively related to performance. Additional tests show that PNB and director remuneration are positively related to performance. This suggests that PNB as the largest institution in MSWG keeps monitoring the relationship between director remuneration and performance.

This study finds that remuneration is positively related to family firm. However, this study finds family firm connected to remuneration committee is negatively related to remuneration. This study suggests that the relationship between remuneration committee and remuneration is dependent on family firm. Further analysis shows that the non family member in remuneration committee positively relates to remuneration. However, this study finds that family firm influences non family member in remuneration committee negatively to remuneration. This study suggests that family firm put pressure and lack of independent of non family member

possibly influences remuneration. Anderson & Reeb (2004) stated that the family firm tend to be less independent when it is dominated by family members.

This study finds evidence that institutional investors are positive and significantly related to director remuneration. Evidence shows that institutional investors play an effective monitoring role in director remuneration, which is linked to better performance as suggested by MCCG (2007 revised). There is no evidence that institutional investors effectively monitor remuneration committees during remuneration-setting in family firms. This study suggests that the relationship between remuneration committee and director remuneration in family firm does not depend on institutional investor role. Further analysis shows that the subsequent to remuneration, the negatively relationship between MSWG and remuneration committee is strengthened only for non executive remuneration. This study also finds that EPF and PNB are positively related to remuneration. However, this study finds EPF, PNB and remuneration committees are negatively related to director and executive remuneration. This suggests that EPF and PNB use their power of shareholding, because they are the two largest institutions in MSWG, to monitor remuneration committee actions on director remuneration.

1.4 Outline of the Remaining Chapters

The remaining chapters are organized as follows: Institutional background related to Malaysia is discussed in chapter 2. Chapter 3 outlines the relevant literature, while developing more fully the ideas from past research that are most important to the

present study. Furthermore, Chapter 4 sets out the hypotheses, building on Chapter 3. Research design and methodology issues are explored in Chapter 5, as well as details regarding the final sample and the measurement of variables. Results and discussion are discussed in Chapter 6 and Chapter 7 outlines the conclusion, limitation and contribution of the study and maps out a plausible future research program.

CHAPTER 2 INSTITUTIONAL BACKGROUND

2.1 Introduction

This chapter presents the institutional background in Malaysia. Section 2.2 discusses Malaysia`s capital market. Sections 2.3 and 2.4 discuss the Malaysia Code on Corporate Governance (MCCG) and Malaysian ownership of family firms. Section 2.5 discusses institutional investors, which is followed by the chapter summary and conclusion in Section 2.6.

2.2 Malaysia`s Capital Market

The Asian Financial Crisis (AFC) of 1997/1998 indicated the need for development in the Malaysian capital market. This realization led regulators to make a concerted effort to enhance market infrastructure and processes to contribute to better regulatory frameworks. Strategies were implemented to improve the role of the capital market in fulfilling investors` desires and to ensure the effectiveness of regulation subsequent to changes in the market environment. For example, the Malaysia Capital Market Master Plan (CMP) was released in 2001 and intended to enhance the development of the Malaysian corporate governance reform agenda. Furthermore, 152 recommendations related to the development of the institutional and regulatory framework were included in the CMP for implementation from 2001 to 2010. Among 152 recommendations, ten specifically addressed corporate governance relating to the fair treatment of all shareholders and protection of

shareholder rights. Issues included minority shareholders` rights to transparency and disclosure, corporate ownership, accountability and independence of the boards of directors, regulatory enforcement, and training and education (Malaysia Securities Commission 2001).

After the AFC of 1997/1998, the equity capital market has shown significant growth in Malaysia, contributing to an increasing number of companies listed and revenues. Prior to the AFC, a total of 621 companies were listed on the Kuala Lumpur Stock Exchange (KLSE) (i.e., Bursa Malaysia), making up a total market capitalization of RM806 billion in 1996. However, during the AFC in 1997 and 1998 the number of listed companies fell to 708 and 736 companies with a significant decline in market capitalization to RM376 and RM374 billion, respectively. Nevertheless, in the post-crisis period in 1999, the figures increased as the number of companies listed on the exchange increased to a total of 757 companies with a market capitalization of RM552 billion, and, by the end of 2004, 963 companies were listed with a total market capitalization of RM722 billion.

2.3 Malaysia Code on Corporate Governance (MCCG)

In Malaysia, external governance mechanisms are less prevalent than internal. There is less threat of take over and merger among companies as Malaysia has a larger proportion of family-owned firms. If such companies have poor performance, they are usually taken over by the government or descendants of the families. Consequently, more attention is given to internal governance mechanisms, such as

the establishment of effective corporate boards of directors, including remuneration committees. Such governance mechanisms are evidenced through the release of MCCG.

We begin our discussion of corporate governance in Malaysia started with the establishment of the Finance Committee on Corporate Governance in 1998, which consisted of both government and industry representatives (Zulkafli et al. 2005). In March 2000, the Malaysia Code on Corporate Governance (MCCG) was developed by the Working Group on Best Practices in Corporate Governance (JPK1) and the code was subsequently approved by the Finance Committee. The JPK1 was chaired by the chairman of the federation public listed companies and their members, who work in both the private and public sectors.

Development of the MCCG was a significant milestone in corporate governance reform. The code describes the principles and the best practices of good governance. It also explains optimal corporate governance structures for public companies. The code outlines three major categories of recommendations and is composed of four parts: Part 1, principle of corporate governance; Part 2, best practice in corporate governance; Part 3, principle and best practice for other corporate participants; and Part 4, explanatory notes.

Part 1 establishes broad principles of good corporate governance for Malaysia. The principles underlying this part focus on four issues including boards of directors, director remuneration, shareholders, and accountability and auditing. Companies are required by the listing requirements of Bursa Malaysia to include in their annual reports narrative statement of how they apply these relevant principles to their particular circumstances. This is to guarantee sufficient disclosure so that investors and others can assess companies' performances and governance practices and invest in an informed way.

Part 2 focuses on three aspects, namely the role of boards of directors, accountability and auditing, and shareholding. This part outlines best practices for companies in designing the best approach to corporate governance. Under this part, companies will be required, as a provision of the listing requirements of the Bursa Malaysia, to state in their annual reports the extent to which they have complied with the best practices set out in Part 2 and explain any circumstances justifying departure from such best practices. Part 3 establishes guidelines for investors and auditors to enhance their roles in corporate governance, and Part 4 provides explanatory notes to earlier parts of the code.

For public companies in Malaysia, most attention is given to Part 2 of the code as they hope to achieve best practice and hence build a positive reputation among investors and regulators. One of the most significant rules concerning boards of directors is the appointing of remuneration committees consisting wholly or mainly of non-executive directors, to recommend remuneration of executive directors in all

forms, drawing from outside advice as necessary. Executive directors should play no part in decisions regarding their own remuneration. Membership of the remuneration committee's should appear in the directors' reports. The determination of remuneration packages for non-executive directors, including non-executive chairmen, should be a matter for the board as a whole. The individuals concerned should abstain from discussion of their own remuneration. MCCG 2000 lists several main responsibilities of boards of directors and remuneration committees, which are expected to facilitate the discharge of board stewardship responsibilities and hence enhance firm performance.

Previous studies indicate that corporate governance becomes an issue in Malaysia context. For example, Abdul Wahab and Abdul Rahman (2009) study the relationship between institutional investor and director remuneration influences by political connection. Hanifa and Cooke (2005) study on corporate social disclosure related to the board of director among Malaysia races. Furthermore, Chen and Nowland (2010) study in Asian countries includes Malaysia focus on Board Monitoring in family-owned companies. The variables were used in this study such as board of director which is consists of audit, board and remuneration committee, corporate governance. Mak and Kusnadi (2005) examine the relationship between board size and firm value in Singapore and Malaysia.

Boards of directors play extensive roles in establishing formal and transparent procedures for developing policies regarding executive director remuneration and

for fixing the remuneration packages of individual directors. As a result, good corporate governance practices raise shareholder awareness of the importance of determining the quality of this governance mechanism, which may be translated into better performance. Therefore, the code was reviewed in 2007 to further strengthen corporate governance practices in line with developments in domestic and international capital markets.

Among the main amendments of MCCG 2000 in 2007 were the specification of the qualifications of appointed directors as having the requisite skills, knowledge, expertise, experience, professionalism, and integrity. The amendments stressed the need to properly document all assessments and evaluations carried out by the nominating committee and to more fully disclose the issues discussed in the board meetings, emphasizing that all boards of directors should link remuneration to corporate and individual performance.

Remuneration committees and boards of directors ensure that companies' remuneration policies remain supportive of corporate objectives and are aligned with the interests of the shareholders. Remuneration committees should strive to reward directors based on accountability, fairness, and competitiveness, as prescribed in the code, and to ensure that the remuneration packages of directors are sufficiently attractive to draw in and retain persons of caliber. Thus, there is a formal and transparent procedure for rewarding and fixing the remuneration packages of directors. Table 2.1 presents differences between MCCG 2000 and MCCG 2007.

Table 2.1
Differences Between MCCG 2000 and MCCG 2007

Corporate Governance Matters	MCCG 2000	MCCG 2007
Appointments of the board	<p>The board of every company should appoint a committee of directors composed exclusively of non-executive directors, a majority of whom are independent with the responsibility for proposing new nominees to the board and for assessing directors on an ongoing basis.</p> <p>In MCCG 2000, the code does not specify the qualifications of appointed board of directors.</p>	<p>MCCG 2007 specifies the qualifications of appointed directors. In reviewed code, the nominating committee should consider the candidates' skills, knowledge, expertise and experience, professionalism, and integrity. The nominating committee should also evaluate independent non-executive directors' abilities to discharge such as expected from independent non-executive directors.</p>
Task of nominating committee	<p>The board should implement a process to be carried out by the nominating committee annually for assessing the effectiveness of the board as whole, the committees of the board, and the contribution of each individual director.</p>	<p>MCCG 2007 specifies that board should assess the effectiveness of the board as a whole, the committees of the board, and the contribution of each individual director, including independent non-executive directors and the chief executive officer. The reviewed code also stresses the need to properly document all assessments and evaluations carried out by the nominating committee in the discharge of all its functions.</p>
Board structure and procedure	<p>The board should meet regularly, with due notice of issues to be discussed and should record its conclusion in discharging its duties and responsibilities. The board should disclose the number of board meetings held in a year and the details of attendance of each individual director.</p>	<p>In MCCG 2007, the code is amended by putting greater emphasis on disclosure of the issues discussed in board meetings. The board should also record its conclusions and deliberations, in terms of the issues discussed.</p>

There are amendments in the Malaysia Code of Corporate Governance 2012 that concentrate on board structure strength and composition regarding the fiduciary roles and responsibilities of boards.

Table 2.2
MCCG 2012

Corporate Governance Matters	MCCG 2012
Principle 2: Strengthen Composition	Recommendation 2.3 The board should establish formal and transparent remuneration policies and procedures to attract and retain directors.
Principle 3: Reinforce independence	<p>Recommendation 3.1 The board should undertake an assessment of its independent directors annually.</p> <p>Recommendation 3.2 The tenure of an independent director should not exceed a cumulative term of nine years. Upon completion of nine years, an independent director may continue to serve on the board subject to the director's redesignation as a non-independent director.</p> <p>Recommendation 3.3 The board must justify and seek shareholders' approval in the event it retains as an independent director a person who has served in that capacity for more than nine years.</p> <p>Recommendation 3.4 The positions of chairman and CEO should be held by different individuals and the chairman must be a non-executive member of the board.</p> <p>Recommendation 3.5 The board must comprise a majority of independent directors where the chairman of the board is not an independent director.</p>

There are previous studies on corporate governance in Malaysia context. According to

In summary, regulators in Malaysia have made every effort to ensure that public companies are ethical and accountable to their stakeholders by promoting good governance. The code puts greater emphasis on qualifications for appointment to boards of directors by focusing on the presence of independent non-executive directors on board committees, such as audit committees, nominating committees, and remuneration committees. In addition, the code also stresses board structures and procedures, which boards must record at the conclusion of meetings.

2.4 Malaysian Ownership

The influence and dominance of family presence and ownership in Malaysia has been well documented (Claessens & Fan 2002; Jaggi et al. 2009; Tam & Tan 2007; Wan-Hussin 2009). According to the *South China Morning Post* (SCMP), as quoted by Jaggi et al. (2009), Malaysia has the second highest percentage of family ownership of listed companies in the region after Indonesia. A study by Claessens et al. (1999) indicates that 67.2% of companies in Malaysia were in family hands, followed by Thailand with 61.6%, and the Philippines with 40%. Indonesia has higher family ownership for public companies, at around 68.8%. Claessens et al. (2000) find that the presence of family dominance has enabled families to control firms and represent a large percentage of stock market capitalization in nine East Asian countries, including Malaysia. Asian countries are often labeled as suffering

from corruption and crony capitalism, with minority shareholders vulnerable to expropriation by management and family shareholders (Claessens & Fan 2002).

According to Lim (1981), the in 1960 the ownership and wealth of the largest 100 companies was concentrated in families. Zhuang (2001) indicate that the largest shareholder had possession of an average of 30.3% of outstanding shares across all public firms in Malaysia in 1998. Furthermore, 58.8% of these shares belonged to the top five shareholders. This demonstrates that, in Malaysia, individual/family shareholders are the largest shareholders (Zhuang 2001). In one study by Claessens et al. (2000), approximately 40.4% of 238 sample Malaysian firms were found to be dominated by a single large shareholder.

In addition, Malaysian ownership is highly concentrated in the hands of single institutional shareholders (Claessens et al. 2000). Institutional investors, such as Permodalan Nasional Bhd (PNB), Employee Provident Fund (EPF), and Armed Forces Fund Board (LTAT), are expected to play vital roles in protecting the interests of minority shareholders in Malaysia. In practice, the concentration of ownership imposes constraints on the Malaysian market for corporate control. In Malaysia, minority shareholders are given fewer opportunities to ask questions or raise doubts, even in meetings. The exercise of voting rights by the institutional shareholders might limit the opportunities of majority shareholders to uphold expropriation (via high remuneration) and to take action against such practices.

2.5 Institutional Investors

The Malaysia Code of Corporate Governance (MCCG) was issued in March 2000, based on the report presented by the Finance Committee on Corporate Governance (FCCG) in March 1999. The enhanced disclosures contained in the annual reports of Malaysian public companies after June 2001 detail the activities of remuneration committees and executive pay structures. MCCG emphasizes the principles of corporate governance on director remuneration through the following recommendations: (a) the component parts of remuneration should be structured so as to link rewards to corporate and individual performance, (b) companies should establish a formal and transparent procedure for developing policies regarding executive remuneration and for fixing the remuneration packages of individual directors, and (c) companies' annual reports should contain details of the remuneration of each director. Under best practices in corporate governance, the MCCG recommends companies to establish remuneration committees consisting of wholly or mainly non-executive directors. Remuneration committees are allowed to seek advice relating to executive remuneration from outside consultants and recommend to the board appropriate remuneration packages for executives.

Although the MCCG developed guidelines to improve corporate governance, such as composition of boards, size of boards, and the link of remuneration to corporate performance, a study by Wan-Hussin (2009) of Malaysian public companies conducted between 2003 to 2005 finds that there is still a positive relationship between remuneration and ownership. The study reveals that institutional investors effectively monitor remuneration committees ability to improve pay-for-

performance sensitivity. The study concludes that any increment of remuneration should link to firm performance to avoid remuneration manipulation. Another past study shows that the presence of institutional investors successfully curbs remuneration manipulation and misuse (Abdul Wahab & Abdul Rahman 2009). Both of these studies focus on remuneration in non-family-owned companies. Significantly, there are a limited number of studies that focus on remuneration in family firms, though nearly 67.2% of public companies in Malaysia are owned by family groups (Claessens et al. 1999).

2.5.1 Minority Shareholder Watchdog Group (MSWG)

The Minority Shareholder Watchdog Group (MSWG) was established as a government initiative in the year 2000 as part of a broader capital market framework to protect the interests of minority shareholders through shareholder activism. It is one avenue of market discipline to encourage good governance amongst public listed companies with the objective of raising shareholder value over time.

The MSWG provides four (4) main services to their customers. First is *Proxy Advisory Services*, which provides pro-active measures on current corporate governance issues by means of analysing firms' financial statements, monitoring corporate abuses and informing current governance practices to clients and others stakeholders. Second is *Proxy Voting Services*, which provides proxy representations to the investing public or institutions in general meetings where minority shareholders have concerns about corporate governance issues. Although

the first service is free to the public, the second service is not. Since its inception, the MSWG has succeeded in obtaining 93 proxy voting services (MSWG, 2006).

Third service is *Articles and Commentaries*, which are written current issues on the market relating to corporate governance matters. By providing valuable advice, this service aims to protect minority interests and this service is free to the public. Furthermore, in 2005, the MSWG served 103 clients on this particular service, exceeding their expectations 3-fold (MSWG, 2006). The final service is *Public Enquiries*, which is a value-added advice provided for the benefit of minority shareholders and available via the MSWG website.

MSWG monitored 185 general meetings of public listed companies (PLCs) in 2009. The monitoring services were focused on corporate governance issues and analysis of the PLCs' financial performance, as well as topical issues such as related party transactions, acquisitions and disposals, privatizations, and director remuneration. From that basic outlook, it can be seen that the members of MSWG can significantly influence the relationship between remuneration and their design by remuneration committees in family firms and link them with firm performance.

2.5.2 Background of MSWG Members` Content History, Functions and Objectives.

The founders of MSWG are Armed Forces Fund Board (LTAT), National Equity Corporation (PNB), Social Security Organisation (SOCSO), Pilgrimage Board (LTH) and Employee Provident Fund (EPF) (Abdul Wahab et al. 2007). They

explain that the founder of MSWG shareholding almost third quarter of institutional shareholding in firms on the Bursa Malaysia's Main board.

First, LTAT was established in 1973, under Act 101, and serves as a superannuation fund for the Armed Forces of Malaysia. The objectives cite that it is a saving scheme for the officers of the armed forces. Under the Act, investment in trusts is not less than 70% and non-trust investments total no more than 30%. LTAT established three corporations to manage their portfolios including Perbadanan Perwira Niaga Malaysia (PERNAMA), which was established in 1983 and ran 70 shops in army camps around Malaysia until end of 2008. Furthermore, Perbadanan Perwira Harta Malaysia (PPHM) was established in 1984 and is responsible for investments in properties and Perbadanan Hal Ehwal Bekas Angkatan Tentera (PERHEBAT) was established in 1994 and provides social programs, such as technical and vocational training and entrepreneurial advice to members. LTAT posted an investment income of RM923.7 million in 2009, which was a decrease of 26.2%, or RM227.6 million, from RM1,252.3 billion in 2008. Under its subsidiary companies, LTAT has long-term interests between 20% and 50% and significant influence in financial matters. LTAT equities were RM7.355,623 billion in 2009, compared with RM7.011,028 billion in 2008. Table 2.2 itemizes the sources of LTAT investment income in 2009.

Table 2.3
Itemization of LTAT Investment Income in 2009

Types of investment	Amount (RM `000)
Subsidiary companies	431.9
Associate companies	38.7
Equity in publicly listed companies and joint ventures	294.4
Portfolio manager	64.4
Waran and preference shares	69.1
Properties	25.2

The second major institutional investor, PNB, was established on 17 March 1978, and is Malaysia`s first unit trust set up to encourage savings by Bumiputeras¹. Its investment products include the Amanah Saham Nasional (ASN), Amanah Saham Malaysia (ASM), Amanah Saham Gemilang (ASG), Amanah Saham Bumiputra (ASB), Amanah Saham Didik (ASD), and Amanah Saham 1Malaysia (AS 1Malaysia). PNB makes investments in diversified portfolios that include unit trusts, institution property trust, property management, and asset management, which contribute to funds totaling about RM150 billion and make the PNB Group the leading investment institution in the country.

Next, LTH was established in 1962 with the goal of helping Malaysian Muslims save for pilgrimages to Mecca. The role of LTH is to make investments in companies to provide contributors with returns on their investments. LTH invests in diversified portfolios that include industrial, services, plantation, and property

¹ Cited from Haniffa & Coke (2000); Bumiputra refers not only to Malaysians of Malay but other indigenous ethnic groups (Malaysia,1991).

investments. Accordingly, LTH employs subsidiaries to handle these portfolios, including TH Plantations Berhad, TH Properties Sdn Bhd, TH Technologies Sdn Bhd, TH Travel and Services Sdn Bhd, and TH Global Services Sdn Bhd. Furthermore, it also invests in Islamic financial resources, such as Bonds, government certificates of investment, mudhaarabah account bank, and bill of acceptances.

PERKESO was established in 1971 to enforce the Employees' Social Security Act (1969) and became a Statutory Body on 1 July 1985. PERKESO is known as SOSCO (Social Security Organization). It has two social injury schemes: the Employment Injury Scheme and the Invalidity Pension Schemes for Malaysian workers. The contribution from employees to these funds increased from RM1.84 billion in 2008 to RM1.87 billion in 2009. Furthermore, PERKESO posted an investment income of RM1.02 billion in 2009, which was an increase of RM623.70, or 159.29%, from RM391.55 million in 2008.

Finally, the last major institutional investor is the EPF, which was established in 1951, as the compulsory national fund for private sector employee, akin to Australian superannuation funds. At the end of December 2009, total EPF membership was close to 12.35 million and the rate of contribution was 23% of employee wages, with 11% taken from employee monthly wages and 12% contributed by employers. Malaysian law mandates that 70% of the EPF's investment portfolio must comprise Malaysian government securities and not exceed

25% in domestic equity. In 2009, the EPF continued to experience a healthy growth in investment assets of 8.55%, or RM29.25 billion, to RM371.26 billion in comparison to RM342.01 billion in 2008. Of the 2009 total investment portfolio, the EPF invested 72.53% in fixed income instruments, including 41.20% in loans and bonds and 25.08% in Malaysian government securities. Another 27.05% and 6.25% were invested in higher return equities and money market instruments, respectively.

These institutional investors play an important role to ensure that the investments of other shareholders are protected. Therefore, MSWG members prefer to increase shareholding and are actively involved in management via decision-making. This tends to enhance confidence levels among minority shareholders to invest due to the perception that their investments are protected. This creates a win-win situation, such that higher capital inflow allows business expansion, which generates profits, leading to better pay outs of dividends to shareholders, including family members.

2.6 Summary

In summary, Malaysian corporate governance has improved in recent years. The regulatory bodies have played important roles in formulating and enforcing rules and regulation that can best serve the interests of companies' stakeholders. The Malaysian Government has also taken an effective initiative to cooperate with regulators to ensure that corporate governance is implemented in ways that can be translated into transparency and disclosure of corporate governance. Nevertheless, Malaysian corporate governance is also influenced by family ownership. Family-

member domination of top positions provides opportunities for private benefits, such as higher remuneration. MCCG requires mandatory disclosure of director remuneration and remuneration committee decisions. However, disclosures according to these codes are unable to prevent expropriation by family members of minority shareholder wealth. It should be stressed that the presence of institutional investors in family firms is very important to monitor firm operations and to enable the achievement of firm objectives.

CHAPTER 3 LITERATURE REVIEW

3.1 Introduction

This chapter provides a review of literature on remuneration packages designed by remuneration committees and the association between remuneration and firm performance in family firms, moderated by the presence of investor(s). The chapter draws on agency theory. Section 3.2 discusses the relevant theoretical perspectives. Sections 3.3 and 3.4 discuss remuneration committees and the relationship between remuneration and performance. Family ownership is discussed in Section 3.5, which is followed by the chapter institutional investor in Section 3.6. Sections 3.7 discuss gaps in the literature and finally, the chapter concludes with a summary in Section 3.8.

3.2 Theoretical Perspectives

Agency theory suggests that boards of directors are motivated to fulfill firm objectives when they are provided with appropriate incentives. This is consistent with the literature that generally suggests that remuneration tends to mitigate the agency problem (Andreas et al. 2010; Jensen & Meckling 1976) and leads to better performance (Bender 2007; Cheng & Firth 2006; Kaplan 1994; Murphy 1985). Providing remuneration could possibly align executive and shareholder interests, which is often an assumption however the limited literature in this area (i.e. Anderson & Reeb 2003; Cheung et al. 2005; Claessens et al. 2000; Faccio & Lang

2002; La Porta et al. 1999; Shleifer & Vishny 1986) suggests that remuneration is less effective in mitigating the agency problem in family firms. Most studies test hypotheses related to effectiveness of remuneration as an instrument to mitigate the agency problem in non-family firms, in which there is separation of ownership and management (Fama & Jensen 1983; Jensen & Meckling 1976; Murphy 1999), by contrast in family firms, in which ownership and management are confounded (Anderson & Reeb 2003; Cheung et al. 2005; Claessens et al. 2000; Faccio & Lang 2002; La Porta et al. 1999).

Remuneration research has mainly applied agency theory to non-family firms (Bebchuk & Fried 2003; Cheng & Firth 2006; Fama & Jensen 1983; Jensen & Meckling 1976). Agency theory suggests that the agency problem is serious when boards of directors seek to increase personal wealth while the objective of shareholders is to maximize profits (Fama & Jensen 1983; Fama 1980; Jensen & Meckling 1976). Such a situation limits the ability of theory applied in family firm to inform remuneration design by remuneration committees but interests in higher remuneration and profitability. Moreover, agency theory suggests that optimal contracts can drive the motivation of boards of directors, as individuals might be willing to work for the shareholders if satisfied with their contracts (Bebchuk & Fried 2003). However, this may not hold true for family firms because the boards of directors and majority shareholders usually are the same individuals. This provides an opportunity to increase remuneration contrary to the remuneration policies and procedures (Anderson & Reeb 2003; Morck & Yeung 2003).

Another central assumption of agency theory is that there are executive behaviors that are unobservable by shareholders (Jensen & Meckling 1976). This assumption argues that shareholders find it difficult to observe how executives operate the firm and that boards are untrustworthy and need to be seriously monitored. Therefore, outside directors are required to become a part of boards in order to monitor board activities and represent shareholders (Beasley 1996; Hassan et al. 2003; Weisbach 1988). However, another perspective argues against the notion that outside directors can increase trustworthiness because outside directors are appointed by the boards and can be argued to never be truly independent (Crystal 1991; Zattoni & Cuomo 2010). Instead, agency theory can focus on monitoring by institutional investors to replace the role played by outside directors. The main theoretical advantage of monitoring by institutional investors is that institutional investors are independent because they are not appointed by the family group. Therefore, they are more able to objectively protect the interests of shareholders. Furthermore, institutional investors also have expertise and knowledge, which can contribute to effective monitoring. Having considered these assumptions and counterarguments, this study employs agency theory as a basis for its research hypotheses.

3.2.1 Agency Theory

Agency theorists make the assumption that boards of directors have their own interests, which might conflict with the objectives of increasing shareholder wealth and may impact firm performance. This conflict of interest is known as the agency problem, which is defined as the presence of dissimilar goals between principal and agent (Fama & Jensen 1983; Jensen & Meckling 1976). In family firms, the major

agency problem occurs between majority and minority shareholders (Peng & Jiang 2010; Young et al. 2008). The conflict is exacerbated due to minority shareholders having little opportunity to monitor the activities of majority shareholders or to check their power within firms.

Eisenhardt (1989) describes the difficulty and costs associated with internal monitoring by the principal as contributing to agency cost, which is the cost incurred as a result of the agency problem. Therefore, agency costs give shareholders incentives to invest in monitoring and incentives to boards of directors to raise performance as protection against potential losses. James (2010, p. 17) explain that the optimal set of contracts that emerges is the set that simultaneously reduces the sum of the three forms of agency cost, which are monitoring cost, bonding costs and the residual (Jensen & Meckling, 1976) and maximizes the firm's market value².

Agency theory is limited for explaining the conflict of interest between majority and minority shareholders in family firms. In family firms, there is no separation between ownership and management, or control (Anderson & Reeb 2003; Claessens et al. 2000; Gomez-Mejia et al. 2003; La Porta et al. 1999), which contrasts with non-family firms. Regardless, there is potential for increased conflict between

² An agency relationship is one arising out of a contract where "one or more persons (principals) engage another (the agent) to perform some service on their behalf which involves the delegation of decision-making authority" (Whittred et al 2000, p. 15). Agency cost arise out of an agency relationship (as the agent may not always act in the best interest of the principal) and they include: (a) the monitoring expenditures incurred by the principal (b) the bonding expenditures incurred by the agent and (c) the residual loss (Jensen and Meckling, 1976, p. 308). The residual loss is the ultimate loss in firm value that the agency relationship creates and which is not optimally reduced any further by either the incurrence of additional monitoring or additional bonding expenditures.

majority and minority shareholders in family firms (Peng & Jiang 2010; Young et al. 2008). For example, the uniqueness of family firms is closely related to the fact that key positions within the firms are held by family members, who can even hold more than one important position simultaneously. Clearly this situation provides spaces for expropriation.

In Malaysia context, agency theory is applicable as mention previously in page 22 paragraph 1, The influence and dominance of family presence and ownership in Malaysia has been well documented (Claessens & Fan 2002; Jaggi et al. 2009; Tam & Tan 2007; Wan-Hussin 2009). Furthermore, Asian countries including Malaysia are often labeled as suffering from corruption and crony capitalism, with minority shareholders vulnerable to expropriation by management and family shareholders (Claessens & Fan 2002).

Many agency theorists' argue that to mitigate the agency problem and agency costs, firms should offer attractive incentives and implement effective monitoring. According to Fama and Jensen (1983), the combination of incentives and monitoring can mitigate the agency problem and agency cost. Figure 3-1 shows a conflict between majority and minority shareholders, and the solution to mitigate the conflict under agency theory.

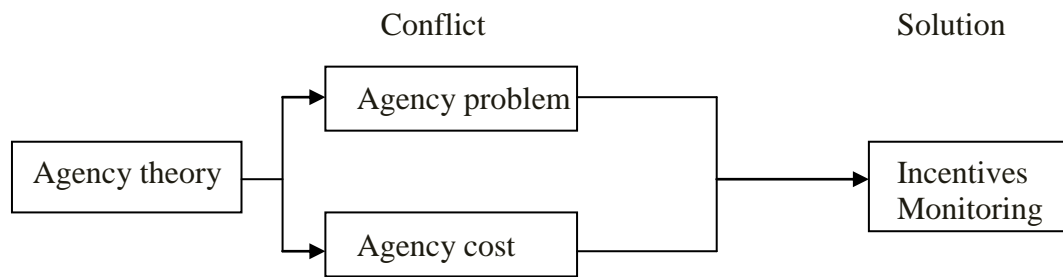


Fig. 3-1. Agency theory, Conflict and Solution

3.2.2 Agency Problem and Agency Cost

Family executives who are on boards of directors, majority shareholders, and remuneration committees believe that the firm itself is a place to store up wealth, which contributes to the agency problem. According to Peng and Jiang (2010) and Young et al. (2008) majority shareholders often refuse to maximize profits because they are unable to restrain their own interests when they increase remuneration. Moores and Craig (2008) agree that majority shareholders possibly misuse their power and control to increase personal wealth. Thus, participation of family members in management, including the remuneration process, can contribute to the agency problem. According to Core et al. (1999) increased agency problem is a bad indicator for long-term firm survival, and must be addressed early before the problem causes firms to lose large amounts of revenue over time. Core et al. (1999) find that the extent of the agency problem is negatively related to firm performance.

Minority shareholders often lack knowledge, skills, and talent specific to firm operations, compared with majority shareholders, which can also contribute to agency costs (Tosi & Gomez-Mejia 1989). This shortcoming is a disadvantage for minority shareholders because it limits them in gaining access to information related

to executive remuneration. Furthermore, minority shareholders are not involved directly in firm operations, which may also limit their access to management information. Thus, inability to monitor by minority shareholders provides spaces for boards to increase personal benefits via excessive remuneration and possibly bring financial problems in future. As a result, agency costs rise, which could lead to losses in profits (Anderson & Reeb 2003). This significantly impacts on firm operations and prevents strategies and planning from being implemented, resulting in lowered dividend payouts. Low dividends lead investors to sell their shares due to loss in confidence in the ability of firms to raise profits.

Furthermore, family firms can intentionally build up barriers via remuneration committees (i.e. family members who are members of committees) between the family group and minority shareholders in order to ensure limited opportunities to question remuneration and participate in the remuneration process. Therefore, minority shareholders find it difficult to monitor firm activities. Agency costs remain high between majority and minority shareholders.

3.2.3 Incentives and monitoring

As previously discussed, the agency problem and agency costs may decrease firm performance, as consistent with agency theory. However, others argue that the agency problem and agency cost can be mitigated by using incentives and monitoring (Andreas et al. 2012; Hartzell & Starks 2003; Jensen & Murphy 1990; Murphy 1999,) which tend to align majority and minority shareholder interests

(Jiang & Peng 2010; Young et al. 2008). In other words, shareholders can motivate managers by controlling their remuneration. Generous remuneration can drive the motivation of boards of directors to work harder to increase firm performance (Kaplan 1994; Letza et al. 2004; Murphy 1985). Additionally, agency cost could be mitigated with links to institutional investors. According to Abdul Wahab and Abdul Rahman (2009), monitoring by institutional investors enables firms to curb remuneration and increase firm performance.

Remuneration committees are responsible for designing better remuneration in order to increase quality of executives and, consequently, firm performance. In family firms, family executives who are members of boards of directors and majority shareholders obtain two benefits if they accept remuneration contracts: First, they receive better remuneration composed of a high salary, large bonuses, or both, as well as stock options (Basu et al. 2007; Bebchuk & Fried 2003; Croci et al. 2010). Second, as shareholders, they can receive large dividends based on firm performance. The logic of these two incentives can be used to possibly influence majority shareholders to re-orientate their private intentions towards increased shareholder wealth (Andreas et al. 2012; Holmstrom 1979). Prior studies indicate that there is a positive relationship between CEO remuneration and firm performance (Barkema & Gomez-Mejia 1998; Kaplan 1994; Murphy 1985), which is consistent with agency theory (Fama & Jensen 1983).

As previously mentioned, mitigation of the agency problem and agency cost contributes to long-term success. This requires majority shareholders to put aside personal interests for firm objectives. As a result, the agency problem in both firms with separate ownership and control (Jensen & Meckling 1976) and family firms (Anderson & Reeb 2003; Claessens et al. 2000) can be reduced via incentives and monitoring as suggested by agency theory. This will induce a closer relationship between remuneration and performance.

Agency theorists (i.e. Fama & Jensen 1983; Jensen & Meckling 1976; Jensen & Murphy 1990; Murphy 1999) argue that the dissimilar interests between principal and agent (non-family firms) and principal and principal (family firms) lead to increased agency problems. The agency problem is closely related to family ownership when family members are involved in remuneration-setting. As a result, pay and performance is not closely linked, as required by firm policies and procedures. Remuneration committees are easily influenced by family executives because they lack real independence and power, as they are appointed by boards of directors. The remuneration process leads to an opportunity among family members to increase personal benefits. For example, the remuneration committee is necessary to propose remuneration to boards of directors and majority shareholders for approval. Boards are willing to accept proposals for remuneration if the packages increase personal benefits, otherwise rejecting them.

Agency theory suggests that providing attractive incentives can help to mitigate the agency problem. Through incentives, family executives can be motivated to work to maximize firm profits (Bebchuk & Fried 2003). As a result, this enables firms to attract minority shareholders to invest and allows firms to diversify. Pay-for-performance requires members of boards of directors to use their talents (i.e., skills, knowledge, and experience) to increase firm performance. In other words, executives are more willing to fulfill firm objectives by using their talents if they are satisfied with the incentives. According to this notion, incentives mitigate the agency problem, and increase firm performance and investment. However, this is not easily implemented in family firms due to expropriation issues.

Family executive tend to increase their voting rights through shareholding to provide opportunities for expropriation via excessive remuneration from minority shareholder wealth. In addition, minority shareholders have difficulty monitoring family executive activities because they are less involved in management. As a result, family member wealth consistently increases, while minority shareholder wealth steadily decreases. This phenomenon results in serious agency costs. Effective monitoring is the best solution to mitigate agency costs, as suggested by agency theory (Ang et al. 2000).

Agency theorists suggest that mitigating agency costs falls under the responsibility of institutional investors to monitor majority shareholder behavior in order to enforce the link with firm performance. Institutional investors play an effective

monitoring role in curbing remuneration (Abdul Wahab & Abdul Rahman 2009; Hartzell & Starks 2003). In other words, institutional investors have the ability to prevent expropriation by family executives through monitoring because they are independent of board appointment and control. Institutional investors need to increase their voting rights to let them participate in the remuneration process. Subramanian and Wang (2009) explain that this provides opportunities to penetrate majority shareholder walls by participation in remuneration processes, including approval stages. Thus, effective monitoring can mitigate agency costs and increase firm performance and minority shareholder wealth.

3.3 Remuneration Committee

3.3.1 Remuneration Committee

Boards of directors are responsible for the direction of firms, including generating profit, expanding the business, increasing market price, and attracting new investors. When boards of directors have similar interests with shareholders, firm objectives can be achieved, possibly increasing shareholder wealth. As agency theory suggests, to align the interests of both parties, the firm can provide incentives which will tend to mitigate the agency problem. Better remuneration should be linked to performance and board member abilities (i.e., knowledge, skills, and experience). To propose better remuneration, remuneration committees are responsible for designing packages that follow the best-practice suggestions for corporate governance and are likely to be contractually accepted by board members.

As previously stated, director remuneration can be used to align the interests of boards of directors and shareholders (Andreas et al. 2012) or of majority and minority shareholders (Jiang & Peng 2010; Young et al. 2008). However, there are a limited number of studies that have examined who is best equipped to design the best remuneration packages (Anderson & Bizjak 2003; Main & Johnston 1992) to enhance firm performance (Canyon & Murphy 2000; Main et al. 1996) in family firms. Remuneration committees play an important role in the determination of executive pay, but only a few studies have examined the relationship (Main & Johnston 1992; O'Reilly et al. 1988; Singh & Harianto 1989). Committees can construct remuneration made up of salary, bonuses, fees (Abdul Wahab & Abdul Rahman 2009; Carter & Zamora 2009; Craighead, J. A. et al. 2004; Hartzell & Starks 2003), and stock options (Hartzell & Starks 2003; Murphy 1999) consonant with executive and firm performance.

Another function of remuneration committees is to evaluate the performance of executives and make recommendations for bonus compensation. Prior studies (Leone et al. 2006; Shaw & Zhang 2010) have shown that firm performance is influenced by remuneration. According to Anderson and Bizjak (2003) and Ezzamel and Watson (2002), remuneration committees play important roles in the executive pay-setting process. Shareholders will reject remuneration proposals related to salary that fail to reward high performance accordingly (Carter & Zamora 2009). As suggested in the Greenbury report (1995, p. 11), the key to encourage enhance performance by directors' lies in remuneration packages which: links to performance by both company and individual.

Initially, remuneration packages are constructed and reviewed by remuneration committees and outside consultants before proceeding to boards and shareholders for approval. As Barkema and Gomez-Mejia (1998, p. 137) explain:

“the task of such board committee is to develop proposals, which approved by the full board, on the level and mix of CEO compensation. The members of remuneration members are supposed to be outside directors – individuals who are not executives of the firm on whose boards they sit”.

The members of remuneration committees should consist wholly or mainly of non-executive directors who do not have preexisting relationships with board members or shareholders and are, thus, independent. Lack of preexisting relationships is important in committee members because only then will they have the ability to transparently design effective remuneration to positively impact performance (Barkema & Gomez-Mejia 1998; Fama & Jensen 1983). However, it can also be argued that the uniqueness of family firms may influence the role played by non-family members on committees. Consequently, expropriation via remuneration may be very hard to eliminate in family firms. Figure 3-2 shows the remuneration process led by family members in key positions.

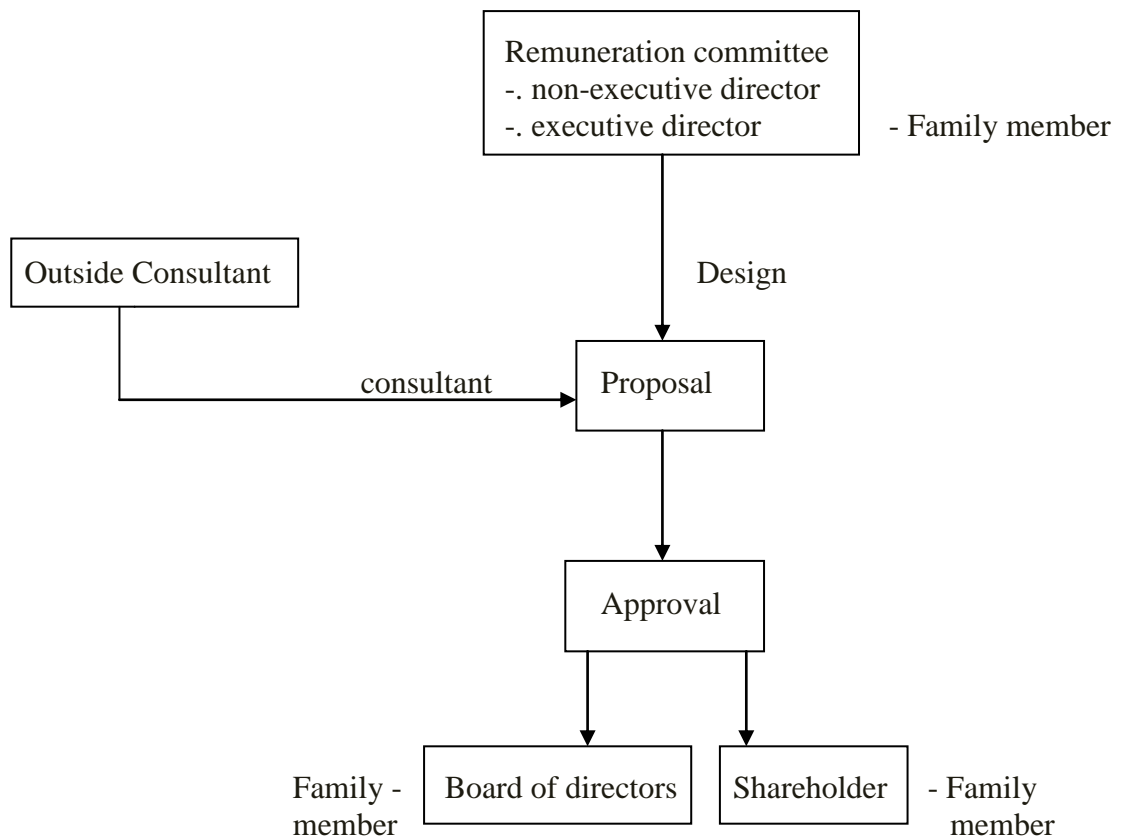


Fig. 3-2. The Remuneration Process

Figure 3-2 represents the remuneration process and shows how it can be dominated by family members as remuneration committee member, board of director member, and shareholder. Furthermore, committees are responsible for proposing better levels of remuneration by following best practices suggestions for corporate governance by linking remuneration with performance. Thus, collaboration within departments such as human resources and finance are very important to provide information related to evaluation for remuneration. However, the presence of family members in key positions such as members of remuneration committee, board of directors and majority shareholder can possibly to cancel out the efforts of committees and outside consultants.

Furthermore, Figure 3-2 shows that remuneration proposals are always forwarded for approval to boards of directors and shareholders, which consist of family members. Proposals tend to be contractually accepted in family firms when they fulfill desires for increases in private benefits. Therefore, the salient issues are regarding the transparency and independence of committee members' remuneration-setting. The next section discusses the importance of non-executives who are non-family members as members of remuneration committees for designing better remuneration in family firms.

3.3.2 Non-Executive Directors

Cadbury (1992) suggests that, under the Code of Best Practice in the United Kingdom, it is necessary to establish remuneration committees. Furthermore, the code recommends that committee members should consist of primarily non-executive directors because their decisions are more likely to be made in the best interests of shareholders. The Cadbury suggestion is echoed in the Malaysian Code of Corporate Governance (2000), which recommends that remuneration committees should consist of wholly or mainly non-executive directors.

In family firms, non-executive directors are usually non-family members who represent minority shareholders and have the right to disagree with executive decisions if they do not follow the remuneration policies and procedures. For example, if remuneration is based on family membership rather than on performance, business is negatively affected, preventing expansion, profit

generation, and investor interest. Non-executive directors have the influence to design optimal contracts to motivate family members to serve the best interests of the firm (Bebchuk & Fried 2003). Furthermore, they have the power to counter remuneration practices that fail to link compensation with performance because non-executive directors are not tied to the family group through a blood or marital relationship (Amran & Ahmad 2009). Consistent with other studies, Lambert et al. (1993) and Boyd (1994) document a positive relationship between CEO compensation and the percentages of boards composed of outside directors. It appears that CEOs get paid more when there are higher percentages of outside directors on the board.

It can also be argued that non-executives face a bigger challenge in family firms to propose better remuneration because proposals must go through family executives (i.e., boards of directors and shareholders) for approval. This is related to the uniqueness of family firms in which the majority of the power, control, and firm ownership are held by family members who are in top positions within the firm. Moores & Craig (2008) note that the family firms are less interested in hiring outsiders, even when they are more qualified or competent, because they want to maintain top management positions for family members. Thus, non-executive is under pressure during remuneration-setting to agree with family members' desires and is often required to supporting proposals which are harmful to minority shareholders. Thus, dissimilar interests contribute to serious agency problem, as suggested by agency theory.

The previous discussion states that non-executives on remuneration committees are less independent in family firms, which can mean that expropriation via remuneration among family executives is not prevented. In addition, non-executives tend to express their appreciation to boards for board and committee appointment. Thus, the non-executive may be less likely to contradict executive decisions and more likely to go along with unfair remuneration practices. Furthermore, the non executive director may have retired from the board but she/he is invited to continue services in the remuneration committee in the same firm. Because of this she/he may possibly go along with proposal without argument.

The family member Chief Executive Officer (CEO) establishes strong power and control inside a family firm, creating challenges for committee members, especially non-executives. Compared to the CEO, the non-executive has little power when it comes to remuneration decisions. Moreover, CEOs gain extra power when they also hold the position of chairman, which is known as duality (Fama & Jensen 1983; Fosberg & Nelson 1999). According to Chen et al. (2006), duality is a common practice in family firms and enables family members to pursue personal gain rather than shareholder interests. CEOs have the power to hire or terminate any directors, include non-executive directors, and any suggestion by non-executives that conflicts with the goals of CEOs is potential cause for termination. In such cases, remuneration set up by the remuneration committees is not transparent and is questionable because of the strong presence of family executives in key positions.

Remuneration committees are not independent in family firms during remuneration-setting, which means that opportunities continue to exist for expropriation via remuneration. The agency problem tends to arise when family members put personal benefit before maximizing shareholder wealth. Bertrand and Schoar (2006, p. 81) explain that “the low performance may reflect a tunneling of capital out of the firms by the controlling families. Family firms may be worse for minority shareholder but financial beneficial for families”.

3.4 Remuneration and performance

3.4.1 Optimal Contracting Approach

Boards of directors are given authority to run businesses on behalf of shareholders to bring success and maximize profits, consistent with the concept of professional management. However, a conflict of interest exists between them when boards of directors do not act in accordance with shareholder desires. Personal interest becomes a priority among boards of directors, which tends to contribute to poor performance and reduced dividends to shareholders. Other implications are less investment, less business expansion, and less remuneration. Thus, agency theory suggests that incentives should drive motivation of executives to enhance firm performance, which would mitigate the agency problem. Remuneration should be consistent with best practices for corporate governance by being linked to performance.

Through remuneration scheme such as fees for meeting which is able to attract board of director interest to attend the meeting. As a result, an important decision able to be decided may achieve firm objectives. Boards of directors are willing to work harder and utilize their skills, knowledge, and experience purposefully to achieve better performance when they are satisfied with remuneration, as demonstrated in prior studies (Conyon & Murphy 2000; Doucouliagos et al. 2007; Murphy 1999; Shaw & Zhang 2010). This superior firm performance is possibly being achieved when boards come with creative ways and ideas such as better strategies and planning. Prior studies show the positive relationship between remuneration and performance. For example Doucouliagos et al. (2007) find no evidence that director remuneration is sensitive towards poor performance rather than better performance.

The implication of accepting remuneration as a contract is that boards of directors are required to utilize knowledge, skills, and expertise purposefully to maximize shareholder wealth. Thus, better remuneration components motivate boards of directors to be creative with great ideas. According to Carter & Zamora (2009), providing suitable salaries as remuneration has significant impacts on motivation of executive to increase firm performance. Figure 3-3 shows better design via optimal remuneration as a significant influence on board of director motivation to enhance performance.

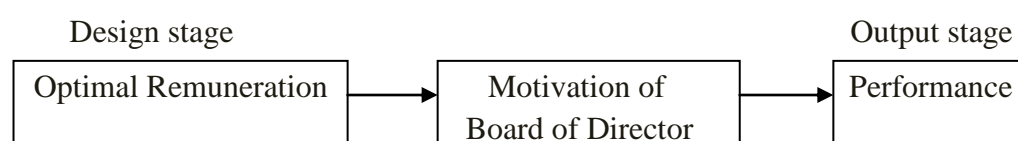


Fig. 3-3. Motivation of Board of Director

Optimal contracting approach is applied into family firm even though the firm is belongs to them in order to indicate appreciation for their effort to bring long term success into firm performance. In family firms, performance is better than non-family firms because family groups have the intention of handing over the firm to the next generation (Anderson & Reeb 2003). Prior studies (e.g. Anderson & Reeb (2003); Miller and Le Breton-Miller (2006); Villalonga and Amit, (2006) show that family firm performance is better than that of non-family firms. Increased remuneration may lead to majority shareholders changing their goals to align with firm objectives. When family executive accepts effective remuneration as a contract this may mitigate the agency problem.

3.4.2 Level of Remuneration

Remuneration committees need to construct attractive packages in order to generate optimal contracts. As Bebchuk and Fried (2003, p. 1) explain regarding optimal contracts boards are assumed to design compensation schemes to provide managers with efficient incentive to maximize shareholder.

Optimal contracts likely motivate boards of directors to maximize profits, as shown by previous studies (Leone et al. 2006; Shaw & Zhang 2010). Better remuneration offered as a contract will likely be accepted if contracts approximate the goals of

boards of directors. Remuneration components such as salary, bonuses (Abdul Wahab & Abdul Rahman 2009; Bartholomeusz & Tanewski 2006; Basu et al. 2007; Murphy 1999), and stock options (Barontini & Bozzi 2009; Ertugrul & Hegde 2008) lead to the mitigation of the agency problem, consistent with agency theory. The level of remuneration enables majority shareholders to align their goals with those of the firm, which is to attract investment. Past studies show that cash remuneration such as salary, fees, and bonuses (Abdul Wahab & Abdul Rahman 2009; Bartholomeusz & Tanewski 2006; Basu et al. 2007; Conyon & Peck 1998; Jensen & Murphy 1990; Murphy 1999; Ozkan 2007) are often effective as components of remuneration contracts.

Earlier discussion emphasized that cash remuneration, such as salary and bonuses, are effective (Chen & Lee 2008; Dong & Ozkan 2008). Many empirical studies have demonstrated that salaries and bonuses are important elements of remuneration (Abdul Wahab & Abdul Rahman 2009; Chen & Lee 2008; Murphy 1985). According to Chen and Lee (2008), executives of Taiwanese public companies tend to receive salaries and bonuses as remuneration. In American Fortune 500 public companies, salaries and bonuses constitute 80% of the total value of executive remuneration (Murphy 1985). Abdul Wahab and Abdul Rahman (2009) note that salaries and bonuses are major components in remuneration in Malaysia publicly listed companies. However, in British companies, 70% of total remuneration for CEOs consists of cash pay (Dong & Ozkan 2008).

Cash remuneration is a major component of total remuneration and has significant impact on performance. Empirical studies indicate that cash remuneration is positively related to firm performance (Leone et al. 2006). According to Vafeas and Afxentiou (1998), cash compensation is associated with firm performance, and Bushman & Smith (2001) find that firm accounting-based earnings are closely related to executive cash remuneration. There are a few reasons why majority shareholders prefer cash as part of remuneration packages. First, cash is linked to wealth status whereby they have the resources to obtain cars and houses, travel around the world, join golf clubs, and take meals in exclusive places. Cash remuneration in the form of salaries and bonuses are immediately accessible for use. Second, the societal status that cash affords leads to respect and influence in the community.

Salary instruments have been discussed widely among researchers (Conyon & Peck 1998; Croci et al. 2010; Gallagher et al. 2006). When salary is considered as part of remuneration, boards of directors gain several benefits. First, the possibility of better bonuses motivates directors to ensure firm performance. Second, salary is associated with social status in society. Higher salaries allow higher quality of life and lead to respect and influence in society. According to Carter and Zamora (2009), shareholders do not approve proposals for high salaries for poor performance unless the higher salaries could potentially improve pay-performance links.

Bonuses are also an important part of cash remuneration and have significant effects on performance. Carter and Zamora (2009) note that bonuses are typically linked to accounting performance. Between 73% to 85% of family firms offer cash bonuses to their executive (Fraser 1990; Greco 1997) to motivate to work harder. Deckop (1988) and Finkelstein and Hambrick (1989) find that returns on equity are positively related to bonuses. Thus, bonuses seem to encourage majority shareholders to put aside their personal interests to ensure that firm objectives are achieved. They are also more likely to be more committed, work longer hours, be more creative, and to waste less time.

3.4.3 Remuneration and Performance

Boards of directors are responsible for enhancing firm performance, which makes shareholders happy. Thus, boards need to use their abilities to propose better planning and strategies. To motivate boards of directors agency theory suggests rewarding them using better incentives. Such incentives may align interests of boards and minority shareholders. The relationship between remuneration and performance has been discussed widely among researchers (Barkema & Gomez-Mejia 1998; Bartholomeusz & Tanewski 2006; Cheng & Firth 2006; Croci et al. 2010). Fama and Jensen (1983) explain that the effective incentives provided to executives tend to mitigate the agency problem and enhance firm performance. However, Hassan et al. (2003) find a weak positive relationship between director remuneration and performance in Malaysian firms before and during the AFC (i.e., 1996 to 1998).

Empirical studies show that under an incentives scheme, firm productivity increases with performance because executives are motivated to work hard due to the compensation they receive. For example, in the agricultural sector in China, the incentive scheme was changed to almost 78%, which led to an increase in productivity by 22% between 1978 and 1984 (McMillan et al. 1989). A similar study by Paarsch and Shearer (2000) in the British Columbia tree-planting industry indicate that incentives increased productivity by almost 173 trees per day, which is equivalent to about 22.6%. They also find that the workers were willing to undertake extra work due to incentives being based on the productivity. In contrast, under the fixed salary system, worker contribution is at a minimum (Paarsch & Shearer 2000).

According to a Fernie & Metcalf (1999) study on horseracing, an official payment system for the jockey can be compared to agency theory vis-à-vis incentive contracts. Their argument is that the official payment system is based on performance—when jockeys win races, the prizes belong to them. Therefore, they argued that, without an incentive contract and monitoring, there is no relationship between pay and performance. Lack of incentives de-motivated and cause minimum effort contributions on the part of employees because employees feel that firm profits are not shared with them. Jensen & Murphy (2010) explain that executives are interested in enhancing firm performance when their pay rises as well. For example, the productivity in an auto-glass company was increased more than 20% after the company introduced a “pay-for-performance” system (Lazear 1996).

The positive relationship between incentives and productivity has a significant impact on firm performance in two ways. First, when production is higher, sales and, thus, profits can increase. As a result, this provides opportunities to increase incentives to employees. Second, employees feel that their efforts are appreciated because they perceive that the firm is sharing profits through incentives. Thus, incentives create a sense of belonging to the firm, which will lead to increased employee creativity and performance (Jensen & Murphy 2010).

In family firms, it is challenging to align interests between majority and minority shareholders because the majority shareholders believe that the firm belongs to them. Thus, incentives are needed to motivate boards of director to enhance performance. Remuneration rewards to executives is more sensitive in family firms than in non-family firms (Craighead, J. et al. 2004). Family executives are interested in maximizing the long-term wealth of the firm, especially when the company bears the family name and, with it, carries the family reputation (Anderson et al. 2003).

Empirical studies show that remuneration enhances performance in family firms. Anderson and Reeb (2003) find that the family firm performance is better than non-family firm performance. Average ROA (EBITDA/Total Assets) of family firms was 6.6% higher than the ROA of non family firms. Ben-Amar and Andre (2006) explain that less power and control significantly impact poor performance so that stronger family ownership with less control over remuneration is strongly associated

with better performance (Chen & Lee 2008). Furthermore, Cheng and Firth (2006) reveal that director stockholding reduces pay because receiving higher dividend lowers the need for cash remuneration. Past studies have shown that family executive remuneration is positively related to performance (Mhrisman et al 2007). As Barkema and Gomez-Mejia (1998, p. 135) explain, there is positively relationship between CEO compensation and firm performance would be consistent with agency theory, the dominant paradigm in this stream of research.

The positive relationship between remuneration and performance leads to majority shareholder motivation. Figure 3-4 shows the relationship between remuneration, motivation of board of director, and performance.

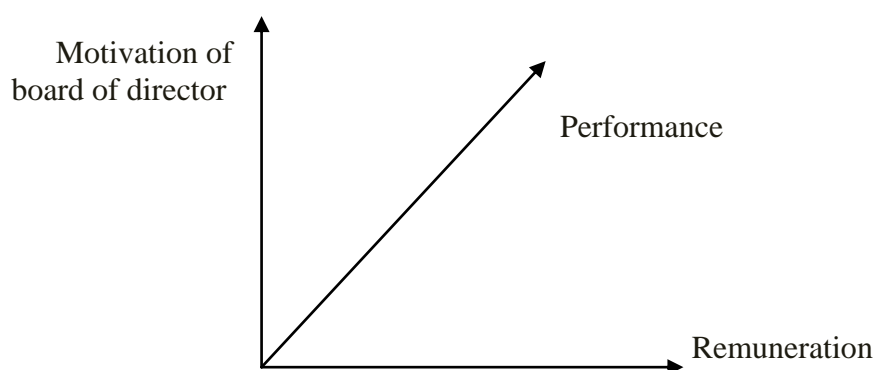


Fig. 3-4. Remuneration, Motivation and performance

Agency theory suggests that providing incentives is the best solution for mitigating the agency problem (Bebchuk & Fried 2003; Fama & Jensen 1983; Jensen & Meckling 1976). In fact, the relationship between pay and performance is not difficult to be achieved if the family executive is satisfied with the level of remuneration. Furthermore, the positive relationship between remuneration and performance is enhanced when different types of remuneration are included. In such

cases, the relationship between principal and agent (non-family firm) or principal and principal (family firm) tend to be aligned.

Cash remuneration in the form of salaries and bonuses are very important and closely related to wealth status. This status is sensitive for family executives because it is linked to reputation in society as a respectable person. Attainment of such status motivates family executive to work harder to apply their expertise and experience. Croci et al. (2010) note that remuneration is positively related to CEO experience. As a result, family executives propose good strategies and planning that lead to long-term success. Attracting and retaining minority shareholder interest in investing in firms may depend on the ability of firms to build confidence in shareholders that they are capable of such long-term profitability.

3.5 Family Ownership

3.5.1 Family Ownership

Incorporating a business is associated with long-term success and the ability to increase shareholder wealth in both non-family and family firms. A common purpose of both types of firms is to continue to improve firm performance, expand business, and increase firm value. In family firms, however, there is the additional interest in keeping the business successful for the next generation (Miller & Le Breton-Miller 2006). Family business is a common phenomenon around the world that has attracted many researchers to test hypotheses regarding to remuneration and institutional investor in family ownership (Anderson & Reeb 2003; Claessens et al.

2000; Claessens et al. 1999; Croci et al. 2010; Faccio & Lang 2002). Nowadays, family ownership is a common practice in Asian countries. A study by Claessens et al (1999) indicates that 67.2% of companies in Malaysia, 61.6% of companies in Thailand, and 40% of companies in the Philippines are run by families. Indonesia has an even higher rate of family ownership for public companies, which is around 68.8%. Faccio and Lang (2002) find that, in 13 Western European countries, 44% of the firms were controlled by families or individuals. Similarly Anderson and Reeb (2003) find that one third of S&P 500 companies during 1992-1999 were owned by families.

Family ownership affords several advantages that can lead to better performance. Family members who have held directorships of different subsidiaries under the parent company develop a wide range of knowledge and experience that can be used in the service of increasing performance. Furthermore, because family members are highly invested, both financially and emotionally, in their firms, they are directly involved in firm management and operations and thus have fewer problems monitoring firm operations. In family firms, the families are the founders and major contributors of capital, which causes them to be strongly motivated to promote long-term success. Thus, in family firms, performance becomes a priority and requires boards of directors to effectively promote company performance.

Previous studies have concluded that performance in family-owned firms is better than in non-family-owned firms (Martinez et al. (2007); Miller and Le Breton-Miller (2006). According to Martninez et al.'s (2007) study of 175 firms in Chile closer

monitoring, long-term focus, similar objectives among shareholders, quicker decision-making, and stronger culture from family values strongly influenced the success of firms. According to Anderson and Reeb (2003) family firms have higher Tobin's Q and ROA. Family ownership is positively correlated with high performance in Taiwan (Chen & Lee 2008), the United States (Anderson & Reeb 2003), and Malaysia (Amran & Ahmad 2009).

The family firm has disadvantages suggested by agency theory. The agency problem may be serious in family firms due to the uniqueness of the power and control dynamics in family-owned firms that may lead to increased focus on personal benefit and decreased concern with maximizing profits for minority shareholders. The agency problem becomes an issue when minority shareholders dispute the relationship between remuneration and performance. If minority shareholders start to feel that their interests are not being protected, they may lose confidence and start to sell their stock (Su et al. 2008). Thus, the agency problem and agency cost are closely related to family concentration, which can affect performance and become a serious issue in Asian countries, including Malaysia (Claessens et al. 2000; Claessens & Fan 2002).

Remuneration awarded to executives in family firms is less likely to conform to the best practice suggestions for corporate governance, which recommend that remuneration be linked to performance. This is because family members prefer to keep key positions in the family rather than hiring outsiders (Moore & Craig 2008). Qualified non-family managers could be knowledgeable and experienced and may question remuneration practices. Empirical studies have documented that CEO

remuneration in non-family firms is lower than CEO remuneration in family firms (Craighead, J. et al. 2004). According to Basu et al. (2007) in Japanese firms top executives receive higher remuneration in firms with higher family ownership.

3.5.2 Family Ownership, Remuneration, and Performance

Boards are motivated through incentives to expand the business and increase firm value. Anderson et al. (2003) note that family executives improve performance with higher remuneration. However, in family firms the agency problem can lead to high remuneration without high performance, which can affect shareholder wealth. For example, Core et al. (1999) find that the ownership structure is negatively related with performance in American firms. However, other studies have demonstrated conflicting results in which higher family ownership is associated with increased performance and lower remuneration (Barontini et al. 2010; Gomez-Mejia et al. 2003).

Lower remuneration for family executives improves the cash flow for businesses and thus, family members may be willing to accept remuneration below industry norms. Furthermore, lower remuneration is accepted as a contract by executives if they are offered secure positions within the firm (Gomez-Mejia et al. 2003). Past studies have shown an inverse relationship between family ownership and remuneration of family executive (Barontini et al. 2010; Cheung et al. 2005; Gomez-Mejia et al. 2003). For example, Dogan and Smyth (2002) find that salaries and fees paid to all directors were lower with higher ownership concentration. It is clear that

there are mixed results regarding the relationship among family ownership, remuneration, and performance.

Family ownership often contributes to increases in performance due to the expectation of leaving the business to the next generation (Miller & Le Breton-Miller 2006). They are required to work harder to ensure that the business keeps going. Furthermore, family members focus on maximizing long-term success because the firm bears the family name and, with it, the family reputation (Anderson & Reeb 2003). Therefore, the performance of family firms is better when founders and family members become parts of boards of directors but, if they only become large shareholders without sitting on the board, it is likely that performance will not improve. This is consistent with prior research that has shown that performance is better when founders are still active, either as executives or supervisors (Andres 2008). The implication of this line of research is that family members are less focused on personal benefits than they are on firm objectives.

Past studies have shown the positive relationship between family ownership and performance (Anderson & Reeb 2003; Barontini & Caprio 2006; McConaughy et al. 1998). The presence of family members creates the powerful motivation to build reputation, which drives improvements in performance (Anderson et al. 2003). Barontini and Caprio (2006) note that family firms tend to perform better rather than non family firms when they combine cash flow and voting flow. Furthermore,

McConaughy et al. (1998) find that family firms are more efficient and have better performance compared with non-family firms.

However, the opposite argument can also be made due to the uniqueness of family firms. The factors that contribute to the negative relationship between family ownership and performance are closely related to expropriation (Anderson & Reeb 2003; Claessens & Fan 2002; Jiang & Peng 2010; La Porta et al. 1999). Family members are sometimes paid large amounts of money, but are unable to increase performance. This is because the executives consist of family members who are appointed based on family ties rather than on their abilities. Furthermore, family groups prefer to place unqualified members or friends in top positions over better qualified candidates from the outside (Faccio et al. 2001; Moores & Craig 2008). This practice makes it easier for executives to continue to amass wealth, even when firms underperform. According to Brick et al. (2006), higher executive remuneration in American firms was linked to underperformance because of cronyism. Cronyism is a sensitive issue in family firms due to blood and marital relationships and long-standing friendships.

Past studies have shown that there is a negative relationship between family ownership and firm performance (Basu et al. 2007; Brick et al. 2006). Melis (2000) argues that linking remuneration with corporate profits is dangerous due to the possibility for manipulation in order to pursue personal wealth. Basu et al. (2007) find that higher ownership and monitoring were negatively related with performance

and, consistent with the agency theory prediction, the majority shareholders focused on personal benefit rather than maximization of profit.

In one study of Malaysian firms, Barrack (2002) finds that, although firms had not paid out dividends to their shareholders for a few years, director salaries still increased. Such practices provide unhealthy environments that affect many parties, including stakeholders and employees. The distribution of benefits among family members through excessive remuneration may adversely affect worker morale and productivity. According to Hill (1996), higher remuneration that is not linked to performance can potentially damage corporate, shareholder, creditor, and worker morale. Thus, financial difficulties may influence the day-to-day operations of firms.

The way power is used to increase personal wealth in family firms may be influenced by their uniqueness. The positive relationship between family ownership and director remuneration is possibly an altruism issue, the way in which parents manage their estates influence the effects of incentives (Schulze et al. 2003). Furthermore, remuneration can become emotionally charged as a sign of competence (Moore & Craig 2008). Founders and family members may consider firms to belong to them, leading them to believe they have a right to use the resources as they see fit, many times in the form of higher salaries. If higher remuneration does not seriously affect firm losses, family members may use their power to derive financial benefits (Chourou 2010). According to Wiwattanakantang (2001) majority shareholders have the ability to pay out firms' cash flow to

themselves through higher salaries and dividends and hold top management positions, even though they are not qualified.

Past studies have demonstrated a positive relationship between ownership and remuneration (Basu et al. 2007; Cheung et al. 2005; Thillainathan 1999). According to Basu et al. (2007), higher ownership positively impacts executive remuneration. In addition, Cheung et al.'s (2005) study of 412 Hong Kong firms finds that cash emoluments received by executives were related to their shareholdings. A study by Thillainathan (1999) demonstrates that family ownership can manipulate remuneration through cross holding and pyramids; these are common practices in Malaysia. He (2008) explains that, through cross holding and pyramids, control can be maximized by majority shareholders to increase private benefit. This results in losses for minority shareholders due to fewer dividends available for pay out.

Through pyramid structures, majority shareholders can switch assets or profits to other child or associated companies (Johnson et al. 2000). Further, Martinez et al. (2007) explains that control can be obtained in two ways: first, a majority shareholder stake in over 50% of outstanding shares, and second, through influencing other shareholders via family or business relationships. In Fan and Wong's (2002) study of East Asian family ownership those authors explain that families can misreport accounting information for personal wealth because power and control belongs to them. This was supported by Cheng and Firth (2006, p. 550) who explain that:

“the concentration of ownership and management in the hands of a family gives a lot of power to that family and it enables them to take actions that are beneficial to the family and are detrimental to the minority owners”.

3.6 Institutional Investors

Agency problem becomes serious when the objectives of managers and shareholders are not aligned. Regarding monitoring there is a lack of monitoring on firm operations by shareholders which provides space for boards to manipulate financial reports and bring financial problems in future. To solve this problem, consistent with agency theory the suggestion is effective monitoring which is ably carried on by institutional investors. Past literature generally explains that the presence of institutional investors brings effective monitoring in regards remuneration (Abdul Wahab & Abdul Rahman 2009; Hartzell & Starks 2003; Ozkan 2007).

The ability of institutional investors to be effective monitors is supported by two factors: independence and sizable investment. Institutional investors are neither appointed by family members nor tied to executives through blood or marital relationships. Therefore, they have the freedom to raise questions and express dissatisfaction related to remuneration. For example, in studies of British (Ozkan 2007) and Malaysian (Abdul Wahab and Abdul Rahman 2009) companies, institutional investor involvement had a negative relationship with CEO and director remuneration. Institutional investors are motivated to monitor firm operations for the purpose of increasing performance because of the large amounts of capital they have invested in the firms. They have an interest in driving the price of shares as high as

possible so that they can maximize their own investment profits (Maug 1998). However those institutional investors making short-term investments may be less serious about monitoring because they can easily liquidate their investments under worse-case scenarios.

Institutional investors have the ability to influence corporate decisions when they hold large parcels of shares. Their holdings allow institutional investors to obtain a large number of votes to curb the manipulation of remuneration. For example, if the remuneration practices are not beneficial for shareholders, the responsibility of institutional investors is to express their dissatisfaction using their votes. In other words, when institutional investors hold more shares, their voices will be heard by other parties and they will have more influence on remuneration. Maury (2006) explains that when votes on remuneration proposals distribute equally among the block shareholders firm value is maximized. Claessens and Fan (2002) note that the involvement of institutional investor equity is able to mitigate the agency problem between majority and minority shareholders in Asian firms. Ryan and Schneider (2003, p. 407) explain that institutional investor increase power through their consolidation of equity shares and their activism and continue embody power through information asymmetric.

The number of institutional investors may positively impact upon remuneration processes and firm performance. Increasing the number of institutional investors can significantly impact decision-making. This power can be used to prevent majority

shareholders from misuse of power and control for private benefit. Each individual institutional investor contributes resources, such as political and business relationships and expertise, which, when used collectively, can lead to effective monitoring (Dong & Ozkan 2008). This monitoring may put pressure on majority shareholders for better remuneration practices and less expropriation.

Majority shareholders have fewer incentives to increase personal wealth via higher remuneration when there is effective monitoring by institutional investors. Therefore, when institutional investors are actively involved, they can reduce top management influence on compensation and executive remuneration structures. Empirical studies show that the relationship between institutional investors and lower level pay is attributable to effective monitoring (Abdul Wahab & Abdul Rahman 2009; Andreas et al. 2010; Gallagher et al. 2006). Effective monitoring can potentially increase salary as well, but decrease it as a proportion of total compensation (Abdul Wahab & Abdul Rahman 2009; Gallagher et al. 2006).

There are many studies that show that the number of institutional investors is more effective for monitoring than shareholding by institutional investors (Back et al. 2000; Cornett, M. et al. 2007; Foster & Viswanathan 1996; Sias et al. 2001). For example, Sias et al. (2001) find lesser relationship between performance and institutional investor shareholding using equity holding rather than number of institutional investors to proxy for institutional investor presence. The relationship between remuneration and performance may be influenced by effective monitoring

by institutional investors (Abdul Wahab & Abdul Rahman 2009) via higher shareholding (Ryan & Schneider 2003) and number of institutional investors (Cornett, M. et al. 2007). Institutional investors can provide direct monitoring and disciplining of managers more effectively than other shareholders because they are typically larger, more active and have access to better information. According to Hartzell and Starks (2003), higher concentrations of institutional investors are negatively related to the level of executive remuneration. This shows that when institutional investors play an effective role in monitoring, companies have lower remuneration levels (Andreas et al. 2010).

Institutional owners are corporate owners, or in terms of agency theory, principals who have corporate management as their agent. In addition, institutional investors reach their concentration through aggregate investments from the beneficial owner and individual investor (Schneider 2000) by increasing the power to prevent misuse of firm resources via excessive remuneration (Hartzell & Starks 2003). Cornet et al. (2007) note that institutional investors have important resources such as information to do effective monitoring and ability to discipline and influence managers. According to Thomsen and Pedersen (2000) institutional investors have strong motivation to control management in order to protect their significant amounts of invested capital.

Institutional investors are required to observe the activities of their boards of directors in family firms. The goal of incentive monitoring is to protect the investment from misuses by majority shareholders. According to Croci et al. (2010),

institutional investors in the United Kingdom and United States put a check on CEO remuneration and monitoring activities and their presence is correlated positively with company performance (Cornett et al. 2007; Del Guercio & Hawkins 1999; McConnell & Servaes 1990). In addition, Cornet et al. (2007) provide evidence, from 676 firms in the United States between 1993 and 2000 of a significant relationship between firm performance and both the percent of institutional stock ownership and the number of institutional stockholders. Furthermore, McConnell and Servaes (1990) find that the percent of institutional investors is positively related to a firm's Tobin's Q. Similar findings by Del Guercio and Hawkins (1999) report a positive relationship between institutional investors and performance, which indicates effective monitoring (Abdul Wahab & Abdul Rahman 2009) and power via shareholding (Maury 2006) to protect their investment. As a result, majority shareholders have very limited space for expropriation via excessive remuneration from minority shareholders.

Therefore, institutional investors have the ability to influence the remuneration committee to make the process of remuneration-setting more transparent, to encourage the adherence to policies and procedures, and to eventually motivate boards of directors to fulfill firm objectives. Institutional investor influences on remuneration committees include increasing the level of total compensation (Gallagher et al. 2006), ensuring that remuneration is linked to performance outcomes, and designing compensation policies that link with shareholder interests (Jensen & Murphy 1990). Prior studies (e.g. Cheng & Firth 2006; Cheung et al. 2005; Tosi et al. 1999) indicate that institutional investors play an important role in

family firms and significantly impact maximization of profits and returns on investments and stock prices. This demonstrates that effective monitoring may curb excessive managerial remuneration (Crocì et al. 2010) and increase shareholder wealth (Hartzell & Starks 2003).

Institutional investors are representative of minority shareholders and have the responsibility to observe and monitor management. However, in family firms, institutional investors can face difficulty in monitoring because power and control is manipulated. The uniqueness of power and control in family firms makes it harder for minority shareholders to observe daily operations (Eisenhardt 1989). Agency theory suggests that difficulty in monitoring family ownership tends to increase agency costs. Accordingly to Perez-Gonzalez (2006), families tend to appoint family members as the top executives of firms. This practice allows remuneration to be decoupled from performance and qualifications (Claessens et al. 2000).

3.7 Gaps in The Literature

This review has argued that remuneration committees influence remuneration and performance in family firms. It has also maintained that institutional investors could contribute to the accomplishment of corporate objectives. The review suggests the following gaps in the literature:

- a. Little prior research has extensively examined the influence of the members of remuneration committees on director remuneration in family firms and the impact on performance.

- b. The literature suggests the possible contribution of incentives to the accomplishment of corporate objectives. However, it provides little theoretical foundation for the study of this contribution in family firms.
- c. The literature suggests that monitoring of institutional investors is linked to the accomplishment of corporate objectives, but little prior research has extensively examined the influence of institutional investors in general, and MSWG in particular, on remuneration and remuneration committee of family firms.
- d. The limited literature to date has largely focused on non-family firms. As a result, understanding of the global configuration of remuneration in family firms is incomplete.
- e. The literature is limited regarding the influence of level of remuneration on performance in family firms.

Therefore, the empirical examination of remuneration from the agency theory perspective becomes necessary. Remuneration and its influence on performance is playing an increasingly essential role in the corporate world. To that end, this review has attempted to establish a theoretical foundation for the influences of remuneration committees and institutional investors on performance in family firms. The following chapter introduces the study's research hypotheses which are based upon this chapter's extensive literature review.

3.8 Summary

This chapter has provided the literature review employed in the study and follows with the gaps in the literature. It has discussed the agency theory which includes agency problem and agency cost. It has also discussed remuneration committee regarding to committee members roles and responsibility. Furthermore, family ownership and institutional investor are discussed in this chapter. Finally, the chapter explained the gaps in the literature. The next chapter reports the development of the research hypotheses which contains with five hypotheses.

CHAPTER 4 HYPOTHESES DEVELOPMENT

4.1 Introduction

This chapter outlines the rationale behind the research hypotheses that are used as the bases for the empirical analysis in this study. Section 4.2 discusses the relationship between director remuneration and firm performance. Section 4.3 details the second hypothesis, the moderating effect of family ownership on the relationship between director remuneration and performance. The third hypothesis is provided in Section 4.4, which discusses the effect of institutional investor presence on the relationship between director remuneration and firm performance in family owned firms. Section 4.5 discusses the relationship between remuneration committees and director remuneration in family owned firms. Finally, Section 4.6 discusses the relationship between remuneration committee and director remuneration which is influenced by institutional investor in family owned firm. The chapter concludes with a summary in Section 4.7. Figure 4.1 and Figure 4.2 display the conceptual model for the study.

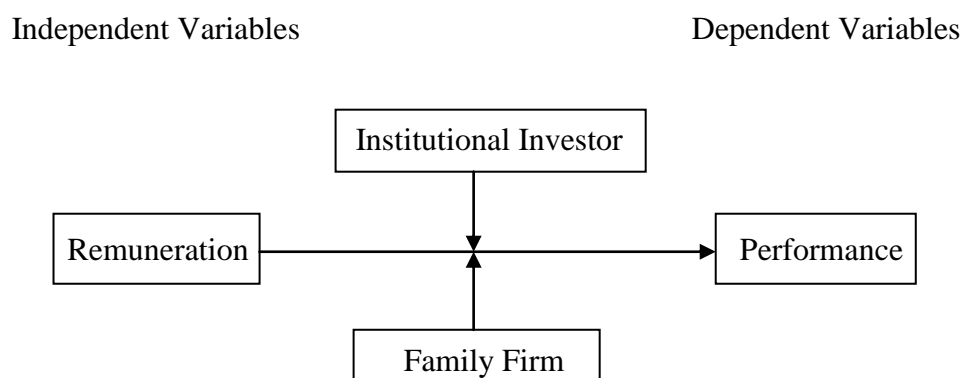


Figure 4.1 Conceptual Framework

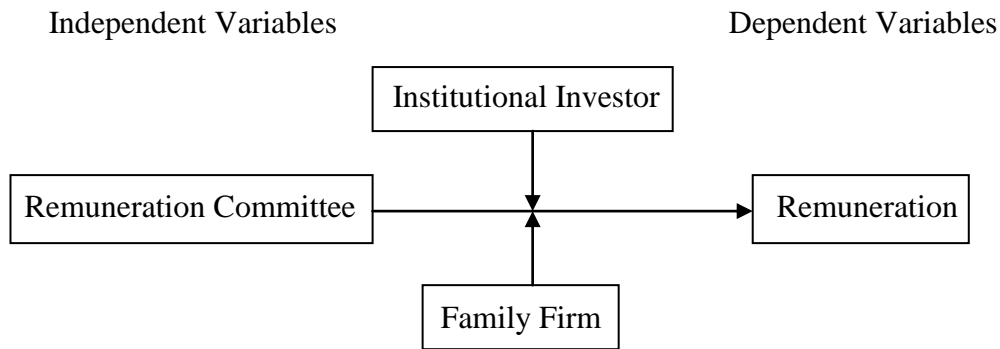


Figure 4.2 Conceptual Framework

4.2 Director Remuneration and Performance

Corporate performance is achieved when boards of directors are willing to fully utilize their abilities (i.e., skills, knowledge, and experience) (Crocì et al. 2010) to develop better planning and strategies that result in improved performance. This may be promoted by providing better remuneration to drive motivation. As Chapter 3 has explained empirical studies have indicated that director remuneration and firm performance are positively related (Kaplan 1994; Leone et al. 2006; Murphy 1985; Shaw & Zhang 2010). This is consistent with the agency theory suggestion that incentives tend to mitigate the agency problem.

According to Jensen and Murphy (2010), increases in remuneration that are related to improved business performance do not represent a transfer of wealth from shareholders to executives. Furthermore, remuneration awards to executives that are based on their talent and performance enable the enhancement of shareholder wealth. Thus, providing remuneration is to encourage the executive motivation (Finkelstein & Hambrick 1989) and align personal interests of executives with firm

objectives (Fama & Jensen 1983; Fama 1980; Jensen & Meckling 1976; Jensen et al. 2005). However, if remuneration is less attractive or lower than that of the industry or peer group, lack of incentive can contribute to poor firm performance (Chen et al. 2006).

Remuneration provided to executive is consistent with their responsibility (MCCG 2007) to ensure that firm performance continues to increase and to bring more wealth to shareholders. As a result, other shareholders will be motivated to invest in high-performing firms, which further increase those firms' capital. According to Mishra et al. (2001), family executives endeavor to increase firm performance if their efforts are supported by better remuneration. This leads to the following research hypothesis:

H₁: There is a positive relationship between director remuneration and performance.

With the failure of some large firms, such as Enron, Global Crossing and Adelphia in 2001 - 2002, shareholders have become concerned about the relationship between remuneration and performance (Subramaniam & Wang 2009). Prior studies have highlighted the positive relationship between remuneration and performance (Lazear 2000; Leone et al. 2006; Murphy 1999; Shaw & Zhang 2010; Vafeas & Afxentiou 1998).

As recorded by Murphy (1999) and Shaw and Zhang (2010), better remuneration impacts upon the firm performance. As mentioned by Lazear (2000), the provision of financial incentives can increase firm performance. Furthermore, Vafeas and Afxentiou (1998) and Leone et al. (2006) explain that cash remuneration positively impacts performance. In addition, studies show that remuneration significantly impacts performance in both family-owned and non-family owned firms, which is consistent with Fama and Jensen's (1983) argument. Other empirical studies document a positive relationship between remuneration and performance in Japanese companies (Abe et al. 2005) and Korean firms (Kato et al. 2007).

4.3 Director Remuneration and Performance in Family Firm

Minority shareholders' willingness to hand over authority to majority shareholders to run businesses on their behalf and to achieve firm objectives, is consistent with the efficient separation of ownership and control (Fama & Jensen 1983; Murphy 1999). However, when majority shareholders seek to increase their own wealth at the expense of achieving firm objectives, agency problems develop (Peng & Jiang 2010; Young et al. 2008). Furthermore, family ownership introduces the agency problem between majority and minority shareholder.

The agency problem may be due to the unique nature of family firms in which family members hold key positions as directors, CEOs, majority shareholders, and remuneration committee members. They may manipulate power and control to turn profits into higher remuneration for personal wealth. Firm objectives are not easily

achieved when executives are not interested in linking their remuneration to performance and this attitude may contribute toward poor performance (Barontini et al. 2010; Ben-Amar & André 2006).

Moore and Craig (2008) state that family firms are more likely to give top management positions to family members than hire more qualified outsiders. They also emphasize that the family group can allow emotions and relationships to influence the perceptions of competence of executives. In such cases, remuneration is not truly linked with performance. Family owners can provide high remuneration for poor performance of unqualified or under-qualified family executives (Claessens et al. 2000; Pérez-González 2006).

Furthermore, family groups do not always strictly follow the remuneration policies and procedures, and are often not truthful or transparent during justification. As a result, firm performance declines (Barak et al. 2008; Barontini et al. 2010; Croci et al. 2010), which negatively impacts minority shareholder wealth (Boubakri et al. 2009; Young et al. 2008). This leads to the second research hypothesis:

H₂: There is a weaker relationship between director remuneration and performance in family firms than in non-family firms.

Empirical evidence clearly demonstrates the positive relationship between family ownership and director remuneration (Basu et al. 2007; Cheung et al. 2005). For example, Cheung et al. (2005) explain that higher shareholding tends to lead to

higher cash remuneration. Additionally they note that expropriation often exists when owner-managers set their own level of remuneration. This will definitely contribute to difficulty in fulfilling firm objectives and shareholder wealth. Furthermore, evidence from Craighead et al. (2004) indicates that CEOs in family owned firms gain higher remuneration than those in non-family owned firms. Increasing remuneration in family owned firms is less likely to enhance firm performance because family executives are focused more on private benefits.

Minority shareholders are indeed discouraged by the negative relationship between remuneration and performance (Barak et al. 2008; Croci et al. 2010), which affects their investments. Family control provides family executives opportunities to use their concentrated blockholding to expropriate via excessive remuneration (Anderson & Reeb 2003; Morck & Yeung 2003). This kind of expropriation eventually leads to poor firm performance, which then affects business operations and expansion prospects. Bloom and Van Reenen (2007) argue that family control expropriates wealth and power from the non-family minority shareholders and can harm performance. Empirical studies by Barak et al. (2008) and Croci et al. (2010) find that family CEO remuneration is negatively related to financial performance in family owned firms.

4.4 Institutional Investors, Director Remuneration, and Performance

Institutional investor presence can play an important role to ensure that remuneration is linked to performance. Thus, director remuneration may be monitored by

institutional investors to ensure that it is awarded not for personal benefit but for fulfilling firm objectives. This requires institutional investors to monitor firm activities diligently in order to protect investments from misuse by family executives. Furthermore, empirical studies indicate that institutional investors can influence the remuneration (Abdul Wahab & Abdul Rahman 2009; Brickley et al. 1988; Croci et al. 2010; Hartzell & Starks 2003) and performance (Guercio & Hawkins 1999).

According to Jensen & Murphy (1990) institutional investors can use their influence to design remuneration policies and outcomes desirable to shareholders. As a result, firms cannot simply reward incentives to executives without the consent of other interested parties, such as minority shareholders. The presence of institutional investors can put pressure on firms to design better remuneration in order to enhance shareholder wealth. Furthermore, Croci et al. (2010) note that institutional investors in two countries, the UK and US, successfully check CEO remuneration. They also explain that the institutional investors reduce remuneration excess. The agency problem in family firms may be mitigated when institutional investors monitor remuneration (Tosi et al. 1999).

To improve firm performance, family firms need to apply the transparency of corporate governance structure and be subject to greater discipline and independent monitoring (Bartholomeusz & Tanewski 2006). One corporate governance structure is the presence of institutional investors, on behalf of minority shareholders, to

protect shareholder wealth. According to Cornett et al. (2007), large institutional investors can implement effective monitoring due to their resources and ability to monitor, discipline, and influence managers. Furthermore, they are independent due to the fact that they are not appointed by the family group and have interests in the firm connected to their own investment portfolios. Therefore, providing more space for institutional investors to utilize their power and expertise (Dong & Ozkan 2008) to be effective monitors can contribute to better alignment between executive and firm goals, which may result in increased shareholder wealth (Hartzell & Starks 2003).

Shareholders prefer to increase investments when they are confident with a firm's ability to achieve better performance and gain optimal benefits via higher dividend. Gallagher et al. (2006) argue that the goal of institutional investors should be to align executive pay with firm performance rather than to focus on levels of pay. Minority shareholder wealth will be increased when financial incentives are linked with performance.

In Malaysia, the Minority Shareholder Watchdog Group (MSWG) plays a key role to ensure that minority shareholder investments are protected (as discussed in Chapter 2). The five largest public institutional investors, all members of MSWG, are two pension funds (the *Employee Provident Fund [EPF]* and *Lembaga Tabung Angkatan Tentera [LTAT]*); an investment fund (*Permodalan Nasional Berhad [PNB]*); a pilgrim fund (*Lembaga Tabung Haji [LTH]*); and an insurance company

(*Pertubuhan Keselamatan Sosial [PERKESO]*). According to Wahab and Rahman (2009), institutional investors are effective monitors. This leads to the third research hypothesis:

H3: There is a stronger positive relationship between director remuneration and performance in the presence of institutional investors in family owned firm.

Empirical evidence shows that institutional investors have significant influence over directors in terms of pay (Abdul Wahab & Abdul Rahman 2009; Almazan et al. 2005; Andreas et al. 2010; Cosh & Hughes 1997; Croci et al. 2010; Hartzell & Starks 2003; Ozkan 2007), which indicates effective monitoring (Abdul Wahab & Abdul Rahman 2009; Brickley et al. 1988; Chaganti & Damanpour 1991; Cornett, M. et al. 2007). Furthermore, findings recorded by Gallagher et al. (2006) show that institutional investors can increase the level of total remuneration.

Increased shareholdings of institutional investors provide direct participation in the remuneration setting. This provides more power to influence executive remuneration both directly and indirectly by affecting share price (Ryan & Schneider 2003) and by putting pressure on the committee to ensure the remuneration is linked with performance. Previous studies document the positive relationship between the presence of an institutional investor and performance (Cornett, M. et al. 2007; Sias et al. 2001) and the ability to reduce cash compensation and curb potential managerial excesses (Croci et al. 2010). Because no more excessive remuneration occurs, as a result, firm performance increases and allows investors to further increase their shareholdings (Maug 1998) and the number of institutional investors also rises (Sias et al. 2001).

4.5 Remuneration Committee and Directors Remuneration

Reports by Cadbury (1992), Greenbury (1995), Hampel (1998), MCCG (2000), and MCCG (2007) calls for greater transparency and accountability in areas such as board structure and operation, director contracts, and the establishment of board monitoring committees. They also stress the importance of the non-executive directors' monitoring roles. In Malaysia, under best practices in corporate governance, the MCCG recommends companies to establish a remuneration committee consisting of wholly or mainly non-executive directors (MCCG, 2007). The remuneration committee is entrusted with the role of determining and recommending suitable policies regarding remuneration packages for executive directors to ensure that rewards are commensurate with their experience and individual performances. Furthermore, remuneration committees are responsible for preparing and submitting recommendations regarding the remuneration policy to their boards of directors (Chalevas, press).

Family members usually prefer to sit on committees with at least one other family member, with the rest of the family remaining non-executive directors. Although the executive family does not dominate the committee they can still influence the remuneration design. Chourou (2010) describes how owner-managers use their power to derive financial benefits only when they do not bear the full cost of their actions. Furthermore, family members emphasize that the firm belongs to them and that they have a right to higher remuneration even though they are unqualified in regard to skill, experience, and knowledge, as long as it does not pose risks to the firm.

The uniqueness of family owned firms causes difficulty for remuneration committees to assess fair and square remuneration. Remuneration committees face the dilemma of designing remuneration to submit to boards of directors while founders, CEOs, and other family executives and large shareholders are members of the committee or the board. This shows that existing family members, as committee members, have the capability to increase director remuneration. Lee (2009) explains that non-executive directors who are remuneration committee members are required to develop the remuneration either to satisfy or achieve executive expectations. However, this role is less effective due to less independence and power in the face of family member domination. This leads to the fourth research hypothesis:

H4: There is a weaker relationship between remuneration committee and director remuneration in family firm.

There are mixed results for the relationship between remuneration committees and director remuneration. Empirical studies indicate that the existence of remuneration committee positively impacts the pay level of top management (Conyon 1997). This is because remuneration committees are involved with remuneration design from the beginning and link corporate governance regulations to individual requirements (Bender 2007). In addition, remuneration committees are responsible to evaluate executive performance and make recommendations for remuneration (Jackson et al. 2008). According to Anderson and Bizjak (2003) there is little evidence to indicate that greater committee independence affects executive pay. Furthermore, they find that the presence of insiders or the CEO on committees does not lead to excessive pay or lower overall executive pay. Reverse results show that in the United

Kingdom remuneration committees have additional power to influence their own pay levels (Ezzamel & Watson 2002).

Meanwhile, previous empirical results also indicate that the presence of a remuneration committee has no significant impact on top management (Renneboog and Trojanowski 2002). It is likely that these results are due to the power of the boards of directors and majority shareholders to influence the effectiveness of remuneration committees regardless of corporate governance policies and procedures. According to Alissa (2009), there is evidence that shareholders vote against the remuneration report when excess remuneration is high. However, this is likely to be different in family owned firms when recommendations by remuneration committees are hard to approve depending on the interests and voting patterns of boards of directors and shareholders.

4.6 Institutional Investors, Remuneration Committees, and Director Remuneration

Institutional investors have the ability to influence board decisions (Parrino et al. 2003) to ensure director remuneration is linked to performance. According to Johnson et al. (1997), firms are *responsive* to pressure from institutional investors. It is possible that these pressures are put on remuneration committees to design better remuneration by the executive family and firm, which leads to enhanced performance. According to Croci et al.(2010), the relationship between family remuneration and institutional investor presence is negative, which suggests that

institutional investors can provide effective monitoring and can check CEO remuneration. Furthermore, institutional investors can use their influence to design compensation policies that give executives incentives to select and implement actions that result in outcomes desirable to shareholders (Jensen & Murphy 1990).

Large institutional investors are better than individual investors at influencing board decisions (Cubbin & Leech 1983). In addition, institutional investors can utilize resources and put pressure on committees, even through direct monitoring (Dong and Ozkan, 2007a) and disciplining, due to greater access to information because of the lower cost of collecting information and economies of scale and diversification (Diamond 1984). As a result, the committee cannot simply reward higher remuneration without proper justification. Furthermore, effective monitoring may be obtained by increasing the shareholding and number of institutional investors. Thus, the following hypothesis:

H₅: There is a weaker relationship between director remuneration and remuneration committees in the presence of the institutional investor in family owned firms.

The empirical evidence indicates that institutional investor involvement reduces top management's influences on boards that set compensation (Bathala 1996). Furthermore, Hartzell and Starks (2003) find that the presence of institutional investors is negatively related to levels of remuneration. They also note that institutional investors are active in influencing executive remuneration structures. In

addition, Ozkan (2007) show that institutional investors are significant influences on CEO remuneration. Furthermore, Wahab and Rahman find a negative relationship between institutional investors and remuneration in Malaysian firms. Furthermore, optimal monitoring by institutional investors, along with their strong resources and participation in decision-making, enables them to protecting their investments (Cornett, M. et al. 2007; Rahul 1996; Thomsen & Pedersen 2000) and obtain higher dividends. As a result, remuneration committees have limited space to increase remuneration.

4.7 Summary

This chapter has provided the development of the research hypotheses. It has outlined five research hypotheses: first (H1), there is a negative relationship between director remuneration and performance; second (H2), there is a weaker relationship between director remuneration and performance in family owned firms; third (H3), there is a stronger relationship between director remuneration and performance when an institutional investor is present in a family owned firm; fourth (H4), there is a positive relationship between remuneration committees and director remuneration in family owned firms; and fifth (H5), there is a weaker relationship between remuneration committees and director remuneration in the presence of institutional investors in family owned firms. The next chapter will discuss the research method, sample selection criteria, regression model, variables definitions, and data collection procedures.

CHAPTER 5 RESEARCH METHODOLOGY

5.1 Introduction

The research hypotheses were presented in the preceding chapter in addition to the research questions and developed the conceptual model. This chapter describes the data and research methodology that were used as the basis for the empirical analysis in the study. Section 5.1 discusses data collection, Sections 5.2 and 5.3 present definitions of variables and describes measurement of variables. Data analysis is discussed in Section 5.4. The chapter concludes with section 5.5.

5.2 Data Collection

All data used in this study were extracted from secondary sources for a number of reasons. Firstly, the data was available for hand collection from Bursa Malaysia annual reports. Secondly, most of the empirical studies on this topic use secondary sources as sample data. For example, Cheng and Firth (2006) extracted financial data from Datastream, Pacap, and Sequencer. Furthermore, Claessens et al (2000) analyzed data from Woldscope, Asian Company Handbook, and Japan and Hong Kong Company Handbook. Furthermore, Wahab and Rahman (2009) and Abdullah (2006) obtained their financial data, remuneration, institutional investor, and firm ownership data from Bursa Malaysia annual reports.

The data will be extracted from the Bursa Malaysia website at www.bursamalaysia.com. Bursa Malaysia is an exchange holding company approved under Section 15 of Malaysia's Capital Markets and Services Act of 2007. The company offers the complete range of exchange-related services including trading, clearing, settlement, and depository services. Close to 1000 publicly listed companies offer a wide range of investments, including Main Market (Main Board and Second Board) and ACE Market (effective starting 3 August 2009) investments. There are five major reasons why many companies are interested in being listed on Bursa Malaysia³ ; (a) simple and clear requirements for listings; (b) swift time-to-market; (c) cost effective listing destination; (d) strong investor protection regime under a sound regulatory framework; and (e) transparent and fully automated marketplace.

From these sources, data was obtained from companies' annual reports from 2007 to 2009. The 2007 to 2009 period was chosen because disclosure of the details of remuneration committee activities and executive pay structure and levels of remuneration, as required under the Malaysia Code of Corporate Governance (MCCG), was made effective for annual reports after June 2001. However, this study is not focus on 2002 to 2009 period because too widely over longer period. According to financial crisis where it is hit United State, European and Asian region including Malaysia which affected remuneration structure and level in relation to expropriation matter during the period 2007 to 2009. Data for the years 2011 and

³ (http://www.bursamalaysia.com/website/bm/resources/download/brochure_listing_bursa.pdf; 4 June 2011)

2012 is still not available due to the reporting cycle not being complete and was therefore excluded from the study. As of 31 December 2009, 844 companies were listed on Main Market on Bursa Malaysia. The sample size for this study is 537 companies from Main Market and the total sample for data from three years (2007 to 2009) is 1611. The sampling method is random by considering the following factors.

This study did not sample companies listed on the MESDAQ (Malaysia Exchange of Securities Dealing and Automated Quotation), known as ACE Market, which includes companies operating in advanced electronics, information technology, telecommunications, automation manufacturing systems, biotechnology and genetic engineering, healthcare, advanced material, energy, and aerospace and other emerging technologies (Saleh et al. 2009). Exclusion of the companies listed on the ACE Market was due to differences between ACE companies and Main Market companies regarding the criteria for paid-up capital. The minimum paid-up capital for ACE companies is RM2 million for technology and non-technology companies with a maximum of RM20 million for technology incubator companies, which is less than the main market criteria for paid-up capital, which is between RM40 million and RM60 million (Bursa Malaysia).

Since 3 August 2009, when first and second boards merged to form Main Market and MESDAQ, known ACE Market, the market capitalization is different (a) Main Market; A total market capitalization at least RM500 million upon listing; and (b) incorporated and generated operation revenue for at least one full financial year

prior to submission. On the other hand ACE Market has no requirement for the market capitalization. This obviously influences executive remuneration. Therefore, ACE Market companies were excluded from this study. Dong and Ozkan (2008) document that the firm size and cash holdings have positive relationships with executive remuneration.

Listing criteria for Main Market includes uninterrupted profits after taxes for three to five full financial years, with an aggregate of at least RM20 million and at least RM6 million for the most recent full financial year. On the hand, the ACE Market has no minimum operating track record or profit requirement. Furthermore, Main Market is a platform established to raise funds while ACE Market is for companies looking for a conducive growth platform. Therefore, performance of ACE Market companies can be potentially miscalculated and such a miscalculation could significantly impact generalization of results.

Furthermore, consistent with Ibrahim and Samad (2010), companies that do not comply with the obligations set forth in Practice Note No 14 (PN14) and No 17 (PN17) were also excluded from this study. After revision on 3 August 2009, PN4 was deleted and PN17 was revised pursuant to paragraph 8.04. PN17 applies to firms that have financial problems and are thus deemed unsuitable due to their unstable nature and the future probability of bankruptcy. Therefore the probability is that the generalization of results would have been inaccurate had PN17 firms been included in this study.

Chief executive officer remuneration was excluded because the data was not disclosed in the annual reports in Bursa Malaysia as a single measurement, but director remuneration was disclosed as aggregates. Furthermore, all the remuneration was reported as cash value. The sample was further reduced by unclear director remuneration or by lack of separation between types of remuneration (e.g., salary, bonus, benefits of kind, and fees) or between executive and non-executive directors (Salim & Wan-Hussin 2009). This differentiation is important because this study focuses on the level of remuneration among executive directors and non-executive directors.

The definition of family owned firms used in this study is consistent with the definition used in prior studies (Claessens et al. 2000; Fahlenbrach 2007; Gomez-Mejia et al. 2003; McConaughy et al. 1998). The information on family director profile and director shareholding was collected from the annual reports. The information on equity of institutional investors was collected from annual reports. All the control variables such as firm size, industry, debt, and firm age were gathered from companies' annual reports. All the variables are summarized in Table 3.

5.3 Variable definition

This section provides the variables definition and associated discussion:

5.3.1 Performance

The operational definition of performance was based on a financial dictionary as “the results of activities of organizations or investments over a given period of time”⁴. The period refers to the financial accounting period related to profit or loss from activities. Furthermore, Mayer (1997, p. 155) defines performance using two approaches:

[F]irst, under shareholder approach that performance is the objective of the firm is to maximize market value through allocative, productive and dynamic efficiency. Second, under stakeholder approach that performance is attract wider consistency interested in employed, market share and growth in trading with supplier and purchaser as well as financial performance.

The performance proxies are based on accounting-based measures such as Return on Assets (ROA) which is measured as the ratio of net income to total assets (Barontini et al. 2010; Basu et al. 2007; Brick et al. 2006; Croci et al. 2010) and Return on Equity (ROE) which is measured as the ratio of net income to total equity (Cheng & Firth 2006; Martinez et al. 2007).

5.3.2 Remuneration

As highlighted in the previous two chapters, to mitigate the agency problem, appropriate incentives or compensation contracts that closely tie remuneration with performance are necessary (Jensen & Meckling 1976). As previously mentioned in Chapter 3, remuneration is a contract tied to performance and includes salary, bonuses, and stock options (Carter & Zamora 2009). Those authors explain that the salary is often fixed rather than variable and links to firm performance. However, a

⁴ <http://www.investorwords/3665/performance.html> , viewed 6 June 2011

bonus is linked to accounting performance. Price Waterhouse Coopers (2000) (cited in Bender 2003, p. 2007) defines “remuneration as contracts for executives that is structured and include salary and performance-related awards for annual and long-term performance”. Another definition by Franzoni (2010, p. 35) explains:

“remuneration as the wealth generated by the corporate business and its allocation among who manage the company, to the end to check the effective costs and benefits obtained by performance, that is, the value of remuneration paid to executive directors and its effects on corporate economic results”.

Furthermore, the operational definition of remuneration packages in the financial dictionary is the total monetary value that an employee receives as part of payment for activities⁵. Moreover, monetary compensation such as salary, bonus, fees, and benefits of kind, but not non-monetary compensation like stock options, are commonly used as remuneration.

5.3.3 Remuneration Committee

Remuneration committee refers to the sub-committee established for designing effective incentives for executives in order to enhance performance. Committee members consist of non-executive and executive directors. Greenbury (1995, p. 14) explains that;

“the [b]oard of directors [s]et up remuneration committees of non-executive directors to determine on their behalf and on behalf of [s]hareholder within agreed terms of reference, the company’s policy on executive remuneration and specific remuneration packages for each of executive directors including pension rights and any compensation payments” .

⁵ http://www.investorwords.com/996/compensation_package.html , viewed 6 June 2011

5.3.4 Family Firm

The definition of a family owned firm in this study is when two or more executives are related by marriage relationship with the founder and hold voting stock equaling at least 20%. The definition of family firms in this study was constructed from several definitions used in previous studies. For example, Claessens et al. (2002) define family firms as firms in which there is a presence of a group of people related by blood or marriage with large ownership stakes. Gomez-Mejia et al. (2003) define firms as family-owned if two conditions are satisfied: Firstly, two or more directors have a family relationship and family members own or control at least 5% of the voting stock. Secondly, family relationships include father, mother, sister, brother, son, daughter, spouse, in-laws, aunt, uncle, niece, nephew, and cousin. Fahlenbrach (2007) defines firms for which the CEO is the founder or co-founder as family firms. La Porta et al. (1999) define a family firm as one in which an individual is the controlling shareholder (ultimate owner) whose direct and indirect voting right exceeds 20%.

5.3.5 Institutional Investor

A leading financial dictionary defines an institutional investor as an organization that trades securities for investment purposes⁶. Furthermore, institutional investors include banks, insurance companies, pension funds, hedge funds, and mutual funds. According to both Ben-Amar and Andre (2006) and Hartzell and Starks (2003), the influence of the institutional investor is measured by y , which is the ratio (voting

⁶ : http://www.investorglossary.com/institutional_investor/html, viewed 8 June 2011

right) of shares held by the institutional investor to the total number of shares outstanding. This metric allows the quantification of the holdings of the top five institutions as a percentage of institutional holdings, including the Minority Shareholder Watchdog Group (MSWG) in Malaysia. For example, the founders of MSWG are the Armed Forces Fund Board (LTAT); National Equity Corporation (PNB); Pertubuhan Keselamatan Sosial (PERKESO); Pilgrimage Board (LTH); and the Employee Provident Fund (EPF) (Abdul Wahab et al. 2007).

5.4 Variable Measurement

The definitions of remuneration committee, remuneration, performance, family ownership, and institutional investor were presented in the preceding section. The next section will discuss the measurement each of these variables in detail.

5.4.1 Dependent Variables Measurement

5.4.1.1 Performance

Performance is the dependent variable and is measured with proxies using accounting-based measures such as Return on Assets (ROA), which is measured as the ratio of net income to total assets, and Return on Equity (ROE), which is measured as the ratio of net income to total equity. The ROA and ROE are the profitability ratios in accounting statements which reflect percentage increment to assets and the shareholders' wealth respectively. Furthermore, ROA is the best

measure for current performance (Cornett, M. et al. 2007) whereas ROE is a better measure of executive ability. Kiel and Nicholson (2003, p.196) explain that;

“accounting-based (ROA and ROE) measures of performance are historical and so experience a more backward and inward looking focus, including the past successes of advice given from the board to the management team and are the traditional mainstay of corporate performance measures”.

Kaplan (1994) finds a positive relationship between remuneration and performance, which was closely tied with executive remuneration (Bushman & Smith 2001). This past study strongly affirms the suggestion by Cadbury (1992) that performance-based remuneration is a determinate of director remuneration. As proxies, these measures provide information about whether or not remuneration is associated with fulfillment of firm objectives. For example, if the results show that remuneration is associated with performance, it can be inferred that firm objectives are being achieved and vice versa. Therefore, a positive relationship is linked to the ability of firms to pay out dividends.

Data was obtained from annual reports under the “Profit and loss account and balance sheet” subsection of the “Financial Report” section. When information related to the data was confusing or unclear, further steps were taken to investigate the notes that accompanied the data. Furthermore, all annual reports were provided to Bursa Malaysia with disclosures for two years, including the current year and the previous year, making it possible to extract the data for two years at the same time.

5.4.2 Independent Variables Measurement

5.4.2.1 Remuneration

Remuneration was measured using proxies representing cash remuneration consisting of salaries, bonuses, benefits of kin, and fees (Abdul Wahab & Abdul Rahman 2009; Basu et al. 2007). As previously discussed, cash remuneration is a popular incentive and has been linked to better performance (Dong & Ozkan et al. 2008; Shaw et al. 2010). Cash remuneration becomes popular as an incentive because of at least three reasons. Firstly, directors prefer cash as remuneration because it is closest to the maximum available given the actual profit (Bushman & Smith 2001). Secondly, previous research indicates that the cash remuneration links to better performance. For example Shaw et al (2010) find that CEO cash remuneration positively increases performance and also can be punishment for bad performance (Jensen & Murphy 2010) including salary cuts, no bonus or dismissal. Thirdly, the cash remuneration is easily expropriated under family ownership. Empirical study indicates that between 73% and 85% of all family owned firms offer cash bonuses (Fraser 1990; Greco 1997).

Director remuneration data, in the form of cash remuneration figures, was obtained from annual reports from Bursa Malaysia for both executive and non-executive directors. The annual reports disclosed cash remunerations in the form of salary, bonus, benefits of kind, and fees for executive and non-executive directors. If the cash remuneration was disclosed as an aggregate, without differentiation of each component, the data was excluded due to difficulty in identifying the level of remuneration. Similarly, when the total remuneration failed to fall within the

executive range, the data was excluded due to difficulty in identifying the total remuneration earned by family members or otherwise. Next, annual reports that only disclosure only cash remuneration but equity-based remuneration such as stock options were excluded because data could not be obtained. In preparation for analyses, all remuneration variables were based on logarithm transformations, since skewed distributions can weaken statistical relationships and lead to heteroscedasticity (Tabachnick & Fidell 2007).

5.4.2.2 Remuneration Committee

Remuneration committee measures included the size of remuneration committee, family members as executive director,⁷ and non-family member as non-executive directors. Size of remuneration committee represents the existence of remuneration committees as suggested by governance. The remuneration committee increases director remuneration if family members prioritize personal desires or if non-family members lack independence. A study by Murphy (1999) in the United States suggests that remuneration committees should include two or more independent directors and affect executive remuneration (Anderson & Reeb 2003). However, Bebchuk et al. (2002) argue that non-executive directors who are less independent can be potentially influenced by executive directors.

⁷ Family members only exist in family firms. This variable indicates whether or not the executive director on the remuneration committee is a family member, based on the definition of a family firm.

The statement of corporate governance under the “Director’s Remuneration” subsection of the “Board of Directors” section outlines the responsibilities of remuneration committees for making recommendations to the board of directors. Therefore, remuneration committee data can be extracted from annual report which discloses the structure and composition of committees. In other words, data was extracted regarding whether members of the committee were executive or non-executive directors, the positions of each of the members (i.e., CEO, chairman, etc.), and whether or not they were family members. The data was obtained from annual corporate proxy statement is similar study with Anderson and Bizjak (2003) and Gregory-Smith (2010).

5.4.2.3 Family Ownership

This study focuses on family ownership structure according to two criteria: The first criterion is based on Claessens et al.’s (2002) definition of family as related by blood or marriage and is consistent with others’ conceptualizations of family ownership as previously discussed (Anderson and Reeb 2003; Fahlenbrach (2007). Therefore, according to this first criterion, family ownership was measured as members of the board of directors (e.g., CEO, chairman, etc.) who were related by blood or marriage. Annual reports from Bursa Malaysia include disclosure of the relationships among executives under board member profiles, which allows for categorization of directors as family members.

The second criterion for family ownership is that family members hold not less than 20% of the voting stock (La Porta et al. 1999). The equity fraction is calculated based on direct and indirect shareholdings of family members. Either one or both of these criteria need to be fulfilled to be selected as family ownership. Claessens et al. (2002, p. 2746) explain that we do not consider ownership by individual family members to be separate, and we use total ownership by each family group-defined as a group of people related by blood or marriage-as the unit of analysis.

To calculate this equity fraction (i.e., direct and indirect shareholding) data was extracted directly from annual reports under the “Shareholdings statistic – list of thirty largest shareholders” section. The information was sorted from the largest to the smallest shareholdings and firms with family members who held more than 20% were categorized as family owned firms. However, it’s also need to go through with sub-section “List of directors’ shareholdings in the company” regards for direct shareholding and sub-section “List of Substantial shareholders” for indirect shareholding. Saleh et al (2009) explain that the percentage of ownership is used as an indicator of degree of family involvement in the firm, which tends to influence remuneration and performance.

Cheung et al (2005) found that for the CEO and Chairman, respective shareholding was associated with higher remuneration when the level of managerial ownership was 35% in small firms and 10% in large firms. Therefore, higher shareholdings were associated with higher power and control and, thus, the potential to increase

personal wealth via remuneration. Therefore, the CEO in closed held firms earned better remuneration than CEOs in widely-held firms (Craighead, J. et al. 2004). There have been past studies on ownership around the world. The results of these studies are shown in Table 3.

5.4.2.4 Institutional Investor

The institutional investors are measured by the ratio (voting right) of shares held by institutional investors to the percent of shares outstanding for each firm. Furthermore, the shareholding is accumulated from various institutional investors holding more than 5% of shares. This figure was based on studies conducted by Ben-Amar and Andre (2006), Hartzell and Starks (2003), Cornett et al. (2007), and Abdul Wahab et al. (2007). The fraction of equity held by institutional investors had to be at least 5% or more because holdings equal to less than 5% are not disclosed in the annual reports. Furthermore, Minority Shareholder Watchdog Group (MSWG) is defined as the holdings of the top five institutions as a percentage of institutional holdings. Abdul Wahab et al. (2007) and Abdul Wahab and Abdul Rahman (2009) notice that the founders of MSWG consisted of the *Armed Forces Fund Board (LTAT)*; *National Equity Corporation (PNB)*; *Pertubuhan Keselamatan Sosial (PERKESO)*; *Pilgrimage Board (LTH)*; and the *Employee Provident Fund (EPF)*.

Furthermore, this study also focuses on the relationship among MSWG (individual member), performance, and remuneration committee, which link to Hypotheses 3 and 5. The measure used was the MSWG members as individual institutional

investors. Abdul Wahab and Abdul Rahman's (2009) study on determination of director remuneration in Malaysian firms during 1999-2003 also used individual institutional investor in MSWG as proxies.

Two measures were used to investigate the relationship between MSWG and performance and remuneration committees. The first measure used was power and control as determined by the equity shareholding. This is important as increase in institutional investor` shareholding gives them significant influence on corporate decision which will allow them to better protect their investment and wealth. When the equity of institutional investors increases they are able to influence decision making, especially related to executive compensation structures (Hartzell & Starks 2003).

The second measure used was a measure of the role played by individual members in MSWG in the remuneration committees and performance in Malaysia firms. As the major minority investor, MSWG members have the ability to influence corporate decisions and monitor firm operations and can attract more investors, which can increase performance, curb remuneration for personal wealth, and payout better dividends. Thus, it is important to involve the MSWG in research due to the significant influence of MSWG to protect minority shareholder investments as highlighted in their objectives.

Data was extracted from annual reports from the “Analysis of shareholder” section “List of thirty (30) largest shareholders.” Individual and company investments were disclosed for the top thirty shareholders with a cut off 5%. Only data for institutional investors were included for investigation of their monitoring role. Individual and family member investments were excluded as the study was not examining individuals’ roles and family member investments were already accounted for under the family ownership variables. For the shareholding measures, only the top five institutional investors were selected but for the number of institutional investors, data for all institutional investors were extracted. For data regarding the involvement of MSWG, only the members of MSWG were selected.

5.4.3 Control Variables

For the purposes of this study, general firm characteristics (variables) were controlled. These control variables included firm size, industry, debt, and firm age. Firm size was measured using the natural log of the book value of total assets, which is consistent with how firm size has been measured in prior studies (e.g. Anderson & Reeb 2003; Chalmers et al. 2006; Maury 2006; Mehran 1995). According to Anderson and Reeb (2003), there was a relationship between founding-family ownership and firm performance using data from the S&P 500 and controlling for firm size measured using the natural log of the book value of total assets. Chalmers et al (2006) also measured firm size using this same variable and find that it was related to factors determining CEO compensation.

Therefore, the size of firm is important to control for due to significant impacts on the director remuneration (Bliss & Rosen 2001; Jensen & Murphy 1990). The executives of small firms are paid less than those in large firms because of task complexity and the difficulty of decision-making. This requires skills and expertise from executives to manage firm operations and costly to management (Rosen 1982). Furthermore, large firms have the potential for higher productivity and to show a positive relationship between performance and pay for executives (Baker et al. 1988). Consistent with these differences between small and large firms, a study of 73 American restaurant firms by Kim and Gu (2005) finds that firm size is positively related to CEO remuneration.

Firm age needs to be controlled for due to the potential significant impact of age upon this research. Firm age is measured based on time since IPO. Publicly listed companies will announce IPO after incorporating in order to increase capital. Firm age is measured by the difference between the current year and the year of IPO, which is the first sale of stock by a company to the public. Firm age needs to be controlled for because the length of time firms have been incorporated is associated with better reputation and stronger presence of the firm in its given industry. Thus, firm age can be associated with market share and number of regular customers who contribute to sales and performance, which provides financial resources for executive remuneration compared to more recently incorporated firms. Furthermore, recently incorporated firms have not had enough time to recover the capital required for the IPO. Therefore they have reduced resources for executive remuneration in the short term.

Next, industry was included as a control variable to differentiate between industrial sectors. Industry was dummy coded with 1 representing the consumer products sector, including trading/service, construction, and plantations/mining, and 0 representing other sectors, including banking, finance, and insurance. Inclusion of industry as a control variable and the dummy coding strategy are consistent with prior research (Barontini & Bozzi 2009; Carrasco-Hernandez & Sanchez-Marin 2007; Martinez et al. 2007; Mitton 2002)

Financial hardship is a significant potential factor causing reductions in director remuneration. For example, Cheung et al (2005) find that lower director remuneration is associated with higher debt. However, others argue that higher debt is an indicator of company growth through purchasing of new equipment, hiring, or increasing of director remuneration. Therefore, it is necessary to control for financial hardship by including firm debt as a control variable. This is supported by the inclusion of debt as a control variable in many other studies (Anderson & Reeb 2003; Cheung et al. 2005; Martinez et al. 2007). Debt was represented by capital structure, which was computed by dividing long-term debt by total assets (Anderson & Reeb 2003).

Data for firm size and debt variables were extracted from annual reports from the “Statement of Financial” section. Information regarding industry for dummy coding was taken from the “By Sector” section of the annual reports, which represented industry categorization with icons, which were identified and coded for each firm.

Finally, firm age was obtained from annual reports under the “Initial Public Offer (IPO)” section. Under this section, the year of IPO is listed for each company.

5.5 Data Analysis

This section outlines the data analysis techniques and procedures employed for quantitative data analyses.

5.5.1 Screening Outliers

Screening for outliers is very important to ensure the data is not disproportionately influenced by a few atypical cases. Tabachnick and Fidell (2007, p. 73) note that “[o]ne of the presences of an outlier is from intended population but the distribution for the variable in the population has more extreme values than a normal distribution”. There were two steps for screening outliers: Firstly, univariate detection⁸ was used for detecting outliers. Secondly, by examining Z scores were examined. After outliers were detected, a further step was taken to determine whether each outlier needed to be removed or could be retained in the analysis.

5.5.2 Descriptive Statistics

Descriptive statistics are used to describe the basic characteristics of the study data. Furthermore, descriptive are also used to present quantitative descriptions in a

⁸ Univariate detection is a method of identifying outliers through examination of the distribution of observations and selecting as outliers those cases falling at the outer range (Hair et al. 1998, p. 65).

manageable way. Descriptive statistics, such as mean, median and the size range, such as maximum and minimum are useful in making some general observations about the data. The mean is important to highlight in this study because it provides an overall picture of the dataset. Maximum and minimum statistics are important to establish a range for each variable. Other statistics such as standard deviation provide more information about the distribution of each variable.

5.5.3 Correlation Analysis

A correlation coefficient (r) is a single number that describes the degree of relationship between two variables. The study conducted three analyses to test the correlations between remuneration and each of the variables identified in this study. Each analysis included (a) dependent variables; (b) independent variables; and (c) control variables. The variables have substantial correlations with each other when close to 1 and less substantial correlations when close to 0 (Gomez-Mejia et al. 2003).

Results of bivariate correlations are shown in Table 6.2. A bivariate correlation is a correlation between two variables (Field 2009, p. 175). Furthermore, there are two types of bivariate correlation coefficients: the Pearson correlation coefficient and Spearman Rho (Abdul Wahab & Abdul Rahman 2009; Chen & Lee 2008) This study did not use partial correlations because it looks at the relationship between two variables while controlling the effects of one or more additional variables. The

minimum requirement to use a Pearson correlation coefficient⁹ is that the variables are interval variables (Field 2009, p. 177). Spearman's correlation coefficient is a non-parametric statistic and is suitable for use when the data violates parametric assumptions, such as non-normally distributed data (nonparametric). Thus, the data is suitable under both Pearson's and Spearman's Rho correlation requirements.

The correlation results can identify multicollinearity problems.¹⁰ According to Maury (2006), multicollinearity is a statistical phenomenon in which two or more predictor variables in a multiple regression model are highly correlated. Multicollinearity is not likely to be a problem when the correlation coefficient is below 0.8¹¹. In other cases there could be serious multicollinearity.

5.5.4 Univariate Analysis

Univariate analysis involves the examination across cases of one variable at a time. In other words, univariate analysis is a method for analyzing data for a single variable at a time. A single variable was tested in two groups, which are linked to family ownership: family firm and non-family firm (Table 6.3). Another group differentiation is remuneration committee variables divided into family member or non-family member (Table 6.4). Furthermore, the univariate analysis was applied using two methods: the independent *t*-test and Mann-Whitney test (*p*-value) (Abdul

⁹ Field (2009, p.177) emphasizes that for correlations to be more robust, other assumptions, such as normality of sampling distribution, should be examined.

¹⁰ Multicollinearity test is based on the variation inflation factor (VIF) and is explained in Chapter 6.

¹¹ Gujarati (1995) (Cited in Haniffa and Cooke (2005, p. 414) correlations below 0.8 are not problems vis-à-vis multicollinearity

Wahab & Abdul Rahman 2009; Abdul Wahab et al. 2007). For independent t -tests, data need to be normally distributed and measured at the interval level (Field 2009, p. 326). According to Field (2009, p. 540), the Mann-Whitney test is equivalent to the independent t -test.

5.5.5 Multivariate Regression Model

Multivariate regression is appropriate for examining independent variables as they interact with each other in affecting dependent variables. According to Field (2009, p. 198), regression analysis is modeling fit to the data and using it to predict values of the dependent variable from one or more independent variables. It is a way of predicting an outcome variable from several predictor variables. Hair et al. (1998, p. 159) note that “[m]ultiple regression analysis, a form of general linear modeling, is a multivariate statistical technique used to examine the relationship between a single dependent variable and a set of independent variables” .

This study has more than 1600 panel data points and contains five predictors. Thus, it is very important in the research design to have enough sample data to obtain a reliable regression model (Field 2009, p. 222) and to have sufficient statistical power (Hair et al. 1998, p. 164). The size of the dataset directly affects statistical power of the significance testing and the generalizability of the results. In evaluating statistical power, the panel data is over 1000 and contains five independent

variables; thus, the power to detect R^2 values at significance levels of 0.05 (0.01) is great (Hair et al. 1998, p. 165).¹²

Furthermore, this model has also been used by previous researchers (Chen & Nowland 2010; Croci et al. 2010). To test all hypotheses related to interaction, centering of the continuous variables is required. According to Aiken & West (1991) and Judd & McClelland (1989), centering of the continuous variables is recommended because it tends to increase interpretability of interaction terms and mitigates the multicollinearity problem.

5.5.5.1 Assumption of Multivariate Regression

The assumption of normality underlying the regression model was tested based on an analysis of residuals by examining plots of standardized residuals against predicted values as well as the Q-Q plot. Furthermore, multicollinearity was tested based on the correlation matrix and variance inflation factor (VIF). Homoscedasticity was tested by examining Levene's test statistics and autocorrelation was tested using the Durbin-Watson test. Finally, linearity was examined visually via a scatterplot. According to Hair et al (1998, p. 70),

“The need to test the statistical assumptions is increased in multivariate applications because of two characteristics of multivariate analysis. [F]irst, the complexity of the relationships, owing to the typical use of a large number of variables, makes the potential distortions and biases more potent when the assumptions are violated. Secondly, the complexity of the analyses

¹² Table 4.7 explains the interplay among the sample size, the significance level chosen, and the number of independent variables in detecting a significant R^2 .

and of the results may mask the signs of assumption violations apparent in the simplest univariate analyses”.

The normality test is commonly based on the sample distribution and coefficients of skewness and kurtosis (Bowman and Shenton, 1973a, 1973b, 1975; Shenton and Bownan 1977; Shapiro and Wilk, 1965). Field (2009, p. 139) argues that, with a large sample (200 or more), normality could be confirmed by visually examining the shape of the distribution and a skewness and kurtosis statistic is preferable to calculating significance.¹³ Similarly, Tabachnick and Fidell (2007, p. 80) argue that, in large samples, the significance level of skewness is not as important as its actual size and the visual appearance of the distribution. However, according to Hair et al. (1998, p. 73), although tests of significance are less useful in small samples (fewer than 30), they can be quite sensitive in large samples (exceeding 1,000 observations). Tabachnick and Fidell (2007, p. 80) also emphasize that, regarding kurtosis in large samples, the impact of departure from zero kurtosis also diminishes.

According to Waternaux (1976) (cited in Tabachnick & Fidell 2007), underestimates of variance were associated with positive kurtosis (distributions with short, thick tails) but disappeared with samples of 100 or more cases; with negative kurtosis, underestimation of variance disappears with samples of 200 or more. Field (2009, p. 139) notes that, with large sample sizes, it is very easy to get significant results from small deviations from normality; thus, a significance test does not

¹³ Rules of thumb are that critical value exceeding ± 2.58 indicates rejection of the assumption of normality of the distribution at the 0.01 probability level. Critical value is ± 1.96 for a 0.05 error level (Hair et al. 1998, p. 71-73). However, in large samples the critical value is should be increased to the 2.58 (Field 2009, p. 139).

necessarily indicate whether the deviation from normality is enough to bias any statistical procedures. Another way to examine whether the sampling distribution is normal is by using the Kolmogorov-Smirnov and Shapiro-Wilk tests. With this method, sampling is normal when $p > 0.05$ (not significant) but it is not normal when $p < 0.05$ (significant). However, this method is limited by the fact that, with large samples, it is very easy to get significant results.

This study contains more than 1600 panel data points, which is large sample size with adequate sensitivity. Statistic approaches show that the data were transformed but some of the data were not improved by the transformations, meaning the post-transformation data was still not normally distributed (critical values; p -value exceeded ± 2.58 and $p < 0.05$). However, using the observation approach, the data was determined to be sufficiently normally distributed and linearity as shown in Appendix A. Furthermore, additional tests were also conducted, such as tests for robustness.

Besides testing the normality assumption, the variables needed to be checked for multicollinearity. Multicollinearity is considered to exist when there is a strong correlation between or two or more predictors in the regression model (Field 2009; Hair et al. 1998). Sen and Srivastara (1997, p. 219) explain that “the quality of estimates, as measured by their variances, can be seriously and adversely affected if the variables are closely related to each other”. There are two methods to measure multicollinearity: examination of the correlation matrix and the variance inflation

factor (VIF). The rule of thumb for detecting multicollinearity¹⁴ is when the correlation is > 0.800 (Gujarati 1995) (cited in Haniffa & Cooke 2005, p. 414). Table 6.2 present the correlation matrix and indicate that multicollinearity is not a problem because all correlations are below 0.800. The second method to check for multicollinearity is measured by VIF.¹⁵ Existing literature indicates that different VIFs have been used as rules of thumb to indicate excessive or serious multicollinearity.¹⁶ Appendix D presents VIF values; it can be seen that multicollinearity is not a problem because all VIF values are below 5.

Another assumption in multivariate regression is homoscedasticity. To ensure that heteroscedasticity¹⁷ is not threatened, Field (2009, p. 150) recommends using Levene's test.¹⁸ However, the large sample affects the variances in the group. Small differences in group variances can be revealed by a significant result using Levene's test. Furthermore, non-significant Levene's test results, at $p < 0.05$, indicate that the variances are equal among the different groups. In other word, heteroscedasticity exists when there is unequal dispersion.

¹⁴ Haniffa and Coke's (2005, p. 414) finds correlations below 0.8 are not problems vis-à-vis multicollinearity. Also see Hair et al (1998, p. 189) who argue that correlations above 0.8 indicate relatively high levels of multicollinearity.

¹⁵ O'Brien (2007, p. 684) notes that VIF is becoming a popular measure of collinearity because it has a clear interpretation in terms of effect of collinearity on the estimated variance of the i th regression coefficient.

¹⁶ Based on VIF, multicollinearity is a problem if a factor exceeds 10 (Neter et al. 1983 and Kennedy, 1992)(cited in Hanifa & Cooke, 2005, p. 414) and Myer (1990)(cited in Field, 2009, p. 224). But Menard (1995)(cited in Field 2009, p. 224) notes that the rule of thumb for multicollinearity is a VIF of 2.

¹⁷ Heteroscedasticity is the opposite of homoscedasticity which occur when that variance of the error term appears constant over a range of independent variables (Hair et al 1998).

¹⁸ If Levene's test is significant at $p < 0.05$, the null hypothesis is incorrect and that the variances are significantly different. However, if Levene's test is non-significant at $p > 0.05$, then the variances are equal. See also Hair et al. (1998, p. 73).

Another assumption that must be tested is the assumption of independent errors or autocorrelation. The residual term for any two observations should be uncorrelated or independent. According to Field (2009, p. 220), the assumption can be tested using the Durbin-Watson test which results in a test statistic between 0 and 4, with a value of 2 meaning that the residuals are uncorrelated. Furthermore, the conservative rule of thumb is that when the value is less than 1 or greater than 3, it indicates autocorrelation. However, values closer to 2 may still be problematic depending on the sample and model specifications. For the current study, the Durbin-Watson test statistic was 1.885, which is close to 2. This suggests that the assumption of no autocorrelation is met.

Finally, a test for the linearity assumption also was conducted. Under this assumption, there is a relationship between dependent and independent variables. According to Hair et al. (1998, p. 173) linearity is easily examined using a residual plot. In multiple regression independent variable residuals are shown by combining the effects of all independent variables. This is very important in order to be able to generalize the results by linking between linear variables with a linear model. Field (2009, p. 221) explains that, when a linear model is used with two variables with a nonlinear relationship, the possibility of generalizing the findings is limited.

5.5.5.2 Econometric Models

The hypotheses in Chapter 4 employ econometric models to examine multiple research questions. The specific regression models used to test these hypotheses are presented in this section:

Equation 1 describes the model used to test the relationship between performance and remuneration committee, director remuneration, family ownership, institutional investors, and control variables:

$$\text{PERFM} = \beta_0 + \beta_1 \text{DIRREM}_{it} + \beta_2 \text{SIZE}_{it} + \beta_3 \text{DEBT}_{it} + \beta_4 \text{AGE}_{it} + \beta_5 \text{IND}_{it} + \epsilon_{it} \dots \dots (1)$$

where REM represents Total Remuneration, $\beta_0, \beta_1, \dots, \beta_5$ represent regression coefficients, i represents firm 1 through j , and t represents year. FAM_FIRM represents family ownership, INST_INVESTOR represents institutional investor, PERFM represents performance, and REMCOM represents remuneration committee.

Equation 2 describes the model used to test the relationship between performance and director remuneration, family ownership, and control variables:

$$\text{PERFM} = \beta_0 + \beta_1 \text{DIRREM}_{it} + (\beta_2 \text{DIRREM}_{it} * \text{FAM_FIRM}_{it}) + \beta_3 \text{SIZE}_{it} + \beta_4 \text{DEBT}_{it} + \beta_5 \text{AGE}_{it} + \beta_6 \text{IND}_{it} + \epsilon_{it} \dots \dots \dots (2)$$

Equation 3 describes the model used to test the relationship between performance and director remuneration, remuneration committee, family ownership, and control variables:

$$\text{PERFM} = \beta_0 + \beta_1 \text{DIRREM}_{it} + \beta_2 \text{FAM_FIRM}_{it} + \beta_3 \text{INST_INVESTOR}_{it} + (\beta_4 \text{DIRREM}_{it} * \text{INST_INVESTOR}_{it}) + (\beta_5 \text{INST_INVESTOR}_{it} * \text{FAM_FIRM}_{it}) + \beta_6 \text{SIZE}_{it} + \beta_7 \text{DEBT}_{it} + \beta_8 \text{AGE}_{it} + \beta_9 \text{IND}_{it} + \epsilon_{it} \dots \dots \dots (3)$$

Equation 4 describes the model used to test the relationship between director remuneration, remuneration committee, and control variables:

$$\text{DIRREM} = \beta_0 + \beta_1 \text{REMCOM}_{it} + \beta_2 \text{FAM_FIRM}_{it} + (\beta_3 \text{REMCOM}_{it} * \text{FAM_FIRM}_{it}) + \beta_4 \text{SIZE}_{it} + \beta_5 \text{DEBT}_{it} + \beta_6 \text{AGE}_{it} + \beta_7 \text{IND}_{it} + \epsilon_i \dots\dots\dots(4)$$

Equation 5 describes the model used to test the relationship between director remuneration and institutional investor, remuneration committee, and control variables:

$$\begin{aligned} \text{DIRREM} = & \beta_0 + \beta_1 \text{REMCOM}_{it} + \beta_2 \text{INST_INVESTOR}_{it} + \beta_3 \text{FAM_FIRM}_{it} + \\ & (\beta_4 \text{REMCOM}_{it} * \text{INST_INVESTOR}_{it}) + (\beta_5 \text{INST_INVESTOR}_{it} * \text{FAM_FIRM}_{it}) \\ & + \beta_6 \text{SIZE}_{it} + \beta_7 \text{DEBT}_{it} + \beta_8 \text{AGE}_{it} + \beta_9 \text{IND}_{it} + \epsilon_{it} \dots\dots\dots(5) \end{aligned}$$

where the REM includes total remuneration consisting of cash remuneration including salaries, bonuses, fees, and benefits of kind. REMCOM represents size of remuneration committee and PERFM includes ROA and ROE. Furthermore, FAM_FIRM includes the factor of whether the CEO, chairman, and executives are related to each by blood or marriage and is a member of a board of directors with holdings equal to no less than 20% of voting equity. Institutional investors include all institutional investors and the top five institutional investors with a cut off of 5%. Finally, control variables include size, industry, debt, and firm age. All the data were coded using SPSS 19, which was used to run descriptive statistics, correlations, and regressions.

5.6 Summary

This chapter has outlined and explained the detailed research methodology employed in the study. It has described the quantitative components of the study. It has also discussed measurement of the dependent and independent variables, data collection instruments, and the sample and data collection procedures. The final sample consists of 537 companies from Main Market on Bursa Malaysia and the total sample for data from three years (2007 to 2009) is 1611. Furthermore, the chapter discussed data analysis in terms of the statistical techniques and procedures employed to understand the nature of the data and test the hypotheses. The next chapter reports the quantitative and empirical results of the analyses.

CHAPTER 6 RESULTS AND DISCUSSION

6.1 Introduction

This chapter presents the empirical results that answer the research questions stipulated in Chapter 1. It is organized as follows. Sections 6.2 and 6.3 present the results from descriptive and correlation analyses, respectively. Section 6.4 and 6.5 present the results from univariate and multivariate analyses, respectively. Robustness issues are discussed in Section 6.6, while Section 6.7 concludes the chapter.

6.2 Descriptive Statistics

Panel A of Table 6.1 exhibits the descriptive statistics relating to director remuneration (DIRREM). Total DIRREM averages RM2.120 million, with a maximum of RM70.347 million. Further, the means (medians) for executive remuneration (EXECREM) and non-executive remuneration (NEDREM) are RM1.855 (RM1.135) million and RM 265,000 (RM160,000), respectively. A Previous study by Abdul Wahab and Abdul Rahman (2009) indicates that DIRREM, EXECREM and NEDREM average RM1.830 million, 1.568 million and RM262,000. In addition, EXECREM consisted of fees and allowances, salaries, bonuses and benefits of kind averaging RM91,000, RM1.359 million, RM219,000, and RM184,000, respectively. Furthermore, components of NEDREM included fees and allowances, salaries, bonuses, and benefits of kind averaging RM185,000,

RM51,000, RM11,000, and RM17,000, respectively. The descriptive finding suggests that firms allocate more remuneration for executive director than non-executive director.

Panel B of Table 6.1 presents the descriptive statistics relating to remuneration committees. The means (medians) of remuneration committee member consisting of family members and non-family members are 0.390 (0.00) and 2.850 (3.00), respectively. Remuneration committee members average at 2.00, with a maximum of 8.00. Panel C of Table 6.1 reports the descriptive results relating to family firm ownership. An average number of family members on boards in family firms is 1, with a maximum of 6 members. Further, means (medians) for direct and indirect shareholding are 6.787% (0.000) and 14.445% (0.000), respectively.

Panel D of Table 6.1 tabulates the institutional ownership. The means (medians) related to top five institutional ownership are 11.178% (5.637%). Furthermore, on average, Minority Shareholder Watchdog Group (MSWG) hold 4.466% of shares in each firm. Further, the averages for the Employees' Provident Fund (EPF) and *Permodalan Nasional Berhad (PNB)* are 1.450% and 1.543%, respectively. *Lembaga Tabung Angkatan Tentera (LTAT)*, *Lembaga Tabung Haji (LTH)*, and *Pertubuhan Keselamatan Sosial (PERKESO)* average shareholdings are 0.414%, 1.053%, and 0.003%, respectively.

Panel E of Table 6.1 reports the descriptive statistics for the performance components. The Return on Asset (ROA) indicator mean (median) is 0.030 (0.037), with a maximum of 1.426. Furthermore, the mean (median) for Return on Equity (ROE) is 0.044 (0.061), with a maximum of 3.004. Panel F of Table 6.1 presents firm characteristics. Average firm size (SIZE) is RM19.542 million, with a maximum of RM24.496 million. Other firm characteristic means (medians) are RM140,000 (RM85,000), for debt (DEBT), with a maximum of RM3.897 million, and 13 (12) years for firm age (AGE), with a maximum of 48 years.

Table 6.1
Descriptive Statistic

	Mean	Median	Minimum	Maximum	Standard Deviation
<i>Panel A: Director Remuneration</i>					
DIRREM (million)	2.120	1.385	0.045	70.347	4.059
EXECREM (million)	1.855	1.135	0.000	69.621	3.971
EXECFEES (million)	0.091	0.024	0.000	2.130	0.213
EXECSAL (million)	1.359	0.897	0.000	68.851	3.373
EXECBON (million)	0.219	0.000	0.000	32.111	1.170
EXECBEN (million)	0.184	0.039	0.000	38.165	1.072
NEDREM (million)	0.265	0.160	0.000	5.035	0.381
NEDFEES (million)	0.185	0.134	0.000	2.074	0.196
NEDSAL (million)	0.051	0.000	0.000	3.588	0.211
NEDBON (million)	0.011	0.000	0.000	1.466	0.078
NEDBEN (million)	0.017	0.000	0.000	3.423	0.114
<i>Panel B: Remuneration Committee</i>					
RC_FM	0.390	0.000	0.000	3.000	0.538
RC_NFM	2.850	3.000	0.000	8.000	0.813
REMCOM	3.230	3.000	2.000	8.000	0.674
<i>Panel C: Family Firm</i>					
FAM_MEM	1.450	0.000	0.000	6.000	1.703
DIR_SHARES	6.787	0.000	0.000	66.400	13.402
INDIR_SHARES	14.445	0.000	0.000	84.250	20.864
<i>Panel D: Institutional ownership</i>					
INST_INVESTOR (percentage)	11.178	5.637	0.000	81.416	14.405
MSWG (percentage)	4.466	0.000	0.000	60.832	8.674
EPF (percentage)	1.450	0.000	0.000	57.931	4.836
PNB (percentage)	1.543	0.000	0.000	49.529	4.792
LTAT (percentage)	0.414	0.000	0.000	33.333	2.474
LTH (percentage)	1.053	0.000	0.000	50.000	4.093
PERKESO (percentage)	0.003	0.000	0.000	1.721	0.076
<i>Panel E: Performance</i>					
ROA	0.030	0.037	-1.139	1.426	0.122
ROE	0.044	0.061	-4.085	3.004	0.305
<i>Panel F: Control Variables</i>					
SIZE (million)	19.542	19.417	11.755	24.496	1.317
DEBT (million)	0.140	0.085	0.000	3.897	0.203
AGE (years)	13.83	12.000	1.000	48.000	10.824

Notes: EXECREM is executive director remuneration and NEDREM is non-executive director remuneration respectively. DIRREM is the total director remuneration respectively. EXECFEES, EXECSAL, EXECBON AND EXECBEN are executive director fees and allowances, salary, bonus and benefit of kin. NEDFES, NEDSAL, NEDBON AND NEDBEN are non-executive director fees and allowances, salary, bonus and benefit of kind respectively. RC_FM and RC_NFM are remuneration committee for family members and non-family members, respectively. REMCOM is a size of remuneration committee. FAM_FIRM is a dummy with 1= family firm and 0= non family firm. FAM_MEM is family member as in board of director. DIR_SHARES and INDIR_SHARES are shareholding in family firm. INST_INVESTOR is percentage shareholdings by top 5 institutional investor. EPF, PNB, LTAT, LTH and PERKESO are denote *Employees Provident Fund*, *Permodalan Nasional Berhad*, *Lembaga Tabung Angkatan Tentera*, *Lembaga Tabung haji and Pertubuhan Keselamatan Social*, respectively. MSWG is Minority Shareholders Watchdog group. ROA is the net income divided by total assets. ROE is the net income divided by total equity. DEBT is the long term debt over total assets. SIZE is logarithm of total assets and AGE is number of year since IPO.

6.3 Univariate Analyses

Table 6.2 presents both the Pearson and Spearman correlations for the test variables. We first note that the various measures of remuneration are correlated with each other. Our study suggests that they are robust increasing our confidence in the way our sample firms remuneration is being calibrated. Since DIRREM is the most broad-based measure of remuneration, this study focuses on this measure in this chapter.

The three measures of remuneration (DIRREM, EXECREM and NEDREM) are all positive and significantly correlated to ROA and ROE. Table 6.2 presents the Pearson correlations for the test variables. Executive remuneration (EXECREM) and non-executive remuneration (NEDREM) are positively and significantly correlated with director remuneration (DIRREM) with significance levels at 0.01. ($r = 0.996$ and $r = 0.277$, respectively). Furthermore, ROA and ROE are both positively and significantly related to director remuneration ($r = 0.101$, $p = 0.01$; $r = 0.100$, $p < 0.01$). ROA and ROE are also positively and significantly correlated to executive remuneration ($r = 0.095$, $p = 0.05$; $r = 0.095$, $p < 0.01$).

Spearman correlations shows that executive remuneration and non-executive remuneration are positively and significantly correlated with director remuneration ($\rho = 0.970$, $p < 0.01$ and $\rho = 0.461$, $p < 0.01$). Furthermore, ROA and ROE are positively and significantly related to director remuneration ($\rho = 0.308$, $p < 0.01$; $\rho = 0.321$, $p < 0.01$). Furthermore, ROA and ROE are positively and significantly

correlated to executive remuneration ($\rho = 0.284, p < 0.01$; $\rho = 0.296, p < 0.01$). These positive correlations provide some preliminary support for the hypothesis that better remuneration is associated with better performance (Bushman & Smith 2001; Leone *et al.* 2006). This is consistent with this study's Hypothesis 1.

The results show that institutional investor (INST_INVESTOR) and MSWG are positively correlated to Return on Assets (ROA) and Return on Equity (ROE). The correlation measures are statistically significant. Pearson correlations shows that ROA and ROE are positively and significantly correlated to institutional investors ($r = 0.098, p < 0.01$; $r = 0.077, p < 0.01$). Similarly, ROA and ROE are positive and significantly correlated to MSWG ($r = 0.105, p < 0.01$; $r = 0.084, p < 0.01$). Furthermore, Spearman correlations shows that ROA and ROE are positively and significantly related to institutional investors ($\rho = 0.111, p < 0.01$ and $\rho = 0.127, p < 0.01$). Similar results for ROA and ROE show that they are positively and significantly related to MSWG ($\rho = 0.187, p = 0.01$; $\rho = 0.203, p < 0.01$). These positive correlations provide support for the prediction that it is these institutional owners who are most effective in improving firm performance (Shleifer & Vishny 1997).

This study also notes that the positive correlation between three measures of family ownership (FAM_MEM, FAM_FIRM and INDIR_SHARES) and performance is significant only for ROA. Pearson correlations show that family members (FAM_MEM), family firm (FAM_FIRM), and indirect shareholding

(INDIR_SHARES) have a positive and significant correlation with ROA ($r = 0.071$, $p < 0.05$; $r = 0.084$, $p < 0.01$, $r = 0.062$, $p < 0.05$). In addition, Spearman correlations show that Family members and indirect shareholding by family members have positive and significant correlations with ROA ($\rho = 0.069$, $p < 0.01$; $\rho = 0.081$, $p < 0.01$). These positive correlations provide support for the prediction that it is these family owners who are most effective in improving firm performance (Anderson & Reeb 2003; Martinez *et al.* 2007).

Furthermore, the negative correlations of four measures of family ownership (FAM_MEM, FAM_FIRM, DIR_SHARES and INDIR_SHARES) with remuneration are significant only for non executive (NEDREM). Pearson correlation shows that family member (FAM_MEM), family firm (FAM_FIRM), direct shareholding (DIR_SHARES) and indirect shareholding (INDIR_SHARES) are negatively and significantly related to non-executive remuneration ($r = -0.063$, $p < 0.05$; $r = -0.103$, $p < 0.01$; $r = -0.108$, $p < 0.01$; $r = -0.061$, $p < 0.05$). Furthermore, Spearman correlation shows that FAM_MEM, FAM_FIRM, DIR_SHARES and INDIR_SHARES are negatively and significantly related to non-executive remuneration ($\rho = -0.159$, $p < 0.01$; $\rho = -0.192$, $p < 0.01$; $\rho = -0.177$, $p < 0.01$; $\rho = -0.139$, $p < 0.01$). This negative correlation for non-executive remuneration provides some preliminary evidence for the hypotheses that higher family ownership has lower expropriation via excessive remuneration (Anderson *et al.* 2003; Anderson & Reeb 2004)

This study notes that the positive correlation between remuneration committee (REMCOM) and remuneration is significant only for size of remuneration committee. This positive correlation provides some preliminary support for the hypothesis that better remuneration committees are most effective monitors for improving remuneration (Cadbury 1992; Greenbury 1995). Furthermore, remuneration measures (e.g. DIRREM, EXECREM and NEDREM) are significantly positively correlated with firm size (SIZE) and debt (DEBT), consistent with previous findings that size is positively related to remuneration (Kim & Gu 2005) and lower remuneration is associated with higher debt (Cheung *et al.* 2005).

Table 6.3 exhibits results from the univariate analysis for the test variables relating to family firms (FAM_FIRM) and non-family firms (NONFAM_FIRM). Remuneration varies according to family or non-family ownership with family firms recording higher director remuneration (DIRREM) (RM2.206 million vs RM2.042 million). This result provides initial support for the hypothesis that family firm executives have higher remuneration which tends to expropriation. Executive fees (EXECFEES) and bonuses (EXECBON) are significantly higher for family firms. Haid and Yurtoglu (2006) report that the family firms pay higher for their directors than non family firms. However, non-executive fees (NEDREM) are significantly improved with non-family firm recording higher non executive remuneration. This result provides some preliminary support for the hypothesis that higher EXECREM in family firm but lower NEDREM provides for expropriation.

Panel B of Table 6.3 reports that family member on remuneration committees (RC_FM) is significantly higher in family firms than in non family firms. This provides support for the prediction that family member in remuneration committee (RC_FM) influences remuneration setting. Panel C of Table 6.3 exhibits results from the univariate analysis on institutional investor variables. Institutional investor (INST_INVESTOR) is significantly higher for non-family firms (NONFAM_FIRM) (RM46.211 million vs RM30.033 million). The results provide initial support for effective monitoring of non family firms by institutional investor to secure their investment. However, family firm mitigates effective monitoring by institutional investor through higher shareholding. Results show that INST_INVESTOR holding is significantly lower in family firms. Employees' Provident Fund (EPF) indicates higher investments in non-family firms (RM1.542 million) than their counterparts (RM1.351 million). Furthermore, a relationship between size of firm and family firm is significant at $p < 0.05$. The results also indicate that debt is higher (RM156,000) in non-family firms than in family firms (RM122,000) but effects of age of incorporation are non-significant.

Table 6.2 Correlation Matrix

Pearson (in shaded area) and Spearman Rank correlations are reported in the table. : EXECREM is executive director remuneration and NEDREM is non-executive director remuneration respectively. DIRREM is the total director remuneration respectively. RC_FM and RC_NFM is remuneration committee for family members and non family members, respectively. REMCOM is a size of remuneration committee. FAM_FIRM is a dummy with 1= family firm and 0= non family firm . FAM_MEM is family member as in board of director. DIR_SHARES and INDIR_SHARES are direct shareholding and indirect shareholding in family firm. INST_INVESTOR is the percentage shareholdings by top five (5) institutional investors. MSWG is Minority Shareholder Watchdog group. ROA is the net income divided by total assets. ROE is the net income divided by total equity. DEBT is the long term debt over total assets. SIZE is logarithm of total assets and AGE is number of year since IPO. IND "1" is for the consumer products sector; trading/service sector; construction; plantations/mining; and "0" if others. * and ** denote significance at the 5% and 1% level respectively.

	DIRREM	EXECREM	NEDREM	FAM_MEM	FAM_FIRMS	DIR_SHARES	INDIR_SHARES	RC_FM	RC_NFM	REMCOM
DIRREM	1.000	.970**	.461**	.202**	.141**	.109**	.165**	.128**	.061*	.230**
EXECREM	.996**	1.000	.294**	.240**	.187**	.150**	.204**	.163**	.017	.206**
NEDREM	.277**	.187**	1.000	-.159**	-.192**	-.177**	-.139**	-.134**	.237**	.187**
FAM_MEM	.060*	.067**	-.063*	1.000	.938**	.835**	.830**	.754**	-.519**	.044
FAM_FIRMS	.020	.030	-.103**	.896**	1.000	.872**	.843**	.777**	-.549**	.022
DIR_SHARES	-.039	-.029	-.108**	.461**	.532**	1.000	.655**	.680**	-.483**	.010
INDIR_SHARES	.041	.047	-.061*	.719**	.727**	.140**	1.000	.687**	-.450**	.064**
RC_FM	.014	.021	-.066**	.717**	.747**	.366**	.581**	1.000	-.642**	.121**
RC_NFM	.043	.028	.167**	-.453**	-.488**	-.283**	-.348**	-.568**	1.000	.658**
REMCOM	.063*	.050*	.149**	.025	.007	-.049	.044	.113**	.754**	1.000
ROA	.101**	.095**	.089**	.071**	.062*	.015	.084**	.067**	.040	.102**
ROE	.100**	.095**	.076**	.022	.010	-.027	.050*	.012	.052*	.072**
INST_INVESTOR	.133**	.126**	.109**	-.051*	-.058*	-.028	-.068**	-.025	.046	.035
MSWG	.072**	.062*	.113**	.003	-.006	-.022	.002	-.003	.093**	.111**
SIZE	.357**	.334**	.315**	.003	-.033	-.124**	.054*	-.048	.102**	.085**
DEBT	.067**	.065**	.029	-.065**	-.084**	-.041	-.075**	-.053*	.039	.005
AGE	-.005	-.003	-.028	-.016	-.039	.054*	.005	-.030	.004	-.019
IND	-.008	.004	-.120**	.076**	.076**	.079**	.091**	.110**	-.151**	-.095**

Table 6.2 (Continued)

	ROA	ROE	INST_INVESTOR	MSWG	SIZE	DEBT	AGE	IND
DIRREM	.308**	.321**	.139**	.248**	.455**	.087**	.010	-.018
EXECREM	.284**	.296**	.112**	.206**	.373**	.071**	.011	.000
NEDREM	.231**	.245**	.196**	.311**	.534**	.127**	.008	-.068**
FAM_MEM	.069**	.033	-.061*	-.010	-.023	-.065**	-.025	.075**
FAM_FIRMS	.046	.010	-.066**	-.034	-.054*	-.081**	-.036	.076**
DIR_SHARES	.029	.002	-.053*	-.043	-.121**	-.076**	.002	.087**
INDIR_SHARES	.081**	.037	-.069**	-.007	.011	-.085**	-.010	.095**
RC_FM	.078**	.043	-.028	-.011	-.058*	-.040	-.045	.111**
RC_NFM	.034	.055*	.043	.096**	.132**	.027	.018	-.142**
REMCOM	.122**	.115**	.037	.122**	.121**	.006	-.014	-.096**
ROA	1.000	.914**	.111**	.187**	.223**	-.078**	.005	.019
ROE	.640**	1.000	.127**	.203**	.277**	-.010	-.006	-.009
INST_INVESTOR	.098**	.077**	1.000	.650**	.222**	.073**	-.067**	-.022
MSWG	.105**	.084**	.635**	1.000	.300**	.063*	-.066**	-.066**
SIZE	.187**	.158**	.247**	.155**	1.000	.274**	.055*	-.082**
DEBT	-.037	-.034	.035	-.006	.108**	1.000	-.024	.052*
AGE	.014	-.002	-.081**	-.043	.038	-.026	1.000	-.005
IND	.021	-.005	-.016	-.037	-.069**	.015	-.010	1.000

Table 6.3
Univariate Analysis of Differences Variables between Family Firm and Non-Family Firm in Malaysia Public Listed

	(n=762) Family Firm = 1 Mean	(n=849) Non Family Firm = 0 Mean	<i>t</i> – Test <i>p</i> - Value	Mann Whitney <i>p</i> - Value
<i>Panel A: Remuneration</i>				
DIRREM (million)	2.206	2.042	0.421	0.000
EXECREM (million)	1.981	1.739	0.223	0.000
EXECFEES (million)	0.112	0.072	0.000	0.000
EXECSAL (million)	1.361	1.435	0.976	0.000
EXECBON (million)	0.301	0.144	0.010	0.000
EXECBEN (million)	0.205	0.166	0.469	0.329
NEDREM (million)	0.224	0.303	0.000	0.000
NEDFEES (million)	0.145	0.221	0.000	0.000
NEDSAL (million)	0.051	0.051	0.952	0.665
NEDBON (million)	0.008	0.013	0.219	0.074
NEDBEN (million)	0.018	0.016	0.780	0.133
<i>Panel B: Remuneration Committee</i>				
RC_FM	0.81	0.00	0.000	0.000
RC_NFM	2.43	3.22	0.000	0.000
REMCOM	3.24	3.23	0.782	0.378
<i>Panel C: Institutional ownership</i>				
INST_INVESTOR (percentage)	10.294	11.980	0.019	0.009
MSWG (percentage)	4.416	4.512	0.824	0.169
EPF (percentage)	1.351	1.542	0.428	0.001
PNB (percentage)	1.541	1.544	0.990	0.468
LTAT (percentage)	0.419	0.410	0.942	0.990
LTH (percentage)	1.102	1.008	0.647	0.986
PERKESO (percentage)	0.001	0.006	0.221	0.908
<i>Panel D: Performance</i>				
ROA	0.038	0.023	0.011	0.064
ROE	0.047	0.041	0.695	0.684
<i>Panel E: Control Variables</i>				
SIZE (million)	19.496	19.583	0.186	0.030
DEBT (million)	0.122	0.156	0.001	0.001
AGE (years)	13.39	14.23	0.122	0.149
IND	0.95	0.91	0.002	0.002

Notes: FAM_FIRM is a dummy with 1=Family Firm and 0 = Non-Family Firm. EXECREM is executive director remuneration and NEDREM is non-executive director remuneration respectively. DIRREM is the total director remuneration respectively. EXECFEES, EXECSAL, EXECBON and EXECBEN are executive director fees, salary, bonus and benefit of kind. NEDFEES, NEDSAL, NEDBON and NEDBEN are non-executive director fees, salary, bonus and benefit of kind. RC_FM and RC_NFM is remuneration committee for family members and non family members, respectively. REMCOM is a size of remuneration committee. INST_INVESTOR is the percentage shareholdings by top five (5) institutional investors. MSWG is Minority Shareholder Watchdog group. EPF, PNB, LTAT, LTH and PERKESO denote *Employees Provident Fund, Permodalan Nasional Berhad, Lembaga Tabung Angkatan Tentera, Lembaga Tabung Haji and Pertubuhan Keselamatan Social*, respectively. ROA is the net income divided by total assets. ROE is the net income divided by total equity. IND "1" is for the consumer products sector; trading/service sector; construction; plantations/mining; and "0" if others. DEBT is the long term debt over total assets. SIZE is logarithm of total assets and AGE is number of year since IPO and IND "1" is for the consumer products sector; trading/service sector; construction; plantations/mining; and "0" if others. Significant *p*-values are bold (significant at the 5% level based on a one-tailed/two-tailed test).

Table 6.4 exhibits results from the univariate analysis for the test variables between remuneration committee consisting of family members and non-family members. Panel A of Table 6.4 reports that director remuneration is higher (RM2.244 million) with presence of family members on remuneration committees compared with presence of non-family members (RM2.050 million). The result provides initial support for a positive relationship between director remuneration and family members sitting on remuneration committees. Remuneration is significantly higher with family members on remuneration committee (RM2.016 million vs RM 1.762 million). Furthermore, the presence of family members leads to significantly higher executive fees and bonuses (RM 115,000 and RM348,000, respectively) compared with the presence of non-family members (RM78,000 and RM145,000, respectively). However, non executive fees are significantly lower with the presence of family members on remuneration committees.

Panel B of Table 6.4 reports that shareholding and amount of investment by institutional investors are higher with presence of non-family members (RM40.533 million) compared with family members (RM34.978 million). The result also indicates that shareholding by Pertubuhan Keselamatan Sosial (PERKESO) is higher with the presence of non-family members than family members. In addition, results show that the presence of non-family members is associated with lower ROA (0.024) compared with their counterparts (0.040). Other variables such as size of firm and debt are not significantly related to remuneration committee.

Table 6.4
Univariate Analysis of Differences Variables between Family Member
and Non Family Member Who Is Remuneration Committee

	(n=514) RC Family members = 1 Mean	(n=1091) RC Non Family members = 0 Mean	<i>t</i> – Test <i>p</i> - Value	Mann Whitney <i>p</i> - Value
<i>Panel A: Director Remuneration</i>				
DIRREM (million)	2.244	2.050	0.358	0.000
EXECREM (million)	2.016	1.762	0.218	0.000
EXECFEES (million)	0.115	0.078	0.002	0.000
EXECSAL (million)	1.321	1.381	0.732	0.000
EXECBON (million)	0.348	0.145	0.009	0.000
EXECBEN (million)	0.231	0.157	0.183	0.291
NEDREM (million)	0.227	0.287	0.003	0.000
NEDFEES (million)	0.151	0.205	0.000	0.000
NEDSAL (million)	0.046	0.054	0.458	0.178
NEDBON (million)	0.008	0.012	0.318	0.206
NEDBEN (million)	0.021	0.015	0.309	0.046
<i>Panel B: Institutional ownership</i>				
INST_INVESTOR(percentage)	11.041	11.257	0.772	0.383
MSWG (percentage)	4.677	4.346	0.463	0.988
EPF (percentage)	1.254	1.563	0.218	0.023
PNB (percentage)	1.671	1.470	0.418	0.687
LTAT (percentage)	0.477	0.378	0.442	0.229
LTH (percentage)	1.273	0.928	0.103	0.584
PERKESO (percentage)	0.000	0.006	0.036	0.064
<i>Panel C: Performance</i>				
ROA	0.040	0.024	0.006	0.005
ROE	0.046	0.043	0.810	0.150
<i>Panel D: Control Variables</i>				
SIZE	19.485	19.574	0.195	0.039
DEBT	0.128	0.147	0.056	0.136
AGE	13.25	14.16	0.105	0.038
IND	0.96	0.92	0.012	0.000

Notes: RC_FM and RC_NFM is remuneration committee for family members and non family members, respectively. REMCOM is a size of remuneration committee. EXECREM is executive director remuneration and NEDREM is non-executive directors remuneration respectively. DIRREM is the total director remuneration respectively. EXECFEES, EXECSAL, EXECBON and EXECBEN are executive director fees, salary, bonus and benefit of kind. NEDFEES, NEDSAL, NEDBON and NEDBEN are non executive director fees, salary, bonus and benefit of kind. INST_INSVENTOR is the percentage shareholdings by top five (5) institutional investors. MSWG is Minority Shareholder Watchdog group. EPF, PNB, LTAT, LTH and PERKESO denote *Employees Provident Fund, Permodalan Nasional Berhad, Lembaga Tabung Angkatan Tentera, Lembaga Tabung Haji and Pertubuhan Keselamatan Sosial*, respectively. ROA is the net income divided by total assets. ROE is the net income divided by total equity. DEBT is the long term debt over total assets. SIZE is logarithm of total assets and AGE is number of year since IPO. IND "1" is for the consumer products sector; trading/service sector; construction; plantations/mining; and "0" if others. Significant *p*-values are bold (significant at the 5% level based on a one-tailed/two-tailed test)

6.4 Multivariate Analysis

The main drawback of univariate tests is that they investigate the effect of one explanatory variable of interest (family firm or remuneration committee), holding all others constant. To the extent that the independent variables do interact with each other in affecting the dependent variable, multivariate tests are more appropriate.¹⁹ There are the focuses of this section.

6.4.1 Remuneration and Performance

Table 6.5 provides regression results for the determinants of performance, measured by ROA and ROE. In Table 6.5, remuneration is measured by director remuneration (DIRREM), executive remuneration (EXECREM) and non-executive remuneration (NEDREM). Multivariate regression (1 to 3) suggests that ROA and ROE are positive and significantly related to DIRREM, EXECREM and NEDREM²⁰. The regression provides strong support for Hypothesis 1 that higher remuneration has a positive and significant impact on performance. These results suggest that the remuneration should be linked to board of director abilities (i.e., individual performance, skills, knowledge, and experience). This has been suggested by MCCG as being beneficial in improving firm performance. This finding is similar to previous studies (Cheng & Firth 2006; Jackson *et al.* 2008; Leone *et al.* 2006; Shaw & Zhang 2010). Furthermore, this finding supports Cheng and Firth's (2006)

¹⁹ Previous studies use multivariate regression (e.g., Brick *et al* 2006, Cheng and Firth 2006;Crocì *et al* 2010; Maury 2006, Abdul Wahab and Abdul Rahman 2009).

²⁰ The very significant constant term suggests correlated omitted variables

argument that remuneration should be linked to performance. Indeed, Chen *et al.* (2006) argue that one of the reasons for poor firm performance is lack of incentives for top managers.

Furthermore, boards of directors are responsible for continuing to improve firm performance, which can lead to higher remuneration. Thus, it is the responsibility of boards of director to translate every single reward into better profitability for the firm. Benefits from better profitability include increased shareholder wealth via better returns, increased firm potential and business prospects, and increased budgets to ensure the continuation of effective operations within the firm. This result suggests that this relationship is driven by motivation of boards of directors to enhance firm performance, which may be influenced by better remuneration that takes into account their abilities. This indicates that shareholders reward boards of directors for increased success through greater risk-taking, effort, and ability (Jensen & Murphy 2010).

Table 6.5
Determination of firm Performances by Remuneration Variables

	ROA			ROE		
	1	2	3	4	5	6
DIRREM	0.21 <i>5.719**</i>			0.043 <i>4.744**</i>		
EXECREM		0.015 <i>4.887**</i>			0.032 <i>4.279**</i>	
NEDREM			0.014 <i>3.958**</i>			0.022 <i>2.533**</i>
SIZE	0.012 <i>4.564**</i>	0.014 <i>5.582**</i>	0.013 <i>5.106**</i>	0.024 <i>3.808**</i>	0.028 <i>4.578**</i>	0.030 <i>4.617**</i>
DEBT	-0.032 <i>-2.184**</i>	-0.033 <i>-2.230**</i>	-0.035 <i>-2.362**</i>	-0.071 <i>-1.934**</i>	-0.073 <i>-1.967**</i>	-0.077 <i>-2.089**</i>
AGE	0.000 0.295	0.000 0.252	0.000 0.366	0.000 -0.335	0.000 -0.369	0.000 -0.298
IND	0.018 1.479	0.017 1.416	0.020 1.686	0.009 0.297	0.007 0.245	0.013 0.433
CONSTANT	-0.502 <i>-9.182**</i>	-0.455 <i>-8.672**</i>	-0.411 <i>-8.170**</i>	-1.035 <i>-7.538**</i>	-0.949 <i>-7.222**</i>	-0.810 <i>-6.418**</i>
Adjusted R^2	0.056	0.051	0.046	0.038	0.036	0.029
F-statistic	<i>20.045**</i>	<i>18.208**</i>	<i>16.497**</i>	<i>13.775**</i>	<i>12.911**</i>	<i>10.464**</i>
Cross-sections	537	537	537	537	537	537
Total observation	1611	1611	1611	1611	1611	1611

Notes: ROA is the net income divided by total assets. ROE is the net income divided by total equity. EXECREM is executive director remuneration and NEDREM is non-executive director remuneration respectively. DIRREM is the total director remuneration respectively. DEBT is the long term debt over total assets. SIZE is logarithm of total assets. AGE is number of year since IPO and IND "1" is for the consumer products sector; trading/service sector; construction; plantations/mining; and "0" if others. t – Statistics are italicised (significant at the 5% level based on a one-tailed/two-tailed test).

Table 6.6 exhibits results of regression analysis of family firm influence on the relationship between director remuneration and performance. This study finds evidence that family firm influence firm performance. However, this study does not find significant evidence for interaction effects of DIRREM*FAM_FIRM on firm performance. Regression 1 shows that the interaction between DIRREM*FAM_FIRM is positive but not significantly related to ROA. Furthermore, regression 2 shows that the interaction between

DIRREM*FAM_FIRM is positive though not significantly associated with ROE. The regression does not provide support for Hypothesis 2 that family firm ownership is a moderating factor on the relationship between director remuneration and performance. Our result suggests that family firms do not manipulate power and control to expropriate via remuneration.

There have been mixed results in prior studies. For example, Croci *et al.* (2010) find that family CEO compensation was negatively related to performance in a study of Continental European firms from 2001 to 2008. Another study by Craighead *et al.* (2004) focused on Canadian publicly listed companies and found evidence that CEO remuneration was more sensitive to firm performance in closely held firms compared to widely held firms. Both of these studies were conducted in developed countries where the corporate governance is established rather than developing countries especially Malaysia where Malaysia Code of Corporate Governance was implemented only in 2000.

Table 6.6
Regression Results of Performance by Interaction Between
Director Remuneration and Family Firm

	ROA (1)	ROE (2)
DIRREM	0.018 3.959**	0.035 3.143**
FAM_FIRM	0.012 2.574**	0.017 2.450**
DIRREM*FAM_FIRM	0.005 <i>0.748</i>	0.021 <i>1.278</i>
SIZE	0.012 4.688**	0.024 3.712**
DEBT	-0.031 -2.082**	-0.075 -2.012**
AGE	0.000 <i>0.323</i>	0.000 <i>-0.407</i>
IND	0.016 <i>1.331</i>	0.009 <i>0.293</i>
CONSTANT	-0.471 -7.048**	-0.914 -5.449**
Adjusted R^2	0.057	0.038
F-statistic	14.777**	10.093**
Cross-sections	537	537
Total observation	1611	1611

Notes: ROA is the net income divided by total assets. ROE is the net income divided by total equity. DIRREM is the total director remuneration respectively. FAM_FIRM is a dummy with 1= family firm and 0= non-family firm. DEBT is the long term debt over total assets. SIZE is logarithm of total assets. AGE is number of year since IPO and IND "1" is for the consumer products sector; trading/service sector; construction; plantations/mining; and "0" if others. *t* – Statistics are italicised. ** denote 5 percent significant levels respectively.

Table 6.7 exhibits results of regression analysis of institutional investor influence on the relationship between director remuneration and performance in family firms. Regression (1 to 2) suggests that INST_INVESTOR is positive and significantly related to ROA. This finding is similar to previous studies which indicate that institutional investors significantly and positively relate to performance (Cornet et al. 2007, Croci et al. 2010; Dong & Ozkan 2008). Furthermore, this finding

supports Ryan and Schneider`s (2003) argument that institutional investors increase their power via shareholding. The INST_INVESTOR is representative of self-interested minority shareholders and many perceive that the INST_INVESTOR has the responsibility of protecting shareholders` interests. The action taken by institutional investors to protect its investment by increasing shareholding our study suggests pressures firms to fulfill firm objectives in the best interests of the minority shareholders.

This study does not find significant evidence of an interaction effect of DIRREM*INST_INVESTOR on ROA and ROE as shown in regression 1 and 3. Furthermore, results of regression analyses in Table 6.7 indicate no significant evidence for an interaction effect of INST_INVESTOR*FAM_FIRM on ROA and ROE on ROA and ROE in regression 2 and 4. The regression does not provide support for Hypothesis 3 that INST_INVESTOR effectively monitor director remuneration in order to enhance performance in family firms. But it is significant by itself only interaction with family firm not significant. This indicates family firm does not change the relationship between INST_INVESTOR and ROA.

Table 6.7
Regression Results of Performance by Interaction of Director Remuneration
and Institutional Investor with Family Firm

	ROA		ROE	
	1	2	3	4
DIRREM	0.020 <i>5.615**</i>		0.042 <i>4.671**</i>	
FAM_FIRM		0.016 <i>2.649**</i>		0.017 <i>2.486**</i>
INST_INVESTOR	0.000 <i>2.019**</i>	0.001 <i>2.455**</i>	<i>0.001</i> <i>1.439</i>	0.001 1.808
DIRREM*INST_INVESTOR	0.000 -0.477		<i>0.000</i> -0.565	
INST_INVESTOR*FAM_FIRM		0.000 -0.987		-0.001 -0.895
SIZE	0.011 <i>4.095**</i>	0.017 <i>7.148**</i>	0.023 <i>3.618**</i>	0.036 <i>6.017**</i>
DEBT	-0.032 <i>-2.185**</i>	-0.032 <i>-2.139**</i>	-0.072 <i>-1.945**</i>	-0.076 <i>-2.034**</i>
AGE	0.000 <i>0.470</i>	0.000 <i>0.528</i>	0.000 <i>-0.237</i>	0.000 <i>-0.239</i>
IND	0.018 <i>1.503</i>	0.016 <i>1.290</i>	0.011 <i>0.367</i>	0.009 <i>0.283</i>
CONSTANT	-0.192 <i>-3.649**</i>	-0.320 <i>-6.636**</i>	-0.397 <i>-3.003**</i>	-0.653 <i>-5.391**</i>
Adjusted R^2	0.057	0.043	0.071	0.026
F-statistic	<i>14.920**</i>	<i>11.386**</i>	<i>10.148**</i>	<i>7.049**</i>
Cross-sections	537	537	537	537
Total observation	1611	1611	1611	1611

Notes: ROA is the net income divided by total assets. ROE is the net income divided by total equity. FAM_FIRM is a dummy with 1= family firm and 0= non-family firm. DIRREM is the total director remuneration respectively. INST_INVESTOR is percentage shareholdings by top five (5) institutional investors. DEBT is the long term debt over total assets. SIZE is logarithm of total assets. AGE is number of year since IPO and IND "1" is for the consumer products sector; trading/service sector; construction; plantations/mining; and "0" if others. *t* – Statistics are italicised. ** denote 5 percent significant levels respectively.

6.4.2 Remuneration

Table 6.8 provides results for the determinants of remuneration, measured by DIRREM, EXECREM and NEDREM. In Table 6.8, regressions 1 to 12 suggest that FAM_FIRM, REMCOM and INST_INVESTOR are positive and significantly related to DIRREM, and EXECREM. The regressions 1 and 4 provide evidence that family ownership has a positive and significant impact on remuneration. Further analysis indicates that the relationship between FAM_FIRM and NEDREM in regression 7 is negative and significant. This finding supports Basu *et al`s.* (2007) argument that the family appointed top executive tends to increase incentives for themselves. Furthermore, this finding does not support to Gomez-Mejia *et al`s.* (2003) argument that family executive should be willing to accept lower remuneration in return for their services. Since family members sit in top positions, our results suggest that family firms manipulate power and control to increase remuneration for personal benefit.

The coefficient on REMCOM is positive and significant in Regressions 2, 5 and 8 in Table 6.8, implying that the size of remuneration committees has impact on remuneration. This finding supports Anderson & Bizjak`s (2003) argument that the independent remuneration committee has great effect on remuneration. Since MCCG recommended that the remuneration committee should consist of mainly or wholly non executive directors, our results suggest that committee members can perform effective monitoring which is beneficial in the remuneration setting. They tend to link the remuneration with board of director skills, knowledge, expertise and

experience. As a result, remuneration drives motivation of boards of directors to remain at the firm and strive to achieve firm objectives.

The coefficient on INST_INVESTOR is positive and significant in Regressions 3, 6 and 9. This indicates that INST_INVESTOR play effective monitoring and this is beneficial for remuneration. Since INST_INVESTOR keep monitoring on remuneration, our result suggests that director remuneration becomes more effective, which capitalizes on the qualities of directors and may increase shareholder wealth. According to Jensen and Murphy (2010), increases in remuneration possibly enhance business performance and do not necessarily represent a transfer of wealth. However, this conclusion contrasts with other researchers who find a negative relationship between institutional investors and director remuneration, consistent with the idea of effective monitoring producing lower remuneration (e.g. Croci *et al.* (Abdul Wahab & Abdul Rahman 2009; 2010; Hartzell & Starks 2003; Khan *et al.* 2005; Ozkan 2007).

Table 6.8
Explanatory Variables on Director Remuneration

	LN(DIRREM)			LN(EXECREM)			LN(NEDREM)		
	1	2	3	4	5	6	7	8	9
FAM_FIRM	0.279 <i>6.843**</i>			0.399 <i>8.189**</i>			-0.319 <i>-7.542**</i>		
REMCOM		0.242 <i>8.056**</i>			0.252 <i>6.940**</i>			0.222 <i>7.041**</i>	
INST_			0.003			0.003			0.005
INVESTOR			<i>2.093**</i>			<i>2.565**</i>			<i>3.501**</i>
SIZE	0.319 <i>20.634**</i>	0.308 <i>19.923**</i>	0.309 <i>19.097**</i>	0.307 <i>16.565**</i>	0.294 <i>15.729**</i>	0.296 <i>15.211**</i>	0.354 <i>21.995**</i>	0.347 <i>21.447**</i>	0.341 <i>20.272**</i>
DEBT	-0.101 -1.009	-0.156 -1.575	-0.160 -1.580	-0.088 -0.738	-0.168 -1.402	-0.172 -1.410	-0.102 -0.977	-0.034 -0.329	-0.038 -0.365
AGE	0.000 0.875	0.000 -0.243	0.000 -0.225	0.000 0.177	0.000 0.015	0.000 0.003	-0.003 -1.662	-0.002 -1.197	-0.002 -1.012
IND	-0.045 -0.550	0.056 0.693	-0.002 -0.028	-0.016 -0.165	0.105 1.077	0.045 0.451	-0.143 -1.699	-0.138 -1.635	-0.192 -2.249
CONSTANT	7.789 <i>24.568**</i>	7.284 <i>22.427**</i>	8.058 <i>24.716**</i>	7.717 <i>20.347**</i>	7.246 <i>18.445**</i>	8.035 <i>20.466**</i>	5.430 <i>16.480**</i>	4.672 <i>13.734**</i>	5.483 <i>16.173**</i>
Adjusted R ²	0.224	0.233	0.204	0.171	0.162	0.138	0.258	0.255	0.238
F-statistic	<i>94.133**</i>	<i>98.673**</i>	<i>83.464**</i>	<i>67.563**</i>	<i>63.171**</i>	<i>52.548**</i>	<i>113.145**</i>	<i>111.237**</i>	<i>101.487**</i>
Cross- sections	537	537	537	537	537	537	537	537	537
Total observation	1611	1611	1611	1611	1611	1611	1611	1611	1611

Notes: EXECREM is executive director remuneration and NEDREM is non-executive director remuneration respectively. DIRREM is the total director remuneration respectively. FAM_FIRM is a dummy with 1= family firm and 0= non-family firm. REMCOM is a size of remuneration committee. INST_INVESTOR is percentage shareholdings by top five (5) institutional investor. DEBT is the long term debt over total assets. SIZE is logarithm of total assets. AGE is number of year since IPO and IND "1" is for the consumer products sector; trading/service sector; construction; plantations/mining; and "0" if others. *t* – Statistics are italicised. ** denote 5 percent significant levels respectively.

The coefficient on the interaction variable REMCOM*FAM_FIRM is negative and statistically significant, suggesting that the positive relationship between REMCOM and DIRREM, EXECREM and NEDREM is less positive for family firm, as shown in Table 6.9. The regression provides strong support for Hypothesis 4 that higher family ownership mitigates effective effort by remuneration committee on DIRREM and EXECREM. This finding support Moores and Craig (2008) and Bartholomeusz and Tanewski (2006) argument that power and control in the hands of family members can lead them to act according to their own personal interests, which can be at the expense of minority shareholders. Our result suggests that family ownership reduced monitoring effects of remuneration committees and enabled manipulation of power and control for expropriation via remuneration. Regarding of this, the monitoring by remuneration committee in family firms was less effectively implemented than as recommended by the MCCG.

In addition, remuneration-setting is under the control of boards of directors and majority shareholders because it is necessary to obtain approval for remuneration proposals. This creates a situation in which they will tend to approve proposals only when they personally benefit and can increase their personal wealth. According to Moores and Craig (2008), family firms are less interested in hiring outsiders, even when they are more qualified or competent, because they want to maintain top management positions for family members. The presence of family members on remuneration committees puts pressure on non-family members to conform to their personal goals. Our study suggest that the non-family members are less independent

and lack power to challenge decision making by the boards of directors and majority shareholders.

Table 6.9
Regression Results of Director Remuneration by Interaction Between
Remuneration Committee and Family Firm

	LN(DIRREM) 1	LN(EXECREM) 2	LN(NEDREM) 3
FAM_FIRM	0.272 6.854**	0.392 8.205**	-0.325 -7.795**
REMCOM	0.354 9.118**	0.374 8.013**	0.270 6.636**
REMCOM* FAM_FIRM	-0.271 -4.543**	-0.298 -4.157**	-0.105 1.681
SIZE	0.308 20.311**	0.294 16.151**	0.344 21.648**
DEBT	-0.123 <i>-1.255</i>	-0.122 <i>-1.954</i>	-0.110 <i>-1.069</i>
AGE	0.000 <i>0.129</i>	0.001 <i>0.437</i>	-0.003 <i>-1.484</i>
IND	0.042 <i>0.526</i>	0.076 <i>0.788</i>	-0.077 <i>-0.926</i>
CONSTANT	7.939 25.653**	7.873 21.138**	5.563 17.140**
Adjusted R ²	0.263	0.203	0.282
F-statistic	83.125**	59.634**	91.544**
Cross-sections	537	537	537
Total observation	1611	1611	1611

Notes: EXECREM is executive director remuneration and NEDREM is non-executive director remuneration respectively. DIRREM is the total director remuneration respectively. FAM_FIRM is a dummy with 1= family firm and 0= non-family firm. REMCOM is a size of remuneration committee. DEBT is the long term debt over total assets. SIZE is logarithm of total assets. AGE is number of year since IPO and IND "1" is for the consumer products sector; trading/service sector; construction; plantations/mining; and "0" if others. *t* – Statistics are italicised. ** denote 5 percent significant levels respectively.

Table 6.10 presents results of the regression on the relationship between remuneration committee and remuneration influenced by institutional investors in family firm. Regression 1 shows that the interaction between

REMCOM*INST_INVESTOR is positively and non-significantly related to DIRREM. Furthermore, the interaction between REMCOM*INST_INVESTOR was negatively but not significantly related to EXECREM. Regression 5 provided evidence for an interaction effect of REMCOM*INST_INVESTOR on NEDREM which is positive and significant.

The regression 5 provides strong support for Hypothesis 5 that higher shareholding by institutional investor has positive and significant influence on remuneration committee and impact on non-executive remuneration. This indicates that institutional investors' reduced effectiveness in monitoring of remuneration is related to presence of non-executive directors. Although it is the task of non-executive to monitor executive activities, including remuneration-setting, our study suggest that non-executives may also be motivated by their own personal goals for higher remuneration. Thus, institutional investors are responsible for monitoring non-executives on remuneration committees in addition to executive directors to ensure that neither group is expropriating wealth.

Regression 2 and 4 in Table 6.10 show that for an interaction effect of INST_INVESTOR*FAM_FIRM on DIRREM and EXECREM is positive and non-significant. Regression 6 shows that the interaction is negative and not significant related to NEDREM. The regression does not provide evidence that FAM_FIRM significantly influences INST_INVESTOR and impacts on remuneration. Since the institutional investor tends to increase shareholding to protect their investment

through monitoring to avoid expropriation by family member, our result provides that no evidence that institutional investors monitor remuneration committees more or more less strictly during remuneration-setting in family firms.

Table 6.10
Relationship between Remuneration Committee and Director
Remuneration by Presence Institutional Investor in Family Firm

	LN(DIRREM)		LN(EXECREM)		LN(NEDREM)	
	1	2	3	4	5	6
REMCOM	0.241 8.033**		0.251 6.913**		0.222 7.068**	
FAM_FIRM		0.285 6.994**		0.405 8.309**		-0.312 -7.382**
INST_INVESTOR	0.003 2.027**	0.002 2.234**	0.003 1.509	0.002 0.913	0.005 3.389**	0.006 2.829**
REMCOM*	0.000		-0.001		0.005	
INST_INVESTOR	0.029		-0.329		2.133**	
INST_INVESTOR*		0.003		0.003		-0.002
FAM_FIRM		1.027		0.994		-0.682
SIZE	0.300 18.777**	0.309 19.398**	0.287 14.860**	0.297 15.552**	0.330 19.827**	0.341 20.583**
DEBT	-0.158 -1.588	-0.105 -1.052	-0.171 -1.421	-0.093 -0.778	-0.030 -0.290	-0.100 -0.960
AGE	0.000 -0.054	0.000 0.116	0.000 0.170	0.001 0.405	-0.002 -0.967	-0.003 -1.378
IND	0.056 0.691	-0.048 -0.595	0.105 1.074	-0.020 -0.206	-0.138 -1.636	-0.143 -1.693
CONSTANT	8.219 25.347**	7.979 24.542**	8.190 20.867**	7.904 20.310**	5.705 16.864**	5.670 16.796**
Adjusted R ²	0.234	0.227	0.162	0.177	0.262	0.262
F-statistic	71.162**	68.512**	45.468**	49.102**	82.543**	82.716**
Cross-sections	537	537	537	537	537	537
Total observation	1611	1611	1611	1611	1611	1611

Notes: EXECREM is executive director remuneration and NEDREM is non-executive director remuneration respectively. DIRREM is the total director remuneration respectively. REMCOM is a size of remuneration committee. FAM_FIRM is a dummy with 1= family firm and 0= non-family firm. INST_INVESTOR is percentage shareholdings by top five (5) institutional investor. DEBT is the long term debt over total assets. SIZE is logarithm of total assets. AGE is number of year since IPO and IND "1" is for the consumer products sector; trading/service sector; construction; plantations/mining; and "0" if others. *t* – Statistics are italicised. ** denote 5 percent significant levels respectively.

6.5 Robustness Checks

Robustness tests are very important to ensure the reliability of the results and to provide extra support for previous findings. Conducting robustness checks is in line with past studies (Abdul Wahab & Abdul Rahman 2009; Croci *et al.* 2010; Dong & Ozkan 2008; Maury 2006; Miller *et al.* 2007). For example, Chen and Nowland (2010) ran robustness checks to ensure the reliability of their results. Similarly, Maury (2006), Miller *et al.* (2007), and Dong and Ozkan (2008) all conducted robustness checks to provide further support for earlier findings.

A number of robustness checks were undertaken to ensure the reliability of the results. Firstly, Hypothesis 2 predicts that there is a weaker relationship between director remuneration and performance in family-owned companies. This study examines family ownership influences on director remuneration. Family ownership is highly correlated with direct and indirect shareholding by family members (correlation coefficients 0.872 and 0.843, respectively; see Table 6.2). In this section, we re-estimate the regression by replacing ownership with direct and indirect shareholding by family member (see Tables 6.11 and 6.12). The results are qualitatively similar in Table 6.11 but different in Table 6.12. An alternative approach is to examine whether family ownership changes the sensitivity of director remuneration by including the interaction term for family ownership and director remuneration. This alternative is very important because either direct or indirect shareholding by family member has an influence on remuneration.

Table 6.11 presents supplementary results to support the results in Table 6.7. There is no evidence as documented in Table 6.7 related to the interaction for $\text{DIRREM}*\text{FAM_FIRM}$. Table 6.11 presents the results of a panel regression model relating to the interaction between $\text{DIRREM}*\text{INDIR_SHARES}$. This variable is an alternative proxy for family firm and the results presented in Table 6.11 are supplementary results to support the results in Table 6.7. This study does not find evidence for an interaction of $\text{DIRREM}*\text{INDIR_SHARES}$ on ROA and ROE. The results of the current analyses are supported by robustness testing, which exhibited similar results when family firm was replaced by indirect shareholding as a proxy for family ownership. Our result suggests that indirect shareholding does not significantly change the relationship between director remuneration and performance.

Table 6.11
Regression Results of Performance by Interaction between
Director Remuneration and Indirect Shareholding in Family Firm

	ROA (1)	ROE (2)
DIRREM	0.019 <i>5.217**</i>	0.042 <i>4.485**</i>
INDIR_SHARES	0.000 <i>2.024**</i>	0.000 <i>0.895</i>
DIRREM*INDIR_SHARES	-0.000 <i>-0.375</i>	0.000 <i>-0.239</i>
SIZE	0.012 <i>4.583**</i>	0.024 <i>3.814**</i>
DEBT	-0.030 <i>-2.015**</i>	-0.069 <i>-2.855**</i>
AGE	0.000 <i>0.315</i>	0.000 <i>-0.320</i>
IND	0.015 <i>1.292</i>	0.007 <i>0.220</i>
CONSTANT	-0.210 <i>-4.054**</i>	-0.427 <i>-3.285**</i>
Adjusted R^2	0.057	0.037
F-statistic	<i>14.923**</i>	<i>9.948**</i>
Cross-sections	537	537
Total observation	1611	1611

Notes: ROA is the net income divided by total assets. ROE is the net income divided by total equity. DIRREM is the total director remuneration respectively. INDIR_SHARES is indirect shareholding by family member in family firm. DEBT is the long term debt over total assets. SIZE is logarithm of total assets. AGE is number of year since IPO and IND "1" is for the consumer products sector; trading/service sector; construction; plantations/mining; and "0" if others. *t* – Statistics are italicised. ** denote 5 percent significant levels respectively.

The regressions 1 and 2 in Table 6.12 provide support for Hypothesis 2 in that the interaction effect of DIRREM*DIR_SHARES on ROA and ROE is positive and significant. Since family firms aim to survive and to generate more wealth to hand down to the next generation, our result here suggests that better remuneration tends to retain qualified members of boards of directors and possibly enhances performance. This finding supports Jensen and Murphy's (2010) argument that

increases in remuneration are driven by improved business performance and does not represent transfer of wealth from shareholders to executives.

Table 6.12
Regression Results of Performance by Interaction between Director Remuneration and Direct Shareholding in Family Firm

	ROA (1)	ROE (2)
DIRREM	0.023 <i>6.037**</i>	0.050 <i>5.227**</i>
DIR_SHARES	0.000 <i>0.705</i>	-0.001 <i>-0.967</i>
DIRREM*DIR_SHARES	0.001 <i>2.274**</i>	0.002 <i>2.119**</i>
SIZE	0.012 <i>4.644**</i>	0.024 <i>3.640**</i>
DEBT	-0.034 <i>-2.282**</i>	-0.076 <i>-2.064**</i>
AGE	0.000 <i>0.245</i>	0.000 <i>-0.282</i>
IND	0.017 <i>1.406</i>	0.010 <i>0.349</i>
CONSTANT	-0.216 <i>-4.150**</i>	-0.413 <i>-3.163**</i>
Adjusted R^2	0.058	0.040
F-statistic	<i>15.187**</i>	<i>10.607**</i>
Cross-sections	537	537
Total observation	1611	1611

Notes: ROA is the net income divided by total assets. ROE is the net income divided by total equity. DIRREM is the total director remuneration respectively. DIR_SHARES is direct shareholding by family member in family firm. DEBT is the long term debt over total assets. SIZE is logarithm of total assets. AGE is number of year since IPO and IND "1" is for the consumer products sector; trading/service sector; construction; plantations/mining; and "0" if others. *t* – Statistics are italicised. ** denote 5 percent significant levels respectively.

Second, this subsection examines the previous results for Hypothesis 3, which examines MSWG and sensitivity to each individual MSWG. This study re-estimates the regression, by replacing MSWG with institutional investor (see Table 6.13). Table 6.13 exhibits results of regression analysis of MSWG influence on the relationship between director remuneration and performance in family firm.

Regression 1 and 3 show no evidence for an interaction effect of DIRREM*MSWG on ROA and ROE. Our result suggests that MSWG does not actively improve remuneration because the proposals must follow MCGG. Furthermore, the interaction between MSWG*FAM_FIRM has no influence on ROA and ROE. Since family firm aims for survival and to generate more wealth to hand down to the next generation, our result suggests that MSWG may not improve remuneration because the objectives of family firm to increase shareholder wealth is similar to their objective.

Further analyses shows that MSWG well represents of minority shareholders in that the shareholders want to protect their own interests and that the MSWG had the responsibility of protecting shareholders' interests. This also may show that MSWG uses their power via shareholding to pressure firms to fulfill firm objectives, in the best interests of the minority shareholders.

Table 6.13
Regression Results of Performance by Interaction of Director Remuneration
and Institutional Investor, and Interaction of Institutional Investor and
Family Firm

	ROA		ROE	
	1	2	3	4
DIRREM	0.019 <i>5.310**</i>		0.042 <i>4.582**</i>	
FAM_FIRM		0.015 <i>2.542**</i>		0.016 <i>2.413**</i>
MSWG	0.001 <i>2.434**</i>	0.002 <i>3.245**</i>	0.001 1.297	0.003 1.536
DIRREM*	0.000		0.001	
MSWG	<i>-0.331</i>		<i>1.304</i>	
MSWG*		-0.001		-0.002
FAM_FIRM		-1.423		-1.170
SIZE	0.011 <i>4.352**</i>	0.017 <i>7.441**</i>	0.023 <i>3.618**</i>	0.036 <i>6.199**</i>
DEBT	-0.031 <i>-2.125**</i>	-0.031 <i>-2.066**</i>	-0.072 <i>-1.945</i>	-0.074 <i>-1.982**</i>
AGE	0.000 <i>0.417</i>	0.000 <i>0.481</i>	0.000 <i>-0.237</i>	0.000 <i>-0.254</i>
IND	0.018 <i>1.542</i>	0.017 <i>1.387</i>	0.011 <i>0.367</i>	0.011 <i>0.351</i>
CONSTANT	-0.201 <i>-3.893**</i>	-0.327 <i>-6.908**</i>	-0.409 <i>-3.154**</i>	-0.660 <i>-5.555**</i>
Adjusted R ²	0.058	0.046	0.040	0.028
F-statistic	<i>15.238**</i>	<i>12.181**</i>	<i>10.583**</i>	<i>7.603**</i>
Cross-sections	537	537	537	537
Total observation	1611	1611	1611	1611

Notes: ROA is the net income divided by total assets. ROE is the net income divided by total equity. FAM_FIRM is a dummy with 1= family firm and 0= non-family firm. DIRREM is the total director remuneration respectively. MSWG is Minority Shareholder Watchdog group. DEBT is the long term debt over total assets. SIZE is logarithm of total assets. AGE is number of year since IPO and IND "1" is for the consumer products sector; trading/service sector; construction; plantations/mining; and "0" if others. *t* – Statistics are italicised. ** denote 5 percent significant levels respectively.

In this sub-section, we re-estimate the regression by replacing individual MSWG with institutional investor (see Table 6.14). The MSWG is total individual institutional investor, which consists of *Employees' Provident Fund* (EPF),

Permodalan Nasional Berhad (PNB), Lembaga Tabung Angkatan Tentera (LTAT), Lembaga Tabung Haji (LTH), and Pertubuhan Keselamatan Sosial (PERKESO).

Furthermore, it is interesting to note that the robustness tests reveal that individual investor in MSWG are not significantly related to performance except for PNB. Regression 2 provides evidence that PNB has a positive and significant impact on ROA and ROE, as shown in Table 6.14. The regression also provides evidence that the interaction effect of DIRREM*PNB on ROA is positive and significant. Since PNB is concerned about their investment, our result suggests that PNB monitors director remuneration and ensures that it is positively associated with performance. Further analysis indicates that PNB leads effective monitoring, which is consistent with its status as a large shareholder in MSWG.

The regression 7 provides evidence that the interaction effect of PNB*FAM_FIRM on ROE is negative and significant. The family firms exerted power and control to reduce effective monitoring of PNB and this reduces ROE other things being equal. Our result suggests that indeed the uniqueness of family firms that is, domination of top positions, makes it difficult for PNB to be directly involved in business management to improve performance. Thus, this exclusivity provides opportunity for family groups to expropriate wealth via excessive remuneration.

This test is important to look which individual's MSWG have ability to influence the performance in family firm which are consistent with role play by MSWG (see sub section 2.5.1).

Table 6.14
Regression Results of Performance by Interaction between Individual MSWG and Family Firm

	ROA									
	1	2	3	4	5	6	7	8	9	10
EPF	0.000					0.001				
	0.085					0.817				
PNB		0.001					0.002			
		2.169**					2.987**			
LTAT			0.001					0.001		
			0.698					0.797		
LTH				0.002					0.002	
				0.785					1.657	
PERKESO					0.054					0.048
					0.761					1.180
DIRREM	0.021	0.020	0.021	0.020	0.020					
	5.669**	5.508**	5.731**	5.450**	5.443**					
FAM_FIRM						0.015	0.015	0.015	0.015	0.015
						2.251**	2.543**	2.526**	2.494**	2.554**
DIRREM*EPF	-0.001									
	-0.729									
DIRREM*PNB		0.002								
		1.958**								
DIRREM*LTAT			0.000							
			0.241							
DIRREM*LTH				-0.001						
				-0.896						
DIRREM*PERKESO					-0.027					
					-0.111					
EPF*FAM_FIRM						-0.001				
						-1.094				
PNB*FAM_FIRM							-0.001			
							-1.089			
LTAT*FAM_FIRM								-0.001		
								-0.609		

Table 6.14 (continued)

	ROA									
	1	2	3	4	5	6	7	8	9	10
LTH*FAM_FIRM									0.000	
PERKESO*FAM_FIRM									0.188	-0.012
SIZE	0.012	0.012	0.012	0.012	0.012	0.018	0.018	0.018	0.018	0.018
DEBT	<i>4.586**</i>	<i>4.831**</i>	<i>4.546**</i>	<i>4.621**</i>	<i>4.577**</i>	<i>7.678**</i>	<i>7.999**</i>	<i>7.968**</i>	<i>7.941**</i>	<i>7.969**</i>
AGE	-0.032	-0.029	-0.032	-0.031	-0.032	-0.032	-0.029	-0.033	-0.032	-0.032
IND	<i>-2.155**</i>	<i>-1.998**</i>	<i>-2.188**</i>	<i>-2.130**</i>	<i>-2.154**</i>	<i>-2.181**</i>	<i>-1.984**</i>	<i>-2.190**</i>	<i>-2.186**</i>	<i>-2.130**</i>
CONSTANT	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	0.328	0.404	0.317	0.506	0.264	0.304	0.279	0.344	0.540	0.292
	0.018	0.019	0.018	0.019	0.017	0.016	0.016	0.015	0.017	0.015
	1.518	1.598	1.469	1.561	1.464	1.306	1.324	1.230	1.419	1.245
	-0.216	-0.227	-0.209	-0.215	-0.211	-0.346	-0.347	-0.345	-0.346	-0.346
	<i>-4.105**</i>	<i>-4.374**</i>	<i>-4.053**</i>	<i>-4.157**</i>	<i>-4.080**</i>	<i>-7.105**</i>	<i>-7.390**</i>	<i>-7.335**</i>	<i>-7.336**</i>	<i>-7.341**</i>
Adjusted R^2	0.055	0.061	0.055	0.059	0.055	0.040	0.045	0.040	0.044	0.040
F statistic	<i>14.428**</i>	<i>15.836**</i>	<i>14.738**</i>	<i>15.306**</i>	<i>14.424**</i>	<i>10.569**</i>	<i>11.915**</i>	<i>10.485**</i>	<i>11.467**</i>	<i>10.604**</i>
Cross-section	537	537	537	537	537	537	537	537	537	537
Total observation	1611	1611	1611	1611	1611	1611	1611	1611	1611	1611

Notes: ROA is the net income divided by total assets. FAM_FIRM is a dummy with 1= family firm and 0= non-family firm. EPF, PNB, LTAT, LTH and PERKESO are denote *Employess Provident Fund*, *Permodalan Nasional Berhad*, *Lembaga Tabung Angkatan Tentera*, *Lembaga Tabung haji* and *Pertubuhan Keselamatan Social*, respectively. DEBT is the long term debt over total assets. SIZE is logarithm of total assets. AGE is number of year since IPO and IND "1" is for the consumer products sector; trading/service sector; construction; plantations/mining; and "0" if others. t – Statistics are italicised. ** denote 5 percent significant levels respectively.

Table 6.14
Regression Results of Performance by Interaction between Individual MSWG and Family Firm

	ROE									
	1	2	3	4	5	6	7	8	9	10
EPF	0.000 0.090					0.002 0.963				
PNB		0.004 2.542**					0.005 2.633**			
LTAT			0.005 1.629					0.002 0.690		
LTH				0.004 0.987					0.003 1.226	
PERKESO					0.052 0.115					0.075 0.735
DIRREM	0.043 4.693**	0.043 4.747**	0.044 4.789**	0.041 4.496**	0.043 4.548**					
FAM_FIRM						0.006 0.406	0.006 0.416	0.006 0.404	0.006 0.372	0.006 0.424
DIRREM*EPF	-0.001 -0.229									
DIRREM*PNB		0.008 4.056**								
DIRREM*LTAT			0.002 0.340							
DIRREM*LTH				-0.002 -0.860						
DIRREM*PERKESO					0.002 0.003					
EPF*FAM_FIRM						-0.003 -0.963				
PNB*FAM_FIRM							-0.009 -2.798**			
LTAT*FAM_FIRM								0.013 0.656		
LTH*FAM_FIRM									0.002 0.558	

Table 6.14 (continued)

	ROE									
	1	2	3	4	5	6	7	8	9	10
PERKESO*FAM_FIRM										-0.031
										-0.073
SIZE	0.024	0.027	0.024	0.025	0.024	0.037	0.038	0.038	0.038	0.038
	3.751**	4.191**	3.771**	3.859**	3.813**	6.281**	6.633**	6.610**	6.569**	6.612**
DEBT	-0.071	-0.065	-0.072	-0.070	-0.071	-0.077	-0.072	-0.075	-0.078	-0.076
	-1.924**	-1.774**	-1.945**	-1.881**	-1.916**	-2.076**	-1.931**	-2.008**	-2.094**	-2.039**
AGE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	-0.321	-0.030	-0.287	-0.141	-0.354	-0.381	-0.010	-0.326	-0.188	-0.391
IND	0.009	0.014	0.008	0.011	0.009	0.009	0.008	0.010	0.012	0.007
	0.308	0.453	0.275	0.372	0.289	0.290	0.276	0.335	0.386	0.247
CONSTANT	-0.429	-0.486	-0.422	-0.437	-0.428	-0.685	-0.697	-0.697	-0.695	-0.695
	-3.250**	-3.743**	-3.257**	-3.371**	-3.297**	-5.617**	-5.922**	5.916**	5.894**	-5.893**
Adjusted R^2	0.037	0.047	0.039	0.040	0.037	0.024	0.029	0.028	0.027	0.024
F statistic	9.836**	12.339**	10.226**	10.659**	9.871**	6.708**	7.865**	7.518**	7.473**	6.629**
Cross-section	537	537	537	537	537	537	537	537	537	537
Total observation	1611	1611	1611	1611	1611	1611	1611	1611	1611	1611

Notes: ROE is the net income divided by total equity. FAM_FIRM is a dummy with 1= family firm and 0= non-family firm. EPF, PNB, LTAT, LTH and PERKESO are denote *Employess Provident Fund*, *Permodalan Nasional Berhad*, *Lembaga Tabung Angkatan Tentera*, *Lembaga Tabung haji* and *Pertubuhan Keselamatan Social*, respectively. DEBT is the long term debt over total assets. SIZE is logarithm of total assets. AGE is number of year since IPO and IND "1" is for the consumer products sector; trading/service sector; construction; plantations/mining; and "0" if others. t – Statistics are italicised. ** denote 5 percent significant levels respectively.

Third, this sub-section examines the previous result for Hypothesis 4 by an alternative measure of remuneration committee. This study re-estimates the regression (reported in Table 6.15) by replacing remuneration committee with non-family members. The result is qualitatively similar to the original result shown in Table 6.9. This result finds evidence of family firm influences on remuneration committee which consists of non-family members, as shown in regressions 1, 2, and 3 of Table 6.15. Results of the regressions indicate that the coefficient on the interaction variable RC_NFM*FAMFIRM is negative and statistically significant, suggesting that the positive relationship between RC_NFM and DIRREM, EXECREM and NEDREM is less positive for family firm.

Robustness testing finds evidence that the relationship of non-family members and directors on remuneration is significantly negative in family firms. Since remuneration committee is required to propose better remuneration, our result suggests that family firms manipulate power and control to put pressure on remuneration committees to eliminate influence of remuneration committee on remuneration. Therefore, non-family members prefer to keep their positions secure by acting in accordance with family members' personal goals rather than questioning or countering decisions made by boards or majority shareholders.

Table 6.15
Regression Results of Director Remuneration by Interaction between
Non-Family Member who is Remuneration Committee and Family Firm

	LN(DIRREM) 1	LN(EXECREM) 2	LN(NEDREM) 3
FAM_FIRM	0.410 9.012**	0.537 9.816**	-0.193 -4.039**
RC_NFM	0.354 9.113**	0.375 8.024**	0.266 6.528**
RC_NFM*FAM_FIRM	-0.349 -6.256**	-0.372 -5.541**	-0.196 -3.341**
SIZE	0.309 20.355**	0.295 16.195**	0.344 21.605**
DEBT	-0.132 <i>-1.346</i>	-0.121 <i>-1.029</i>	-0.177 <i>-1.134</i>
AGE	0.000 <i>0.135</i>	0.001 <i>0.442</i>	-0.003 <i>-1.475</i>
IND	0.044 <i>0.551</i>	0.078 <i>0.808</i>	-0.070 <i>-0.828</i>
CONSTANT	7.780 25.133**	7.706 20.696**	5.442 16.724**
Adjusted R^2	0.265	0.202	0.278
F -statistic	82.498**	59.332**	89.442**
Cross-sections	537	537	537
Total observation	1611	1611	1611

Notes: EXECREM is executive director remuneration and NEDREM is non-executive director remuneration respectively. DIRREM is the total director remuneration respectively. FAM_FIRM is a dummy with 1= family firm and 0= non-family firm. RC_NFM is non-family member who is remuneration committee. DEBT is the long term debt over total assets. SIZE is logarithm of total assets. AGE is number of year since IPO and IND "1" is for the consumer products sector; trading/service sector; construction; plantations/mining; and "0" if others. t – Statistics are italicised. ** denote 5 percent significant levels respectively.

Fourth, this sub-section re-examines the previous results for Hypothesis 5 by MSWG and this sub-section re-estimates the regression (reported on Table 6.16). Further analysis indicates that effective monitoring by MSWG does not influence the relationship between remuneration committees and director remuneration because remuneration committees effectively monitor executive remuneration. Extended analysis reveals evidence that is somewhat MSWG monitoring effective in family firm with respect to non-executive remuneration.

Table 6.16
Relationship between Remuneration Committee and Director
Remuneration by Presence Institutional Investor and MSWG in
Family Firm

	LN(DIRREM)		LN(EXECREM)		LN(NEDREM)	
	1	2	3	4	5	6
REMCOM	0.230 7.600**		0.242 6.605**		0.200 6.317**	
FAM_FIRM		0.279 6.912**		0.400 8.248**		-0.319 -7.615**
MSWG	0.011 4.420**	0.015 4.496**	0.011 3.823**	0.015 3.889**	0.012 4.814**	0.019 5.676**
REMCOM*MSWG	-0.001 -0.166		-0.003 -0.658		0.006 1.726	
MSWG*FAM_FIRM		-0.005 -1.118		-0.006 -1.103		-0.010 -2.131**
LN_SIZE	0.297 19.147**	0.307 19.754**	0.283 15.062**	0.294 15.780**	0.334 20.590**	0.340 21.100**
DEBT	-0.146 -1.477	-0.086 -0.865	-0.158 -1.318	-0.073 -0.610	-0.021 -0.205	-0.082 -0.797
AGE	0.000 -0.024	0.000 0.097	0.000 0.207	0.001 0.396	-0.002 -0.971	-0.003 -1.399
IND	0.062 0.775	-0.031 -0.389	0.111 1.135	-0.002 -0.022	-0.127 -1.511	-0.126 -1.512
CONSTANT	8.255 26.111**	8.008 25.214**	8.255 21.549**	7.941 20.853**	5.619 17.025**	5.677 17.256**
Adjusted R ²	0.241	0.237	0.168	0.181	0.271	0.275
F-statistic	74.119**	72.423**	47.565**	51.834**	85.149**	88.271**
Cross-sections	537	537	537	537	537	537
Total observation	1611	1611	1611	1611	1611	1611

Notes: EXECREM is executive director remuneration and NEDREM is non-executive director remuneration respectively. DIRREM is the total director remuneration respectively. FAM_FIRM is a dummy with 1= family firm and 0= non-family firm. MSWG is Minority Shareholder Watchdog group. REMCOM is a size of remuneration committee. DEBT is the long term debt over total assets. SIZE is logarithm of total assets. AGE is number of year since IPO and IND "1" is for the consumer products sector; trading/service sector; construction; plantations/mining; and "0" if others. *t* – Statistics are italicised. ** denote 5 percent significant levels respectively.

This sub-section re-examines the previous results for Hypothesis 5 by an alternative measure of individual MSWG, such as *Employees' Provident Fund (EPF)* , *Permodalan Nasional Berhad (PNB)*, *Lembaga Tabung Angkatan Tentera (LTAT)*, *Lembaga Tabung Haji (LTH)*, and *Pertubuhan Keselamatan Sosial (PERKESO)*.

This sub-section re-estimates the regression (reported on Table 6.17). The result is qualitatively similar to the original result in Table 6.8.

Table 6.17 presents results of the regression on the relationship between remuneration committee and remuneration as influenced by individual MSWG in family firm. Regression 1 and 2 show that EPF and PNB are positive and significantly influence DIRREM, EXECREM and NEDREM. The regression provided strong support that EPF and PNB are able to improve remuneration since they are the two largest institutions in MSWG. Our result suggests that this provides opportunities for them to become involved in remuneration-setting and tend to increase firm performance and minority shareholder wealth.

This sub-section finds evidence for a significant interaction effect of REMCOM*EPF and REMCOM*PNB on DIRREM and EXECREM. The coefficients on the interactions REMCOM*EPF and REMCOM*PNB are negative and statistically significant, suggesting that the positive relationship between REMCOM and DIRREM and EXECREM is reduced by the presence of EPF and PNB. Since EPF and PNB want to keep secure their investment, our study suggests that both EPF and PNB tend to monitor remuneration committees to ensure the remuneration should link with performance. The sub-section also speculates that EPF and PNB might have members on board of director and play the role of minority shareholder agent to these firms. However, the regression does not provide evidence that the presence of EPF and PNB are influence DIRREM differently in family firms compared to non-family firms.

Further analysis finds evidence that family firms manipulate power and control in remuneration-setting vis-à-vis non-executive remuneration by reducing effective monitoring of PNB. Family firms provide less remuneration to non-executives and this even lower for PNB. Our sub-section suggests that a disproportionate amount is appropriated for executive (family member) remuneration and this shows that family firms do indeed expropriate via remuneration and that PNB is not able to prevent this.

Table 6.17
Regression Results of Remuneration by Interaction between Individual MSWG and Family Firm

	LN(DIRREM)									
	1	2	3	4	5	6	7	8	9	10
EPF	0.019 4.105**					0.022 3.654**				
PNB		0.012 2.733**					0.019 3.332**			
LTAT			0.026 1.065					0.015 1.310		
LTH				0.010 2.038					0.014 1.908	
PERKESO					0.955 1.119					0.472 1.733
REMCOM	0.249 8.112**	0.238 7.923**	0.246 8.065**	0.240 7.982**	0.237 7.827**					
FAM_FIRM						0.281 6.931**	0.279 6.882**	0.279 6.843**	0.278 6.821**	0.282 6.902**
REMCOM*EPF	-0.015 -2.651**									
REMCOM *PNB		0.013 -2.070**								
REMCOM *LTAT			-0.004 -0.510							
REMCOM *LTH				-0.003 -0.473						
REMCOM *PERKESO					-0.879 -0.768					
EPF*FAM_FIRM						-0.007 -0.847				
PNB*FAM_FIRM							-0.006 -0.744			
LTAT*FAM_FIRM								0.013 0.766		

Table 6.17 (continued)

	LN(DIRREM)									
	1	2	3	4	5	6	7	8	9	10
LTH*FAM_FIRM									-0.006	
									-0.564	
PERKESO*FAM_FIRM										0.263
										0.228
SIZE	<i>0.293</i>	0.308	0.307	0.307	0.308	0.301	0.319	0.320	0.319	0.319
	<i>18.437**</i>	<i>20.031**</i>	<i>19.880**</i>	<i>19.913**</i>	<i>19.938**</i>	<i>18.885**</i>	<i>20.717**</i>	<i>20.643**</i>	<i>20.630**</i>	<i>20.638**</i>
DEBT	-0.155	-0.135	-0.159	-0.157	-0.151	-0.095	-0.079	-0.095	-0.100	-0.095
	-1.570	-1.367	-1.601	-1.583	-1.521	-0.945	-0.794	-0.945	-0.994	-0.945
AGE	0.000	0.000	0.000	0.000	0.001	0.000	0.000	0.000	0.000	0.000
	-0.046	-0.219	-0.265	-0.080	-0.282	-0.061	-0.224	-0.183	0.038	-0.219
IND	0.051	0.056	0.055	0.062	0.054	-0.047	-0.039	-0.041	-0.032	-0.047
	0.634	0.701	0.685	0.762	0.665	-0.583	-0.482	-0.499	-0.397	-0.583
CONSTANT	8.358	8.053	8.076	8.065	8.065	8.140	7.782	7.791	7.775	7.791
	<i>25.821**</i>	<i>25.661**</i>	<i>25.596**</i>	<i>25.602**</i>	<i>25.596**</i>	<i>24.976**</i>	<i>24.641**</i>	<i>24.540**</i>	<i>24.517**</i>	<i>24.576**</i>
Adjusted R^2	0.241	0.239	0.233	0.234	0.233	0.233	0.230	0.224	0.226	0.225
F statistic	<i>73.963**</i>	<i>73.231**</i>	<i>70.675**</i>	<i>71.176**</i>	<i>70.797**</i>	<i>70.696**</i>	<i>69.865**</i>	<i>67.482**</i>	<i>68.124**</i>	<i>67.789**</i>
Cross-section	537	537	537	537	537	537	537	537	537	537
Total observation	1611	1611	1611	1611	1611	1611	1611	1611	1611	1611

Notes: DIRREM is the total director remuneration respectively. FAM_FIRM is a dummy with 1= family firm and 0= non-family firm. REMCOM is a size of remuneration committee. EPF, PNB, LTAT, LTH and PERKESO are denote *Employess Provident Fund, Permodalan Nasional Berhad, Lembaga Tabung Angkatan Tentera, Lembaga Tabung haji and Pertubuhan Keselamatan Social*, respectively. DEBT is the long term debt over total assets. SIZE is logarithm of total assets. AGE is number of year since IPO and IND "1" is for the consumer products sector; trading/service sector; construction; plantations/mining; and "0" if others. t – Statistics are italicised. ** denote 5 percent significant levels respectively.

Table 6.17
Regression Results of Remuneration by Interaction between Individual MSWG and Family Firm

	LN(EXECREM)									
	1	2	3	4	5	6	7	8	9	10
EPF	0.019 3.568**					0.023 3.133**				
PNB		0.011 2.124**					0.018 2.661**			
LTAT			0.000 0.040					0.012 0.848		
LTH				0.011 1.863					0.016 1.794	
PERKESO					1.022 0.990					0.553 1.696
REMCOM	0.265 7.133**	0.248 6.823**	0.257 6.989**	0.250 6.864**	0.247 6.738**					
FAM_FIRM						0.401 8.261**	0.400 8.217**	0.399 8.186**	0.398 8.169**	0.402 8.233**
REMCOM*EPF	-0.020 -2.936**									
REMCOM *PNB		0.028 -2.823**								
REMCOM *LTAT			0.024 0.941							
REMCOM *LTH				-0.002 -0.232						
REMCOM *PERKESO					-0.913 -0.660					
EPF*FAM_FIRM						-0.008 -0.813				
PNB*FAM_FIRM							-0.006 -0.636			
LTAT*FAM_FIRM								0.013 0.685		

Table 6.17 (continued)

	LN(EXECREM)									
	1	2	3	4	5	6	7	8	9	10
LTH*FAM_FIRM									-0.007	
									-0.577	
PERKESO*FAM_FIRM										0.115
										0.083
SIZE	0.279	0.294	0.293	0.293	0.294	0.289	0.307	0.307	0.307	0.307
	14.513**	15.780**	15.676**	15.715**	15.740**	15.094**	16.603**	16.563**	16.559**	16.564**
DEBT	-0.166	-0.149	-0.172	-0.169	-0.163	-0.091	-0.068	-0.085	-0.086	-0.081
	-1.388	-1.243	-1.434	-1.407	-1.352	-0.764	-0.566	-0.712	-0.721	-0.678
AGE	0.000	0.000	0.000	0.000	0.000	0.001	0.000	0.000	0.001	0.000
	0.208	0.030	0.008	0.165	-0.022	0.256	0.125	0.165	0.357	0.118
IND	0.101	0.106	0.104	0.114	0.103	-0.018	-0.011	-0.012	-0.002	-0.019
	1.036	1.086	1.061	1.156	1.052	-0.187	-0.110	-0.126	-0.023	-0.195
CONSTANT	8.352	8.050	8.078	8.058	8.061	8.069	7.710	7.712	7.700	7.720
	21.316**	21.162**	21.162**	21.142**	21.146**	20.661**	20.374**	20.322**	20.293**	20.356**
Adjusted R^2	0.169	0.165	0.161	0.163	0.162	0.177	0.175	0.171	0.173	0.172
F statistic	47.906**	46.524**	43.055**	45.659**	45.376**	50.553**	49.788**	48.326**	48.974**	48.739**
Cross-section	537	537	537	537	537	537	537	537	537	537
Total observation	1611	1611	1611	1611	1611	1611	1611	1611	1611	1611

Notes: EXECREM is executive director remuneration respectively. FAM_FIRM is a dummy with 1= family firm and 0= non-family firm. REMCOM is a size of remuneration committee. EPF, PNB, LTAT, LTH and PERKESO are denote *Employess Provident Fund, Permodalan Nasional Berhad, Lembaga Tabung Angkatan Tentera, Lembaga Tabung haji and Pertubuhan Keselamatan Social*, respectively. DEBT is the long term debt over total assets. SIZE is logarithm of total assets. AGE is number of year since IPO and IND "1" is for the consumer products sector; trading/service sector; construction; plantations/mining; and "0" if others. t – Statistics are italicised. ** denote 5 percent significant levels respectively.

Table 6.17
Regression results of Remuneration by Interaction between Individual MSWG and Family Firm

	LN(NEDREM)									
	1	2	3	4	5	6	7	8	9	10
EPF	0.021 4.433**					0.026 4.222**				
PNB		0.019 4.268**					0.033 5.734**			
LTAT			0.018 2.010					0.021 1.719		
LTH				0.007 1.330					0.008 0.981	
PERKESO					1.498 1.677					0.357 1.260
REMCOM	0.206 6.413**	0.214 6.840**	0.223 7.003**	0.221 6.997**	0.214 6.750**					
FAM_FIRM						-0.317 -7.537**	-0.319 -7.599**	-0.319 -7.552**	-0.320 -7.566**	-0.313 -7.388**
REMCOM*EPF	0.002 0.266									
REMCOM *PNB		0.012 1.832								
REMCOM *LTAT			0.015 0.669							
REMCOM *LTH				-0.004 -0.577						
REMCOM *PERKESO					-1.502 -1.255					
EPF*FAM_FIRM						-0.006 -0.644				
PNB*FAM_FIRM							-0.024 -2.718**			
LTAT*FAM_FIRM								-0.002 -0.130		

Table 6.17 (continued)

	LN(NEDREM)									
	1	2	3	4	5	6	7	8	9	10
LTH*FAM_FIRM									0.002	
									0.180	
PERKESO*FAM_FIRM										1.765
										1.477
SIZE	0.327	0.347	0.347	0.347	0.347	0.331	0.354	0.354	0.353	0.354
	19.649**	21.643**	21.463**	21.428**	21.486**	20.003**	22.218**	22.057**	21.952**	22.042**
DEBT	-0.037	-0.005	-0.035	-0.035	-0.027	-0.105	-0.066	-0.101	-0.103	-0.094
	-0.360	-0.045	-0.340	-0.335	-0.256	-1.014	-0.636	-0.967	-0.988	-0.899
AGE	-0.002	-0.002	-0.002	-0.002	-0.002	-0.003	-0.003	-0.003	-0.003	-0.003
	-1.094	-1.217	-1.259	-1.087	-1.244	-1.543	-1.778	-1.728	-1.529	-1.710
IND	-0.149	-0.136	-0.137	-0.136	-1.141	-0.148	-0.136	-0.141	-0.136	-0.146
	-1.751	-1.616	-1.623	-1.603	-1.672	-1.785	-1.622	-1.670	-1.603	-1.734
CONSTANT	5.787	5.370	5.388	5.390	5.385	5.879	5.420	5.420	5.429	5.421
	17.088**	16.396**	16.329	16.326**	16.327**	17.407**	16.615**	16.470**	16.460**	16.462**
Adjusted R^2	0.264	0.266	0.257	0.255	0.256	0.270	0.273	0.261	0.259	0.260
F statistic	83.661**	84.479**	80.559**	79.728**	80.129**	86.213**	87.422**	82.025**	81.257**	81.668**
Cross-section	537	537	537	537	537	537	537	537	537	537
Total observation	1611	1611	1611	1611	1611	1611	1611	1611	1611	1611

Notes: NEDREM is non-executive director remuneration respectively. FAM_FIRM is a dummy with 1= family firm and 0= non-family firm. REMCOM is a size of remuneration committee. EPF, PNB, LTAT, LTH and PERKESO are denote *Employeess Provident Fund, Permodalan Nasional Berhad, Lembaga Tabung Angkatan Tentera, Lembaga Tabung haji and Pertubuhan Keselamatan Social*, respectively. DEBT is the long term debt over total assets. SIZE is logarithm of total assets. AGE is number of year since IPO and IND "1" is for the consumer products sector; trading/service sector; construction; plantations/mining; and "0" if others. t – Statistics are italicised. ** denote 5 percent significant levels respectively.

6.6 Summary

This chapter has provided the results of hypotheses testing. It has outlined five types of analyses: first, descriptive analyses; second, correlational analyses; third, univariate analyses; fourth, multivariate regression; and fifth, robustness testing. The next chapter will discuss the results and draw conclusions to answer the research questions and address the hypotheses. The chapter will conclude with discussion of future research and limitations of the current research.

CHAPTER 7 CONCLUSION

7.1 Introduction

Section 7.2 presents a summary and conclusion following on from the results presents in Chapter 6. Section 7.3 and 7.4 then present the contributions and limitations of the study. Finally, future research is discussed in Section 7.5.

7.2 Summary and Conclusion

This study examined the relationship between director remuneration and performance and how that relationship is influenced by the presence of institutional investors and remuneration committees in family firms, based on the panel dataset of 537 firms, between 2007 and 2009. This thesis finds strong evidence to support that, in a developing country like Malaysia, the presence of strong remuneration motivates boards of directors to enhance firm performance. Remuneration that is proposed is as recommended by MCCG which are recommends a strong link to performance and abilities of board members. This is consistent finding by Barkema and Gomez-Mejia (1998). However, Dogan and Smyth (2002) find that there is no association between director remuneration and firm performance in Malaysia context.

Although family firm dominates in Malaysia public listed companies, no evidence shows that family firm ownership influences significantly the relationship between

director remuneration and performance. Regarding the robustness tests, this study finds no evidence that indirect shareholding of family members (INDIR_SHARES) exerts significant influence on the relationship between director remuneration and performance. In addition, no evidence shows that family members tend to intervene in remuneration-setting. However, direct shareholding (DIR_SHARES) is significantly influences the association between director remuneration and performance.

This study provides strong evidence that the presence of institutional investors significantly and positively relate to performance, consistent with previous studies (Cornet et al. 2007; Croci et al. 2010; Dong & Ozkan 2008). However, no evidence shows that INST_INVESTOR changes the relationship between DIRREM and performance. Furthermore, no evidence shows that FAM_FIRM changes the relationship between INST_INVESTOR and performance. This study extend the test on this relationship by incorporating two interaction variables (DIRREM*MSWG) and (MSWG*FAM_FIRM) to examine whether there is a significantly weaker relationship between remuneration and performance by the presence of MSWG in family firm. No evidence shows that MSWG influence on the relationship between remuneration and performance in family firms. Further analysis indicated that PNB shareholding has a positive and significant impact on performance.

Further analysis finds evidence that the positive relationship between remuneration committee (REMCOM) and director remuneration (DIRREM) is significantly negatively affected in family firms (i.e. it is made less positive). However, Anderson and Bizjak (2008) find no evidence that the remuneration decrease or total of remuneration increase when CEOs as part of remuneration committee. This shows that family ownership mitigates effective effort by REMCOM on DIRREM, EXECREM and NEDREM. The role played by REMCOM as recommended by MCGG is less effective in family firms, consistent with the uniqueness of family firms. Robustness testing finds evidence that the relationship between RC_NFM and DIRREM is significantly negative in family firms. Furthermore, less independence and pressure from family members makes non-family members less opposed to proposals that increase family executives' personal wealth.

Empirical results show that there is no evidence that the presence of institutional investors significantly influences the relationship between remuneration committees and remuneration. Furthermore, no evidence shows that FAM_FIRM influence relationship of INST_INVESTOR and remuneration. The robustness test indicates there is no evidence that MSWG influences on the relationship between remuneration committee and remuneration in family firm. However the result shows that MSWG monitoring is effective in family firm regarding non-executive remuneration. Additional tests indicate that EPF and PNB use their power via shareholding as the two largest institutions in MSWG to monitor remuneration committee's influence on director remuneration.

Although director remuneration enables firms to enhance performance, consistent with agency theory, this is difficult to achieve in family firms because remuneration committees are not truly independent. Non-family members are manipulated by family members or are willing to accommodate family members in order to protect their own positions in the firm. In addition, institutional investors do not monitor remuneration committees during remuneration-setting in family firms because the settings of institutional investors, including MSWG, in Malaysia do not provide a large enough space to participate seriously in remuneration-setting. There are still many practices, including remuneration, that are based on voting among the shareholders, which gives an advantage to family members who are the majority shareholders in family firms.

7.3 Contribution of Study

7.3.1 Contribution to the literature

This study offers the following useful contributions to the literature:

- 1) The current study extends the remuneration committee research by using size of remuneration committee, which consists of family members and non-family members, as a proxy. This study focuses on expropriation by family firms, which is consistent with the agency theory argument that incentives to obtain personal benefits harm other shareholders and increases the agency problem. This study is considered an extension to existing literature because prior studies have only investigated the influence of remuneration committee quality on the pay-performance relationship.

2) Prior studies in Malaysia examine institutional investors and director remuneration by examining the importance of political connections. In a study by Abdul Wahab and Abdul Rahman (2009), they use MSWG and individual MSWG investor as proxies for institutional investors to look at their influence on director remuneration. Panel analysis of this research includes 434 firms from 1999 to 2003. However, the current study differs from Abdul Wahab and Abdul Rahman's (2009) study by focusing on 537 firms with 1611 panel data points from 2007 to 2009 in Malaysia. Furthermore, this study also uses MSWG and individual MSWG investors as proxies for institutional investors but it also investigates the relationship between director remuneration and performance in family firms. Therefore, this study is considered an extension to existing research because prior studies have employed MSWG and individual MSWG investors in relation to non-family firms only.

3) There has not been much research on the relationship between MSWG and remuneration committees, especially in family firms. This study uses MSWG and individual MSWG investors as proxies for institutional investors to look at the relationship between remuneration committees and director remuneration. Because director remuneration is designed by remuneration committees, this presents a conflict of interest in family firms. Monitoring by MSWG and individual MSWG investors of remuneration committees is very important to ensure that director remuneration is not expropriated by family members. This current study is considered an extension to existing studies

because prior studies have employed the effect of MSWG and individual MSWG investors on director remuneration without considering the conflict of interest in family firms.

- 4) To extend institutional investor research, this study investigates the relationship between remuneration committees and director remuneration in family firms. Monitoring of committee members by institutional investors in family firms ensure effectiveness of design on remuneration. This study is considered an extension to the existing literature because prior studies have employed the effect of institutional investors and family firms on director remuneration only, without considering committee membership.
- 5) This study attempted to interpret expropriation within the context of remuneration committee effectiveness. A close relationship between director remuneration and remuneration committee can lead to possible expropriation due to family members working for their own interests and non-family members working for family interests because of a lack of independence and desire to secure their positions within the firm. Thus, this study is considered an extension to the existing literature because it considers non family members as agents of expropriation.

7.3.2 Contribution to Practice

This study provides certain useful contributions to practice in three areas: for example, in carrying through the decision-making process to involve parties including minority shareholders and regulators. Previous studies relating to director remuneration and performance have focused on developed countries such as the United States and parts of Europe and Australia. The findings from the current study offer some insights into the principles of remuneration in developing countries, as it focuses on companies in Malaysia. Thus, this empirical evidence from this study enables researchers to extend the international aspects of remuneration theory and practice.

Second, results from this study are expected to be important for government policy-makers, institutional owners, and boards of directors. Furthermore, this study could also be informative for international financial institutions that provide funds in different arrangements to developing countries, including Malaysia. According to Reeb (2002) and Tsamenyi et al. (2007), with the increasingly globalized nature of business, corporate governance reforms are becoming priorities in certain developing countries. For example, the World Bank has undertaken ROSC (Reports on the Observance of Standard and Codes) studies on more than 100 developing and developed countries (World Bank 2012). In addition, the results regarding remuneration, which is part of corporate governance in developing countries, could support international effort to understand and/or reform corporate governance mechanisms.

Third, the results of this study are expected to contribute the following: First, this study focuses on developing country (i.e., Malaysia), contributing to understanding of remuneration within a global context. In addition, these results could be used to understand how remuneration can be manipulated in developing countries. Finally, the results enable to help stakeholders understand priorities for better investment prospects in more detail and with more sophistication.

7.4 Limitations of the Study

Despite the several contributions that this study aims to make, some caution is necessary in interpreting the results. There are several limitations regarding the findings and results. First, this study investigated firms listed only on the Main Market in Bursa Malaysia for the years 2007 and 2009 and thus may not be generalizable to other periods or types of companies. The limited period allows only very specific conclusions that are limited by context. The study may help to provide insight into the influences of shareholding in ownership (institutional investor and family firm) and remuneration committees on the pay-performance relationship.

Furthermore, the presentation of data such as remuneration, remuneration committee, family firm and shareholding, and institutional investor (include MSWG) are different in each firm's annual report. The data is considered useful when it becomes part of a large sample in which there are many variables and is considered together as part of an aggregate dataset. However, Bursa Malaysia has

not emphasized specific format of presentation as long as firms offer disclosure so individual variables may not always be aggregated at the same level.

A further limitation is related to the sample size. The firms were selected based on the random sampling method. This study focused on 567 firms which represents 67.18% of over 844 firms. As a result, there is no guarantee that the relationship observed for the sample firms are the same as those not observed for the non-sample firms.

Furthermore, limitation of this study is related to research design. Multivariate regression was used in this study to analysis the data. However, this study could not take into the account by using The Structural Equation Model (SEM). Although there is one variable can act as both independent and dependent variable such as director remuneration.

Finally, limitation of this study relates to changing of ownership and the results may not be generalizable to other periods. Ownership refers to family firms and institutional investors, which are influenced by the nature of the behavior of shareholders and stock traders. Furthermore, the market price of a business may be influenced by the prospects of sale and the probability of sale could change firms from family firms to non-family firms. Similarly, depending on the size of their

holdings, institutional investors could no longer be representative of the minority shareholders because they plan to sell their interest.

This study only focuses on cash remuneration such as fees, salaries, bonuses, and benefits of kind, which only makes up one type or level of remuneration. Results should be generalized to cash-based analyses only. Furthermore, analyses based on only cash remuneration likely do not show the whole picture. However, this study could not take into account remuneration related to stock options because the data was not available from the annual reports. This limits the scope of the study regarding director remuneration.

7.5 Future Research

There are several remaining questions that can be used to guide future research based on the current study. First, the main task of non-executives on remuneration committees is to monitor executive remuneration. They are responsible for ensuring that remuneration proposals take into account performance and director abilities. However, independence of non executives become an issue because they are appointed by boards of directors where there may be less effective monitoring in family firms cause and then wealth of shareholders will decrease. Furthermore, instead of agency theory applied into this matter, stakeholder theory is applicable to integrate with agency theory for internal monitoring by non-executive directors representative of minority shareholder.

Second, institutional theory possibly should integrate with agency theory as a research framework in future studies related to effective monitoring by institutional investors. They are representative of minority shareholders with the charge of protecting their interests.

Third, the role of culture and race in the relationship between remuneration committee and director remuneration could be a topic of future study, especially in Malaysia. Ethnicity is a complex matter in Malaysian culture and society, which consists of Malays (also known as Bumiputera) as the majority, Chinese, Indian, and others. The members of remuneration committees likely come from different cultural and ethnic backgrounds, which may influence decisions and director remuneration.

Fourth, future study could include the examination of the relationship between subcommittees such as audit, nomination, and remuneration committees and director remuneration in family firms. Instead of monitoring by remuneration committee, others subcommittee also could play effective monitoring roles in remuneration-setting.

Fifth, future research could look at the trend between remuneration committee and director remuneration in family firms in Malaysia by making comparison over at

least two years. Such a longitudinal study could trace trends of director remuneration, which could possibly impact remuneration committees in the future.

Six, future study could use the Structural Equation Model (SEM) for analysis data when variables such as director remuneration and remuneration committee can act as both independent and dependent variables.

APPENDICES

APPENDIX A: PRINCIPLES OF CORPORATE GOVERNANCE

A DIRECTORS

I The Board

Every listed company should be headed by an effective board which should lead and control the company.

II Board Balance

The board should include a balance of executive directors and non-executive directors (including independent non-executives) such that no individual or small group of individuals can dominate the board's decision making.

III Supply of Information

The board should be supplied in a timely fashion with information in a form and of a quality appropriate to enable it to discharge its duties.

IV Appointments to the Board

There should be a formal and transparent procedure for the appointment of new directors to the board.

V Re-election

All directors should be required to submit themselves for re-election at regular intervals and at least every three years.

B DIRECTORS' REMUNERATION

I The Level and Make-up of Remuneration

Levels of remuneration should be sufficient to attract and retain the directors needed to run the company successfully. The component parts of remuneration should be structured so as to link rewards to corporate and individual performance, in the case of executive directors. In the case of non-executive directors, the level of remuneration should reflect the experience and level of responsibilities undertaken by the particular non-executive concerned.

II Procedure

Companies should establish a formal and transparent procedure for developing policy on executive remuneration and for fixing the remuneration packages of individual directors.

III Disclosure

The company's annual report should contain details of the remuneration of each director

APPENDIX B: BEST PRACTICES IN CORPORATE GOVERNANCE

AA THE BOARD OF DIRECTORS

I Principal Responsibilities of the Board

The board should explicitly assume the following six specific responsibilities, which facilitate the discharge of the board's stewardship responsibilities:

- Reviewing and adopting a strategic plan for the company;
- Overseeing the conduct of the company's business to evaluate whether the business is being properly managed;
- Identifying principal risks and ensuring the implementation of appropriate systems to manage these risks;
- Succession planning, including appointing, training, fixing the compensation of and where appropriate, replacing senior management;
- Developing and implementing an investor relations programme or shareholder communications policy for the company; and
- Reviewing the adequacy and the integrity of the company's internal control systems and management information systems, including systems for compliance with applicable laws, regulations, rules, directives and guidelines.

III Board Balance

Non-executive directors should be persons of calibre, credibility and have the necessary skill and experience to bring an independent judgement to bear on the issues of strategy, performance and resources, including key appointments and standards of conduct. To be effective, independent non-executive directors should make up at least one-third of the board membership.

XXIV Remuneration Committees

Boards should appoint remuneration committees, consisting wholly or mainly of nonexecutive directors, to recommend to the board the remuneration of the executive directors in all its forms, drawing from outside advice as necessary. Executive directors should play no part in decisions on their own remuneration. Membership of the remuneration committee should appear in the directors' report.

The determination of remuneration packages of non-executive directors, including non-executive chairman, should be a matter for the board as a whole. The individuals concerned should abstain from discussing their own remuneration.

APPENDIX C: CORPORATE GOVERNANCE PRINCIPLES AND RECOMMENDATIONS

This section is a listing of the eight principles and their corresponding 26 recommendations. The principles and recommendations focus on, amongst others, laying a strong foundation for the board and its committees to carry out their roles effectively, promote timely and balanced disclosure, safeguard the integrity of financial reporting, emphasise the importance of risk management and internal controls and encourage shareholder participation in general meetings.

Principle 2 – Strengthen composition

Recommendation 2.1

The board should establish a Nominating Committee which should comprise exclusively of non-executive directors, a majority of whom must be independent.

Recommendation 2.2

The Nominating Committee should develop, maintain and review the criteria to be used in the recruitment process and annual assessment of directors.

Recommendation 2.3

The board should establish formal and transparent remuneration policies and procedures to attract and retain directors.

Principle 3 – Reinforce independence

Recommendation 3.1

The board should undertake an assessment of its independent directors annually.

Recommendation 3.2

The tenure of an independent director should not exceed a cumulative term of nine years. Upon completion of the nine years, an independent director may continue to serve on the board subject to the director's re-designation as a non-independent director.

Recommendation 3.3

The board must justify and seek shareholders' approval in the event it retains as an independent director, a person who has served in that capacity for more than nine years.

Recommendation 3.4

The positions of chairman and CEO should be held by different individuals, and the chairman must be a non-executive member of the board.

Recommendation 3.5

The board must comprise a majority of independent directors where the chairman of the board is not an independent director.

REFERENCES

- Abdul Wahab, E & Abdul Rahman, R 2009, 'Institutional investors and director remuneration: do political connections matter?', *Corporate Governance and Firm Performance*, vol. 13, pp. 139-69.
- Abdul Wahab, E, How, J & Verhoeven, P 2007, 'The impact of the Malaysian code on corporate governance: Compliance, institutional investors and stock performance', *Journal of Contemporary Accounting and Economics*, vol. 3, pp. 106-29.
- Abe, N, Gaston, N & Kubo, K 2005, 'Executive pay in Japan: the role of bank-appointed monitors and the main bank relationship', *Japan and the World Economy*, vol. 17, no. 3, pp. 371-94.
- Aiken, LS, West, SG & Reno, RR 1991, *Multiple regression: Testing and interpreting interactions*, Sage Publications, Inc.
- Alissa, W 2009, 'Boards' Response to Shareholders' Dissatisfaction: The Case of Shareholders' Say on Pay in the UK.
- Almazan, A, Hartzell, J & Starks, L 2005, 'Active institutional shareholders and costs of monitoring: Evidence from executive compensation', *Financial Management*, vol. 34, no. 4, pp. 5-34.
- Amran, N & Ahmad, A 2009, 'Family Business, Board Dynamics and Firm Value: Evidence from Malaysia', *Journal of Financial Reporting & Accounting Vol*, vol. 7, no. 1, pp. 53-74.
- Anderson, R & Bizjak, J 2003, 'An empirical examination of the role of the CEO and the compensation committee in structuring executive pay', *Journal of Banking & Finance*, vol. 27, no. 7, pp. 1323-48.
- Anderson, R & Reeb, D 2003, 'Founding-family ownership and firm performance: Evidence from the S&P 500', *Journal of Finance*, vol. 58, no. 3, pp. 1301-28.
- Anderson, R & Reeb, D 2004, 'Board composition: Balancing family influence in S&P 500 firms', *Administrative Science Quarterly*, vol. 49, no. 2, pp. 209-37.
- Anderson, R, Mansi, S & Reeb, D 2003, 'Founding family ownership and the agency cost of debt', *Journal of Financial Economics*, vol. 68, no. 2, pp. 263-85.
- Andreas, J, Rapp, M, & Wolff, M 2010, 'Determinants of director compensation in two-tier systems: evidence from German panel data', Working paper series.
- Andreas, JM, et al. 2012, 'Determinants of director compensation in two-tier systems: evidence from German panel data', *Review of Managerial Science*, vol. 6, no. 1, p. 33.

- Andres, C 2008, 'Large shareholders and firm performance--An empirical examination of founding-family ownership', *Journal of Corporate Finance*, vol. 14, no. 4, pp. 431-45.
- Ang, J, Cole, R & Lin, J 2000, 'Agency costs and ownership structure', *The Journal of Finance*, vol. 55, no. 1, pp. 81-106.
- Back, K, Cao, CH & Willard, GA 2000, 'Imperfect competition among informed traders', *The Journal of Finance*, vol. 55, no. 5, pp. 2117-55.
- Baker, G, Jensen, M & Murphy, K 1988, 'Compensation and incentives: Practice vs. theory', *Journal of Finance*, vol. 43, no. 3, pp. 593-616.
- Barak, R, Cohen, S & Lauterbach, B 2008, *The effect of CEO pay on firm valuation in closely held firms*, Working paper series.
- Barkema, H & Gomez-Mejia, L 1998, 'Managerial compensation and firm performance: A general research framework', *The Academy of Management Journal*, vol. 41, no. 2, pp. 135-45.
- Barontini, R & Caprio, L 2006, 'The effect of family control on firm value and performance: Evidence from continental Europe', *European Financial Management*, vol. 12, no. 5, pp. 689-723.
- Barontini, R & Bozzi, S 2009, *CEO Compensation and performance in family firms*, Working paper.
- Barontini, R, Bozzi, S, Sant'Anna, S & della Libertà, P 2010, 'CEO Compensation and Performance in Family Firms'.
- Bartholomeusz, S & Tanewski, G 2006, 'The relationship between family firms and corporate governance', *Journal of Small Business Management*, vol. 44, no. 2, p. 245.
- Basu, S, Hwang, L, Mitsudome, T & Weintrop, J 2007, 'Corporate governance, top executive compensation and firm performance in Japan', *Pacific-Basin Finance Journal*, vol. 15, no. 1, pp. 56-79.
- Bathala, C 1996, 'Determinants of managerial stock ownership: the case of CEOs', *Financial Review*, vol. 31, no. 1, pp. 127-47.
- Beasley, M 1996, 'An empirical analysis of the relation between the board of director composition and financial statement fraud', *Accounting Review*, vol. 71, no. 4, pp. 443-65.
- Bebchuk, L & Fried, J 2003, 'Executive compensation as an agency problem', *Journal of Economic Perspectives*, vol. 17, no. 3, pp. 71-92.
- Bebchuk, L & Fried, J 2005, 'Pay without performance: Overview of the issues', *Journal of applied corporate finance*, vol. 17, no. 4, pp. 8-23.

- Bebchuk, L & Neeman, Z 2009, 'Investor protection and interest group politics', *Review of Financial Studies*, vol. 23, no 3, pp 1089-1119.
- Bebchuk, L, Fried, J & Walker, D 2002, 'Managerial power and rent extraction in the design of executive compensation', *University of Chicago Law Review*, vol. 69, pp. 751-846.
- Ben-Amar, W & André, P 2006, 'Separation of ownership from control and acquiring firm performance: The case of family ownership in Canada', *Journal of Business Finance & Accounting*, vol. 33, no. 3-4, pp. 517-43.
- Bender, R 2003, 'How executive directors' remuneration is determined in two FTSE 350 utilities', *Corporate Governance: An International Review*, vol. 11, no. 3, pp. 206-17.
- Bender, R 2007, 'Onwards and Upwards: why companies change their executive remuneration schemes, and why this leads to increases in pay', *Corporate Governance: An International Review*, vol. 15, no. 5, pp. 709-23.
- Bertrand, M & Schoar, A 2006, 'The role of family in family firms', *The Journal of Economic Perspectives*, pp. 73-96.
- Bliss, R & Rosen, R 2001, 'CEO compensation and bank mergers', *Journal of Financial Economics*, vol. 61, no. 1, pp. 107-38.
- Bloom, N & Van Reenen, J 2007, 'Measuring and Explaining Management Practices Across Firms and Countries', *Quarterly Journal of Economics*, vol. 122, no. 4, pp. 1351-408.
- Boubakri, N, Guedhami, O & Mishra, D 2009, 'Family control and the implied cost of equity: Evidence before and after the Asian financial crisis', *Journal of International Business Studies*, vol. 41, no. 3, pp. 451-74.
- Boyd, B 1994, 'Board control and CEO compensation', *Strategic Management Journal*, vol. 15, no. 5, pp. 335-44.
- Brick, I, Palmon, O & Wald, J 2006, 'CEO compensation, director compensation, and firm performance: Evidence of cronyism?', *Journal of Corporate Finance*, vol. 12, no. 3, pp. 403-23.
- Brickley, J, Lease, R & Smith Jr, C 1988, 'Ownership structure and voting on antitakeover amendments', *Journal of Financial Economics*, vol. 20, pp. 267-91.
- Bushman, R & Smith, A 2001, 'Financial accounting information and corporate governance 1', *Journal of Accounting and Economics*, vol. 32, no. 1-3, pp. 237-333.
- Cadbury, A 1992, 'The code of best practice', *Report from the Committee on the Financial Aspects of Corporate Governance*. London: Gee Publishing,

- Carrasco-Hernandez, A & Sanchez-Marin, G 2007, 'The Determinants of Employee Compensation in Family Firms: Empirical Evidence', *Family Business Review*, vol. 20, no. 3, p. 215.
- Carter, M & Zamora, V 2009, 'Shareholder remuneration votes and CEO compensation design', *paper SSRN*
- Chaganti, R & Damanpour, F 1991, 'Institutional ownership, capital structure, and firm performance', *Strategic Management Journal*, vol. 12, no. 7, pp. 479-91.
- Chalevas, CG 'The Effect of the Mandatory Adoption of Corporate Governance Mechanisms on Executive Compensation', *The International Journal of Accounting*, vol. In Press, Corrected Proof.
- Chalmers, K, Koh, P & Stapledon, G 2006, 'The determinants of CEO compensation: Rent extraction or labour demand?', *The British Accounting Review*, vol. 38, no. 3, pp. 259-75.
- Chen, E-T & Nowland, J 2010, 'Optimal Board Monitoring in Family-owned Companies: Evidence from Asia', *Corporate Governance: An International Review*, vol. 18, no. 1, pp. 3-17.
- Chen, G, Firth, M, Gao, DN & Rui, OM 2006, 'Ownership structure, corporate governance, and fraud: Evidence from China', *Journal of Corporate Finance*, vol. 12, no. 3, pp. 424-48.
- Chen, M & Lee, K 2008, 'Compensation, Corporate Governance and Owner Shareholding: Theory and Evidence from Family Ownership', *International Research Journal of Finance and Economics*, vol. 22.
- Chen, X, Harford, J & Li, K 2007, 'Monitoring: Which institutions matter?', *Journal of Financial Economics*, vol. 86, no. 2, pp. 279-305.
- Cheng, S & Firth, M 2006, 'Family ownership, corporate governance, and top executive compensation', *Managerial and Decision Economics*, vol. 27, no. 7, pp. 549-61.
- Cheung, Y, Stouraitis, A & Wong, A 2005, 'Ownership concentration and executive compensation in closely held firms: Evidence from Hong Kong', *Journal of Empirical Finance*, vol. 12, no. 4, pp. 511-32.
- Chourou, L 2010, 'Compensation of owner managers in Canadian family-owned businesses: expropriation of minority shareholders', *Canadian Journal of Administrative Sciences/Revue Canadienne des Sciences de l'Administration*, vol. 27, no. 2, pp. 95-106.
- Claessens, S & Fan, J 2002, 'Corporate governance in Asia: A survey', *International Review of Finance*, vol. 3, no. 2, pp. 71-103.

Claessens, S, Djankov, S & Lang, L 2000, 'The separation of ownership and control in East Asian Corporations* 1', *Journal of Financial Economics*, vol. 58, no. 1-2, pp. 81-112.

Claessens, S, Fan, J, Djankov, S & Lang, L 1999, 'On expropriation of minority shareholders: evidence from East Asia', paper *SSRN*.

Claessens, S, Djankov, S, Fan, J & Lang, L 2002, 'Disentangling the incentive and entrenchment effects of large shareholdings', *The Journal of Finance*, vol. 57, no. 6, pp. 2741-71.

Conyon, M 1997, 'Corporate governance and executive compensation', *International journal of industrial organization*, vol. 15, no. 4, pp. 493-509.

Conyon, M & Peck, S 1998, 'Board control, remuneration committees, and top management compensation', *Academy of Management Journal*, vol. 41, no. 2, pp. 146-57.

Conyon, MJ & Murphy, KJ 2000, 'The prince and the pauper? CEO pay in the United States and United Kingdom', *The Economic Journal*, vol. 110, no. 467, pp. 640-71.

Core, J, Holthausen, R & Larcker, D 1999, 'Corporate governance, chief executive officer compensation, and firm performance', *Journal of Financial Economics*, vol. 51, no. 3, pp. 371-406.

Cornett, M, Marcus, A, Saunders, A & Tehranian, H 2007, 'The impact of institutional ownership on corporate operating performance', *Journal of Banking & Finance*, vol. 31, no. 6, pp. 1771-94.

Cosh, A & Hughes, A 1997, 'Executive remuneration, executive dismissal and institutional shareholdings', *International journal of industrial organization*, vol. 15, no. 4, pp. 469-92,

Craighead, J, Magnan, M & Thorne, L 2004, 'The impact of mandated disclosure on performance-based CEO compensation', *Contemporary Accounting Research*, vol. 21, no. 2, pp. 369-98.

Craighead, JA, Magnan, ML & Thorne, L 2004, 'The Impact of Mandated Disclosure on Performance-Based CEO Compensation', *Contemporary Accounting Research*, vol. 21, no. 2, pp. 369-98.

Croci, Gonenc, H, Ozkan, N & Italy, M 2010, 'CEO Compensation, Family Control, and Institutional Investors in Continental Europe', paper *SSRN*.

Crystal, G 1991, 'CEO compensation: the case of Michael Eisner', *Executive Compensation: A Strategic Guide for the 1990s*, pp. 353-65.

Cubbin, J & Leech, D 1983, 'The effect of shareholding dispersion on the degree of control in British companies: theory and measurement', *The Economic Journal*, vol. 93, no. 370, pp. 351-69.

Deckop, J 1988, 'Determinants of chief executive officer compensation', *Industrial & Labor Relations Review*, vol. 41, no. 2, pp. 215-26.

Del Guercio, D & Hawkins, J 1999, 'The motivation and impact of pension fund activism', *Journal of Financial Economics (JFE)*, Vol. 52, No. 3, 1999.

Diamond, D 1984, 'Financial intermediation and delegated monitoring', *The Review of Economic Studies*, vol. 51, no. 3, pp. 393-414.

Dogan, E & Smyth, R 2002, 'Board remuneration, company performance, and ownership concentration: Evidence from publicly listed Malaysian companies', *ASEAN Economic Bulletin*, vol. 19, no. 3, pp. 319-47.

Dong, M & Ozkan, A 2008, 'Institutional investors and director pay: An empirical study of UK companies', *Journal of Multinational Financial Management*, vol. 18, no. 1, pp. 16-29.

Doucouliaagos, H, Askary, S & Haman, J 2007, 'Directors` Remuneration and Performance in Australia Banking', *Journal compilation*, vol. 15, no. 6, pp. 1363-83.
Eisenhardt, K 1989, 'Agency theory: An assessment and review', *Academy of management review*, pp. 57-74.

Ertugrul, M & Hegde, S 2008, 'Board compensation practices and agency costs of debt', *Journal of Corporate Finance*, vol. 14, no. 5, pp. 512-31.

Ezzamel, M & Watson, R 2002, 'Pay comparability across and within UK boards: An empirical analysis of the cash pay awards to CEOs and other board members', *Journal of Management Studies*, vol. 39, no. 2, pp. 207-32.

Faccio, M & Lang, L 2002, 'The ultimate ownership of Western European corporations', *Journal of Financial Economics*, vol. 65, no. 3, pp. 365-95.

Faccio, M, Lang, L & Young, L 2001, 'Dividends and expropriation', *American Economic Review*, vol. 91, no. 1, pp. 54-78.

Fahlenbrach, R 2007, 'Founder-CEOs, investment decisions, and stock market performance', *The Journal of financial and quantitative analysis*.

Fama, E & Jensen, M 1983, 'Separation of ownership and control', *The journal of law and Economics*, vol. 26, no. 2, p. 301.

Fama, EF 1980, 'Agency Problems and the Theory of the Firm', *The Journal of Political Economy*, pp. 288-307.

Fan, JPH & Wong, TJ 2002, 'Corporate ownership structure and the informativeness of accounting earnings in East Asia', *Journal of Accounting and Economics*, vol. 33, no. 3, pp. 401-25.

Fernie, S & Metcalf, D 1999, 'It's Not What You Pay It's the Way That You Pay It and That's What Gets Results: Jockeys' Pay and Performance', *Labour*, vol. 13, no. 2, pp. 385-411.

Field, AP 2009, *Discovering statistics using SPSS: (and sex and drugs and rock 'n' roll)*, SAGE.

Finkelstein, S & Hambrick, D 1989, 'Chief executive compensation: A study of the intersection of markets and political processes', *Strategic Management Journal*, vol. 10, no. 2, pp. 121-34.

Fosberg, RH & Nelson, MR 1999, 'Leadership structure and firm performance', *International Review of Financial Analysis*, vol. 8, no. 1, pp. 83-96.

Foster, FD & Viswanathan, S 1996, 'Strategic trading when agents forecast the forecasts of others', *The Journal of Finance*, vol. 51, no. 4, pp. 1437-78.

Franzoni, S 2010, 'International comparison of the remuneration system disclosure', *EuroEconomica*, vol. 25, no. 2, pp. 35-44.

Fraser, J 1990, 'Executive compensation survey: missed opportunities', *INC Magazine*, vol. 12, no. 1.

Gallagher, D, Smith, G & Swan, P 2006, Do institutional investors really monitor executive compensation, *paper SSRN*.

Gomez-Mejia, L, Larraza-Kintana, M & Makri, M 2003, 'The determinants of executive compensation in family-controlled public corporations', *The Academy of Management Journal*, pp. 226-37.

Greco, S 1997, 'Employee package deal', *INC Magazine*, vol. 19, pp. 15-30.

Greenbury, R 1995, 'Directors' remuneration', *Report of a Study Group Chaired by Sir Richard*.

Gregory-Smith, I 2010, 'Chief Executive Pay and Remuneration Committee Independence*', *Oxford Bulletin of Economics and Statistics*, pp. 510-531.

Guercio, DD & Hawkins, J 1999, 'The motivation and impact of pension fund activism', *Journal of Financial Economics*, vol. 52, no. 3, pp. 293-340.

Haid, A & Yurtoglu, B 2006, 'Ownership structure and executive compensation in Germany', *paper SSRN*

Hair, JF, Anderson, Tatham & Black 1998, *Multivariate data analysis*, Prentice Hall, New Jersey.

Haniffa, R & Cooke, T 2005, 'The impact of culture and governance on corporate social reporting', *Journal of Accounting and Public Policy*, vol. 24, no. 5, pp. 391-430.

- Hartzell, J & Starks, L 2003, 'Institutional investors and executive compensation', *Journal of Finance*, vol. 58, no. 6, pp. 2351-74.
- Hassan, S, Christopher, T & Evans, R 2003, 'Directors' remuneration and firm performance: Malaysian evidence', *ECU Publications*, pp. 3174.
- He, L 2008, 'Do founders matter? A study of executive compensation, governance structure and firm performance', *Journal of Business Venturing*, vol. 23, no. 3, pp. 257-79.
- Hill, J 1996, 'What Reward Have Ye? Disclosure of Director and Executive Remuneration in Australia', *Company and Securities Law Journal*, vol. 14.
- Hölmstrom, B 1979, 'Moral hazard and observability', *The Bell Journal of Economics*, vol. 10, no. 1, pp. 74-91.
- Ibrahim, H & Samad, F 2010, 'Corporate Governance and Agency Costs: Evidence From Public Listed Family Firms in Malaysia'.
- Jackson, S, Lopez, T & Reitenga, A 2008, 'Accounting fundamentals and CEO bonus compensation', *Journal of Accounting and Public Policy*, vol. 27, no. 5, pp. 374-93.
- Jaggi, B, Leung, S & Gul, F 2009, 'Family control, board independence and earnings management: Evidence based on Hong Kong firms', *Journal of Accounting and Public Policy*, vol. 28, no. 4, pp. 281-300.
- James, K 2010, *Accounting for goodwill in Australian business combinations: is there a value to choose?*, VDM Verlag Dr Muller.
- Jensen, M & Meckling, W 1976, 'Theory of the firm: Managerial behavior, agency costs and ownership structure', *Journal of Financial Economics*, vol. 3, no. 4, pp. 305-60.
- Jensen, M & Murphy, K 1990, 'Performance pay and top-management incentives', *Journal of political economy*, vol. 98, no. 2, pp. 225-64.
- Jensen, M & Murphy, K 2010, 'CEO Incentive - It's Not How Much You Pay, But How*', *Journal of applied corporate finance*, vol. 22, no. 1, pp. 64-76.
- Jensen, M, Murphy, K & Wruck, E 2005, 'CEO Pay and how to fix it', *Harvard Business*.
- Jiang, Y & Peng, M 2010, 'Principal-principal conflicts during crisis', *Asia Pacific Journal of Management*, pp. 1-13.
- Johnson, M, Porter, S & Shackell-Dowell, M 1997, 'Stakeholder pressure and the structure of executive compensation', *papers SSRN*.

- Johnson, S, La Porta, R, Lopez-de-Silanes, F & Shleifer, A 2000, 'Tunneling', *American Economic Review*, vol. 90, no. 2, pp. 22-7.
- Kaplan, S 1994, 'Top executives, turnover, and firm performance in Germany', *Journal of Law, Economics, and Organization*, vol. 10, no. 1, p. 142.
- Kato, T, Kim, W & Lee, J 2007, 'Executive compensation, firm performance, and chaebols in Korea: Evidence from new panel data', *Pacific-Basin Finance Journal*, vol. 15, no. 1, pp. 36-55.
- Khan, R, Dharwadkar, R & Brandes, P 2005, 'Institutional ownership and CEO compensation: a longitudinal examination', *Journal of Business Research*, vol. 58, no. 8, pp. 1078-88.
- Kim, H & Gu, Z 2005, 'A preliminary examination of determinants of CEO cash compensation in the US restaurant industry from an agency theory perspective', *Journal of Hospitality & Tourism Research*, vol. 29, no. 3, pp. 341-55.
- La Porta, R, Lopez-de-Silanes, F, Shleifer, A & Vishny, R 1999, 'Corporate ownership around the world', *Journal of Finance*, vol. 54, no. 2, pp. 471-517.
- Lambert, R, Larcker, D & Weigelt, K 1993, 'The structure of organizational incentives', *Administrative Science Quarterly*, vol. 38, no. 3.
- Lazear, E 2000, 'Performance pay and productivity', *American Economic Review*, pp. 1346-61.
- Lazear, EP 1996, Performance pay and productivity, National Bureau of Economic Research, *Working paper series*.
- Lee, J 2009, 'Executive performance-based remuneration, performance change and board structures', *The International Journal of Accounting*, vol. 44, no. 2, pp. 138-62.
- Lee, J 2009, 'Executive Performance-based Remuneration: How is it Paid under Performance Change and Different Board Structures?'
- Leone, AJ, Wu, JS & Zimmerman, JL 2006, 'Asymmetric sensitivity of CEO cash compensation to stock returns', *Journal of Accounting and Economics*, vol. 42, no. 1-2, pp. 167-92.
- Letza, S, Sun, X & Kirkbride, J 2004, 'Shareholding versus stakeholding: a critical review of corporate governance', *Corporate Governance*, vol. 12, no. 3, pp. 242-62.
- Lim, MH 1981, *Ownership and control of the one hundred largest corporations in Malaysia*, Oxford University Press Kuala Lumpur.
- Main, B & Johnston, J 1992, 'Remuneration committees and corporate governance', *Accounting and Business Research*, Vol. 23, no. 1.

- Main, B, Bruce, A & Buck, T 1996, 'Total board remuneration and company performance', *The Economic Journal*, vol. 106, no. 439, pp. 1627-44.
- Martinez, J, Stohr, B & Quiroga, B 2007, 'Family ownership and firm performance: Evidence from public companies in Chile', *Family Business Review*, vol. 20, no. 2, p. 83.
- Maug, E 1998, 'Large shareholders as monitors: is there a trade-off between liquidity and control?', *The Journal of Finance*, vol. 53, no. 1, pp. 65-98.
- Maury, B 2006, 'Family ownership and firm performance: Empirical evidence from Western European corporations', *Journal of Corporate Finance*, vol. 12, no. 2, pp. 321-41.
- Mayer, C 1997, 'Corporate governance, competition, and performance', *Journal of Law and Society*, vol. 24, no. 1, pp. 152-76.
- McConaughy, DL, Walker, MC, Henderson, GV & Mishra, CS 1998, 'Founding family controlled firms: Efficiency and value', *Review of Financial Economics*, vol. 7, no. 1, pp. 1-19.
- McConnell, JJ & Servaes, H 1990, 'Additional evidence on equity ownership and corporate value', *Journal of Financial Economics*, vol. 27, no. 2, pp. 595-612.
- McMillan, J, Whalley, J & Zhu, L 1989, 'The impact of China's economic reforms on agricultural productivity growth', *The Journal of Political Economy*, vol. 97, no. 4, pp. 781-807.
- Mehran, H 1995, 'Executive compensation structure, ownership, and firm performance', *Journal of Financial Economics*, vol. 38, no. 2, pp. 163-84.
- Melis, A 2000, 'Corporate governance in Italy', *Corporate Governance: An International Review*, vol. 8, no. 4, pp. 347-55.
- Miller, D & Le Breton-Miller, I 2006, 'Family governance and firm performance: Agency, stewardship, and capabilities', *Family Business Review*, vol. 19, no. 1, pp. 73-87.
- Miller, D, Le Breton-Miller, I, Lester, RH & Cannella Jr, AA 2007, 'Are family firms really superior performers?', *Journal of Corporate Finance*, vol. 13, no. 5, pp. 829-58.
- Mishra, CS, Randøy, T & Jenssen, JI 2001, 'The effect of founding family influence on firm value and corporate governance', *Journal of International Financial Management & Accounting*, vol. 12, no. 3, pp. 235-59.
- Mitton, T 2002, 'A cross-firm analysis of the impact of corporate governance on the East Asian financial crisis* 1', *Journal of Financial Economics*, vol. 64, no. 2, pp. 215-41,

Moore, K & Craig, J 2008, 'Agency differences in professional family businesses: the known and the unknown', *Business papers*, p. 154.

Morck, R & Yeung, B 2003, 'Agency problems in large family business groups', *Entrepreneurship Theory and Practice*, vol. 27, no. 4, pp. 367-82.

Murphy, K 1985, 'Corporate performance and managerial remuneration: An empirical analysis', *Journal of Accounting and Economics*, vol. 7, no. 1-3, pp. 11-42.

Murphy, K 1999, 'Executive compensation', *Handbook of Labor Economics*, vol. 3, pp. 2485-563.

Naudé, WAWIFDER 2009, The financial crisis of 2008 and the developing countries, *United Nations University, World Institute for Development Economics Research*.

O'Reilly, CA, Main, BG & Crystal, GS 1988, 'CEO compensation as tournament and social comparison: A tale of two theories', *Administrative Science Quarterly*, vol. 33, no. 2, pp. 257-74.

Ozkan, N 2007, 'Do corporate governance mechanisms influence CEO compensation? An empirical investigation of UK companies', *Journal of Multinational Financial Management*, vol. 17, no. 5, pp. 349-64.

Paarsch, H & Shearer, B 2000, 'Piece rates, fixed wages, and incentive effects: Statistical evidence from payroll records', *International Economic Review*, vol. 41, no. 1, pp. 59-92.

Parrino, R, Sias, R & Starks, L 2003, 'Voting with their feet: institutional ownership changes around forced CEO turnover 1', *Journal of Financial Economics*, vol. 68, no. 1, pp. 3-46,

Peng, M & Jiang, Y 2010, 'Institutions behind family ownership and control in large firms', *Journal of Management Studies*, vol. 47, no. 2, pp. 253-73.

Pérez-González, F 2006, 'Inherited control and firm performance', *The American Economic Review*, vol. 96, no. 5, pp. 1559-88.

Rahman, R & Ali, F 2006, 'Board, audit committee, culture and earnings management: Malaysian evidence', *Managerial Auditing Journal*, vol. 21, no. 7, pp. 783-804.

Rahul, D 1996, 'Barriers to effective corporate governance by institutional investors: Implications for theory and practice', *European Management Journal*, vol. 14, no. 5, pp. 457-66.

Reed, D 2002, 'Employing normative stakeholder theory in developing countries', *Business & Society*, vol. 41, no. 2, pp. 166-207.

Rosen, S 1982, 'Authority, control, and the distribution of earnings', *The Bell Journal of Economics*, pp. 311-23.

- Ryan, L & Schneider, M 2003, 'Institutional investor power and heterogeneity', *Business & Society*, vol. 42, no. 4, p. 398.
- Salim, B & Wan-Hussin, W 2009, 'Remuneration Committee, Ownership Structure and Pay-for-Performance: Evidence from Malaysia', *paper SSRN*.
- Schneider, M 2000, 'When financial intermediaries are corporate owners: An agency model of institutional ownership', *Journal of Management and Governance*, vol. 4, no. 3, pp. 207-37.
- Schulze, W, Lubatkin, M & Dino, R 2003, 'Toward a theory of agency and altruism in family firms', *Journal of Business Venturing*, vol. 18, no. 4, pp. 473-90.
- Shaw, KW & Zhang, MH 2010, 'Is CEO cash compensation punished for poor firm performance?', *The Accounting Review*, vol. 85, p. 1065.
- Shleifer, A & Vishny, R 1986, 'Large shareholders and corporate control', *The Journal of Political Economy*, vol. 94, no. 3.
- Shleifer, A & Vishny, RW 1997, 'A survey of corporate governance', *national bureau of economic research, working paper series*.
- Sias, RW, Starks, LT & Titman, S 2001, 'The price impact of institutional trading'. *Working paper series*.
- Singh, H & Harianto, F 1989, 'Top management tenure, corporate ownership structure and the magnitude of golden parachutes', *Strategic Management Journal*, vol. 10, no. S1, pp. 143-56.
- Srivastava, S 1997, *Resampling Methods for Imputing Missing Observations in Regression Models*, University of Toronto.
- Su, Y, Xu, D & Phan, P 2008, 'Principal–principal conflict in the governance of the Chinese public corporation', *Management and Organization Review*, vol. 4, no. 1, pp. 17-38.
- Subramaniam, C & Wang, F 2009, 'Performance-oriented shareholder proposals and CEO compensation', *Unpublished manuscript, University of Texas*.
- Sun, J, Cahan, SF & Emanuel, D 2009, 'Compensation committee governance quality, chief executive officer stock option grants, and future firm performance', *Journal of Banking & Finance*, vol. 33, no. 8, pp. 1507-19.
- Tabachnick, BG & Fidell, LS 2007, *Using multivariate statistics*, Pearson/Allyn & Bacon.
- Tam, O & Tan, M 2007, 'Ownership, governance and firm performance in Malaysia', *Corporate Governance: An International Review*, vol. 15, no. 2, pp. 208-22.

Thillainathan, R 1999, 'Corporate governance and restructuring in Malaysia-A review of markets, mechanisms, agents and the legal infrastructure', *Survey of Corporate Governance-World Bank*.

Thomsen, S & Pedersen, T 2000, 'Ownership structure and economic performance in the largest European companies', *Strategic Management Journal*, vol. 21, no. 6, pp. 689-705.

Tosi, H, Gomez-Mejia, L, Loughry, M, Werner, S, Banning, K, Katz, J, Harris, R & Silva, P 1999, 'Managerial discretion, compensation strategy, and firm performance: The case for ownership structure', *Research in personnel and human resources management*, vol. 17, pp. 163-208.

Tosi, J, H.L. & Gomez-Mejia, LR 1989, 'The decoupling of CEO pay and performance: An agency theory perspective', *Administrative Science Quarterly*, pp. 169-89.

Tsamenyi, M, Enninful-Adu, E & Onumah, J 2007, 'Disclosure and corporate governance in developing countries: Evidence from Ghana', *Managerial Auditing Journal*, vol. 22, no. 3, pp. 319-34.

Vafeas, N & Afxentiou, Z 1998, 'The association between the SEC's 1992 compensation disclosure rule and executive compensation policy changes', *Journal of Accounting and Public Policy*, vol. 17, no. 1, pp. 27-54.

Villalonga, B & Amit, R 2006, 'How do family ownership, management and control affect firm value', *Journal of Financial Economics*, vol. 80, no. 2, pp. 385-417.

Wan-Hussin, W 2009, 'The impact of family-firm structure and board composition on corporate transparency: Evidence based on segment disclosures in Malaysia', *The International Journal of Accounting*, vol. 44, no. 4, pp. 313-33.

Weisbach, M 1988, 'Outside directors and CEO turnover', *Journal of Financial Economics*, vol. 20, pp. 431-60.

Wiwattanakantang, Y 2001, 'Controlling shareholders and corporate value: Evidence from Thailand', *Pacific-Basin Finance Journal*, vol. 9, no. 4, pp. 323-62.

Young, M, Peng, M, Ahlstrom, D, Bruton, G & Jiang, Y 2008, 'Corporate governance in emerging economies: A review of the principal-principal perspective', *Journal of Management Studies*, vol. 45, no. 1, pp. 196-220.

Zattoni, A & Cuomo, F 2010, 'How Independent, Competent and Incentivized Should Non-executive Directors Be? An Empirical Investigation of Good Governance Codes', *British Journal of Management*, vol. 21, no. 1, pp. 63-79.

Zhuang, J 2001, *Corporate Governance and Finance in East Asia: Country studies*, vol. 2, *Asian Development Bank*.

Zulkafli, A, Adul Samad, M & Ismail, M 2005, 'Corporate Governance in Malaysia', *Malaysian Institute of Corporate Governance. 1*, vol. 18.