DETERMINANTS AND IMPACTS OF DIRECTORS' REMUNERATION DISCLOSURE: EVIDENCE FROM MALAYSIAN FTSE30 COMPANIES

A thesis submitted for the degree of Doctor of Philosophy

by

Akhma Adlin Khalid

Department of Economic and Finance
College of Business, Arts and Social Sciences
Brunel University London

January, 2018

Abstract

Directors' remuneration has long attracted a great deal of attention from financial economists and academics due to its strategic role as a remedy to control agency problems. The key issue is the conflict between directors and shareholders on whether the remuneration is designed to maximise shareholders' value or to favour directors, who run the company on behalf of the investors. However, the conflict can never be detected when the disclosure of remuneration is not transparent. The study was conducted in Malaysia which provides a distinctive research setting different from other developing countries because Malaysia has a disclosure exercise that is still far below best practice as well as a unique Malaysian cultural and institutional environment. Thus, the unusual combination of politics (government) dominated by Malays and business dominated by the minority Chinese provides an interesting background to explore the determinants and consequences of directors' remuneration disclosure.

This study's novelty stands on the exploration of ownership structure and board diversity in determining directors' remuneration disclosure, as well as the impact of disclosure towards firm value. The first chapter investigates the association between ownership structure and directors' remuneration disclosure. A significant and negative association is noted between family ownership and remuneration disclosure, suggesting that the traditional family control in Malaysia continue to be dominating outweighing the necessity of public disclosure. Moreover, this study encountered a non-linear relationship between government ownership and remuneration disclosure, indicating that the disclosure of directors' remuneration is positive up to a certain level of government ownership but reduces as government ownership increases. Evidently, directors in government-owned companies are being extra vigilant in disclosing their remuneration due to the political and personal security reasons, particularly post the 12th general election of Malaysia in 2008 that witnessed the government lose its two-thirds majority in parliament for the first time after 40 years.

The second chapter examines how board diversity influences disclosure. The study found that only age diversity is significantly and negatively associated with directors' remuneration disclosure, supporting the age stereotype that characterised old directors who are wise and wisdom. Hence, the adverse disclosure behaviour can be explained by their ability to credibly withhold voluntary information and strategically disclose mandatory information on remuneration. Contrary to prior studies, this study found that ethnic diversity does not have a significant influence on directors' remuneration disclosure possibly due to the equal number of Malay and non-Malay directors on board throughout the period under review. Interestingly, cultural convergence is also known to be a contributing factor as both ethnics exercise their belief in determining the level of strategic remuneration disclosure. In line with upper echelon theory, the presence of female directors is found to be an insignificant determinant of remuneration disclosure possibly due to their risk-averse personality in the high-risk disclosure area.

The third chapter aims to assess the extent to which directors' remuneration disclosure reflects information that is relevant to firm value. By using Tobin's Q, this chapter shows that directors' remuneration disclosure is value relevant in both financial and non-financial sectors among the FTSE30 companies. The finding implies that the market highly values directors' remuneration disclosure as it signals board transparency and provides a window to overall governance quality of an organisation. This chapter proposes that commitment to directors' remuneration disclosure has potential benefits that outweigh the risk of disclosing within the Malaysian context. Furthermore, this chapter explicitly addresses and justifies the potential endogeneity problem that has been ignored by typical accounting studies. Using the two-stage least squares (2SLS) technique to control for the endogeneity of voluntary remuneration disclosure in assessing its impact on firm value, findings from the robustness analysis carried out suggest that the empirical results reported are robust to potential endogeneity problems.

Finally, this study provides two practical implications. First, it provides a disclosure incentive for directors to make better remuneration disclosure in the annual report. Despite that there is evidence of hesitancy to disclose due to the political volatility in Malaysia subsequent to the 12th general election in 2008, the market significantly values directors' remuneration disclosure as it signals good governance practice by the company as well as great reputation portrayed by the board members. More specifically, this study encourages disclosure on directors' remuneration as it positively affects firm value, in both financial and non-financial sectors. Secondly, this study offers essential guidelines for companies in determining the board composition. It suggests that a distinctive personality of each director can be a competitive advantage of a firm when it is properly transformed to make it congruent with the firm's objective, in achieving maximum efficiency of decision-making. While age diversity is found to be significantly associated with directors' remuneration disclosure, the remaining board diversity dimensions such as gender, and ethnicity are also significant in a condition when it is critically analysed using the upper echelon theory within the context of Malaysia. Overall, the study indicates the need to incorporate a diversified composition of the top decision-makers in deciding a strategic remuneration disclosure.

Acknowledgement

In The name of God, the Most Gracious and the Most Merciful
"Read! And your Lord is the Most Generous, who has taught by the pen and has taught a man that which he knew not" [Al 'Alaq, verse 3-5]

All praises to the Almighty for His countless blessings that enable me to get through this PhD journey with great perseverance and determination.

I would like to extend my deepest appreciation to many people, in United Kingdom (UK) and my country, Malaysia, which was generously contributed to the completion of this thesis.

Special thanks to both of my supervisors, Professor Frank Skinner and Dr Siming Liu. My PhD has been an amazing experience, and I thank both of them, for their tremendous academic support by giving constructive comments on my mistakes and complimenting my good work.

I would especially like to thank Dr Omaima Hassan, Dr Basariah and Professor Zubaidah, who used to be my former supervisors for believing in me and for their continuous support throughout my PhD study.

To my housemates for the past four years in UK, Syimah and Yona, you are among the toughest ladies I ever know, who can bear with me, during my good and my bad. People can never be perfect, but we had tried our best to make our home from Hira' to UH to TG and FR as a perfect one! And not to forget the people who come and go as part of our housemates in the UK, Nurul Ain and Saharah. This journey would be more difficult if it is without the presence of great companion like all of you.

My most profound appreciation also goes to the people around me literally in UK, Dr Anisah Hambali, Dr Norhafizah Abu Hasan, Dr Liyana Azmi, Dr Norhafizah Haris and much more who always inspired and encouraged me throughout this unexplained journey. I am totally blessed to be surrounded by positive people like you.

I am also hugely appreciative to my Economics and Finance's colleague in Marie Jahoda building, Dr Ahmad Alsaireh, Dr Ali, Dr Haboub, Dr Mahmood, Dr Housam, Dr Huthaifah, Omer Faruq, Hao, Diyama, Janeeta and others for the advice and experience that we shared together, on Stata and many things beyond that!

Finally but never the least, I must give a heartfelt, extra-ordinary gratitude to my families in Malaysia. To my lifetime mentors, who are my dad, Hj Khalid and my mom, Hjh Mahanum, I can never thank you enough for your understanding and unconditional love. We might be a thousand miles apart, but you are the anchor of my strength that keeps me going. Also, I am grateful to my siblings, Akhma Deena, Akhma Azizi, Omar and Syafiqah who have provided endless support to me along the way, primarily by taking care of our parents when I am not around. To my lovely nieces and nephews, Mus'ab, Huzaifah, Nu'aim, Sumayyah, Nusaibah, Amrah, Alya and Anas, let's pick up where we left before. And not to forget, one special person who just came into my life at the end of this long journey. Thank you, my dearest husband, Dr Haslizan Hassan.
I can never imagine that when I am about to complete my PhD journey, you came to complete me, with the presence of beautiful Qistina and Insyirah.

Your prayer for me was what sustained me until the end. Thus, again, from the bottom of my heart, I sincerely thank you.

Declaration

I hereby declare that the thesis is based on my original work, except for quotations and citations which have been duly acknowledged. I also declare that it has not been previously or concurrently submitted for any other degree at Brunel University or other institutions. In addition, I certify that no part of this work will, in the future, be used in a submission in my name, for any other degree or diploma in any university or other tertiary institution without the prior approval of Brunel University, London and where applicable, any partner institution responsible for the joint-award of this degree. I further declare that all information in this thesis has been obtained and presented by academic rules and ethical conduct.

Name : Akhma Adlin Khalid

Date : January 2018

Table of Contents

List of Tables

List of Figures

List of Appendix

Preamble

The numbers of corporate collapses after the Asian financial crisis in 1997 has led the East Asian countries to call for enhanced transparency including Malaysia. Many economists have pointed to the malfunctioning of the corporate governance mechanism as one of the major factors responsible for causing the situation. Malaysia, being one of the most affected countries upon the crisis had experienced a big decline in the total market capitalization from RM 717 billion (approximately GBP 130 billion) in 1997 to RM 519 billion (approximately GBP 94 billion) in 2003 for approximately 800 public listed companies. Thus, Malaysia has strengthened its corporate governance with the first introduction of Malaysian Code on Corporate Governance in 2000 to recover the market condition by focusing on the transparency in the corporate sector. Despite the substantial improvement in the Malaysian market, evidenced by the financial system that has well weathered the 2007 global financial crisis (International Monetary Fund, 2013), Malaysia is still rated below the average in terms of governance (Forum for a new World Governance, 2011) and transparency (Transparency International, 2016).

While the Malaysian setting has been explored in some earlier studies on the corporate governance reporting practices, transparency of directors' remuneration has received less attention (Sengupta and Zhang, 2015). Hence, this study focuses on disclosure of directors' remuneration in the annual report, given that it attracts a great deal of attention from the practitioners and academics due to its strategic role as a remedy of the agency problem (Arye *et al.*, 2003). The issue on directors' remuneration was exacerbated in the recent crisis where it is well known that executive pay arrangement might have encouraged excessive risk-taking among the financial firms (Bolton, Mehran, & Shapiro, 2015; Bebchuk, Cohen, & Spamann, 2010). Similarly, the conflict between directors and shareholders for all firms is whether the remuneration is designed to maximise shareholders' value or to favour directors, who run the company on behalf of the investors. However, the conflicts can never be detected when the disclosure of remuneration is not transparent in a country where disclosure environment is less rich like Malaysia that could lead to the agency problem.

(I) Research motivations

Scholars increasingly realize that there is no single model that adequately depicts corporate governance (CG) in any national contexts. Therefore, a large number of literature highlights the need to consider specific legal and institutional setting explicitly in analysing the effect of CG on disclosure (Melis, Gaia and Carta, 2015; Rodríguez Bolívar, Alcaide Muñoz and López Hernández, 2013; García-Meca and Sánchez-Ballesta, 2010; Hope, 2003). This is because the differences in the legal and institutional setting in respective countries had played a major role in shaping the disclosure practices. Although Malaysia is considered as a developing market, results from prior research on developing countries may not necessarily apply to its reporting environment mainly due to the cultural factors that have varieties in terms of its disclosing behaviour. Following are the two main reasons that fundamentally motivate this study.

First, Malaysia is a common law country where there are numbers of legal systems being inherited from the British. For example, the CG code adopted in Malaysia is similar to the Hampel Report (UK) which was strongly emphasized after the Asian Financial Crisis in 1997/1998. Prior studies in Malaysia have generally examined the relationship between CG practices and various type of disclosure, such as mandatory accounting disclosure (Abdullah *et al.*, 2015), voluntary disclosure (Mohd Ghazali and Weetman, 2006), risk disclosure (Maizatulakma *et al.*, 2015), segmental disclosure (Wan-Hussin, 2009) and corporate social disclosure (Haniffa and Cooke, 2005; Haniffa and Cooke, 2002) but limited work has been done on directors' remuneration disclosure. Malak (2012) has observed the level of directors' remuneration disclosure before and after the introduction of remuneration disclosure regulatory reforms for Malaysian context from 2000 to 2008. However, the regulatory reforms only cover the first CG code which is Malaysian Code on CG (MCCG) 2000 and two Financial Reporting Standards (FRS) which are FRS 2 (Share-based payments) and FRS 124 (Related party disclosure). Therefore, this study extends the prior research by including MCCG 2007 and 2012 in a new research period, i.e. from 2007 to 2014 to reflect recent changes. On top of that, this study includes FRS 119 (Employee benefits) that closely observes the disclosure on employee benefits. This has led to the development of a combined disclosure index between weighted and un-weighted items that measure the disclosure of total directors' remuneration, as compared to Malak (2012) who employed un-weighted disclosure index in measuring directors' remuneration disclosure.

Second, Malaysia is unique for its multi-ethnicity culture. Historically, British had implemented a formal mechanism that recruits overseas labour to support the growing economic sectors in the 1970s, and this has led to a permanent plural society in Malaysia (Hirschman, 1987). Moreover, British involvement in the political matters includes separation of the population based on occupational and economic activities. For instance, the local Malays were involved in the political and education sectors, the Chinese peasants imported from China were introduced to the business activities while the Indian labour was imported to work in the new capitalist rubber estates (Yazid, 2014). Thus, the unusual combination of politics (government) dominated by Malays and business dominated by the minority Chinese provides a distinctive research setting different from other developing countries. However, there is no prior studies that have investigated the impact of board diversity on directors' remuneration disclosure in Malaysia despite that there is a growing pressure on firms to address board diversity in developed countries (Mallin and Farag, 2017; Ben-Amar, Chang and McIlkenny, 2015; Chapple and Humphrey, 2014) and developing countries (Hoang, Abeysekera and Ma, 2016; Ararat, Aksu and Tansel Cetin, 2015; Low, Roberts and Whiting, 2015).

The final research motivation is regarding the incentive of directors' remuneration disclosure as the effect is complex (Park, Nelson and Huson, 2001). The main reason for disclosing comprehensive directors' remuneration that includes the process and practices is to reduce the information asymmetry between directors and the shareholders, as low quality of transparency would hinder the shareholders' ability to monitor the performance of directors. On the other hand, the main reason for not disclosing is to avoid the additional cost that entails from the disclosure. To illustrate, when all firms disclose the same information of compensation, any firms that distinguish themselves by disclosing more will attract additional public scrutiny and answerable to the shareholders (Lo, 2003). Consequently, directors are in a dilemma to weigh between the benefits and the cost of providing the extent of directors' remuneration disclosure. Thus, this study investigates the value relevance of directors' remuneration disclosure that could stimulate more transparent of a pay-performance link in future.

In conclusion, as the size of Malaysian market is much smaller than the developed country like US and UK, the understanding of directors' remuneration disclosure may be more amenable to capture disclosure behaviour. Therefore, Malaysia is an attractive market to examine the determining factors of disclosure that are not covered by other countries as the disclosure environment in Malaysia is less rich than that of the developed countries. For example, this study introduces the effect of government ownership towards directors' remuneration disclosure. Government-owned companies (GLC) in Malaysia is unique due to its strong politically connected hence less disclosure is anticipated to protect their political interest. On top of that, this study also introduces board diversity that includes culture in determining directors' remuneration disclosure. The diversity of board members in a multi-ethnic society and the traditional strength of a culture of relative secrecy in highly concentrated companies (government and family-owned) might outweigh the reforming efforts of corporate governance in Malaysia. Therefore, this study is motivated to consider factors influencing directors' remuneration disclosure particularly in period after the global economic crisis by indicating the level of governance implemented in a developing country, which might be also potentially interesting for other similar countries like Malaysia.

(II) Research questions

Based on the research motivations explained in section (I), this thesis investigates the determinants and impact of directors' remuneration disclosure in the annual report among FTSE30 companies in Malaysia. There are three research questions to be answered in three separate empirical chapters, further explained as below:

Empirical chapter one:

(1) How does corporate governance (a proxy of statutory characteristics) influence the level of directors' remuneration disclosure?

Empirical chapter two:

(2) How does board diversity (a proxy of demographic characteristics) influence the level of directors' remuneration disclosure?

Empirical chapter three:

(3) Is disclosure of directors' remuneration affects firm value? Is there any different impact on accounting performance and in the financial sector?

(III) Research contributions

This research contributes in seven different ways:

(1) The previous study on directors' remuneration disclosure in Malaysia had utilised MCCG 2000 and two Financial Reporting Standards (FRS) which are FRS 2 (Share-based payments) and FRS 124 (Related party disclosure) to derive to the directors' remuneration disclosure index. However, this study includes the latest update on CG code, i.e. MCCG 2007 and 2012. This study further includes FRS 119 (Employee benefits) to closely observe the disclosure practices on directors' benefit. This will be the interest of policymakers in assessing the effectiveness of regulatory changes in improving the transparency of directors' remuneration. Additionally, detailed disclosure of directors' remuneration not only benefits corporate governance but improved company's strategic performance by ensuring that directors deliver on the key performance indicators. Hence, the development of a combination between weighted and un-weighted items in a self-constructed disclosure index in this study contributes to the existing disclosure literature that is still absent with an agreed model of disclosure quality to date (Hassan and Marston, 2010);

(2) This study extends, as well as contributes to, the extant CG literature by showing whether the traditional dominance of government and family are still present in determining the extent of directors' remuneration disclosure, particularly in a new sampling period from 2007 to 2014. This period is significant to this study due an important event that had taken place in Malaysia, i.e. changes in the political atmosphere in 2008;

(3) While most previous studies on disclosure only analyse linear relationships, this study advances the existing literature by offering a non-linear analysis of some of the CG elements, as suggested by the current CG scholars (Alnabsha *et al.*, 2017; Sun *et al.*, 2016).

(4) Unlike previous studies that examine the link between board diversity and financial performance, this study explores the link between board diversity and disclosure. The diversity of board members in a multi-ethnic society like Malaysia that includes the traditional strength of a culture of secrecy who prefers confidentiality about the business only to those who are closely involved with the management (family-owned) requires an empirical explanation to prove the importance of diversity among Malaysian directors and their disclosure behaviour. Consequently, this study fills the gap in the existing literature particularly on directors' remuneration disclosure and board diversity. Also, this study is significant since the topic has not been researched previously in Malaysia;

(5) This study also assists policymakers and management team in assessing the effectiveness of existing board composition in influencing disclosure. Malaysia is the first Asian country that announced the gender policy in 2004 under the Ministry of Women, Family and Community Development established via the amendment of Article 8(2) Federal Constitution in 2001; thus the results of this study will benefit the policymakers in reviewing the existing and future policy to deliver diversity in every level of a firm. Statistically, there is an increase of Malaysian female directors from 12 percent in 2008 to 17 percent in 2014 but due to the deeply rooted of cultural resistance towards gender equality among emerging countries, Malaysian companies need to be more diverse in terms of board composition than those countries which are open in accepting gender equality.

(6) While previous studies mostly concentrate on the value relevance of financial performance, this study focuses on the value relevance (using Tobin's Q) of directors' remuneration disclosure. Hence, the result of this study will help directors and the management team in determining the extent of directors' remuneration disclosure to secure the benefit of disclosure. Additionally, as

far as this study is concern, there are no prior studies that have investigated the value relevance of directors' remuneration disclosure in Malaysia;

(7) Finally, the overall result of this study may assist shareholders in scrutinizing the adequacy of directors' remuneration information disclosed in the annual report for them to evaluate the performance of directors as their agent.

(IV) Thesis structure

The thesis consists of six sections that are as follows: First, the thesis starts with a preamble section that presents the overall introduction of the research. This section includes the motivations, research questions and contribution of the study. This is followed by the second section that provides a literature review on Malaysian backgrounds such as the capital market and the evolution of Malaysian regulatory framework on disclosure of directors' remuneration. The third, fourth and fifth sections of the thesis discuss the three empirical chapters on determinants and impact of directors' remuneration disclosure.

Empirical chapter one (1) investigates the association between directors' remuneration disclosure and its association with corporate governance mechanism, represented by governance structure and ownership structure. Using the self-constructed of directors' remuneration disclosure index as a dependent variable, seven hypotheses are developed in this chapter to ascertain the link between disclosure of remuneration and corporate governance, a proxy of statutory characteristics. Apart from testing the linearity of the relationship, this chapter also tests for non-linearity effect in some of the independent variables that are consistent with prior studies.

Empirical chapter two (2) examines the association between directors' remuneration disclosure and board diversity, a proxy of demographic characteristics. Similarly, this chapter employs directors' remuneration disclosure index as a dependent variable and four independent variables that are gender, ethnicity, age and educational background. Hence, four hypotheses are constructed in this chapter in uncovering the relationship.

Empirical chapter three (3) assesses the value relevance of directors' remuneration disclosure in the annual report by using Tobin's Q. Furthermore, this chapter also intends to observe the impact of directors' remuneration disclosure on financial performance and in a specific financial sector. In view that previous studies in disclosure demonstrate an effect of endogeneity problem, this chapter proposes to address the potential endogeneity issue that might occur in this study using the statistical methodology as recommended by prior scholars.

Finally, the last section summarizes the overall key findings from the three empirical chapters represented in this study. Additionally, it also suggests some practical implications and identifies the main limitations of this study. At the end of the thesis, the chapter concludes with some recommendations for future research that are beyond the scope of this research.

Literature Review on Malaysian Background

(A) Malaysian Capital Market

Malaysia is a stable high-growth, an advanced emerging market with a diversified and strong economic base. Prior to the global financial crisis in 2007, the Malaysian economy was consistently stable with an average GDP growth of 9%. However, the crisis had led a fall in GDP growth to 3.32% and 2.53% in 2008 and 2009, respectively. To facilitate economic growth, various initiatives were introduced to strengthen the capital market. The effort has contributed to the rapid growth of the Malaysian economy, recording an average of 6% GDP growth between 2010 and 2014. On top of that, the capital market for all public listed companies in Malaysia stood at RM1.7 billion (GBP311 million) as of 2014, a significant improvement from RM0.9 billion (GBP164 million) in 2009, showing that Malaysia had made good progress in recovering from the crisis.

This strong growth was achieved mainly through robust regulatory oversight that underpinned investor confidence in the capital market. The Securities Commission (SC) established the 'Capital Market Masterplan 2.0 (CMP2)' in 2011 for the future plans until 2021. Starting with the Capital Market Masterplan 1.0 (CMP1) that covers the period from 2000 to 2010, CMP2 is a continuation of the government's plan to ensure the stability and the growth of the capital market, considering that the challenges of this decade are different from those that the country had faced over the previous ten years. As a result of CMP1, Malaysia has been receiving international recognition for its achievement in regulating the capital market. This provides a strong foundation for continuing with CMP2 by taking the global aspect forward. CMP2, which was launched in April 2011 by the SC, outlines strategies to strengthen the positioning of the capital market to meet the challenges from the changing global landscape over the next ten years (Securities Commission Malaysia, 2011).

As the Malaysian capital market becomes increasingly advanced, there will be a need to strengthen the quality of the information disclosed, particularly in the annual report, which is the main reference source of company information in Malaysia. Global networking must cater for an environment where there are national differences in various aspects of disclosure especially non-financial information such as directors' remuneration (Riaz *et al.*, 2015). While most developed countries have mandated the disclosure report requirements for directors' remuneration, Malaysia is still in the infancy stage with a combination of mandatory and voluntary disclosure requirements. In view of the urgency to encourage directors' remuneration disclosure, CMP2 has specifically included 'improve disclosure of remuneration' as part of the governance strategy for the period from 2011 to 2021 (Securities Commission Malaysia, 2011).

(B) Malaysian Regulatory Framework

Laws and Institutions

As a country that has achieved its' independence from the British, there are a number of laws, regulations, non-legal requirements and codes of conduct that have been introduced and implemented over the past 60 years in Malaysia in order to guide company directors in performing their duties and responsibilities. Public listed companies are required to comply with the Companies Act, the Bursa Malaysia Listing Requirement, the Securities Commission guidelines and the respective accounting standards (Abdullah *et al.*, 2015; Liew, 2007). In addition, listed companies are also required to comply with the Malaysian Code of Corporate Governance (MCCG) which was introduced by the High Level Finance Committee subsequent to the 1997/1998 financial crisis.

(a) Companies Act 1965

The Companies Act (CA) 1965 is based on the 1948 UK Act and has undergone few amendments. Part IV and the 9th schedule of the CA deal with accounts and auditing while section 169[14] of the CA requires listed companies to publish their accounts in a 'true and fair' view. However, the CA is decades old, and it has some gaps, for example, a detailed explanation of what constitutes a 'true and fair' view is not found elsewhere in the act (Morris, Pham and Gray, 2011). There have been few amendments made to the current CA since the act's inception in 1965, and these only addressed specific sections, instead of fully full reviewing it. Therefore, the Companies Commission of Malaysia (CCM) who administers the act, formed a committee called the 'Corporate Law Reform Committee (CLRC)' which was responsible for comprehensively reviewing the CA 1965 in 2003. CLRC finally released a report of 188 recommendations in 2008.

CCM had to propose the recommendations to the Cabinet of Malaysia by making them into policy statements and publishing a draft for public consultation. This effort took some time; then CCM issued the legislation draft, namely the 'Companies Bill (CB) 2015' in 2016, with the intention of replacing the existing CA 1965. The CB 2015 was passed by the Parliament of Malaysia in April 2016 and was gazetted in September of the same year. Based on CB 2015, CCM established the new Malaysia's Companies Act (CA) 2016 and announced its effective date as being on 31 January 2017 (Ernst & Young, 2017). CA 2016 aims to transform a 52-year old act into a 21st century document that is updated, competitive and relevant to international standards. Therefore, it is the culmination of more than a decade's worth of thorough review as well as collective insights from various bodies to craft new regulations that can be both practically and effectively applied.

(b) Bursa Malaysia

Bursa Malaysia's main responsibility is providing the listing requirements and guidelines for the Malaysian stock exchange. It was demutualised in 2004, and since then it has been considered as both, the front-line regulator for the listed companies and a locally-listed, profit-making company on its own. Hence, Bursa Malaysia is distinct from other exchanges that have generally reduced their regulatory role subsequent to demutualising.

(c) Securities Commission

The SC is the principal regulator of the capital markets including the Capital Markets and Services Act 2007 (CMSA) and the Securities Commission Act 1993 (SCA). Therefore, SC is responsible for monitoring the securities markets, and it has authority over listed companies as well as other issuers, such as dealers, brokers and fund managers. The SC also oversees Bursa Malaysia, conducts investigations and undertakes a range of enforcement actions, as well as being the body responsible for issuing the MCCG that was introduced subsequent to the Asian financial crisis in 1997/1998.

(d) Financial Reporting Standards (FRS)

Accounting standards, on the other hand, are issued by the Malaysian Accounting Standards Board (MASB), whose activities and operations are overseen by the Financial Reporting Foundation (FRF). Both MASB and FRF were established in 1997 in response to the financial crisis. The MASB standards were officially renamed to Financial Reporting Standard (FRS) in January 2005, and this became effective on 1 January 2006. Finally, Malaysia fully converged its accounting standards with IFRS in 2012 after several phases (Abdullah *et al.*, 2015).

(e) Others

Malaysia is also regulated by its central bank (namely Bank Negara Malaysia), which has authority over commercial banks, insurance companies and Islamic financial institutions. Bank Negara Malaysia (BNM) has the resources to monitor financial institutions, and it can extend this scrutiny whenever it is needed. BNM is independent in certain areas, but the Ministry of Finance (MoF) still plays a significant role. For example, the MoF has the power to advise on the choice of BNM's board members, and it can remove them with due cause (The World Bank, 2012). For governance-related issues, the Minority Shareholder Watchdog Group (MSWG) was initiated in 2000 with the aim of protecting the minority shareholders' interests by minimising abuses by insiders against them (Lim, How and Verhoeven, 2014; Liew, 2007). MSWG also acts as an independent organisation that advises and encourages good governance practices among the public listed companies. Starting in 2009, it has produced the Malaysian Corporate Governance Report on an annual basis - this assesses and ranks the corporate governance compliance of the listed companies based on publicly available data.

Regulations on disclosure

(a) Regulations on corporate disclosure

Demand by communities and stakeholders for transparent and more visible corporate practices is not new (Roberts and King, 1989). Moreover, the demand for transparency and disclosure has evolved from traditional financial reporting that requires firms to report the accounting-related figures (Abdullah *et al.*, 2015b; Hassan *et al.*, 2009) to non-accounting-related figures such as social and environment disclosure (Qiu, Shaukat and Tharyan, 2016; Liao, Luo and Tang, 2015), corporate social responsibility (Chen, Feldmann and Tang, 2015), risk disclosure (Elbannan and Elbannan, 2015), corporate governance (Ntim, Opong and Danbolt, 2012) and directors' remuneration (Sheu, Chung and Liu, 2010).

Enhancing firms' information transparency seems to be the priority of any corporate governance initiative in the world. In the latest edition of the Organization for Economic Co-operation and Development (OECD) Principles of Corporate Governance in 2015, for example, the six areas of corporate governance have been maintained, one of which is 'Disclosure and Transparency'. OECD is a well-known body that is responsible for issuing documents that are influential among member and non-member countries in terms of evaluating and improving the regulatory framework for better governance (Bai *et al.*, 2004). In Australia, the disclosure requirements are a combination of two regulatory frameworks: the Corporate Law Economic Reform Program (CLERP) Act 2004 and the Principles of Good Corporate Governance Practice and Best Practice Recommendations issued by the Corporate Governance Council of Australian Securities Exchange (ASX) in 2003 (Riaz *et al.*, 2015).

"A strong disclosure regime can help to attract capital and maintain confidence in the capital markets. By contrast, weak disclosure and non-transparent practices can contribute to unethical behaviour and to a loss of market integrity at great cost, not just to the company and its shareholders but also to the economy as a whole"

OECD Principles of Corporate Governance (2004, 2015)

In the same spirit as that of the OECD, Malaysia introduced the first MCCG in 2000 in an effort to regain the stock market subsequent to the Asian financial crisis in 1997/1998. It started with the establishment of the National Economic Action

Council (NEAC) in January 1998 to formulate the country's strategies, and NEAC highlighted that improving transparency and enhancing governance could be the key to restoring market confidence (Mohd Ghazali and Weetman, 2006). Consistent with OECD, the objective of MCCG is to have a strong disclosure regime that promotes real transparency since this is a pivotal part of the market-based monitoring of companies and it allows shareholders' to exercise their ownership rights on an informed basis. However MCCG implementation is on a voluntary basis hence the quality of disclosure in Malaysia depends to a large extent, on the information provided by the listed issuers.

The importance of disclosure in Malaysia is further reflected in the corporate disclosure framework under the Bursa Malaysia Main Market Listing Requirements (MMLR), issued in 2001. Chapter 9 (Continuing Disclosure) of MMLR sets out the mandatory requirements for disclosure by prescribing the minimum disclosure requirements for various events and transactions. Non-compliance with the MMLR could expose listed companies and their directors to penalties that include issuance of caution letters, reprimands, fines, directions for rectification, non-acceptance of applications/submissions, suspension of trading and also de-listing (The World Bank, 2005). The latest statistic of enforcement actions taken by Bursa Malaysia for various breaches of MMLR was fourteen (14) public listed companies in 2015/16. On top of that, Bursa Malaysia also imposed fines against 37 and 38 directors amounting to RM5.8 million and RM2.1 million in 2015 and 2016, respectively.

(b) Regulation on disclosure of directors' remuneration

In developed countries such as the United Kingdom (UK) and the United States (US), the disclosure of directors' compensation by public listed firms is regulated through the Directors Remuneration Report Regulations 2002 and the Sarbanes–Oxley Act 2002, respectively. These regulations require the disclosure of detailed compensation information for each executive director. In fact, the UK imposes a different requirement on the disclosure of directors' remuneration for FTSE and AIM firms. In 2009, FTSE firms were required to provide detailed information of directors' remuneration including the policy, contract and amount received by each director, the characteristics of their pension schemes and the share-based payment granted or exercised/retired during the year. On the other hand, AIM firms which smaller in size (London Stock Exchange plc, 2007) are not mandated to disclose their directors' remuneration information; hence all information provided in the annual reports is voluntary (Melis, Gaia and Carta, 2015).

In Japan, the Japanese Financial Service Agency (FSA) adopted new guidelines in 2009 on the publication of executive compensation, requiring public firms to disclose their base salary, bonus, stock option and additional income for directors and officers when these exceeded 100 million yen (Boyd, Franco Santos and Shen, 2012). Before that, individual executive compensation was not publicly disclosed hence compensation was only publicised as the sum of all the board directors' cash salaries and bonuses (Sakawa, Moriyama and Watanabel, 2012). Unlike Japan, Korea has only recently adopted the new regulation on executives' compensation disclosure upon the amendment of the Financial Investment Services and Capital Markets Act (FISCMA) in 2013. The enhanced legislation requires listed firms to disclose compensation data for individual registered directors who receive more than 500 million won annually, with the purpose of controlling excessive compensation among directors (Kim, Lee and Shin, 2017).

Malaysia has a combination of mandatory and voluntary disclosure requirements for directors' remuneration. The mandatory requirements are derived from the Bursa Malaysia Listing Requirements (BMLR) and the accounting standards that relate to disclosure, while the non-mandatory requirements are all based on the MCCG. The effects of non-compliance with mandatory requirements are de-listing from the stock exchange, being penalised by the regulatory bodies and perhaps damage to the firm’s reputation. In Malaysia, there are two bodies that monitor the quality of financial reporting, namely, the Financial Reporting and Corporate Surveillance Department (a department of the SC) and the Financial Statement Review Committee of the Malaysian Institute of Accountants (MIA) (Abdullah *et al.*, 2015). However, previous research suggests that the enforcement of these bodies is weak (Tam and Tan, 2007; Ball, Robin and Wu, 2003); this is similar to other emerging economy characteristics such as those of Egypt (Hassan *et al.*, 2009).

(i) Mandatory requirements

Appendix 9c, Part A (11) of BMLR makes it mandatory for companies to disclose remuneration information in their annual reports. It is mandatory for public listed companies to disclose the following information for the financial year:

> (1) the aggregate remuneration of directors with categorization into appropriate components (e.g. directors’ fees, salaries, percentages, bonuses, commission, compensation for loss of office, benefits in kind based on an estimated money value) distinguishing between the executive and non-executive directors; and
>
> (2) the number of directors whose remuneration falls in each successive band of RM50,000 distinguishing between the executive and non-executive directors
>
> (*Chapter 9 Continuing Disclosure*, 2014).

Apart from that, the accounting standards that apply to the disclosure of directors’ remuneration are FRS 2 (share-based payment), FRS 119 (employee benefits and FRS 124 (related-party disclosure). FRS 2 was first issued in 2005 but the effective date was 1 January 2006. FRS 2 originated from IFRS 2, which provides measurement principles and specific requirements for share-based payment (SBP) plans. SBP awards are common features of remuneration for directors, senior executives and other employees. Prior to IFRS 2, there were no standards covering the recognition and measurement of this type of transaction but it became a key issue when SBP awards became increasingly prevalent in many countries (Ernst & Young, 2015). Therefore, standard-setters decided to include SBP awards as an integral component of total remuneration packages.

In Malaysia, FRS 2 mainly applies to the issuance of shares for the acquisition of assets and to employee share option schemes ('ESOS'). The recognition of ESOS is dependent on the vesting condition, which should be clearly explained in the annual report. Share options granted under ESOS are measured according to the fair value, i.e. using the market price when it is available. If it is not, a valuation technique needs to be used (KPMG, 2005). FRS 2 follows the grant date approach for recognising and measuring ESOS, where a date is set by which the entity and the employee must agree to an SBP arrangement. The standard requests that the SBP arrangement is clearly spelt out in the annual report so that both parties have a shared understanding of its terms and conditions. Hence, the disclosure requirements of FRS 2 aim to enable users of the annual report to understand (1) the nature and extent of ESOS that exists during the period, (2) the process of calculating the fair value of the share options granted; and lastly, (3) the effect of the ESOS transactions on the entity's financial position, particularly its profit or loss.

FRS 119 (Employee Benefits) was adopted from the International Accounting Standard (IAS) 19 and was previously known as MASB 29, when it was first issued in 2003 in Malaysia. The objective of this standard is to prescribe the accounting and disclosure for employee benefits, which consist of (a) formal plans/agreements between an entity and employees; (b) legislative requirements whereby entities are required to contribute to the national or the state or the industry and (c) informal practices that give rise to a constructive obligation. In summary, this standard covers the following categories:

(i) short-term employee benefits [e.g. wages, salaries, paid and unpaid annual leave, bonuses, compensated absences, non-monetary benefits such as medical care, housing and cars for current employees]

(ii) post-employment benefits [e.g. pensions, post-employment life insurance and medical care with distinction between defined contribution plans (DCP) and defined benefit plans(DBP)]

(iii) other long-term employee benefits [e.g. long-term paid absences like sabbatical leave, jubilee or long-service benefits and long-term disability benefits]

(iv) termination benefits

(Malaysian Accounting Standards Board, 2011)

After the effective date in 2003, MASB made amendments to FRS 119 in 2011 with the new effective date on 1 January 2013. However, there is no significant difference between the two version of FRS 119 and MASB 29 with respect to the disclosure requirements. The only detailed disclosure requirement spelled out in the standard is for post-employment benefits, where plans must be described (either DCP or DBP) including their characteristics, the measurement used and their impact on financial statements (Malaysian Accounting Standards Board, 2002). The remaining categories of employee benefits generally mention that there are no specific disclosure requirements but suggest that other relevant standards be referred to, such as FRS 124.

The last accounting standard that is employed in this study to explain directors' remuneration disclosure is FRS 124 on Related Party Disclosures. This standard was first introduced in 2000 with the name of MASB 8, and it has been revised a few times in 2004, 2005 and 2010. Nevertheless, the significant changes that directly affect disclosure of directors' remuneration are in the updated version of 2005, where the term 'key management personnel' has been included. Key management personnel are defined as personnel who are responsible for planning, directing and controlling the activities of the entity, i.e. both executive and non-executive directors and senior managerial personnel (KPMG Malaysia, 2005).

Furthermore, FRS 124_{2005} also specified the requirements for disclosing the compensation of key management personnel in total, according to the categories discussed under FRS 2 and FRS 119, i.e. short-term employee benefits, post-employment benefits, other long-term benefits, termination benefits and share-based payment. The effective date for FRS 124_{2005} was on 1 October 2006. The latest version of FRS 124_{2010} maintains the definition of key management personnel as well as the disclosure requirements of the directors' remuneration in the annual report (Malaysian Accounting Standards Board, 2010). Previous studies have shown that key management personnel in a firm could obscure their rent-diverting activities through insider trading by abusing the corporate fund for personal use as well as manipulating the compensation contract (Desai, 2005). Therefore, the disclosure requirements introduced by FRS 124_{2005} among Malaysian public listed companies were crucial in ensuring the transparency of the remuneration received by directors. Summary of the mandatory requirements is presented in Table 1.

Table 1
Summary of mandatory requirements for directors' remuneration disclosure

Accounting standards	Title	Issuance date	Effective date
FRS 2	Share-based payment	2003	2006
FRS 119	Employee benefits	2003	2003
FRS 124	Related party disclosure	2005	2006

(ii) Voluntary requirements

Non-mandatory detailed disclosure in Malaysia is encouraged through the guidelines specified by the MCCG. This is an effort made by the Malaysian government to regain the stock market subsequent to the Asian financial crisis in 1997/1998. The government heeded the recommendation by NEAC by establishing a High Level Finance Committee (the Committee) in March 1998 to seriously look into corporate governance matters in Malaysia.

Given the fact that there had been no pre-existing or qualified corporate governance framework before in Malaysia, the Committee had to consider the approaches undertaken by jurisdictions around the world in order to propose MCCG on a 'scratch from zero' basis. The MCCG was finally developed using a hybrid approach (similar to the Hampel Report, UK), which combined a prescriptive approach and a non-prescriptive approach. The code does not require each firm to comply strictly with the prescriptions because it applies flexibility for firms to develop CG practices on their own (Securities Commission

Malaysia, 2007). The first MCCG was issued in March 2000 and it marked a significant milestone in CG history in Malaysia. The code was reviewed and updated in 2007 and 2012 to ensure that it remains relevant and it is aligned with globally recognised best practices and standards. Recently, a new code was issued in 2017, which takes on a new approach to promote greater internalisation of the corporate governance culture (Securities Commission Malaysia, 2017).

Despite the fact that there are four versions of MCCG, the standard's requirements for directors' remuneration have been maintained throughout the updates, except for the requirement to disclose individual directors' remuneration, which was removed in MCCG 2012 but added back in MCCG 2017. Furthermore, MCCG 2017 introduced a new principle which is 'Integrity in Corporate Reporting and Meaningful Relationship with Stakeholders'. Detailed disclosure of directors' remuneration allows stakeholders to understand the linkage between directors' remuneration and the company's performance, as well as determining whether the remuneration is fair according to the industry benchmark (Securities Commission Malaysia, 2017). Stakeholders are also able to assess the company's desire to attract and retain the right talent through transparent remuneration policies available in the annual report. In summary, directors' remuneration is discussed in five subtopics illustrated in Table 2.

Table 2
Summary of voluntary requirements for directors' remuneration disclosure

Details of directors' remuneration requirement	**MCCG**			
	2000	**2007**	**2012**	***2017**
(1) The level and structure of remuneration: - should be aligned with the business strategy and the long-term objectives of the company - should reflect the board's responsibilities and expertise, and the complexity of the company's activities	√	√	√	√
(2) Procedure: - Remuneration policies and decisions should be created through a transparent and independent process	√	√	√	√
(3) Disclosure - Companies should be encouraged to fully disclose the detailed remuneration of each director and senior management	√	√		√

(4) Remuneration committee - A committee should be established that only consists of non-executive directors, the majority of whom must be Independent Directors	√	√	√	√
(5) Stakeholders - Stakeholders should be able to assess whether the remuneration of directors is commensurate with their individual performance, taking into consideration the company's performance				√

*Released on 26th April 2017

(C) Directors' remuneration disclosure practices in Malaysia

The disclosure of directors' remuneration in the annual report is a personal and sensitive issue for management (Liu and Taylor, 2008). For this reason, it is anticipated that not all firms will choose to fully comply with the spirit of the code. Similar to other developing countries, it is also expected that directors will only select disclosures that fit with their interests (Sheu, Chung and Liu, 2010). In view of the fact that there is a high concentration of ownership in the capital market, this can lead to the Type 2 agency problem which is also known as 'owner opportunism', suggesting that the controlling shareholders might benefit at the expense of minority shareholders in terms of choosing which items to disclose (Abdullah *et al.*, 2015). Using a Malaysian sample for the year ending 31 December 2008, Minhat and Abdullah (2014) found that it is common for firms not to disclose each director’s compensation separately in Malaysia, and this has been the main obstacle for researchers wishing to conduct a further review of directors remuneration.

The MSWG, which is a government initiative that helps to protect the interests of minority shareholders, has published a statistic on the corporate governance compliance of listed companies in Malaysia. The findings reveal that compliance to MCCG slightly increased over four years, i.e. from 55% in 2010 to 60% in 2014 (Minority Shareholder Watchdog Group, 2014). This finding strengthens the earlier study by Wahab, How and Verhoeven (2007) who noticed that there was a significant improvement in corporate governance practices subsequent to the MCCG governance reforms, using 440 firms from 1999 to 2002. MSWG has announced the latest key corporate governance statistic for public listed companies in Malaysia for the period of 5 years from 2010 to 2014. The summary of the average annual remuneration of Malaysian directors (by sectors) is reported in Table 3.

Table 3
Summary of directors' average annual remuneration from 2010 to 2014

AVERAGE ANNUAL REMUNERATION OF EXECUTIVE & NON-EXECUTIVE DIRECTORS BY SECTOR

(Rounded to nearest MYR1,000)

SECTOR	2010	2011	2012	2013	2014
Construction	731,000	688,000	947,000	877,000	992,000
Consumer Products	578,000	676,000	1,308,000	893,000	831,000
Finance	1,648,000	2,050,000	2,618,000	2,801,000	3,085,000
Hotel	468,000	391,000	550,000	781,000	635,000
Industrial Products	566,000	622,000	1,105,000	908,000	922,000
Infrastructure	1,611,000	1,633,000	2,903,000	3,449,000	2,209,000
Mining	32,000	64,000	56,000	82,000	N/A
Plantation	995,000	1,325,000	1,373,000	1,497,000	1,818,000
Property	688,000	798,000	1,117,000	1,300,000	1,492,000
Technology	354,000	428,000	793,000	455,000	466,000
Trading/Service	1,016,000	1,255,000	2,279,000	1,651,000	2,375,000
TOTAL (in MYR)	**9,598,400**	**10,949,000**	**16,099,000**	**15,691,000**	**15,903,000**
TOTAL (in GBP)	**1.7 mill**	**1.9 mill**	**2.8 mill**	**2.7 mill**	**2.8 mill**

(Source: Malaysia-ASEAN Corporate Governance Report 2014 by MSWG)

Table 3 shows that there was a significant increase in directors' remuneration from 2010 to 2014 based on the average of 800 companies publicly listed on the Bursa Malaysia. The doubled growth of the average remuneration for executive and non-executive directors over the five year period provides an interesting case to investigate. The overall purpose of establishing directors' remuneration arrangements is to align the interests of owners and managers which will reduce the agency problems. However, such compensation could itself give rise to agency problems (Brick, Palmon and Wald, 2006; Ryan and Wiggins, 2004). Therefore, previous studies suggested that one way to resolve such a problem is to provide full disclosure of compensation (Morse, Nanda and Seru, 2011; Muslu, 2010; Lo, 2003). Table 4 illustrates the percentages of Malaysian companies that disclosed board key statistics in their annual report on their directors' remuneration between 2010 and 2014.

Table 4
Key Board Statistic Disclosure in the Annual Report

Key Board Statistics	2010	2011	2012	2013	2014
Existence of RC	93%	93%	94%	94%	95%
RC comprised majority of INEDs	46%	51%	77%	80%	81%
Companies disclosing individual disclosure of remuneration	6%	8%	15%	9%	8%

(Source: Malaysia-ASEAN Corporate Governance Report 2014 by MSWG)

Legend:

INED = Independent Non-Executive Director

RC = Remuneration Committee

Empirical Chapter 1: The relationship between directors' remuneration disclosure and corporate governance (statutory characteristics)

1.0 Introduction

Researchers increasingly realize that there is no single agency model that adequately depicts corporate governance (CG) in any national contexts, including both the developed and developing countries. Supported by García-Meca and Sánchez-Ballesta (2010), the results of the meta-analysis highlights the need to consider the specific legal and institutional setting explicitly in analyzing the effect of CG on disclosure. Unlike the developed countries, research in CG is not a well-debated topic in developing countries until in the past few years (Arora and Sharma, 2016). Even so, studies linking CG and corporate social disclosure in the emerging countries had no doubt received more attention compared to specific directors' remuneration disclosure (Sengupta and Zhang, 2015). Therefore, this chapter specifically contributes to the debate on whether CG practices in Malaysia leads to better disclosure of directors' remuneration, being the best remedy to agency problem, as widely agreed by the previous scholars (Arye *et al.*, 2003).

Prior research that linked CG and disclosure studies in Malaysia has shown an improving, positive and significant association over time. For instance, earlier studies by Haniffa and Cooke (2005) and Mohd Ghazali and Weetman (2006) found that board of directors play a limited role in influencing corporate social disclosure for a sample period of 2002 and 2001, respectively. On the other hand, recent studies by Ho and Taylor (2013) encountered that the relationship between CG structure and firms' disclosure is strengthened for a sample in 2001 and 2006. While the former findings suggest that it might have been too close to expect changes in the CG implementation after one or two years gap from the introduction of MCCG 2000 in Malaysia, the latter findings demonstrate that the enhancement of CG structure appears to lead higher disclosure after few years in applying the regulation. Hence, this study selects 2007 to 2014 to review directors' remuneration disclosure, considering the effective date of its specific regulation as required by the mandatory Financial Reporting Standard (FRS) – refer to (b) in the literature review section.

Apart from that, this study is similar to Malak (2012) who observed the impact of changes in Malaysian regulatory framework on executive directors' remuneration disclosure from 2000 to 2008. However, this study departs from the previous research in three (3) main approaches, which firstly, this study includes the latest update on CG code, i.e. MCCG 2007 and 2012. MCCG 2012 comprises an important change from MCCG 2000 on the removal of individual directors' disclosure recommendation. Furthermore, this study develops a combination of weighted and un-weighted disclosure index that closely observe disclosure on employee benefits as required by FRS 119, on top of FRS 2 (Share-based payments) and FRS 124 (Related party disclosure).

Secondly, the sample covers a different period that includes few significant events such as (a) the global financial crisis in 2007 and (b) the 12th Malaysian general election in 2008 which yields an unpredicted result of the government that lost its majority for the first time after 40 years of ruling. Finally, this study embarks on investigating the non-linearity relationship between some of the CG elements as suggested by the current CG literature (Alnabsha *et al.*, 2017; Elmagrhi, Ntim and Wang, 2016; Sun *et al.*, 2016; Hidalgo, Garcia-Meca and Isabel Martinez, 2011). The justification is supported by the Malaysian context, which has high ownership concentration that the power of controlling shareholders might hinder the effectiveness of CG implementation once it surpasses the 'changeover' point. Thus, this study complements the previous research using current updates in Malaysia.

Considering that efficient CG is an important mechanism for the firms to make decision in disclosing the level of directors' remuneration, this study proposes to establish which factors of its internal CG element influence the decision making process. Thus, the first motivation rests on the governance structure, with regards to the proportion of independent directors, the duality of CEO/Chairman, the board size and the type of external auditor. Likewise, the second motivation of this study focuses on the manner which shares are distributed, whether they are held by the government, family or foreign shareholders. Both of the corporate governance measures will be analysed on its effect on directors' remuneration disclosure. With these parameters, this study aims to cover the major aspects of corporate governance measures with the specific objectives are (1) to examine the relationship between the governance structure on directors' remuneration disclosure and (2) to explore the relationship between ownership structure on directors' remuneration disclosure.

1.1 Literature Review

1.1.1 Agency theory

Agency theory has become a cornerstone of the corporate governance field, not only regarding its impact on the literature but also concerning policy and practices across the world (Shleifer and Vishny, 1997). It is the contract between owners, being the principal engaging another party, which is the management, being the agent to perform service on their behalf. The theory includes some delegation of decision-making authority to the agent with the expectation that the decision taken is for the principal's best of interest. However, the reality is that both parties are utility maximizers whose interests are diverged from one another. Utility maximizer is an essential assumption of agency theory whereby a rational individual is self-interested and will pursue to maximize his or her wealth foremost, probably at the expense of the principal (Davis, Schoorman and Donaldson, 1997).

The divergence of interests between the two contracting parties leads to agency problems. A simple model that portrays the fundamental conflict of a principal and agent who engaged in a contract but having different goals is their attitude towards risk. An agent, being a director or a manager in a firm is unable to diversify their employment; hence, they should be risk-averse. Principal on the other hand who is capable of diversifying his investments should be risk neutral (Eisenhardt, 1989). Another dimension of agency problem is called 'moral hazard' which derived from the agent who would prefer to work less (when other things are equal) while the principal is indifferent to the level of the agent's effort (Harris and Raviv, 1979). Thus, previous empirical studies prove that agency problem is real, and it contradicts the traditional economic perspective of a firm, which is called a 'black box' with the sole objective of maximizing profit without people or information problem (Jensen, 1983).

To resolve the agency problems, a principal can establish an appropriate monitoring mechanism that could limit the aberrant activities by the agent (Hölmstrom, 1979). From the agent's point of view, they could also incur the bonding mechanism to guarantee their action that will not harm the principal. These two mechanisms are referred as 'agency cost' (Jensen and Meckling, 1976). On the one hand, it is impossible for the principal or the agent to eliminate the agency cost while on the other hand, it is also impossible for the principal or the agent to have a flawless monitoring and bonding mechanisms that will perfectly align the interest of the agents to the principal's interest. However, the inevitable of agency cost does not imply that agency relationship should not be entered in the first place due to the limited resources. Therefore, Jensen and

Meckling (1976) and Eisenhardt (1989) had emphasized that agency cost will be incurred only if the benefits outweigh the monitoring cost.

Managers, in the knowledge that shareholders will control their action through the monitoring activities will seek for an incentive that convinces shareholders that they are acting optimally and disclosure is one of the means to reduce the agency cost. It seems obvious that transparency reduces information asymmetries and subsequently leads to positive capital market. Moreover, recent financial crisis and corporate scandals have triggered all firms around the world to improve the transparency and disclosure. The crisis has led to increasing number of studies that have empirically proves the role of disclosure in reducing agency problem. Therefore, it is crucial to understand the factors that influence voluntary disclosure practices in firms that are traditionally embedded with agency conflict. Recent researchers are increasingly focusing their attention on the links between corporate governance mechanisms and the level of disclosure (Abdullah *et al.*, 2015; Ernstberger and Grüning, 2013). Ownership structure, on another hand, had received the same weight of attention in determining disclosure. Thus, current scholars have grounded their research in determining disclosure with the core governance mechanism and ownership structure (please refer to section 2.2).

Theoretically, agency theory underpins the board's monitoring function that derived from the separation of ownership and control in an organisation (Jensen and Meckling, 1976). The monitoring function that refers directly to the responsibility of directors has consumed the attention of corporate governance researchers, especially in accounting and finance to be the mitigating elements of the agency problem. In developed countries where the institutional context relatively a wide spread of the ownership and managerial functions, the governance conflicts that receive the lion's share of attention are the principal-agent (PA) conflicts between owners and managers (Young *et al.*, 2008).

Nevertheless, developing countries like Malaysia has an entirely different landscape which is traditionally and consistently referred as a high concentration of ownership (Hasnan, Rahman and Mahenthiran, 2013; Liew, 2007).

High concentration of ownership has led to a new perspective of agency theory that called 'type 2' agency problem, where the agency conflict lies between the controlling and minority shareholders (Abdullah *et al.*, 2015; Palmberg, Eklund and Wiberg, 2009). Besides characterized by concentrated ownership, developing countries are also known to have poor institutional protection of minority shareholders with weak governance indicators such as poor investors' protection, lack of enforcement (Hassan *et al.*, 2009; Saudagaran and Diga, 1997) and expropriation of minority interest (Morck, Wolfenzon and Yeung, 2005; Mitton, 2002). As a result, the controlling shareholders may be beneficial at the expense of minority shareholders that lead to principal-principal (PP) conflicts. Nevertheless, prior studies have proven that comprehensive disclosure of directors' remuneration contract is a contributory element that could resolve agency conflict among the shareholders (Sheu, Chung and Liu, 2010; Laksmana, 2008).

1.1.2 Signalling theory

The information asymmetry that arises from the notion 'different people knows different things' has led to the enormous volume of literature applying signalling theory in a range of disciplines particularly in the management research (Taj, 2016). This is evidenced by a rapid increase of citation of signalling theory in the management literature from approximately 20 citations in 1989 to 140 number of citations in 2009 (Connelly, Ireland and Reutzel, 2011). Traditionally, previous scholars in management have applied the basic signalling theory on earnings forecasts where firms that voluntarily disclose their earnings forecast provided investors with good news and distinguished themselves from those non-disclosing firms (Lev and Penman, 1990; Penman, 1980). Earlier, Patell (1976) had observed a statistically significant upward of stock price change during the week when management voluntarily released the earnings forecasts, indicating that the act of voluntary disclosure does signal information to investors.

The signalling theory was initially formulated at the beginning of the 1970s which was based from one of the main contributors namely, Spence (1973). Taken from a labour market environment in searching for a job, the author described how high-quality of prospective employees distinguishes themselves from low-quality prospects by sending signals to the market with their higher education. There are three key elements that comprise of signalling theory which are signaller, signal and the receiver. The signallers are the insiders that obtain information that the outsiders are unaware of (Taj, 2016; Connelly, Ireland and Reutzel, 2011). Signals are the informational hint or cues that include both positive and negative private information, delivered by one party to another with the intention to influence the desired outcome (Taj, 2016). Receivers are the outsiders who possess limited information about the organisation but very keen to receive the information for decision making purposes (Connelly, Ireland and Reutzel, 2011).

The accounting scholars have extended the underlying concept of signalling theory to the role of nonfinancial information. This study has been a research call by the previous scholars who noticed a decreasing relevance of financial information in determining equity value (Riley, Pearson and Trompeter, 2003; Trueman, Wong and Zhang, 2000; Amir and Lev, 1996). Lev and Zarowin (1999) have specifically observed the declination of the association between earnings and stock returns over a 20 years period from 1977 to 1996, suggesting to the loss of informativeness of financial data. On top of that, Cohen *et al.*, (2011) further found that retail investors were most concerned with the nonfinancial disclosure that affected future earnings such as relevant economic indicators.

Therefore, there is no surprise that signalling theory has been widely used in nonfinancial researches including corporate governance (Connelly, Ireland and Reutzel, 2011; Stiglitz, 2002).

Corporate governance is a system that governed a company to protect the shareholders' interest, and directors are the responsible party in exercising the governance mechanism. By using signalling theory, Certo (2003) had proposed that board of directors represent important nonfinancial information for initial public offering (IPO) investors in making the investment decision. The author argues that board prestige is a subjective concept that could influence investors' perception in receiving the signal of the directors' status. On the other hand, Zhang and Wiersema (2009) had observed the signalling role of an array of CEO attributes using the association between CEO and his/her prior financial restatement. The authors found that CEO becomes less trustworthy in the eyes of investors when he/she has an association with the company's prior financial restatement. In a more recent study, Gomulya and Boeker (2014) found that firms with severe restatements that announce the successors of prior CEO with a turnaround experience and elite education convey a positive message to the stakeholders and public on the CEO's and firms' credibility.

Directors' remuneration arrangement is another governance mechanism that the overall aim is to align the interest of owners and managers, thereby reducing the information asymmetry. However, previous scholars have emphasized that remuneration itself, could lead to more information asymmetry issue when the compensation process and the value are not transparent (Sheu, Chung and Liu, 2010; Arye *et al.*, 2003; Bebchuk, Fried and Walker, 2002). This is more severe in developing countries like Malaysia where the enforcement practice is not as strict as developed countries and most of the transparency-related requirements such as remuneration policy, pay-for-performance link and individual remuneration disclosure are covered by the voluntarily standards, instead of mandatory. In view that directors' remuneration is expected to be linked to the company's performance, the manager can choose arrangements that favour them instead of the company. Hence, comprehensive disclosure of directors' remuneration is one of the effective ways to resolve the information asymmetry problem between the signaller and receiver (Morse, Nanda and Seru, 2011; Sheu, Chung and Liu, 2010; Muslu, 2010; Arye *et al.*, 2003).

Unlike the traditional method that only relies on agency theory in using optimal contracting approach or managerial power approach to explain the disclosure of directors' remuneration, this study employs signalling theory to justify the determinants of directors' remuneration disclosure among FTSE30 firms in Malaysia. The underlying reason in choosing signalling theory apart from agency theory is to address the PP agency conflict between controlling and minority shareholders that is very relevant to Malaysian context. De Cesari (2012) found that firms with weak corporate governance set up and dominated by controlling shareholders have strong incentives to expropriate minority shareholders compared to firms with stronger governance. Therefore, this study argues that under signalling theory, controlling shareholders disclose directors' remuneration to signal transparency in exercising their monitoring role in the company.

1.1.3 Corporate governance and disclosure

1.1.3.1 Relationship between governance structure and disclosure

Prior research on corporate governance has always been linked to the corporate performance of a company especially in the developed countries (Larcker, Richardson and Tuna, 2007; Bushman *et al.*, 2004) and some developing countries including Malaysia (e.g. Tam and Tan, 2007). This is not surprising because it is consistent with the common tenet of all governance system where achieving the maximization of firm value is the main objective. However, the importance of corporate transparency is as good as corporate performance in view that the latter measure the growth of the company while the former indicates the quality of the boards as well as the management team that runs the company. This can be evidenced by the expanding research that links between corporate governance and disclosure recently (Torchia and Calabrò, 2016; Khan, Muttakin and Siddiqui, 2013; Ntim and Soobaroyen, 2013).

The literature on the board independence has shown that higher ratio of board non-executive directors had influenced higher disclosure in both developed (Torchia and Calabrò, 2016) and developing countries (Khan, Muttakin and Siddiqui, 2013; Ntim and Soobaroyen, 2013). Similarly, consistent negative and significant association is noted between CEO/Chairman duality and level of disclosure as evidence in samples across the developed and developing countries in Italy, India and South Africa, suggesting that the dual role control mechanism is limited in improving disclosure despite the growth of the countries. On the other hand, number of board size is significantly positive in South Africa (Ntim and Soobaroyen, 2013) but significantly negative in Italy (Torchia and Calabrò, 2016), implying that directors in developed country might be efficient enough to decide on higher disclosure even in a small number of directors as compared to directors in the developing countries. Finally, the type of auditor is found to be insignificant towards disclosure (Khan, Muttakin and Siddiqui, 2013).

Studies that linked governance structure and disclosure have also taken place in Malaysia ever since the introduction of MCCG in 2000. However, the findings for board independence in Malaysia is inconsistent with previous studies where results found by Haniffa and Cooke (2005) is significantly negative towards disclosure while Mohd Ghazali and Weetman (2006) found an insignificant relationship with disclosure. Furthermore, Mohd Ghazali and Weetman (2006) also found insignificant relationship between CEO/Chairman duality and disclosure. The insignificant result by these studies is justified by the sampling period of both research which are only one or two years after the introduction of MCCG (samples are for the year 2001 and 2002). This further indicates that the impact of governance structure might take some time in the implementation process before it benefits the firm as expected. This view is supported by a recent study that found a strong and positive relationship between elements of CG and disclosure in using the sample of the year 2001 and 2006 (Ho and Taylor, 2013). In summary, the findings support that director have all the power to select what needs to be disclosed more and what needs to be disclosed less.

1.1.3.2 Relationship between ownership structure and disclosure

Malaysian institutional setting offers a particularly good ‘laboratory’ to study ownership for an emerging country as it is very much known to have a highly concentrated ownership (as elsewhere in Asia), even with the rapid growth of Malaysia’s economy for the past years. Zhuang et al. (2001b) show the largest shareholder among all listed firms in Malaysia in 1998 possesses an average of 30.3 percent of outstanding shares. The study is then supported by Haniffa and Hudaib (2006) who found the single largest shareholder in Malaysia is 31 percent while Tam and Tan (2007) reported the average ownership concentration in Malaysia is 43.44 percent among the top 150 Malaysian listed companies. Of that 150 firms, Tam and Tan (2007) have further categorized the ownership type into four categories; the highest ownership type is individual (65 percent) followed by a trust fund, foreign and state ownership of 15 percent, 12.7 percent and 0.7 percent, respectively.

According to Jensen and Meckling's (1976), the theory says that as the managers' ownership falls, outside shareholders will increase monitoring of managers' behaviour. To reduce the monitoring cost by shareholders, managers will provide sufficient voluntary disclosure. Prior literature had proven this relationship (Eng and Mak, 2003). Another ownership that found to be positively related towards disclosure is government (state) shareholdings in studies conducted in China (Wang, O and Claiborne, 2008) and Singapore (Eng and Mak, 2003). The results indicate that firms with more government-owned shares disclosed more information than firms with less or no-government owned shares. However, Mohd Ghazali and Weetman (2006) found that government ownership is not significant in Malaysia using data in 2001. Foreign ownership is also found in the past literature to have a positive and significant impact on disclosure studies in the emerging market (Wang, O and Claiborne, 2008; Xiao, Yang and Chow, 2004; Haniffa and Cooke, 2002).

Finally, the last two type of ownership that has been widely mentioned in the ownership literature are family and concentrated shareholdings. Previous studies in Malaysia has consistently encountered significant and negative relationship between disclosure and family ownership (Mohd Ghazali and Weetman, 2006 Haniffa and Cooke, 2002), suggesting that higher ratio of family members on the board disclose less information in the annual reports. Furthermore, the results are consistent with prior studies in Malaysia that has a culture of secrecy regarding accounting disclosures, which shows that it is a preserving tradition inherited from the predecessors (Morris, Pham and Gray, 2011; Gray, 1988). However, results on the relationship between disclosure and concentrated ownership are found to be mixed in the literature. While ownership concentration is positively significant to influence disclosure in Malaysia (Haniffa and Cooke, 2002), no significant impact of ownership concentration is found in another study in Malaysia (Mohd Ghazali and Weetman, 2006) and Singapore (Eng and Mak, 2003).

1.2 Hypothesis Development

1.2.1 Relationship between governance structure and directors' remuneration disclosure

Prior research has agreed that BOD is responsible for making a firm's decision on disclosure. Due to that, the disclosure of directors' remuneration is another spectrum of disclosure that is interesting to be specifically examined. The reason is that when directors are the one who decides what information to be disclosed to the public, they are expected to be more vigilant in disclosing their salary. Due to that, the U.S. Securities and Exchange Commission (SEC) has made it harder for the boards to be more accountable for their decisions by requiring a report justifying their compensation policies (Laksmana, 2008). Similarly, in the UK, the government mandated the boards of public companies of FTSE to produce a comprehensive report of directors' remuneration as part of the submission to the shareholder vote at the firms' Annual General Meeting (Conyon and Sadler, 2010).

For Malaysia, the regulations on directors' remuneration disclosure are governed by mandatory and voluntary guidelines as mentioned in section 1.2.2 of Chapter One. While BMLR and IFRS set a minimum mandatory disclosure for directors' remuneration, MCCG provides more voluntarily guidelines to encourage on remuneration's transparency. The challenge of having 'voluntarily' guidelines is consistent in all parts of the world, i.e. solely depending on the directors who strategically determine the amount and extent of information to be disclosed. The element of voluntariness in disclosure is more difficult among developing countries like Malaysia that is known to be ownership concentrated, family oriented, lack of regulations' enforcement and others. Nevertheless, prior research that proves governance structure plays a significant role in deciding remuneration disclosure has driven this study towards determining the right governance structure in shaping the directors' remuneration disclosure in Malaysia.

Prior studies conclude that good governance structure significantly influences mandatory and voluntary disclosure of directors' remuneration in both developed and developing countries. In the US, Laksmana (2008) found that governance structure represented by board independence, board size and compensation committee are positively and significantly associated with compensation practice transparency. The finding on board independence is consistent with Liu and Taylor (2008) who conducted a similar study in Australia but contradicts Melis, Gaia and Carta (2015) and Schiehll, Terra and Victor (2013) who found that board independence is not significant in UK, Italy and Brazil, respectively. For the board size and compensation committee, Schiehll, Terra and Victor (2013) encountered similar result with Laksmana (2008) on employee stock option (ESO) disclosure in Brazil. Therefore, the literature on directors' remuneration disclosure proves that the governance structure, represented by board independence, board size and compensation committee are important in influencing the level of remuneration disclosure regardless the development of the countries.

Another governance structure that highly discussed in the remuneration disclosure literature is the duality of CEO/Chairman role and the type of external auditor. In Australia, Bassett, Koh and Tutticci (2007) found that CEO who also serves as the Chairman of the board has a lower level of compliance with the mandatory disclosure requirements, thus supporting prior literature that concentrated CEO power leads to less transparency in disclosure. Likewise, the study also noticed that big-4 auditor contributes to a greater level of compliance towards the disclosure regulations. The same governance structure was adopted by Schiehll, Terra and Victor (2013) for ESO disclosure in Brazil but only big-4 auditor is found to be positive and significant while CEO duality is not significant in explaining disclosure. The insignificant impact of CEO duality is agreed by Melis, Gaia and Carta (2015) in observing the difference of directors' remuneration disclosure between companies in UK and Italy accordingly. In conclusion, the governance structure represented by CEO/Chairman duality role and external auditor also play a major role in determining the extent of remuneration disclosure.

In view that there are many types of board characteristics that have been tested as a proxy of governance attributes, this study chooses four variables to explain the monitoring role by the board as determinants of directors' remuneration disclosure practices in Malaysia. Consistent with agency theory, the boards are expected to monitor the actions of managers to protect the interest of the owners, including minority shareholders. Ben-Amar *et al.*, (2013) define the monitoring role from a statutory perspective where the mandated regulation and highly recommended governance practices should be able to reduce the agency costs. Therefore this study employs board independence and CEO duality as both are highlighted in MCCG 2007 and 2012 as an efficient mechanism of board monitoring role. This is also in line with the previous studies that examine factors contributing to disclosure (Abdullah *et al.*, 2015; Melis, Gaia and Carta, 2015; Laksmana, 2008; Bassett, Koh and Tutticci, 2007; Cheng and Courtenay, 2006).

The remaining two governance variables that are employed in this study are the number of directors (board size) and type of external auditor. Both variables are spelt under the mandatory requirements of Malaysian Companies Act 1965 (consistently mentioned in the Companies Act 2016) to ensure the monitoring role that serves the fiduciary duty is in place. The Act requests a minimum of two directors in a public company and the directors must appoint an auditor at every general meeting. Certo (2003) argues that having more directors (bigger board size) and being audited by the Big-4 are a signal of the boards' virtuous ethical in disclosing the remuneration practices towards minority shareholders as well as the stakeholders. Hence, using signaling theory, board size and type of external auditor are expected to be the determinants that influence disclosure of directors' remuneration, as supported by the previous scholars (Alnabsha *et al.*, 2017; Elmagrhi, Ntim and Wang, 2016; Laksmana, 2008; Bassett, Koh and Tutticci, 2007). Based on the extensive literature review, this study further develops four hypotheses to determine the relationship between directors' remuneration disclosure and the governance structure.

1.2.1.1 Proportion of independent directors

Boards of directors comprise individuals drawn from top management and others from outside the firm, which the latter is known as independent directors. Independent directors or outside directors are placed to monitor management in view that they are not officers working in the firm on a daily basis (Donnelly and Mulcahy, 2008). Therefore, it is widely accepted that a board with a higher proportion of independent directors can exercise monitoring of management more effectively which is consistent with the agency theory. This has resulted to positive association noted between the number of independent directors and the extent of disclosure in most of the previous studies (Torchia and Calabrò, 2016; Liao, Luo and Tang, 2015; Ntim and Soobaroyen, 2013; Laksmana, 2008).

However, Eng and Mak (2003) argued that the presence of independent directors could limit the extent of disclosure when their role of complementary is being substituted to monitoring role of disclosure. This means that the block holders purposely elected more outside directors to represent their interest in determining what amount to be appropriately disclosed to the public. Hence, there is an inverse relationship between the proportion of independent directors and voluntary disclosure found in the study. With regards to directors' remuneration disclosure, independent directors are expected to balance between striving for greater disclosure to show impartiality and limiting the boards only to disclose pay that is linked to the performance of the company. A recent study by Nelson, Gallery and Percy (2010) supports Eng and Mak (2003) when they found a contradicting result from the initial expectation, that board independence is negatively and significantly associated with the increased compliance with executive stock option (ESO) disclosure.

Previous studies that linked disclosure and independent directors in Malaysia show some inconsistent empirical result. Haniffa and Cooke (2005) found that Malaysian companies with boards dominated by independent directors are negatively associated with corporate and social disclosure, suggesting a limited role played by the non-executive directors in influencing disclosure practices. On the other hand, Wan-Hussin (2009), Mohd Ghazali and Weetman (2006) and Haniffa and Cooke (2002) noticed that independent directors are not significant in promoting corporate transparency among Malaysian firms sampled in 2002, 2001 and 1995, respectively. In view that the sampling years was conducted before the Asian financial crisis in 1997/1998 and the beginning of corporate governance code implementation in 2000, this study expects that the independent directors have improved in exercising their monitoring role, given a grace period of governance practices in Malaysia (Ho and Taylor, 2013). Therefore, it is hypothesized that according to agency theory:

Hypothesis 1: There is positive association between the extent of directors' remuneration disclosure and the proportion of independent directors

1.2.1.2 CEO/Chairman duality

Separation of the positions facilitates the division of responsibilities between them, where CEO should focus on the daily business operation while chairman would concentrate on leading the oversight of the management. The separation also benefits in minimizing the possible abuse of CEO power (Donnelly and Mulcahy, 2008) and reducing the threat of poor disclosure (Forker, 1992). Bassett, Koh and Tutticci (2007) prove that firms with a CEO who is concurrently chairperson of the board have lower levels of compliance with the mandatory disclosure of ESO in Australia. Furthermore, Chau and Gray (2010) assert that separation of CEO/chairman post resulted to a positive and significant disclosure of all type of disclosure (i.e. strategic, financial and non-financial) among listed firms in Hong Kong. Nevertheless, many studies show that the relationship between CEO/Chairman duality and voluntary disclosure seems to be tenuous.

This particular governance structure does not seem to play any significant role in the scientific evidence of the effects of greenhouse gas (GHG) emissions on global warming, measured using the greenhouse gas disclosure (Liao, Luo and Tang, 2015). The study is in line with Khan, Muttakin and Siddiqui (2013) who failed to discover any significant impact of CEO/Chairman duality on corporate social responsibility (CSR) disclosure in Bangladesh. Similar studies that linked CEO/Chairman duality and CSR disclosure in Malaysia found consistent results. Mohd Ghazali and Weetman (2006) and Haniffa and Cooke (2002) both observed a non-significant relationship between CEO/Chairman duality and voluntary disclosure of CSR activities among Malaysian firms. Additional to that, Melis, Gaia and Carta (2015) also noticed a non-significant association in their study of directors' remuneration disclosure practices in UK and Italy.

Similar to the previous justification of samples that represented Malaysian firms during the initial stage of corporate governance practices, it is expected that

Malaysian firms have familiarized with the governance code that was introduced in 2000, given that the sample of this study is from 2007 to 2014. This is evidenced by the on-going effort by the Malaysian government that has reinforced on the monitoring role with CEO/Chairman duality in the latest MCCG 2012. Therefore, despite that previous study has empirically proven on the non-significant relationship, this study argues on the basis of agency theory that CEO/Chairman duality discharges their monitoring duty in disclosing the directors' remuneration practices and individual remuneration amount to minority shareholders and stakeholders, upon familiarizing with the corporate governance (CG) code over time. Therefore, it is hypothesized that according to agency theory:

Hypothesis 2: There is positive association between the extent of directors' remuneration disclosure and the separation of CEO/chairman duality role

1.2.1.3 Board size

Board size represents the total number of executive and non-executive directors on board at the date of the annual meeting in each fiscal year. The literature on board size seems to be not straightforward. Some studies found a positive link between board size and voluntary disclosure (Ntim and Soobaroyen, 2013; Hidalgo, Garcia-Meca and Isabel Martinez, 2011; Laksmana, 2008). This is consistent with the notion that says larger boards give more benefits in terms of expertise and resources available to the organization. However, there are few recent literature that noticed a non-linear relationship of board size and voluntary disclosure suggesting that as the number of the board increases, voluntary disclosure decreases due to increase in poorer communication and decision-making time (Elmagrhi, Ntim and Wang, 2016; Hidalgo, Garcia-Meca and Isabel Martinez, 2011). For example, Hidalgo, Garcia-Meca and Isabel Martinez (2011) indicates that disclosure of intangibles only increase until the board size reach 15 directors. Any additional directors give an inverted effect and become adverse in promoting disclosure.

In a recent study by Torchia and Calabrò (2016), a negative relationship is noted between board size and voluntary disclosure of financial attributes. Similarly, Hearn (2013) also found a small and negative but statistically significant relationship of board size with the likelihood of disclosure of individual CEO salary. Nevertheless, there are also literatures on board size which do not find any association between board size and disclosure (Donnelly and Mulcahy, 2008) (Cheng and Courtenay, 2006). In fact, Alnabsha *et al.*, (2017) and Bassett, Koh and Tutticci (2007) initially predicted a non-linear association between board size and disclosure but no evidence of association was found. Interestingly, Esa and Mohd-Ghazali (2012) noticed a significant and positive link between board size and CSR disclosure in Malaysia for both years in 2005 and 2007. The result supports signalling theory that larger boards provide better monitoring by sending a signal on their cohesiveness in terms of more disclosure to the minority shareholders and stakeholders. Therefore, this study formulates a positive hypothesis as below:

Hypothesis 3: There is a positive association between the extent of directors' remuneration disclosure and the board size

1.2.1.4 Big 4 auditors

The accounting literature on external auditors focuses on two principal forces that motivate the auditors to deliver quality, i.e. a litigation incentive and a reputation incentive (Skinner and Srinivasan, 2012). Therefore, big public audit firms (now known as 'the Big 4') are seen to be able to provide the two elements as they have the scale and relevant technical expert. Apart from that, the earlier study on the selection of external auditor by DeAngelo (1981) argues that audit quality is not independent of the audit firm size due to client-specific quasi-rents by the incumbent auditors. Hence, there are some studies that observed a positive relationship between disclosure and the Big 4 auditors. Wang, O and Claiborne (2008) reported that Big 4 audit firms in the Chinese setting appear to maintain their reputation and assure quality that pushes more transparent disclosure from the companies. This is supported by an earlier study by Bassett, Koh and Tutticci (2007) who also found that Big-4 auditor is associated with higher level of mandatory disclosure requirements as well as voluntary disclosures on ESO.

However, past literature have also revealed a non-significant relationship between disclosure and the type of auditor. Barako, Hancock and Izan (2006) found an insignificant influence of external auditor in corporate annual reporting in Kenya while Depoers (2000) found similar result among French public listed companies in disclosing voluntary financial and non-information in the annual report. This is consistent with similar studies conducted in Malaysia by Haniffa and Cooke (2002) who also noticed that Big 4 auditors do not have any significant impact towards CSR disclosure. In another recent study, Abdullah *et al.*, (2015) further found that Big 4 auditors do not have a significant role to influence on IFRS mandatory disclosure subsequent to the IFRS convergence in Malaysia. Signalling theory argues that directors who perceive their firms to be superior will select bigger audit firms (Bar-Yosef and Livnat, 1984). To manage the minority shareholders and other stakeholders, this study predicts that directors signal their monitoring role in disclosing directors' remuneration by using the reputation of Big 4 auditors. Hence, it is hypothesized that:

Hypothesis 4: There is positive association between the extent of directors' remuneration disclosure and the big 4 auditors

1.2.2 Relationship between ownership structure and directors' remuneration disclosure

Tosi and R. Gomez-Mejia (1994) have laid a foundation proving that monitoring of CEO compensation differs by ownership classification in the US. They found that less additional monitoring is needed when ownership is highly concentrated as compared to when ownership is highly dispersed. The rationale of this finding is when a particular equity holders' own a substantial portion of a firm, the principal can actively involve in monitoring the managements' action and directly access to the internal information of the company. This finding somehow delivers an impact to disclosure in the sense that in highly concentrated ownership firms, CEO compensation is closely monitored by the principal hence less disclosure is needed. The same result was found by Laksmana (2008) where institutional ownership in the US is used. However, the findings are inconsistent with studies in Europe which reports that voluntary disclosure is positively related to dispersed ownership (Melis, Gaia and Carta, 2015; Chizema, 2008).

Chizema (2008) found that three types of ownership structure (out of six types being tested) are significant in improving the disclosure level of executive pay among the German companies listed in the Deutsche Aktien Xchange (DAX), i.e. state, institutional and dispersed ownership. The study employed organizational behaviour as a framework to explain why some firms support changes but some firms in the same institutional context resisted in explaining the changes of pay disclosure. A recent study by Schiehll, Terra and Victor (2013) has included family-controlled companies as one of the key variables to explain remuneration disclosure among firms listed on Brazil Stock Exchange for the year 2007. Consistent with other studies on emerging economies, Brazil reported high family control that resulted in the dominance of family members on board. They encountered a negative but insignificant coefficient of a family-owned company towards ESO disclosure, but significant association exists towards another aspect of disclosure such as cash and bonus.

Malaysia, like many other East Asian countries, is characterized by its key features of having a high level of ownership concentration (Hasnan, Rahman and Mahenthiran, 2013; Liew, 2007). Consistent with agency theory, ownership concentration is seen as a mechanism to control moral hazard problems that arise from the separation of ownership and management (Haniffa and Hudaib, 2006). Earlier studies by Christie, Joye and Watts (2003) and Fan and Wong (2002) were also proven that ownership concentration has led to value maximization when the decision making lies with the right party, who possess the knowledge to the decision made. However, past literature has also proved that ownership concentration seems to be a drawback when there is a controlling party among the dominated shareholders that might have the opportunity to expropriate the company's wealth at the expense of the minority shareholders (Lang, Lins and Miller, 2004; Shleifer and Vishny, 1997; Fama and Jensen, 1983).

Previous studies in Malaysia suggested that significant numbers of shares are held in the hands of few large shareholders, such as family owners, governments and institutions (Annuar and Rashid, 2015; Jalila and Devi, 2012; Tam and Tan, 2007). Therefore this study employs similar controlling shareholders in the Malaysian market, i.e. government and family ownership to explain the disclosure of remuneration practices, excluding institutions. This is because the institutional bodies in Malaysia are also owned by the government as they retain their shares upon its privatization (Mohd Ghazali and Weetman, 2006). In line with the agency theory, this study chooses government-controlled companies as the first ownership structure that determines disclosure of directors' remuneration in the annual report to discharge their accountability towards the public.

The second ownership structure used in this study is family-concentrated ownership. Family owned companies are proven in the past literature to disclose less in the annual report due to the availability of private communication channels as a mean to obtain demanded information (Abdullah *et al.*, 2015a; Ball, Robin and Wu, 2003). However, this study argues that family ownership in Malaysia make more disclosure of the remuneration practices to signal transparency to the minority shareholders and other stakeholders. Finally, this study employs foreign ownership to respond to the government's call for firms to be competitive at the international level (Ernst & Young, 2017). Although it does not represent ownership concentration in Malaysia, firms with foreign ownership were proven to disclose more in the previous literature (Alnabsha *et al.*, 2017; Wang, O and Claiborne, 2008; Andrew *et al.*, 1989). Hence, this study argues that firms with foreign ownership are transparent with their directors' remuneration to signal the firm's reputation. Due to prior literature, this study develops three hypotheses to ascertain the relationship between directors' remuneration disclosure and ownership structure.

1.2.2.1 Government ownership

The effect of government ownership on disclosure in previous research seems to be mixed. An earlier study on ownership and disclosure by Eng and Mak (2003) evidenced significant relationship between government ownership with increased in disclosure. In line with that, it is also noted that Chinese cross-listed state-owned (SOEs) disclose more information voluntarily with the expectation that higher disclosure may reflect the interest in developing a good reputation to get more capital in future listings (Wang, O and Claiborne, 2008). This is further supported by a recent study by Ntim and Soobaroyen (2013) who found that higher government ownership makes significantly more disclosure in the socio-economic affirmation action in South Africa. Concerning directors' remuneration transparency, Chizema (2008) observed a similar significantly positive association with state ownership firms implying that those firms should be exemplary in discharging their monitoring role.

In rebuttal, Xiao, Yang and Chow (2004) found negative effects of state ownership on voluntary internet-based disclosures by listed Chinese companies in 2001. The authors emphasized that the negative association is consistent with the intention that state owners do not demand a high quality of voluntary financial disclosures since their primary concern is not profit-oriented. A similar result is noted in another emerging market context that linked between government ownership and financial reporting quality in Egypt (Ebrahim and Fattah, 2015). Highlighting that the negative result is inconsistent with recent findings reported by other emerging countries, the authors argue that lack of financial reporting transparency in Egypt especially in companies with high government ownership reassured their findings. In addition to that, current literature on ownership further argues that there is a non-linear relationship between ownership variables and corporate disclosure practices that evidenced in both developed and developing countries (Alnabsha *et al.*, 2017; Elmagrhi, Ntim and Wang, 2016; Sun *et al.*, 2016).

Unlike Egypt, a study in Malaysia that relates government ownership and disclosure revealed a non-significant link among 87 non-financial companies in the KLSE Composite Index for the year 2001 (Mohd Ghazali and Weetman, 2006). Nevertheless, the authors expected a negative relationship due to the fact that government-controlled companies in Malaysia are strongly politically connected; hence less disclosure is anticipated to protect their political interest. In contrary with that, the Malaysian government has launched a transformation manual for the Government-Linked Companies (GLC) on 29 July 2005 with the aim to sustain structural improvement in GLC organisational and performance practices focusing on the next ten (10) years until 2015 (Putrajaya Committee on GLC High Performance, 2006). GLC are defined as companies that have the primary commercial objective which the major ownership and direct controlling stake are by the government. In view that it is a national agenda, this study expects a positive relationship between government ownership and directors' remuneration policy, supporting agency theory that caters monitoring role by the government. Therefore, this study formulates a positive hypothesis as below:

Hypothesis 5: There is positive association between the extent of directors' remuneration disclosure and the government ownership of companies (GLCs)

1.2.2.2 Family ownership

In the case of family firms, Ho and Shun Wong (2001) revealed that family ownership in Hong Kong is often high enough to be the controlling party; hence the management entrenchment practices was evidenced. The study found a negative relationship between family members on board and voluntary disclosure. Chizema (2008) however found no support of family ownership in the disclosure of individual compensation of management board members among the German companies, despite that it was expected to be negatively related due to the assumption that disclosure on individual remuneration would adversely affect the board's interest. On the other hand, Chau and Gray (2010) noticed a non-linear relationship between voluntary disclosure and different levels of family ownership in Hong Kong. The study shows that the extent of voluntary disclosure is low at moderate to low levels of family ownership (less than 25 percent). However, disclosure increases when the family ownership increases (above 25 percent).

Previous studies in Malaysia indicate inconsistent results on the link between family ownership and disclosure. Mohd Ghazali and Weetman (2006) and Haniffa and Cooke (2002) found a significant negative relationship between the proportion of family members on board and the extent of voluntary disclosure in Malaysia for the sample year of 2001 and 1995, respectively suggesting that family-controlled companies in Malaysia continue to be more secretive about their activities. Recent studies further found asimilar result that family-owned firms are negatively associated with the International Financial Reporting Standards (IFRS) mandatory disclosure for Malaysian public listed companies, which implies that dominance of family ownership reduces demand for public reporting as information asymmetry can be resolved by private communication channels (Abdullah *et al.*, 2015). However, Wan-Hussin (2009) discover a conflicting result among family firms who are more inclined towards early adoption of FRS 114 (segmental disclosure in the annual report) in full rather than delaying the adoption.

Despite that most of the past results have encountered negative relationship between family ownership and disclosure, this study argues that family firms will provide more disclosure on directors' remuneration in justifying the amount received by family directors. Furthermore, family-owned firms in Malaysia need to signal transparency to other stakeholders as well as the minority shareholders on their activities of managing the company to gain their continuous support. In view that specific requirement of individual remuneration disclosure and pay for performance link are voluntary required under the CG code, this study expects that director is more inclined to signal the transparency by disclosing their remuneration as compared to other mandatory and straightforward information such as financial-related figures. Additionally, directors in family-owned companies disclose more on remuneration to get financial support from the creditors. Hence, consistent with signalling theory this study expects that:

Hypothesis 6: There is positive association between the extent of directors' remuneration disclosure and family ownership

1.2.2.3 Foreign ownership

Foreign ownership indicates that financial statement users could rely more on the annual report to access corporate information if a company has a higher percentage of foreign ownership (Wang, O and Claiborne, 2008). In line with that, Firth, Fung and Rui (2007) found that companies with foreign shareholders have higher earnings information, providing some evidence that the foreign shareholders put pressure on companies to improve the quality of accounting information. Apart from that, foreign shareholders also play a significant role in monitoring management when Xiao, Yang and Chow (2004) noticed that foreign ownership encourages the disclosure of company's information through the internet/website. Therefore, a large number of prior studies found a significantly positive impact of foreign ownership on voluntary disclosure (Khan, Muttakin and Siddiqui, 2013; Wang, O and Claiborne, 2008; Barako, Hancock and Izan, 2006; Andrew *et al.*, 1989).

According to Malaysian law, foreign-owned companies in Malaysia have the option to prepare their financial statement in accordance to the Malaysian Accounting Standard Board (MASB) approved accounting standards or any acceptable internationally recognized accounting standard (Laws of Malaysia, 1997). Hence, the disclosure of directors' remuneration might vary according to whichever standards selected by the companies that have significant foreign ownership or foreign board members. Nevertheless, previous findings in Malaysia show a mixed result. Haniffa and Cooke (2002) and Haniffa and Cooke (2005) found a positive association between foreign ownership and CSR disclosure among Malaysian companies using the earlier sample, i.e. prior and post Asian financial crisis, respectively. On the other hand, Amran and S. Susela Devi (2008) noticed that foreign shareholding indicates no contribution to CSR reporting on annual reports for the year ending 2002/2003.

Alnabsha *et al.*, (2017) found support to non-linearity link between foreign ownership and disclosure in the annual reports for companies listed and non-listed in the Libyan Stock Market (2006 - 2010). For Malaysia, the government has liberalized its policy on foreign participation in Malaysian business as one its strategies to continuously attract foreign investments into the country. For example, the Foreign Investment Committee (FIC) began to allow foreigners to hold up to 70 percent of the equity in Malaysian companies in 2004 (to quote MIDA's website). The percentage has been increased to 100 percent foreign ownership for sectors like healthcare and education in 2011 (US Department of State, 2015). However, in view that foreign-owned company is not a majority among FTSE30, this study expects that the existence of foreign shares in a company influence for a better disclosure particularly on directors' remuneration to signal the firm's reputation and their virtuous, ethical practices to attract more foreign investors and minority shareholders. Therefore, it is hypothesized that:

Hypothesis 7: There is positive association between the extent of directors' remuneration disclosure and foreign ownership

In summary, Table 5 illustrates all seven hypotheses employed in this chapter with the respective theory justification that will investigate the relationship between directors' remuneration disclosure and corporate governance mechanism, represented by governance structure and ownership structure.

Table 5
Summary of hypotheses

Hypothesis statement		Theory justification	Expected sign
H1	There is positive association between the extent of directors' remuneration disclosure and the proportion of independent directors	Agency theory	(+) ve
H2	There is positive association between the extent of directors' remuneration disclosure and the separation of CEO/chairman post	Agency theory	(+) ve
H3	There is an association between the extent of directors' remuneration disclosure and the board size	Signalling theory	(+) ve
H4	There is positive association between the extent of directors' remuneration disclosure and the type of external auditor	Signalling theory	(+) ve
H5	There is positive association between the extent of directors' remuneration disclosure and the government ownership companies (GLCs)	Agency theory	(+) ve
H6	There is negative association between the extent of directors' remuneration disclosure and the family ownership	Signalling theory	(+) ve
H7	There is positive association between the extent of directors' remuneration disclosure and the foreign ownership	Signalling theory	(+) ve

1.3 Research Methodology

This study employs content analysis, a research method that codifies the text or content of a piece of writing into various groups or categories, depending on certain criteria and quantifies the scales to permit further analysis (Hackston and Milne, 1996). This is consistent with a definition by Krippendorff (1989, p.403) who defines content analysis as a research technique for making replicable and valid inferences from data to their context. Content analysis can be conducted manually or automatically or both (Hassan and Marston, 2010). For the purpose of this study, data collection for the remuneration related information is manually extracted from companies' annual reports which are available online in the Bursa Malaysia's website as well as from the companies' website. This is because the information on detailed remuneration disclosure practices is not available in any public database such as Datastream and Bloomberg. Consistently, the manual content analysis approach has been utilised by some prior studies in the literature (Riaz *et al.*, 2015; Linsley and Shrives, 2006; Hackston and Milne, 1996).

According to Krippendorff (1989), the appropriate data for content analysis are any texts to which meanings are conventionally attributed such as written documents and visual representations. In short, anything that has reasonably stable meanings for a specific group of a targeted user could be subjected to content analysis. While some researchers adopted the number of pages or words (e.g. Liu and Taylor 2008) to measure the level of disclosure, this study adopts disclosure scoring index, a methodology derived from content analysis to appraise the level of remuneration disclosed in the annual reports. Regardless that disclosure scoring index inevitably involves subjective judgment, previous studies have proven that it is a valuable research tool which will continue to be used in a disclosure focus area (Al-Akra and Ali, 2012; Barako, Hancock and Izan, 2006; Beattie, McInnes and Fearnley, 2004; Ahmed and Courtis, 1999). Moreover, the annual report is the main source used in this study because it is generally considered as the key information base for investors in making a decision and it mirrors a company's overall attitude towards public disclosure (Qu and Leung, 2006; Hail, 2002; Lundholm and Lang, 1993).

1.3.1 Definition of disclosure scoring index

Following Hassan *et al.*, (2009), there are four (4) main steps to develop a disclosure scoring index (DISC). The first step is to identify the list of disclosure items based on the research objectives and prior studies. Since this study focuses on the total disclosure of directors' remuneration, the list of disclosure comprises of short-term benefits (cash salary, bonuses, fees and other special allowance), long-term benefits (long-term incentive plan, options, grant, termination) and the related process that derive to the remuneration amount such as the remuneration policy and narrative of pay-performance link (Riaz *et al.*, 2015; Muslu, 2010; Laksmana, 2008). The disclosure list is then matched with the requirements and recommendations by the regulators, including mandatory and voluntary, respectively. Thus, it is principally guided by the requirements of the Companies Act, Bursa Malaysia Listing Requirement and Financial Reporting Standards (FRS) for mandatory requirements and best practices guideline as per the MCCG (2000, 2007 and 2012) for voluntary requirements. This is similar with Botosan (1997) who constructed his disclosure index, guided by various regulations such as American Institute of Certified Public Accountant (1994), Canadian Institute of Chartered Accountants (1991) and others.

On an important note, this study improves from Malak (2012) who have developed similar disclosure index in Malaysian context from 2000 to 2008. For instance, Malak (2012) had only adopted MCCG 2000 and two Financial Reporting Standards (FRS) which are FRS 2 (Share-based payments) and FRS 124 (Related party disclosure) to derive to the directors' remuneration disclosure index. In contrast, this study includes the latest update on CG code, i.e. MCCG 2007 and MCCG 2012 to capture the changes made by the regulators in the recent requirements. In addition, this study includes FRS 119 (Employee benefits) to closely observe the disclosure practices on directors' benefit in the annual report. Farmer, Archbold and Alexandrou (2013) suggest that individual elements of pay need to be analysed to comprehend pay for performance relationship as they relate to firm performance differently. This has led to a development of a combined disclosure index between weighted and un-weighted, unlike Malak (2012) who employed un-weighted disclosure index in measuring directors' remuneration disclosure.

The second step involves the refinement process of the disclosure list to check for the usefulness of items included. Unlike Hassan *et al.*, (2009) who adopted 'Centre for International Financial Analysis and Research' (CIFAR) checklist which might be irrelevant to the Egyptian context, this study has performed the filtering process in the first step because the disclosure is focused on directors' remuneration within Malaysian context. However, the refinement process in this study includes an extensive review of directors' remuneration disclosure literature to ensure a complete list of remuneration items to be included in the final list of disclosure (e.g. Melis, Gaia and Carta, 2015; Riaz *et al.*, 2015; Muslu, 2010; Chizema, 2008; Laksmana, 2008; Bassett, Koh and Tutticci, 2007). Also, the disclosure list was further checked using a sample of companies' annual reports to find out the disclosing practices by companies. For example, MFRS 119 spells out that a company 'should disclose' the chronology in determining post employee benefits (defined benefit plans) without clearly mandating it. Thus, the refinement process includes surveying to what extent did companies actually disclosed in the annual reports. This process has led to a final disclosing index that consists of fifteen (15) directors' remuneration items (refer Appendix 1).

Once the final disclosing index is determined, the following step is to assign a score to each of the items in the list according to the extent of disclosure.

According to Marston and Shrives (1991), this is normally the debatable point whether some items should be weighted more heavily than others. In accounting research, both weighted (Barako, Hancock and Izan, 2006; Botosan 1997) and un-weighted (Al-Akra and Ali, 2012; Wallace and Naser, 1995) disclosure indexes have widely been used although both methods have its disadvantages. A weighted disclosure index has been criticised as it may lead to bias towards particular user-orientation while un-weighted disclosure index has been criticised on its fundamental assumption that all items are equally important. Therefore, this study adopts a combination of weighted and un-weighted disclosure index to distinguish quantitative and qualitative information provided as well as the different level of information disclosed on directors' remuneration in the annual reports.

All annual reports were read in their entirety before they were scored accordingly because the information on directors' remuneration was found to be disclosed in various sections in the annual reports. Unlike developed countries where the disclosure of executive compensation is disclosed in a specific directors' remuneration (e.g. UK), the disclosure of directors' remuneration in Malaysia can be presented in directors' report, statement of CG, financial statements and notes to the accounts depending on the nature of directors' benefits. This study finally constructed a disclosure scoring index that consists of eight (8) weighted items and seven (7) un-weighted items to measure the level of disclosure.

For the un-weighted index, dichotomous scores, where 1 is given for item disclosed and 0 is given for item not disclosed. The scoring is mainly assigned to a straightforward disclosure requirement such as the separation of executives and non-executives, disclosed in a band or individually, existence and impendence of the remuneration committee and others. On the other hand, the weighted index is mainly assigned to items that require narrative disclosure such as pay for performance linkage, remuneration policy, the definition of post-employment benefits, the process of share-based payments (SBP) and others. Hence, 2 is given if there was extensive disclosure, 1 is given when it was partially disclosed, and 0 is given when it was not disclosed at all. Following Marston and Shrives (1991), a not-applicable (N/A) is given when a firm did not disclose an item when it not applicable for them to disclose. For example, if the firm clearly mentioned that they did not grant any SBP for that particular year, it will be codified as N/A and will not be included in the computation of total disclosure index.

The final step in constructing a disclosure scoring index is to assess the reliability and validity of the index to draw meaningful inferences from the analysis. This is because a disclosure index is not easily evaluated as the development and application of a disclosure score relies heavily on a person's subjective perception and depending on the researcher's technique (Beattie and Thomson, 2007; Hail, 2002; Botosan, 1997). Therefore, it is crucial to assess whether the measurement used in the disclosure index is a relatively reliable and valid for the extent and quality of disclosure. According to Milne and Adler (1999), reliability in content analysis is achieved by demonstrating the use of multiple coders and reporting the discrepancies between coders, either reporting that the discrepancies between the coders are few, or that the discrepancies have been re-analysed and the differences resolved. Detail work done for reliability and validity assessment is further described in section 1.3.1.1.

1.3.1.1 Reliable and validity assessment

For this study, the researcher, who are a qualified Chartered Accountants from a Big Four firm with specific knowledge of Malaysian Financial Reporting Standards (MFRS) is the main coder and a sample of eight annual reports were re-coded by another two coders (independent coder) who are also a professional accountant currently working in the industry. The independent coders work in a government sector (National Audit Department of Malaysia) and in a private sector (one of the biggest oil and gas companies in Malaysia), whom both are familiar with this type of disclosure. Samples of annual reports were scrutinized by the independent coders with a set of decision rules (Appendix 2) that was produced for their reference. The decision rules were developed for the purpose of enabling the content analysis to be performed in a replicable manner (Linsley and Shrives, 2006). After the data were re-coded, the results were matched in order to assess the reliability of the coding procedure. Using similar inter-coder reliability methods by Melis, Gaia and Carta (2015), this study employs the percentage of agreement index and Cohen's kappa index, and the results meet the appropriate minimum acceptable levels of 80 percent and 0.7, respectively.

For validity testing, this study adopts construct validity method which is applicable in social sciences studies (Hassan and Marston, 2010). According to G.Carmines and A.Zeller (1979), construct validity specifically test the consistency of performance measure with the theoretical expectation which has been developed by the previous studies. This means that the construct of disclosure index is valid when the performance of the measure is consistent with the result expected by the theories. The objective of validity testing is to ensure that any measuring instruments measures what it is intended to measure. Therefore, correlation analysis is performed between the remuneration disclosure index and the various firm characteristics that were found to have a consistent relationship with the disclosure in prior studies such as firm size, gearing and profitability (Cheng and Courtenay, 2006; Hail, 2002; Botosan, 1997). Table 6 provides both Pearson (parametric) and Spearman (non-parametric) correlation coefficient with the expected association.

Table 6

Correlations between disclosure and various firm characteristics

Statistical tests	LGMV (+)	LEV (+)	ROE (+)	GOV (+)
Pearson correlation	0.1979	0.2089	0.1310	0.1831
	(0.0025)	(0.0014)	(0.0462)	(0.0051)
Spearman's rho	0.1299	0.2799	0.0566	0.1616
	(0.0480)	(0.0000)	(0.3912)	(0.0137)
No of observation	232	232	232	232

Standard errors are in brackets

Firm size is proxied by log market value (LGMV), i.e. the market value of common stock, while gearing is proxied by leverage (LEV), the ratio of total liabilities to total assets. Profitability is represented by return on equity (ROE) in this testing. Following Cheng and Courtenay (2006), this study includes government ownership (GOV) to the analysis in view that there is significant government involvement in various industries that demonstrate the specific characteristic of corporate landscape in Malaysia. From the correlation analysis in Table 6, both Pearson and Spearman correlation show positive and significant (at 5 percent and 1 percent level, accordingly) correlation coefficient measures for all measurements as expected, except for ROE. Nevertheless, ROE is positive and significant under Pearson correlation but insignificant under Spearman rank. This result is consistent with Ahmed and Courtis (1999) who do not found a significant association between profitability and aggregate disclosure level in the meta-analysis of disclosure related studies. Taken together, the validity of the disclosure scoring index, used as a measure of remuneration disclosure practices is supported by the correlation analysis.

1.3.2 Research sample

The sample source of data for this study comprises the companies listed on FTSE Bursa Malaysia Top 30 (FTSE30) during the period from 2007 to 2014, which derives to 232 observations in running the regression model in this study (8 observations were not available as some of the companies were incorporated in the middle of the sampling period). The index is used because it represents the largest 30 companies by market capitalization listed on the Bursa Malaysia Main Market stock exchange that pass the relevant investment screens (FTSE Group, 2015). There is also a list of FTSE100 companies in Malaysia, but it consists of companies with low market capitalization. This is proven by the total market capitalization of the FTSE30 companies which represents 72 percent of the total market capitalization of FTSE100.

The decision to focus on the largest 30 companies was driven by five (5) factors. Firstly, data for FTSE30 companies are readily available in the Bloomberg and Datastream database as compared to data for FTSE100 which has a lot missing information throughout the eight (8) years period. Second, it is believed that FTSE30 data is more reliable in view that 90 percent of them are audited by the Big 4 companies, and it is more likely represent the best corporate governance practice practices in Malaysia. Thirdly, the stock data for the FTSE30 companies are believed to be more liquid and updated since the indices are completely captured by the Bloomberg terminal. This argument supports Qu and Leung (2006) who highlighted that top company are more likely to attract the attention of investors who are interested and rely upon the quality of corporate disclosure in making the investment decision.

The remaining two factors support previous literature in disclosure and content analysis study, respectively. Prior disclosure studies believe that large companies are more likely to take the lead in the area of reporting due to available resources to make more disclosure (Ben-Amar, Chang and McIlkenny, 2015; Guthrie and Petty, 2000; Ahmed and Courtis, 1999). Finally, Boesso and Kumar (2007) emphasized that it is fairly common to find a small sample size in studies that adopt content analysis methodology as it is labour-intensive and time-consuming. For example, data set from previous studies that adopt similar method are: Hummel and Schlick, 2016 (195 observations); Riaz *et al.*, 2015 (60 observations); Al-Akra and Ali, 2012 (243 observations); Oliveira, Rodrigues and Craig, 2011 (42 observations); Hassan *et al.*, 2009 (272 observations); Bozzolan, Favotto and Ricceri, 2003 (30 observations) and Guthrie and Petty, 2000 (20 observations). Therefore, the largest 30 companies with a total of 232 observations employed in this study seem to be adequately confirming the norm.

Unlike most of the previous studies in this area that perform analysis of cross-sectional data, this study adopts a panel dataset that consists of observation of the same set of sampling companies over the sampling period. Panel data analysis has a number of advantages over traditional cross-sectional data analysis. For example, panel data analysis provides a larger number of observations that increases the degree of freedom and reduces any collinearity problems among explanatory variables (Hassan *et al.*, 2009). Consequently, panel data analysis improves the estimation efficiency as compared to the traditional cross-sectional data analysis. This also compliments the limitation of study by Haniffa & Cooke (2005) that suggest a longitudinal study on a yearly basis that can trace the disclosure practice of a particular company over the years and its relationship with the strategic changes on the company. On top of that, this study differs from Malak (2012) as it employs different sampling period between 2007 to 2014, which includes few significant events such as the global financial crisis in 2007 and the changes in Malaysian political atmosphere in 2008.

1.3.3 Development of empirical models

A basic panel data regression is used to assess the extent to which variability in the extent of directors' remuneration disclosure is explained by corporate governance mechanism. To empirically test the research question, two different models were formed to observe the impact of the main ownership variables individually, i.e. government (model A) and family (Model B). These models integrate all the theoretical perspectives explored in the literature review and hypothesis development chapters, together with the control variables of dummies for years and industry classifications. The two different models are:

Model A

$DISC_{it} = \beta0 + \beta1\ GOV_{it} + \beta2\ FOR_{it} + \beta3\ BIND_{it} + \beta4\ DUAL_{it} + \beta5\ BSIZ_{it} + \beta6\ BIG4_{it} + \beta7\ LGMV_{it} + \beta8\ LEV_{it} + \beta9\ GROW_{it} + \beta10\ TOBS_{it} + \beta11\ ROA_{it} + \Sigma$ ʆc $Control_{it} + \varepsilon_{it}$

Model B

$DISC_{it} = \beta0 + \beta1\ FAM_{it} + \beta2\ FOR_{it} + \beta3\ BIND_{it} + \beta4\ DUAL_{it} + \beta5\ BSIZ_{it} + \beta6\ BIG4_{it} + \beta7\ LGMV_{it} + \beta8\ LEV_{it} + \beta9\ GROW_{it} + \beta10\ TOBS_{it} + \beta11\ ROA_{it} + \Sigma$ ʆc $Control_{it} + \varepsilon_{it}$

Where,

DISC	=	disclosure of directors' remuneration index;
$\beta0$	=	value of the constant;
GOV	=	percentage of shares owned by government;
FOR	=	percentage of shares owned by foreigners;

FAM	=	percentage of shares owned by family;
BIND	=	percentage of independent board members;
DUAL	=	CEO/Chairman duality role;
BSIZ	=	total number of directors on board;
BIG4	=	audited by big-4 audit firms;
LGMV	=	log market value;
LEV	=	leverage;
GROW	=	sales growth;
TOBS	=	tobins Q; and
ROA	=	return on asset.

1.3.4 Variables measurement

1.3.4.1 Dependent variable

The dependent variable is represented by a set of mandatory and voluntary disclosure of directors' remuneration based on the BMLR, IFRS and MCCG. On top of that, previous literature on directors' remuneration studies is also referred to capture comprehensive disclosure items of directors' remuneration in this study.

1.3.4.2 Independent variables

Independent variables in this chapter are divided into two elements of CG, which are the ownership structure and governance structure. Ownership structure consists of government, family and foreign shareholdings where all data are extracted from the list of substantial shareholders available in the annual reports. Government ownership is measured using the proportion of shares held by the government over total outstanding shares (Chizema, 2008; Eng and Mak, 2003). There are seven (7) entities referred as Government Link Investment Companies (GLIC), namely Ministry of Finance Malaysia (MOF), Khazanah Nasional Berhad, Kumpulan Wang Amanah Pencen (KWAP), Lembaga Tabung Haji (LTH), Lembaga Tabung Angkatan Tentera (LTAT), Employees Provident Fund (EPF) and Permodalan Nasional Berhad (PNB). Therefore, the lists of substantial shareholders are carefully scrutinized to calculate the total shares held by the GLIC.

Other than government ownership, the remaining shareholders disclosed in the annual reports mainly comprises of family and foreign ownership. Family ownership is identified from the individual names that are written in the list of substantial shareholders (Chau and Gray, 2010; Haniffa and Cooke, 2002).

Hence, it is measured using the proportion of shares held by family members over the total outstanding shares. Similarly, foreign ownership is recognized from the companies' name that normally mentions 'Holdings' as part of their names. Foreign ownerships are measured using the proportion of shares held by foreigners over total outstanding shares (Barako, Hancock and Izan, 2006). The measurement and computation of each ownership structures are consistent with previous studies in Malaysia that utilised similar variables (Abdullah *et al.*, 2015; Haniffa and Cooke, 2002).

On the other hand, the governance structure has four variables to be tested, which are the proportion of board independence, CEO duality, board size and Big Four auditors. The measurements for each variable are consistent with prior CG studies as they are almost comparable. For example, the proportion of board independence is measured using the percentage of independent non-executive directors to the total number of directors on the board of a company (Ntim and Soobaroyen, 2013; Bushman *et al.*, 2004). The CEO duality is computed using a dummy variable that takes the value of 1, if the roles of CEO and chairman of a company are split, otherwise 0 (Ntim and Soobaroyen, 2013; Donnelly and Mulcahy, 2008). Board size represents the number of directors on the board while Big Four auditors are measured using dummy variables, where 1 represents companies that are audited by the Big Four and 0, otherwise (Abdullah *et al.*, 2015). All independent variables for the governance structure are extracted from the Bloomberg database.

1.3.4.3 Control variables

There are five control variables employed in this study namely firm size, leverage, profitability, growth and Tobin's Q which are consistent with the previous studies that determine disclosure. Studies on corporate disclosure have been extensively examined, and specific firm characteristics such as size, leverage and profitability are found to be significantly related to the extent of disclosure (Abdullah *et al.*, 2015; Ntim and Soobaroyen, 2013; Cerbioni and Parbonetti, 2007; Ahmed and Courtis, 1999). While larger firms are expected to follow better disclosure practices to signal their compliance effort, highly leveraged firms are expected to increase disclosure to reduce monitoring costs by the investors. On the other hand, profitability firms provide greater disclosure to increase investors' confidence in the superior performance. Similarly, high growth firms also provide more information as a viable method for bridging a potential information gap due to the higher asymmetry between potential investors and the management (Cerbioni and Parbonetti, 2007). Finally, this study follows Lazarides and Elektra (2010) who control for Tobin's Q in examining the disclosure factors for executive remuneration, suggesting that firms with better Tobin's Q seem to disclose more information.

1.4 Results Analysis

1.4.1 Univariate analysis

1.4.1.1 Analysis on corporate governance

Table 7
Summary statistics for all variables from 2007 to 2014

Variable	Obs (n)	Mean	Std Dev	Min	Med	Max
Disclosure Index (DISC)	232	0.509	0.121	0.261	0.522	0.889
Government Ownership (GOV)	232	0.315	0.279	0.000	0.149	0.845
Foreign Ownership (FOR)	232	0.054	0.137	0.000	0.000	0.551
Family Ownership (FAM)	232	0.243	0.262	0.000	0.148	0.781
Board Size (BSIZ)	232	9.629	2.435	5	9	15
Board Duality (DUAL)	232	0.828	0.379	0.000	1.000	1.000
Board Independence (BIND)	232	0.460	0.118	0.000	0.444	0.875
Type of Auditor (BIG4)	232	0.862	0.346	0.000	1.000	1.000
Log Market Value (LGMV)	232	10.610	0.511	9.436	10.578	11.824
Leverage ratio (LEV)	232	0.232	0.160	0.000	0.193	0.659
Revenue growth (GROW)	232	0.089	0.203	-0.673	0.067	1.250
Tobins Q (TOBS)	232	2.114	2.321	0.675	1.245	15.068
Return on asset (ROA)	232	7.672	11.750	-4.957	4.489	72.360

Obs (n) = Observation

Descriptive statistics of the variables in the full sample are reported in Table 7 The mean disclosure index from 2007 to 2014 for directors' remuneration is 50.9 percent and the range is between 26.1 to 88.9 percent. The ownership structure of the Malaysian sample companies reflects that the highest percentage shareholdings are held by the government followed by family and foreign with 84.5 percent, 78.1 percent and 55 percent accordingly. It is further noted that the mean shareholding for government is higher than the family of 30.1 percent and 23 percent, respectively. The average number of directors on board is nine (9) while the average board composition that consists of independent directors 46.4 percent. As for the type of auditor, a majority of the firms are audited by the Big 4 audit firms with an average of 86.2 percent. The result is similar to sampling by Chau and Gray (2010) who noted that a high proportion of sample firms (93%) were audited by Big 4 firms in Hong Kong.

Figure 1
Ownership structure in 2007

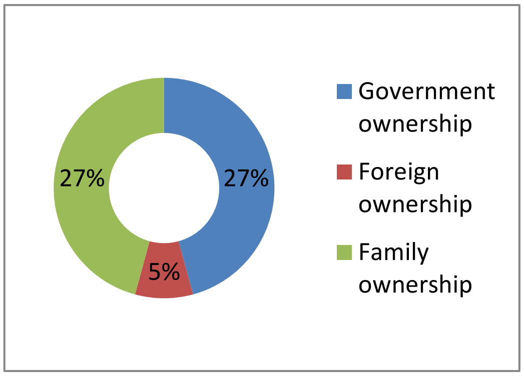


Figure 2
Ownership structure in 2014

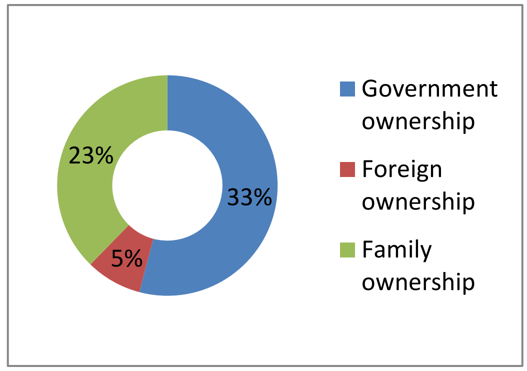


Figure 1 and 2 portray the percentage of ownership structure in 2007 and 2014, respectively. There is a slight movement of ownership among the FTSE30 companies in Malaysia within the eight (8) years period. It shows that government ownership had increased from 27 percent to 33 percent while family ownership had reduced from 27 percent to 23 percent. Foreign ownership remains the same from 2007 until 2014.

Figure 3
Statistics of compliance for governance structure from 2007 to 2014

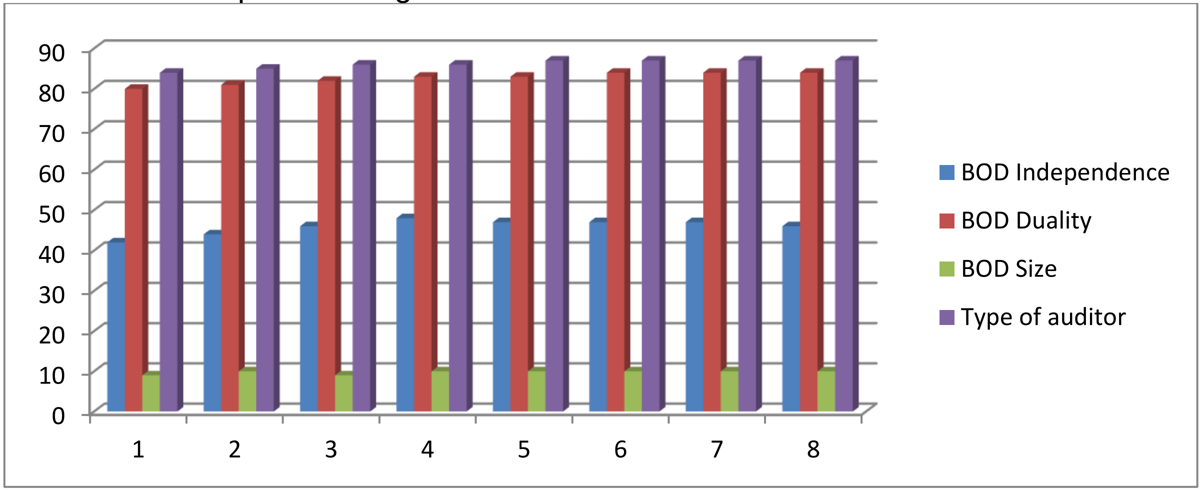


Figure 3 presents the percentage of compliance towards four (4) governance structure among FTSE30 companies. The compliance trend is consistent for all variables for the same period. BOD independence is found to be at 47 percent of average compliance level, which is below the recommended target by the MCCG of at least one-third of the board member.

1.4.2 Bivariate analysis

Table 8
Pearson's correlation for all variables (n = 232)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
DISC (1)	1.00												
GOV (2)	0.18*	1.00											
FOR (3)	0.21*	-0.20*	1.00										
FAM (4)	-0.39*	**-0.76***	-0.30*	1.00									
BSIZ (5)	0.46*	0.05	-0.20*	0.00	1.00								
DUAL (6)	0.05	0.45*	0.14*	-0.38*	-0.27*	1.00							
BIND (7)	-0.08	0.18*	-0.16*	-0.19*	-0.32*	0.12	1.00						
BIG4 (8)	0.11	0.31*	0.16*	-0.32*	0.11	0.08	0.13*	1.00					
LGMV (9)	0.20*	0.08	-0.06	-0.05	0.24*	0.25*	0.16*	0.22*	1.00				
LEV (10)	0.21*	-0.20*	0.05	0.20*	0.28*	-0.37*	-0.35*	-0.12	-0.13*	1.00			
GROW (11)	-0.04	-0.12	-0.04	0.13	0.04	-0.15*	-0.12	0.00	0.06	0.11	1.00		
TOBS (12)	0.20*	-0.21*	**0.76***	-0.17*	-0.16*	0.01	-0.18*	0.12	-0.26*	0.14*	-0.04	1.00	
ROA (13)	0.08	-0.15*	0.68*	-0.20*	-0.30*	0.13*	-0.11	-0.00	-0.27*	0.03	0.00	**0.81***	1.00

Sample period is from 2007 to 2014
*Correlation is significant at 5 percent levels

The result of correlation provides indications of the validity of the explanatory variable in influencing the level of directors' remuneration disclosure. The correlation value provides a degree of linear dependency between variables and does not consider the interactions between them. Based on correlation matrix presented in Table 8 above, it is noted that government and family are highly correlated at 0.76 and this might lead to the multicollinearity problems. Other variables that are also highly correlated are Tobin's Q and ROA. However, multicollinearity diagnostics using variance inflation factor (VIF) indicates that there is no severe multicollinearity issue in this model. This is because the VIF scores of less than 10 (depicted in Table 9 below), suggesting that it will not significantly influence the stability of the parameter estimates particularly for government and family variables (Griffith and Harvey, 2001).

Table 9
Multicollinearity test using variance inflation factor (VIF)

Variable	VIF	1/VIF
Government Ownership (GOV)	6.97	0.1434
Foreign Ownership (FOR)	5.53	0.1809
Family Ownership (FAM)	6.39	0.1564
Board Size (BSIZ)	2.00	0.5008
Board Duality (DUAL)	2.24	0.4467
Board Independence (BIND)	1.79	0.5592
Big-4 Auditor (BIG4)	1.47	0.6798
Log Market Value (LGMV)	2.85	0.3503
Leverage ratio (LEV)	1.75	0.5716
Revenue growth (GROW)	1.17	0.8561
Tobins Q (TOBS)	4.71	0.2122
Return on asset (ROA)	4.05	0.2470
Mean VIF	2.99	

1.4.3 Multivariate analysis

1.4.3.1 Overall regression with ownership structure and governance structure

Table 10 summarizes the regression results of how corporate governance elements could influence on directors' remuneration disclosure, and it produced an adjusted R^2 of 0.493. This means that 49.3 percent of the variation in the total disclosure of directors' remuneration is explained by the corporate governance (explanatory) variables. The corporate governance elements in this chapter are divided into two components, i.e. ownership structure and governance structure. The first component consists of government, foreign and family ownership while the second component is comprised of boards' number, boards' duality, boards' independence and type of audit firm. Consistent with previous literature, ownership (Eng and Mak, 2003) and governance structure (Bassett, Koh and Tutticci, 2007) are important factors that determine the level of monitoring and thereby determines the level of disclosure.

Table 10
Full regression result

VARIABLES	DISCINDX
Government Ownership	-0.108*
	(0.0573)
Foreign Ownership	-0.0919
	(0.0814)
Family Ownership	-0.281***
	(0.0507)
Board Size	0.0220***
	(0.00374)
Board Duality	0.0351
	(0.0228)
Board Independence	0.0558
	(0.0729)
Big-4 Auditor	-0.0362**
	(0.0156)
Log Market Value	0.00493
	(0.0250)
Leverage ratio	0.175***
	(0.0471)
Revenue growth	0.0101
	(0.0266)
Tobins Q	0.0126***
	(0.00455)
Return on asset	-0.000271
	(0.000683)
Constant	0.221
	(0.259)
Observations	232
R-squared	0.493
Year Effects	Yes
Industry Effects	Yes

Robust standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Although there is no severe multicollinearity between the ownership structure of government and family as depicted in Table 9, there is a possibility that the two slopes coefficient estimators tend to be highly and negatively correlated when two independent variables are highly and positively correlated. From Table 10, the coefficient value for government is (-) 0.1082, and it is significant at 10% level while the family is (-)0.2812 and highly significant at 1% level. Due to that, two separate regressions (Model A and B) are conducted to identify the individual effect of government and family ownership towards the variation of directors' remuneration disclosure as shown in Table 11 and 12 below.

1.4.3.2 Regression of government ownership and governance structure

Table 11

Model A: Regression result without family ownership

VARIABLES	DISCINDX
Government Ownership	0.119***
	(0.0351)
Foreign Ownership	0.233***
	(0.0717)
Board Size	0.0267***
	(0.00367)
Board Duality	0.0169
	(0.0211)
Board Independence	0.169**
	(0.0776)
Big-4 Auditor	-0.0501***
	(0.0158)
Log Market Value	0.0156
	(0.0248)
Leverage ratio	0.118**
	(0.0461)
Revenue growth	0.0124
	(0.0271)
Tobins Q	0.0116**
	(0.00474)
Return on asset	-0.000299
	(0.000701)
Constant	-0.0860
	(0.252)
Observations	232
R-squared	0.435
Year Effects	Yes
Industry Effects	Yes

Robust standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

The separate regression gives an interesting result as the government ownership structure in Table 11 shows an inverse impact towards disclosure (i.e. 0.119 and positively significant at 1% level). This has changed the direction of the impact because it was negatively significant in Table 10 when all three ownership structures are being regressed in one model. Other than the government ownership, there are also other explanatory variables that produce a different result in the two separate models (i.e. Table 11 and 12) as compared to the combination model of Table 10. This indicates that different type of ownership structure leads to a different level of monitoring in an organisation.

Table 11 reports the regression result of directors' remuneration disclosure using ownership structure (government and foreign) and governance structure that consists of board size, board duality, number of independent board and Big Four audit firm as the main explanatory variables. The control variables used are the company size (LGMV), leverage (LEV), company's growth (GROW), company's value (TOBS) and profitability (ROA). The result shows that all component of corporate governance tested in this model (ownership and governance structure) are significantly related to directors' remuneration disclosure except for CEO/chairman duality. In other words, approximately 83 percent of the corporate governance elements tested in this study contributed to disclosure of directors' remuneration in the Malaysian context.

The result proves that disclosure significantly increased in line with the increased in the government ownership (significant at 1% level) as reported in Table 11. This is consistent with the expectation towards governments' ownership companies that should model the exemplary in transparency. One of the major efforts done by the Malaysian government is by creating the Government-Linked Investment Companies (GLICs) to support the Malaysia Government's New Economic Policy introduced in in 1970 (Gomez and Jomo, 1999). There are seven (7) entities referred as GLIC including Ministry of Finance Malaysia (MOF), Khazanah Nasional Berhad, Kumpulan Wang Amanah Pencen (KWAP), Lembaga Tabung Haji (LTH), Lembaga Tabung Angkatan Tentera (LTAT), Employees Provident Fund (EPF) and Permodalan Nasional Berhad (PNB).

The main objectives of GLICs are to play a significant role in the market by investing on behalf of governments and exert their influence over the companies to achieve key government policies. As a result, the large fund that supports the Malaysian market is mobilized by GLIC. For example, EPF is a body that mandates all private sectors employees to pay 11 percent of their salary to the fund while the employers are mandated to contribute at 12 to 13 percent (The World Bank, 2012). Companies that are under the control of GLICs are called Government Link Companies (GLCs), and the purpose of GLCs is to stimulate economic growth, to provide social services as well as to attract local and foreign investors. GLC has evolved in several ways since 1970, and they have embarked on a 'GLC Transformation Program' on 14 May 2004 (Putrajaya Committee on GLC High Performance, 2006).

The positive and highly significant association between government ownership and disclosure of directors' remuneration supports the agency theory, indicating that government-controlled companies complied more with the statutory requirements on remuneration disclosure. This is consistent with Chizema (2008) who noticed that state ownership is associated with transparency in relation to executive pay in German. The result also contradicts previous research on poor quality of accounting information among politically connected firms (Chaney, Faccio and Parsley, 2011; Ball, Robin and Wu, 2003). Mohd Ghazali and Weetman (2006) further emphasized that politically connected firms in Malaysia are 'favored' firms by the ruling government; hence less disclosure is required as the companies do not need to attract potential investors and able to obtain cheaper funds from local banks.

However, this finding proves that the government-owned companies in Malaysia are committed to complying with the remuneration disclosure practices as part of their social objective towards stakeholders as well as the minority shareholders. The result complements the national agenda by the government that promotes the high value of performance among the GLC companies by the 10-years period of GLC Transformation Program. In fact, this result further corroborates earlier findings by Gul (2006) who noticed that auditors in politically connected firms reduced the level of assessed audit risk due to better a quality of financial statements post-financial crisis period in 1997/98. Hence, hypothesis 5 is accepted on the basis that government-owned companies support agency theory by being transparent in the directors' remuneration process in the annual report.

Foreign ownership is also found to be highly significant (at 1% level) and positively contributed to the directors' remuneration disclosure. This finding validates the earlier empirical results of the foreign ownership role in influencing voluntary disclosure within Malaysian context (Haniffa and Cooke, 2005) (Haniffa and Cooke, 2002) (Andrew *et al.*, 1989). Following the aspiration initiated by the earlier Prime Minister, Tun Dr Mahathir Mohamed who turned the country to focus on heavy industrialization in the 1980s, the involvement of foreign affiliates in Malaysian economy is significant and has made Malaysia to be one of the fastest growing economies in Southeast Asia (Amran and S.Susela Devi, 2008). Despite that foreign shareholders typically have a minority stake in Malaysian companies, this study supports findings by Firth, Fung and Rui (2007) that emphasized on the ability of low-ownership foreign shareholders in pressuring companies to improve their quality of reporting.

Furthermore, the positive relationship towards directors' remuneration disclosure in this study is also consistent with a recent study by Riaz *et al.*, (2015). The authors found that multinational corporations (MNC) subsidiaries disclosed a better level of directors and executive remuneration to gain external legitimacy in

Australia. Similarly, this finding supports signalling theory when foreign shareholders in Malaysian FTSE30 companies seems to be more responsive to comply with the remuneration disclosure requirements in Malaysia regardless of its less control in the company as compared to other significant block holders. In other words, companies that have foreign ownership tend to convey their reputation in Malaysia by contributing to the extension of directors' remuneration disclosure in the annual report. Due to that, hypothesis 7 is accepted.

As for the CG on governance structure, this study found a positive and significant relationship between the number of board members (board size) and the number of independent non-executive directors on board towards directors' remuneration disclosure. These findings suggest that the higher board size and independent non-executive directors in a company, the better disclosure of directors' remuneration being reported in the annual report. Laksmana (2008) found a similar result in disclosure of directors' remuneration among unregulated firms listed on Standard & Poor's 500 (S&P) for the year 1993 and 2002, suggesting that board size and proportion of independent directors are positively associated with greater communication about remuneration practices to shareholders. This study, however, provides a complementary to the result by Laksmana (2008) in a different context of economic background, i.e. emerging country. Hence, board independence supports agency theory while board size supports signalling theory as proposed in hypothesis 1 and 3, respectively.

However, no relationship is noted for CEO/chairman duality indicating that the separation duty between CEO and chairman still not able to influence the directors' remuneration disclosure among FTSE30 companies in Malaysia. In the same vein, this study further noticed that firms having big-4 auditors disclosed less as compared to medium sized auditors, as evidenced by the coefficient of (-

)0.05 at 1% significant level in table 2.6. The result implies that big-4 auditors tend to reduce the transparency of directors' remuneration process in the annual report. Nevertheless, this is justified by the nature of directors' remuneration disclosure requirements which are a combination of mandatory and voluntary. Therefore the reverse relationship between big-4 auditors and remuneration disclosure is reasonable due to the main focus of external auditors is to provide a true and fair view of the financial statements according to the standards, instead of directors' remuneration disclosure. With that, hypothesis 2 and 4 are rejected, and both theories are not supported.

1.4.3.3 Regression of family ownership and governance structure

Model B of Table 12 highlights the relationship between family ownership and disclosure. This study found a significant and negative coefficient of (-) 0.191 at 1% level which tells that family-owned company do not influence disclosure of directors' remuneration in the annual report. Prior studies in Malaysia show a consistent result of a negative relationship between family ownership and level of disclosure (Abdullah *et al.*, 2015; Mohd Ghazali and Weetman, 2006; Haniffa and Cooke, 2002). Interestingly, this proves that the traditional family control in Malaysia continue to be so strong that it managed to outweigh the disclosure requirements whether it is locally or globally (IFRS) regulated, mandatory or voluntary and at any period whether pre or post-financial crisis. Similar results were found in remuneration disclosure practices by other emerging markets in Brazil (Schiehll, Terra and Victor, 2013) and in North Africa region (Hearn, 2013a) in terms of voluntarily ESO disclosure and individual executive remuneration among family firms companies, respectively.

Table 12
Model B: Regression result without government ownership

VARIABLES	DISCINDX
Family Ownership	-0.191***
	(0.0313)
Foreign Ownership	0.0107
	(0.0866)
Board Size	0.0225***
	(0.00371)
Board Duality	0.0143
	(0.0193)
Board Independence	0.0777
	(0.0764)
Big-4 Auditor	-0.0501***
	(0.0139)
Log Market Value	0.00583
	(0.0249)
Leverage ratio	0.164***
	(0.0460)
Revenue growth	0.0118
	(0.0259)
Tobins Q	0.0131***
	(0.00451)
Return on asset	-0.000153
	(0.000669)
Constant	0.166
	(0.255)
Observations	232
R-squared	0.484
Year Effects	Yes
Industry Effects	Yes

Robust standard errors in parentheses
*** $p<0.01$, ** $p<0.05$, * $p<0.1$

According to Chau & Gray (2010), when the substantial shareholders are also the board members of the company, the convergence of interest between the owner and outside investors occurs as owners are expected to act according to their interest. Therefore, the justification of less voluntary disclosure in company owned by family is due to the decrease of conflict between the owner and outside directors. Abdullah, Evans, Fraser, & Tsalavoutas (2015) further justified that less disclosure is required among companies dominated by family shareholdings because information asymmetry can be resolved by private communication channels. However, this study argues from the point that Malaysian context is having PP conflicts of agency theory where private communication channels do not resolve the information asymmetry with the minority shareholders. The result shows that family firms do not signal their virtuous practices in disclosing the directors' remuneration process publicly (rejecting hypothesis 5). They could have chosen other avenue of disclosure to convey transparency, for example, fraudulent financial reporting (Hasnan, Rahman and Mahenthiran, 2013).

Table 12 also presents a regression model (Model B) observing foreign ownership (without government) alongside with the same four governance structure in influencing the level of directors' remuneration disclosure in the annual report. However, it is interesting to note that model B depicts quite a different result from model A for both ownership and governance structure. For example, foreign ownership was significant in explaining the level of disclosure of directors' remuneration when it was regressed with the government ownership in Model A (refer Table 11). Nevertheless, foreign ownership becomes insignificant in explaining the level of directors' remuneration disclosure when it is regressed with the family ownership in Model B as shown in Table 12. This result emphasizes the significant control of family-owned companies among FTSE30 in Malaysia. It implies that foreign ownership in a company controlled by family shareholders is not able to influence transparency in directors' remuneration disclosure.

For governance structure, Model B found that independent directors fail to execute their monitoring role in companies that are owned by family and foreign, unlike its positive and significant role observed in government and foreign- owned companies in Model A. Duality of CEO/chairman continue to be insignificant in this model, indicating that the power of CEO in both companies owned by family as well as government and foreigners is not materialized to influence the disclosure of directors' remuneration. In addition to that, MSWG reported that the compliance with MCCG specifically on separation of CEO/chairman had been consistently high at 94 percent (from the year 2012 to 2015) among top 100 companies in Malaysia, leaving a question on the effectiveness of the governance code (Minority Shareholder Watchdog Group, 2015). In overall, Model B shows that there is only 50 percent of the corporate governance elements tested in this study contributed to disclosure of directors' remuneration in the Malaysian context, compared to 83 percent in Model A.

1.4.3.4 Additional test (non-linearity)

Existing literature suggests that some of the ownership structure and governance structure (board size) have a non-linear relationship with corporate disclosure (Alnabsha *et al.*, 2017; Elmagrhi, Ntim and Wang, 2016; Sun *et al.*, 2016; Hidalgo, Garcia-Meca and Isabel Martinez, 2011). Therefore, model A and B of this study have been re-estimated by adding the square root of all ownership structure and board size to derive to a new model C (without family) and model D (without government) as depicted in Table 13. These findings indicate the existence of the non-linear association between some of the variables tested and remuneration disclosure practices, i.e. government ownership and board size.

Table 13
Test for non-linearity

VARIABLES	DISCINDX (Model C)	DISCINDX (Model D)
Government Ownership	0.808***	-
	(0.128)	-
Government Ownership ^{2}	-0.873***	-
	(0.159)	-
Foreign Ownership	0.198	0.154
	(0.157)	(0.164)
Foreign Ownership ^{2}	-0.576	-0.592
	(0.411)	(0.412)
Family Ownership	-	-0.186*
	-	(0.0946)
Family Ownership ^{2}	-	-0.00455
	-	(0.128)
Board Size	-0.0387	-0.0294
	(0.0283)	(0.0270)
Board Size ^{2}	0.00292**	0.00251*
	(0.00140)	(0.00136)
BOD Duality	-0.0406*	0.0214
	(0.0221)	(0.0211)
BOD Independence	0.107	0.0776
	(0.0680)	(0.0767)
Big-4 Auditor	-0.0352**	-0.0397**
	(0.0170)	(0.0155)
Log Market Value	0.00269	0.00837
	(0.0252)	(0.0244)
Leverage Ratio	0.0403	0.178***
	(0.0457)	(0.0459)
Revenue Growth	-0.00725	0.00233
	(0.0280)	(0.0257)
Tobin’s Q	0.0229***	0.0162***
	(0.00534)	(0.00473)
Return on Asset	0.00100	0.000705
	(0.000738)	(0.000653)
Constant	0.387	0.361
	(0.248)	(0.247)
Observations	232	232
R-squared	0.507	0.494
Year Effects	Yes	Yes
Industry Effects	Yes	Yes

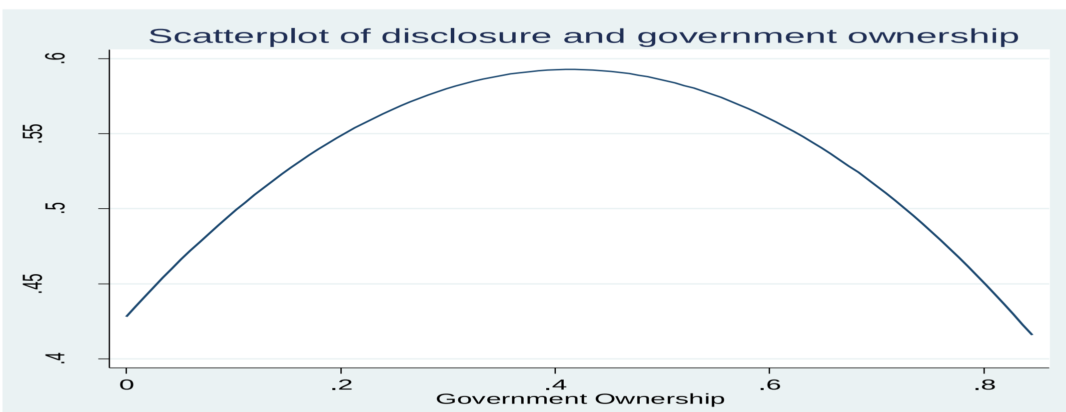
Robust standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Model C in Table 13 assumes non-linearity with the quadratic term for government ownership. When the coefficient of the linear term is positive and significant at 1% level, it means that the higher the government shares in a company, the greater the disclosure of directors' remuneration. But when the non-linear term is negative, it can be deduced that an excess of government shares hinders the disclosure practices. Specifically, firms with government ownership tend to align the interests of managers and shareholders at lower shareholding level by disclosing more directors' remuneration. However, when the government shareholding is high, firms become less transparent in disclosing the directors' remuneration. This is consistent with Sun *et al.*, (2016) who found that the positive effect of managerial ownership only holds up to 13 percent before it turns to support the entrenchment behaviour by disclosing lower debt ratio.

This result contradicts the effort done by the Malaysian government on the GLC transformation plan that reports a strong 10-year track record in delivering the financial performance which should be benefiting all stakeholders, including the public (Putrajaya Committee, 2015). However, this can be justified that firms with government ownership might be successful in meeting the targeted plan of financial growth but at the same time being extra vigilant in term of disclosing their remuneration. This is consistent with the notion that directors' pay is linked with firms' performance; hence higher performance signals higher remuneration received by the directors. Costa *et al.*, (2016) found that firms in Brazil refused to disclose executive compensation because it will expose the top executives to crimes against themselves, their families and their property. In fact, the security issue is more severe in Malaysia after the Malaysian general election in 2008.

The ruling coalition in Malaysia, namely Barisan Nasional (BN) enjoyed veto-proof control over all branches of government from 1969 to 2008 with large majority wins. However, the 12th general election of Malaysia held in 2008 took everyone in surprise and perhaps being regarded as a turning point in the country's political atmosphere (Miner, 2015; Fung, Gul and Radhakrishnan, 2015). The election witnessed the government lost its two-thirds majority in parliament for the first time after 40 years of supermajority that enabled them to pass important laws relating to special privileges for politically connected firms. In view that directors in GLC are mainly politically connected (Mohd Ghazali and Weetman, 2006; Faccio, 2006), higher ownership of government in a firm will lead to higher directors' remuneration as a result of the successfulness in the GLC transformation plan. Hence, the disclosure practice is positive up to certain level of ownership but will reduce as the ownership continues to increase (refer to Figure 4).

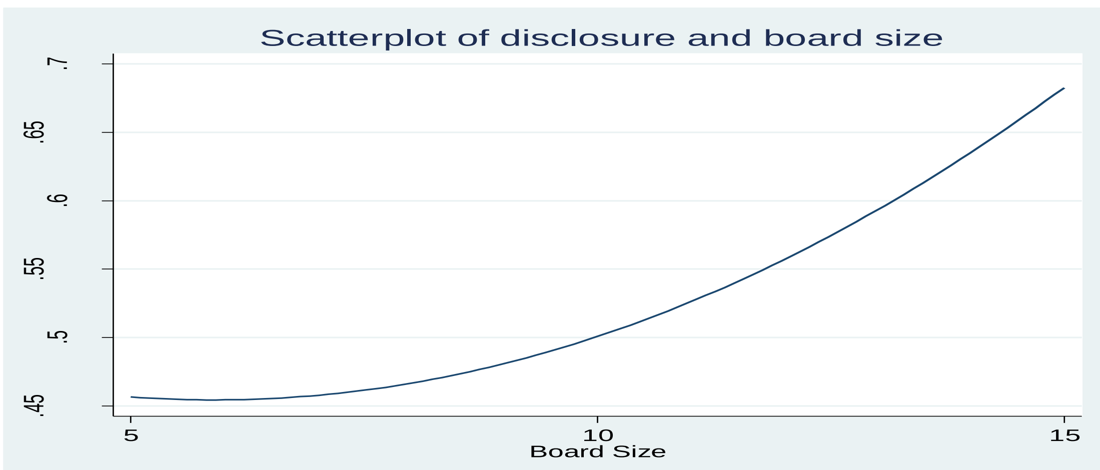
Figure 4
Relationship between government ownership and disclosure



Unlike government ownership, board size provides a different non-linear relationship as evidenced in both model C and D in Table 13. The coefficient of the board size variable is negative (insignificant) whereas the coefficient of its squared value ($BSIZE^2$) is significantly positive at 5% and 10% for model C and

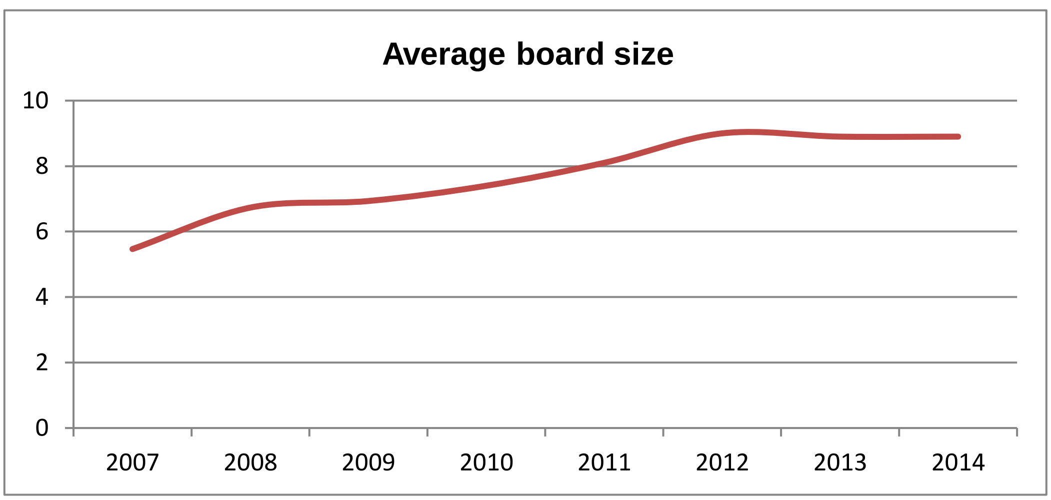
D, respectively. Figure 5 graphically represents the relationship between board size and directors' remuneration disclosure. It suggests that lower number of board members at first has a slight negative effect on the level of remuneration disclosure, probably because the benefits of having few board members are counterbalanced by problems related to integration difficulties. But beyond a certain level, board members start enhancing their ability and cohesiveness to work as a team in dealing with strategic decisions and results in better disclosure of the directors' remuneration.

Figure 5
Relationship between board size and disclosure



In view that the average board size among Malaysian FTSE30 companies is 9 with the highest number of board members is 15 as mentioned in Table 7, this study validates the result by Hidalgo, Garcia-Meca and Isabel Martinez (2011) that bigger board size lead to better disclosure as compared to smaller board size (please refer to Figure 6 for the average board size in Malaysia). However, Hidalgo, Garcia-Meca and Isabel Martinez (2011) further found that the benefits of having larger board are outweighed by the cost of poorer communication when the number of board members exceeds 15. On top of that, this result is also justified by the earlier cultural study introduced by Hofstede and Bond (1988) that had ranked Malaysia among the higher scorer in collectivism (as opposed to individualism). Collectivism is defined as a group of people living in a society in which the ties between individuals are tightly knit, where they can expect others in the group to look after them as a proof of loyalty (Gray, 1988). Therefore, this study confirms a non-linear link between board size and directors' remuneration disclosure that initially negative when the number is small but become positive as the number increases.

Figure 6
Time series graph for average board size



1.4.4 Robustness test

A robustness test is performed to validate the original sample of the top 30 companies selected in this study by using the extended top 100 companies (FTSE100) in Malaysia. The list of top 100 companies is attached in Appendix 3. In view that the robustness test is crucial in validating the result of this study, the test is done for two years, i.e. 2009 and 2014 taking into consideration the highlighting events of each years respectively. The first year, 2009 is selected to reflect the effect of the recent global financial crisis while 2014 seems to be the most recent year in the sample (2007 to 2014) that better reflect the post-crisis environment.

Table 14
Regression result for year 2009

Variables 2009	Model A (without family) DISC Top 30 (1)	Model A (without family) DISC Top 100 (2)	Model B (without gov) DISC Top 30 (1)	Model B (without gov) DISC Top 100 (2)
Government Ownership	0.251**	0.117**	-	-
	(0.0885)	(0.0529)	-	-
Foreign Ownership	0.0513	0.0839	-0.200	-0.0257
	(0.138)	(0.0520)	(0.222)	(0.0647)
Family Ownership	-	-	-0.242**	-0.139***
	-	-	(0.101)	(0.0459)
Board Size	0.0198*	0.0120**	0.0161	0.0114**
	(0.0110)	(0.00530)	(0.0124)	(0.00493)
Board Duality	-0.0511	0.0118	-0.0140	0.0176
	(0.0561)	(0.0363)	(0.0669)	(0.0371)
Board Independence	-0.0750	-0.0167	-0.259	-0.0487
	(0.187)	(0.0867)	(0.231)	(0.0800)
Big-4 Auditor	-0.0381	-0.0206	-0.0107	-0.0115
	(0.0377)	(0.0372)	(0.0359)	(0.0345)
Log Market Value	0.0880*	0.0337***	0.0793	0.0342***
	(0.0480)	(0.0110)	(0.0504)	(0.0104)
Leverage ratio	0.0548	0.0863	0.0564	0.0874
	(0.125)	(0.0617)	(0.133)	(0.0597)
Revenue growth	-0.132	-0.0213	-0.0798	-0.0229
	(0.149)	(0.0496)	(0.165)	(0.0517)
Tobins Q	0.0308**	0.0196***	0.0267**	0.0193**
	(0.0114)	(0.00724)	(0.0116)	(0.00729)
Return on asset	0.00145	-0.00123	0.00120	-0.00142
	(0.00139)	(0.00143)	(0.00165)	(0.00144)
Constant	-0.651	-0.0301	-0.332	0.0507
	(0.392)	(0.110)	(0.362)	(0.117)
Observations	28	75	28	75
R-squared	0.657	0.464	0.636	0.495

Robust standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

The first regression (refer to Model A) between ownership structure (without family ownership) and the remaining governance structure in Table 14 shows that the results in both samples (original 30 companies vs extended 100 companies) are comparable. Companies with government shareholdings and higher board size are found to be significant and positive in both results, proving that the corporate governance elements do influence directors' remuneration disclosure in annual report. Additionally, the control variables represented by firm size (log market value) and Tobin's Q are also found to be significant in determining the extent of directors' remuneration disclosure in both samples of top 30 and top 100 companies. Therefore, the similar results found in both regressions above had proven that the original result of using top 30 companies in Malaysia is robust even when the samples are extended to the top 100 companies which mainly consist of companies with smaller market capital.

The second regression (refer to Model B) is between the ownership structure (without government ownership) with the remaining governance structure in order to see its relationship with directors' remuneration disclosure. The result has similar findings except for board size which has become significant in the testing for extended sample of top 100 companies (refer to Column 2 of Model B, Table 14). This is further justified by the fact that family dominant is higher among the smaller companies included in the top 100 companies, as evidenced by the higher t-value of (-) 3.03 compared to (-) 2.41 in the top 30 companies sample (t-value results are not reported). Therefore, having more board members is expected to provide better monitoring in terms of disclosure among smaller size companies which are dominated by the family members. Notably, the result indicates that the testing for the top 30 companies in Malaysia is robust even when it is extended to the top 100 companies in Malaysia.

Table 15
Regression result for year 2014

VARIABLES	Model A (without family)		Model B (without gov)	
2014	DISC		DISC	
	Top 30 (1)	Top 100 (2)	Top 30 (1)	Top 100 (2)
Government Ownership	0.0770	0.00615	-	-
	(0.115)	(0.0626)	-	-
Foreign Ownership	0.411	-0.0604	0.281	-0.0986
	(0.300)	(0.0590)	(0.316)	(0.0708)
Family Ownership	-	-	-0.128	-0.0810
	-	-	(0.108)	(0.0577)
Board Size	0.0330**	0.0180***	0.0284*	0.0160**
	(0.0133)	(0.00633)	(0.0137)	(0.00611)
Board Duality	0.108*	0.0745***	0.105**	0.0646***
	(0.0622)	(0.0254)	(0.0455)	(0.0225)
Board Independence	0.306	0.123	0.249	0.114
	(0.227)	(0.111)	(0.214)	(0.108)
Big-4 Auditor	-0.0720	-0.0361	-0.0666	-0.0407
	(0.0547)	(0.0457)	(0.0394)	(0.0436)
Log Market Value	0.0232	0.0334**	0.0341	0.0317**
	(0.0573)	(0.0167)	(0.0592)	(0.0153)
Leverage ratio	0.264	0.121	0.304*	0.142
	(0.163)	(0.0820)	(0.161)	(0.0875)
Revenue growth	0.209**	0.0820	0.212**	0.0855
	(0.0989)	(0.0912)	(0.0992)	(0.0966)
Tobin's Q	0.0415	0.0296***	0.0426	0.0309***
	(0.0342)	(0.0109)	(0.0310)	(0.0108)
Return on asset	-0.0101	-0.00425*	-0.0104	-0.00466*
	(0.00702)	(0.00237)	(0.00651)	(0.00234)
Constant	-0.336	-0.165	-0.331	-0.0889
	(0.599)	(0.207)	(0.590)	(0.192)
Observations	31	78	31	78
R-squared	0.600	0.346	0.616	0.365

Robust standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Interesting results are found in the regression table for 2014. Both regressions (Model A and B in Table 15) show similar results between original 30 samples and the extended 100 samples as evidenced by the significant findings of the main variables, namely board size and board duality. This is justified by the post-crisis environment which Malaysia has focused on the quality of board members who run the company as the agent of the shareholders. Other main variables for governance and ownership structure are not significant in explaining directors' remuneration disclosure in 2014. For control variables, the revenue growth has become insignificant in the extended sample of top 100 companies as compared to the top 30 companies (refer to Column 2 of Model A and B in Table 15). This is explained by smaller companies which have limitation in terms of its growth hence it does not influence disclosure. Other control variables like firm size (log market value) and Tobin's Q are found to be significant in the extended sample as compared to the top 30 companies, mainly due to more observations that normally lead to significant results. In view that both regressions (Model A and B) produce identical results between sample for the original top 30 companies and the extended top 100 companies, this indicates that the original finding of this study is robust and reliable.

1.5 Conclusion

This chapter examines the corporate governance mechanism, using ownership structure and governance structure as determinants of directors' remuneration disclosure in Malaysia. Seven hypotheses were developed to identify the association between disclosure and the explanatory variables, namely government ownership, family ownership, foreign ownership, board independence, CEO/chairman duality, board size and type of external auditor as shown in Table 5. However, this study concludes that despite the upheaval of the economic crisis, traditional influences of family domination ownership outweigh the effect of other governance attributes particularly on board independence. Furthermore, foreign ownership in family-dominated owned companies is also not able to influence disclosure of directors' remuneration. On the other hand, these two variables are effectively working in demonstrating their monitoring role when it is owned by the government.

This study found a non-linear relationship between government ownership companies and directors' remuneration disclosure, suggesting that companies are only being transparent until a certain percentage of holdings. Any higher of ownership will reduce the transparency level of disclosing the directors' remuneration. This is fairly justified with the government's announcement on the tremendous financial result from the national agenda of GLC transformation (2005 – 2015) plan. The situation had made the directors in a dilemma to be transparent in disclosing higher remuneration followed by the higher performance due to the security issue that will expose them to potential high-profile crimes (The New York Times, 2013). This is further exacerbated by Malaysian political condition particularly after the 12th general election in 2008 that witnessed a major loss by the government after 40 years of ruling. Therefore, less public support towards the government had led the directors in GLC to be vigilant in disclosing their remuneration especially when it is not clearly justified in the pay-performance link explanation in the annual report.

As a result, this study provides an interesting result on the corporate governance mechanism as a determinant of directors' remuneration disclosure specifically during the period under review. In general, ownership structure evidences a strong influence towards remuneration disclosure either government (positively related) or family (negatively related) owned. However, there is an unpredictable remark on the government ownership that shows a non-linear relationship. The governance related structure, however, have less influence on disclosure, as evidenced by only board size that is consistent to be affecting the level of remuneration disclosure in both companies dominated by government or family. Taken together, the structural role of directors in adopting the corporate governance mechanism is supported by this finding using ownership structure, but it is partly supported using governance structure.

Empirical Chapter 2: The relationship between directors' remuneration disclosure and board diversity (demographic characteristics)

2.0 Introduction

Malaysia had a comparatively good legal system to other English-origin legal system countries in terms of shareholder rights and was ranked as above average as compared to other countries in East Asia prior to the 1997/1998 financial crisis (La Porta et al., 1998). Surprisingly, Malaysia was one of the worst affected countries upon the crisis despite of the good system that they have, due to lack of legal enforcement in place (Abdullah et al., 2015; Krishnamurti, Sevic and Sevic, 2005; La Porta et al., 1998). The aftermath of the East Asian financial crisis had led to the first introduction of the Malaysian Code of Corporate Governance (MCCG) in 2000 to enhance transparency in the corporate world. However, Tam and Tan (2007) argued that there is a need to further scrutinize the functionality of corporate governance in Malaysia due to the existence of large shareholders. Likewise, this problem is often seen in the emerging markets as a result of weak corporate governance system (Abdullah et al., 2015; Tam and Tan, 2007).

The previous chapter (Chapter 1) has provided evidence that large shareholders have a significant impact towards determining the level of directors' remuneration disclosure. Unlike government ownership which positively influences disclosure, traditional family dominance was found to be negatively related to disclosure. For the governance structure, only board size was found to be positive and significant in determining disclosure. The result of the remaining governance structure such as board duality and big-4 auditors are not significant except for board independence which only works effectively in the government-owned companies. Consequently, these findings support existing literature on emerging markets that still need a long way to improve its corporate governance system. In view that the statutory characteristics discussed in the previous chapter are insufficient to motivate more disclosure, this chapter (Chapter 2) embarks on understanding the demographic characteristics of the board in stimulating disclosure behaviour.

At present, researchers have explored into understanding the group of people that run a company on top of relying solely on the corporate governance of the institution to improve on transparency (Hoang, Abeysekera and Ma, 2016; Ben-Amar, Chang and McIlkenny, 2015; Liao, Luo and Tang, 2015). The notion of understanding demographic diversity among top management team as dominant factor in shaping the organizational outcome is not new as it has been discussed in the earlier literature such as firm performance (Murray, 1989), corporate strategy (Wiersema and Bantel, 1992) and decision-making (Hambrick, Cho and Chen, 1996). These research are based on the popular strategic management theories such as resource-based view, resource- dependent theory and upper echelon. Given promising findings from previous board diversity studies, Pelled, Eisenhardt and Xin (1999) had called for more empirical investigation with different dependent variables, thereby extending this line of research into corporate disclosure by the current scholars.

Recent studies has found a significant positive effect of diversity on various type of disclosure such as corporate social disclosure (Hoang, Abeysekera and Ma, 2016), specific disclosure on black economic empowerment (Ntim and Soobaroyen, 2013) as well as greenhouse gas (GHG) disclosure in the annual report (Liao, Luo and Tang, 2015). Despite the evolving research explaining the relationship between board diversity and disclosure, the relevant empirical investigations to date have not explored disclosure on directors' remuneration, being one of the key elements of corporate governance. Therefore, the objective of this chapter is to examine how managerial attributes, known as board demographic diversity influence firms' strategic disclosure of directors' remuneration. Furthermore, this study is the first that examines, theoretically and empirically, the relationship between board diversity and directors' remuneration disclosure in the context of emerging markets.

Traditionally, economists have considered that managers' compensation is the best remedy to agency problem (Arye *et al.*, 2003). This means that managers' compensation increase when shareholders gain and fall when shareholders lose. In developed countries like the US, the link between pay and performance can be easily identified as a result of detail remuneration disclosure requirements, evidenced by Fahlenbrach and Stulz (2011). Unlike a developing country like Malaysia, the minimal regulation on directors' remuneration disclosure has led to unavailability of public scrutiny (Minhat and Abdullah, 2014). Furthermore, the strategic disclosure of the pay-for-performance link and remuneration policy are stipulated under the voluntary requirements, i.e. Malaysian Code of Corporate Governance, thus giving the board considerable latitude in what details to report. Hence, exploration on how personal board attribute could impact on directors' remuneration disclosure is crucial in an emerging country like Malaysia, where the statutory requirements that are mandated by law and best practices are not sufficient.

In addition to that, there is a growing pressure on firms to address the lack of board diversity in developed countries (Ben-Amar, Chang and McIlkenny, 2015; Chapple and Humphrey, 2014) as well as in the developing countries (Hoang, Abeysekera and Ma, 2016; Ararat, Aksu and Tansel Cetin, 2015; Low, Roberts and Whiting, 2015). However, current studies on board diversity have mainly focused on gender diversity; thus, a study on broader board diversity remain under-researched (Beech *et al.*, 2017; Mallin and Farag, 2017). In Malaysia, Abdullah, Ismail and Nachum (2016) have study the relationship between women's board participation and firm performance. Low, Roberts and Whiting

(2015) have conducted similar research on emerging countries in Asian including Malaysia, Singapore, South Korea and Hong Kong for firms listed in the respective exchanges for 2012 and 2013. Building on the assumptions that a broader concept of diversity is necessary to achieve an effective balance board, this study contributes towards filling this important gap with empirical evidence in an emerging country like Malaysia.

Malaysia is of interest not only because it is an emerging country with the developed capital market but because it has a divergence in culture as a result of the ethnic polarization. Indeed, there were riots involving the Malay (a majority ethnic in Malaysia) against the Chinese ethnic group in 1969 which led to the affirmation action by the government, called as New Economic Policy (NEP) with the intention to eliminate the identification of race with economic function (Gomez and Jomo, 1997). The NEP continues to be a successful tool that balances the involvement of each ethnicity in the economic activities, but it has resulted in unintended consequences of institutionalized positive discrimination towards Malay by offering them various concessions. In view that the ethnic discrimination has been historically embedded in the society, there is a fundamental basis to assume that the multi-racial ethnicity affects its social disclosure practices. Haniffa and Cooke (2005) support this assumption with a significant impact of Malay directors towards corporate social disclosure, proving that disclosure is not culture free.

Taken together, this study contributes to few knowledge areas in the board diversity literature. Firstly, it investigates board demographic diversity, a subject of current active policy which makes it even more crucial to understand the role it plays in decision making. Second, this study further deepens the literature on disclosure by examining the relationship between directors' remuneration disclosure and board diversity (Samaha, Khlif and Hussainey, 2015). Finally, this study embarks on researching a broader dimension of board diversity that includes ethnicity, age and education instead of focusing solely on gender. This is particularly important in a multi-cultural country like Malaysia where the distinctions between ethnics are institutionalized up to the extent of being legalised. Since culture is a collectively accepted operating system that interprets a people's situation to themselves, it is a fruitful approach to regard culture as the source of a family concept (Pettigrew, 1979a). Hence, this study believes that culture affects one's upbringing that shapes his character and decision-making process.

2.1 Literature Review

Prior studies have relied on few theories to explain the motivations of directors to engage in disclosure practices such as agency theory/stewardship theory (Greiling and Spraul, 2010), resource dependence theory (Hoang, Abeysekera and Ma, 2016), legitimacy theory (Ntim, Soobaroyen and Broad, 2017), stakeholder theory (Yekini *et al.*, 2015) and upper echelon theory (Bamber, Jiang and Wang, 2010). The results of each study prove that different theories have a different impact towards disclosure. Hence the interpretations of the motivations are also varied. Since this study specifically focuses on the association between board diversity and disclosure, the relevant theory is not to heighten control or monitoring of the management, but rather to highlight the characteristics of a 'man' in an organisation as the main decision maker.

Stewardship theory has been an alternative to agency theory due to the behavioural premises. The theory views directors as guardians of a company and wishes to do the best, as compared to agency theory that views director as an opportunistic shirker (Francoeur *et al.*, 2017; Lan and Heracleous, 2010; Haniffa and Cooke, 2002). While agency theory proposes that directors disclose more to reduce the agency conflicts for the sake of the principals, stewardship theory, on the other hand, suggests that directors make more disclosure as a result of their intrinsic motivation such as trustworthiness and self-control actualization. Francoeur *et al.*, (2017) had emphasized that directors are a human being who is steward of the natural environment; hence they have the moral duty to act ethically and to do the right thing even in a dominant position. However, stewardship theory had focused on the role of inside directors who are assumed to know better of the company, more capable and possess superior internal information as compared to the outsiders (Song, Hoof and Park, 2017; Donaldson and Davis, 1991).

Management scholars propose a resource dependence perspective as a complementary function of a director in an organization. Despite playing the monitoring role, directors are also viewed as providing important resources to the firm through advising and counselling role as well as and their connections with key stakeholders under the resource dependence theory (Ben-Amar, Chang and McIlkenny, 2015; Hillman and Thomas, 2003). The proponent of this theory is to address boards' contribution as boundary spanners of the organization and its environment. Hence, diversity among board members is capable of engaging responsibility towards shareholders and society as different directors can introduce difference values in responding towards institutional pressure. A recent study had proven that diversity in boardroom significantly affects disclosure (Hoang, Abeysekera and Ma, 2016; Liao, Luo and Tang, 2015). However, resource dependence theory has been argued to be useful in corporate strategic management since the applicable characteristics include functional background, experience and political connections rather than the demographic dimension of a director (Alnabsha *et al.*, 2017; Ferreira, 2010).

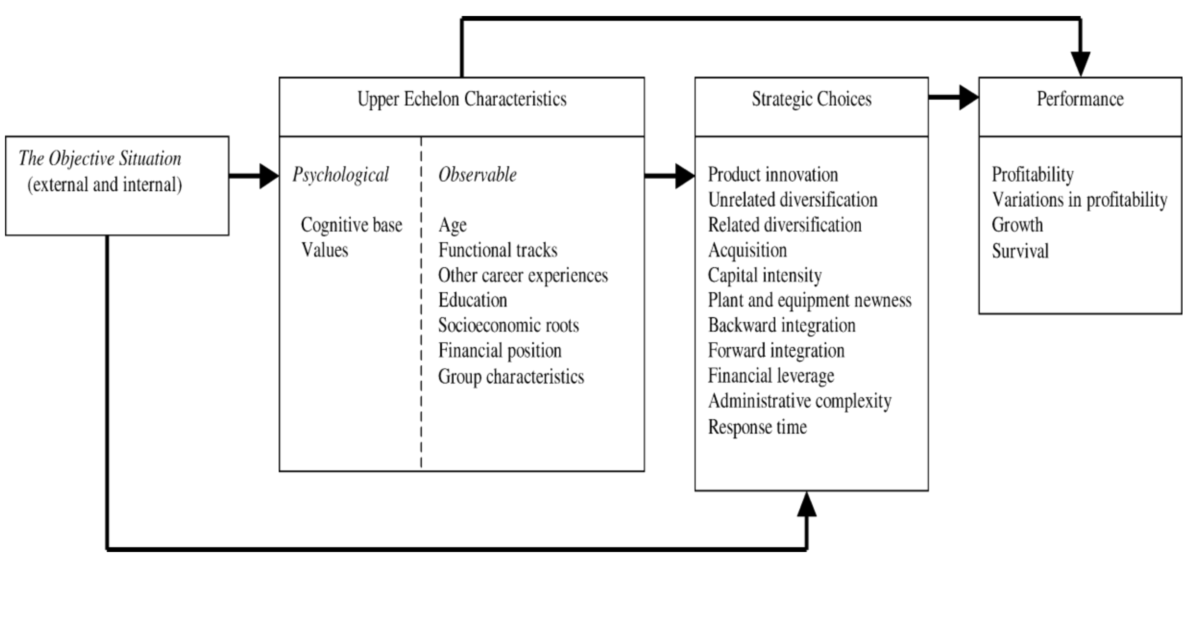
Another theory that highlights the human part of a director is upper echelon (UE). This theory has shown an improving trend of scholars in employing top management team (TMT) to justify disclosure (Liao, Luo and Tang, 2015) (Bamber, Jiang and Wang, 2010) (Haniffa and Cooke, 2005). It is argued that the characteristics of TMT could influence the strategic decisions in a firm due to the diversities between them (Hambrick and Mason,1984). The central idea of this theory lies on two interconnected parts of top management which firstly, the executive acts on the basis of their personalized interpretations and secondly, the personalized interpretations are based on the executives' own experience, values and personalities (Hambrick, 2007). Therefore the theory was constructed on the concept of bounded rationality. Directors are positioned in an uncertain situation, confronted with complex phenomena, that is merely 'interpretable' rather than 'knowable' (Plöckinger *et al.*, 2016; Hambrick, 2007).

This is when the individual's cognitive base is construed which eventually reflects his characteristics and idiosyncrasies in making a strategic decision. However, the executive cognitions are difficult to measure in a real world. Thus, the UE theory suggests that demographic value such as observable managerial characteristics are reasonable and valid to be an efficient proxy. Examples of such characteristics are age, tenure, education, nationality background and others which are easy can be measured. Consistent with the explanation above, this study employs UE theory in explaining the variations of directors' remuneration disclosure in the annual report. There are two fundamental reasons that justify the appropriateness of UE theory in this study. Firstly, Malaysia is known as a multiracial country where the diversity of board members historically exist as a result of the government agenda and secondly, this study specifically examines directors' remuneration disclosure, a topic which is open to opportunistic behaviour (Pepper and Gore, 2015; Aboody and Kasznik, 2000; Forker, 1992).

2.1.1 Upper echelon (UE) theory

Originated by Hambrick and Mason (1984), this theory refers to a dominant coalition of the organisation, particularly knows as its top management. The authors argue that an entire team of directors cannot scan every aspect of the organisation and its environment. Furthermore, the bits of information used for decision making are interpreted through one's cognitive base. However, this theory emphasizes on observable characteristics rather than psychological dimensions as the perceptions of TMT are not convenient to measure. Based on the original UE model as recreated in Figure 7, the left-hand side of the model shows that after the organisation's internal and external situation, the observable characteristics are taken next as proxies for the psychological constructs. In addition to that, many studies have developed the UE theory with other characteristics such as gender (Liao, Luo and Tang, 2015; Srinidhi, Gul and Tsui, 2011) and culture (Ntim and Soobaroyen, 2013; Haniffa and Cooke, 2005).

Figure 7
Hambrick and Mason's (1984) upper echelons perspective of organizations



The UE theory has further expanded by including intra-TMT distributions and TMT behavioural integration into the theoretical framework instead of focusing on one CEO or executive board members (Hambrick, 2007). Finkelstein (1992) has proven that TMT characteristics yield better predictions of strategic behaviour when different amount of each TMT power are accounted for. Kor and Sundaramurthy (2009) have added into the research stream with the findings on the significant effect of outsiders' board to firm growth. This is further emphasized by Johnson, Schnatterly and Hill (2013) who suggest focusing on the appropriate level of research analysis to avoid confound differential effects of individuals or sub-group with the board. Thus, previous studies in UE theory had noticed that that all-inclusive TMT (known as 'behavioural integration') has shown to have a positive impact on organisational performance (Srinidhi, Gul and Tsui, 2011; Lubatkin *et al.*, 2006; Hambrick, 1997).

Association between UE theory and corporate disclosure quality had not received much attention as there is still unexplored management style that has yet to be discovered in corporate governance area (Bamber, Jiang and Wang, 2010). Nevertheless, recent studies have shown an improving trend of scholars in employing UE theory to justify disclosure. For example, Bamber, Jiang and Wang (2010) noticed a different disclosure style from managers promoted with legal backgrounds as compared to accounting regarding management forecast. Managers with military experience favour more precise forecast while managers born before World War II are more conservative and reluctant in forecasting. Liao, Luo and Tang (2015) found a positive influence of female directors on the extensiveness of greenhouse gas (GHG) emissions in the Carbon Disclosure Project report. In an earlier study by Haniffa and Cooke (2005), the authors observed a significant relationship between corporate social disclosure with the ethnicity of a dominated board in Malaysia.

Based on the research call by Hambrick (2007), UE theory presumes that directors vary and the presumption is far more valid in a society that is highly diversified. Malaysia is uniquely known as a multicultural country because it consists of three main ethnics, i.e. Malay – 68.8 percent, Chinese - 23.2 percent and Indians - 7.0 percent (Department of Statistics Malaysia, 2017c). Interestingly, Malaysia is further distinguished by the fact that even though the Malay ethnic (known as Bumiputera, literally “sons of the soil”) leads the Malaysian population, business in Malaysia has historically been dominated by ethnic Chinese (Johnson and Mitton, 2003). Therefore, the three ethnics which pose cultures, attitudes and behaviours of each race in the society are believed to differ to some extent in terms of disclosure outcomes.

In addition to that, directors’ remuneration disclosure is a topic that is very much subject to opportunistic behaviour (Pepper and Gore, 2015; Aboody and Kasznik, 2000; Forker, 1992). Although it is guided by the mandatory and voluntary disclosure requirements in Malaysia, the detail of disclosure is still subject to management’s discretionary. For example, the mandatory requirements which mainly derived from the IFRS are spelt in terms of the items to be disclosed, but management can disclose the option that favours them (Aboody and Kasznik, 2000). For voluntary disclosure, the requirements are left with the ‘best practices’ guidelines which are highly depending on the TMT’s preference. Examples of voluntary disclosure items are detailed remuneration policy and pay for performance link, which falls into complex and conflicting situations. According to Bamber, Jiang and Wang (2010), these type of information are proprietary and need to be protected from competitors. Therefore, the decision to disclose directors’ remuneration is strategically important, and it matches the bounded rationality criteria, highlighted in the UE model (Lewis, Walls and Dowell, 2014).

2.1.2 Board diversity

Diversity is defined as 'the great number of different statuses among which a population is distributed' (Miller and Triana, 2009, p.758). In a corporate world, boards are viewed as groups of diverse individuals who have different biases and prejudices and whose behaviour is affected by social constraints and power relations (Ferreira, 2010). Therefore, researchers believe that diversity within the members of top management team may bring advantages to the entity, such as broader perspectives in decision making (Hillman, 2015), higher creativity and innovation (Carter, Simkins, & Simpson, 2003), and successful marketing to different types of customers (Darmadi, 2011). Likewise, diversity improved management action in responding towards any query by the media, employees, customers, and suppliers (Hillman, 2015).

However, Milliken and Martins (1996) highlighted that diversity appears to be a double-edged sword that might increase the opportunity for benefit as well as reduce its competitive advantages by the likelihood of that group members to be dissatisfied. This is proven by the previous literature on the potential costs that diversity brings into the organization, such as lack of cooperation, interpersonal conflicts, conflict of interest, communication problems and many more (Darmadi, 2011; Ferreira, 2010; Carter, Simkins and Simpson, 2003; Tsui, Egan and O'Reilly, 1992). Cox & Blake (1991) argue that as the organization become more diverse, the cost of a poor job in integrating their diverse workers will increase. These costs are related to turnover and absenteeism of women and minorities who are dissatisfied with their careers and prospects for advancement in a survey conducted in large American companies. Therefore, there is a need to deal with the diversity-related issue to gain the cost advantage over firms that do not (Carter, Simkins and Simpson, 2003).

Research literature concerning the effects of diversity on organisational functioning reflects two different approaches (Kilduff, Angelmar and Mehra, 2000). First is ‘demographic approach’ which studies cognitive diversity concerning proxy variables such as gender, age, organisational tenure, ethnicity, and nationality where the emphasis is on directly measurable attributes of individuals. Second is ‘cognitive approach’ which studies cognitive diversity through measures of attitudinal and normative differences between individuals on demographic indicators such as attitudes, values, and beliefs. Consistently, other scholars had categorized the different type of diversity using one common method, i.e. ‘observable’ and ‘less visible’ diversity (Kang, Cheng and Gray, 2007; Erhardt, Werbel and Shrader, 2003). The first category is readily detectable attributes of directors such as gender, age and race/ethnic background while the latter is non-observable or underlying attributes that include cognitive characteristics, like directors’ education, tenure, professional background, industry experience, organizational membership and personal values (Rao and Tilt, 2016; Darmadi, 2011; Kang, Cheng & Gray, 2007; Milliken & Martins, 1996).

Previous research on diversity had focused on demographic approach because studying these observable characteristics overcomes the difficulties of getting access to measure directors’ psychological or personal value (Erhardt, Werbel and Shrader, 2003). On top of that, scholars had criticized the use of cognitive approach using attitudes, needs, value and preferences because conceptually they are neither concrete nor unambiguous in their meanings and interpretation (Nielsen, 2010). Demographic diversity, measured over such visibly salient variables as age, gender and race, has been proven in the previous studies to be an accurate reflection of how much the team shares a common set of attitudes and values. For example, Tsui, Egan and O’Reilly (1992) found that individual use demographic categories such as age and race to define psychological groups that reinforce self-identity. However, it is agreed that demographic indicators may contain some noise. Despite its weaknesses, if the demographic data yield significant results then the psychological side of directors will have been put to a relatively stringent test (Hambrick and Mason, 1984).

In summary, diversity can be explained from various angles and can also be drawn to various functional aspects. Given the emphasis being placed on delivering diversity within corporate board recently, the relationship between board diversity and shareholder value deserves both theoretical and empirical investigation (Beech *et al.*, 2017; Mallin and Farag, 2017; Hillman, 2015). Since the objective of this study is to examine directors' demographic diversity and its influence towards firms' strategic disclosure of directors' remuneration, four observable variables have been selected namely ethnicity, gender, age and educational background. Ethnicity represents the exclusivity of Malaysian society, while gender equality in Malaysia has been proactively implemented in responding to the call by the government to accelerate women's access to board seats (Corporate Women Directors International, 2015). Age and educational background, on the other hand, are among the common attributes in determining disclosure (Ntim and Soobaroyen, 2013).

2.2 Hypothesis Development

2.2.1 Relationship between board diversity and directors' remuneration disclosure

2.2.1.1 Gender

Gender diversity has been identified as one of the most debatable issues discussed by modern corporations in discussing the behaviour of top management (Carter, Simkins and Simpson, 2003). Recently gender diversity is not only argued in terms of board diversity but has now become a topic of active policy making and also general societal situations in many countries (Adams *et al.*, 2015; Kang, Cheng and Gray, 2007). In Norway, a gender quota was initially proposed in 2003 on a voluntary basis before it was mandated in 2006 of having at least 40 percent representation from each sex on their board (Matsa and Miller, 2013). This practice was followed by few European countries such as Spain and Netherland in 2007 and 2009, respectively. In 2010, France passed a law that requires 50 percent gender parity on the board of every publicly listed company by 2015 (Bohren and Strom, 2010). On top of European countries, there are few developing countries recognizing the importance of having female on board such as India, China and Middle Eastern (Rao and Tilt, 2015).

Despite a dramatic increase in the trend of having gender quota on board, the question of whether it is likely to bring advantages to the firm remain puzzled (Joecks, Pull and Vetter, 2013). Women by nature are believed to possess a “feeling’ cognitive style which emphasizes on harmony, able to bring people together and inspire confidence among peers (Hurst, C.Rush and White, 1989). Women are also equipped with psychological benefits as resulted of various roles played in their personal lives, including marital and parental, that sharpen their multitasking abilities and enrich their interpersonal as well as leadership skills (Ohlott and King, 2002). They are also considered as “tough” in view that they had to cope with challenges on their way up the corporate ladder (Krishnan and Park, 2005) and managed to survive the circumstances that male normally faced along their career path. On the other hand, women are risk-averse than men (Croson and Gneezy, 2009), and their presence on board is also seen as less competitive (Niederle and Vesterlund, 2007; Andreoni and Vesterlund, 2001).

Despite the controversial issues resulted by the women, their contribution in the top management is still being supported by the corporate governance scholars.

Past studies found a link between gender diversity and financial performance in the developed market (Adams and Ferreira, 2009; Campbell and Minguez-Vera, 2008) as well as in the developing countries (Abdullah, Ismail and Nachum, 2016; Mahadeo, Soobaroyen and Hanuman, 2012; Darmadi, 2011). However, a responsible board of directors are also expected to communicate management information to the shareholders (Laksmana, 2008). Researchers and practitioners strongly believe that an organisation should not be evaluated just on their profit-maximizing success but also on their effort to promote transparency (Rao and Tilt, 2015; Jamali, Safieddine and Rabbath, 2008). Therefore, recent scholars have explored the impact of female directors towards disclosure.

Rao, Tilt and Lester (2012) found a significant positive relationship between the extent of environmental reporting and the proportions of female directors on board using a sample of largest 100 Australian firms listed on the Australian Stock Exchange (ASX) in 2008. Similarly, Liao, Luo and Tang (2015) had added to the literature of developed country by using data of FTSE350 companies in the UK and noticed a significant positive association between a number of female directors and voluntary greenhouse gas (GHG) disclosure in the environmental disclosure reports. Recently, Ben-Amar, Chang and McIlkenny (2015) further noted that the likelihood of voluntary disclosure in the carbon disclosure project increases with women percentage on boards among the public listed Canadian firms from 2008 to 2014. As far as this study is concerned, there is limited similar study that has been conducted in the emerging market. One of the possible reasons is due to the deeply rooted of cultural resistance towards gender equality among the countries where the political power is still new (Abdullah, Ismail and Nachum, 2016; Terjesen and Singh, 2008).

Malaysia, being one of the developing countries and the first Asian government has announced its gender policy as early as 2004 stipulating that 30 percent of the decision-makers in all sectors should be women (Government of Malaysia and United Nation Development Programme, 2006). Thus, there is a positive response by the Malaysian corporate sector witnessing a slight increase of the female directors on board, from 12 percent in 2008 to 17 percent in 2014 (Ministry of Women Family and Community Development, 2015). The Malaysian government is serious in meeting the target thus threatening the recalcitrant private companies by limiting the government contracts with them until the target is achieved (The Straitstimes, 2017). In addition, Malaysia was named as a country that has high rates of increase in appointing women on board among the Asia-Pacific Economic Cooperation (APEC) countries (Corporate Women Directors International, 2015). Furthermore, the government reported that there are 208 women being prepared for board placements through the Women Directors' Program (Ministry of Women Family and Community Development, 2012). In view of the proactive initiatives by the Malaysian government, the first hypothesis is:

Hypothesis 1: There is positive association between the extent of directors' remuneration disclosure and the proportion of female directors on the board

2.2.1.2 Culture/Ethnicity

Culture has been recognized as a significant part of human behaviour for many years. Prior research that has integrated culture with various areas found a positive impact of culture towards organizational behaviour (Pettigrew, 1979b), management (Hofstede, 1984), accounting system (Gray, 1988) and psychology (Betancourt and López, 1993). In defining culture, scholars had often used the concept of culture interchangeably with ethnicity, nationality or race as a result of its subjectiveness (Efferin and Hopper, 2007). Hofstede and Bond (1988) define culture as “the collective programming of the mind that distinguishes the members of one category of people from those of another” (p.6). Other scholars further agreed that culture consists of the human way of life which are learned within the group and normally transmitted from one generation to another. Ethnicity refers to a group that classifies a person in terms of his most general identity which is presumptively determined by his origin or background (Mcguire, 1982). Taken originally from the Greek concept of ethnos, ethnicity is defined as a group that characterized of a common nationality, language or culture (Betancourt and López, 1993).

Earlier literature on culture in the West has shown that identification of one’s ethnicity is difficult to determine. This is because it involves substantial complexities in the classification of ethnic identity and most cases, ethnicity is identified through photographic evidence from the annual reports or internet materials (Brammer, Millington and Pavelin, 2007). Unlike Asian countries particularly Malaysia, the ethnic classification is obvious and easily identified by the full name. The three main ethnics in Malaysia are differentiated by their official name registered with the National Registration Department, for example (1) Malays are registered with ‘bin’ (2) Indian are registered with ‘a/l’ and (3) Chinese are registered with the combination of the first and surname. However, prior research on cultural impact in Malaysia had focused on examining the variance of having Malays and non-Malays directors on board (Yatim, Kent and Clarkson, 2006; Haniffa and Cooke, 2002). This is due to corporate business in Malaysia has historically been dominated by the Chinese despite that the Malays account for the largest ethnic at approximately 70 percent (Johnson and Mitton, 2003).

Previous empirical results indicate that culture has positive effect on disclosure. Buhr and Freedman (2001) observed a dramatic increase in the environmental disclosure of Canadian firms from 1988 to 1994, due to the collectivistic culture among the Canadian society as compared to the US, its counterparts. Hope (2003) had further emphasized the significance of culture in providing an explanatory power for disclosure levels in the annual reports using a sample from 22 developed countries. Using Gray (1988)'s framework in analysing the impact of culture on the accounting system, Orij (2010) concluded that level of corporate social disclosure (CSD) is likely to be influenced by the national culture. Furthermore, a recent study by Ntim and Soobaroyen (2013) had shown a positive impact of ethnicity and nationality in South Africa towards disclosure of the Black Economic Empowerment (BEE) report.

Studies that examine the impact of ethnicity on disclosure practices among Malaysian companies have encountered similar results. Earlier studies by (Haniffa and Cooke, 2002) and Haniffa and Cooke (2005) had found a significant and positive impact of Malay directors on board towards corporate social reporting (CSR) disclosure for public listed companies for samples in the year 1995 and 1996, respectively. The positive impact of Malay directors is further evidenced by (Wan-Hussin, 2009) who found that Malay CEOs are more likely to be full early adopters on segmental disclosure, prior to the introduction of the segmental reporting standard in Malaysia. On top of that, (Norziana, Cotter and Mula, 2012) also noticed a positive association between the proportion of Malay directors towards CG voluntary disclosure based on 2007 annual reports. The transparency behaviour by the Malay directors is consistent with the notion that Malay directors (who are majority Muslim in Malaysia) adhere to Islamic business ethics that encourage full disclosure (Baydoun and Willett, 2000).

Despite that there is consistent evidence in the literature proving that companies with higher proportions of Malay directors make more disclosure than those without Malay directors, there is a gap in identifying how do Malay directors behave towards disclosing directors' remuneration. A recent study by Norziana, Cotter and Mula (2012) had shown a contrasting result where Malay directors are not significantly associated with directors' remuneration disclosure. This indicates the distinctiveness of directors' remuneration disclosure as compared to other information of CG disclosure. Directors' remuneration information is confidential hence it has a higher risk especially when it is publicly disclosed. Hence, detail disclosure on remuneration requires further consideration by the directors (individually as well as in group) rather than merely a box-ticking exercise. (Rashid and Ho, 2003) suggest that the more complex the situation (more interaction among individuals in an organisation), the more likely the influence of culture would be. Therefore, it is crucial to fill the gap in understanding how ethnicity among directors affects remuneration disclosure in Malaysia.

Originating from Hofstede's model of culture, Gray (1988) has extended the societal value to develop a specific accounting value systems that could measure accountants' attitude. He identified four accounting values which one of it is 'secrecy', which have been statistically proven by previous scholars (Chanchani and Willett, 2004; Salter and Niswander, 1995). Secrecy is a preference for confidentiality about the business only to those who are closely involved with the management, as opposed to a more transparent accountable approach. Since most prior studies found that firms dominated by Malay directors disclose more information (Wan-Hussin, 2009; Haniffa and Cooke, 2002), Malay directors are considered as more transparent as a result of the Islamic business ethics. Chinese, on the other hand, is less transparent due to their family-oriented minded which derived from highly individualistic personality (Rashid and Ho, 2003). Using UE theory to understand directors' demographic culture, the hypothesis is constructed as below:

Hypothesis 2: There is negative association between the extent of directors' remuneration disclosure and the proportion of board dominated by non-Malay

2.2.1.3 Age

As compared to gender and ethnicity, there has been less focus and effort that has been done to prevent age diversity in an organisation (Ali, Ng and Kulik, 2013; Kunze, Boehm and Bruch, 2011; Posthuma and Campion, 2009). This is because in most cases, age diversity is not actively fostered or managed by the authority through affirmative actions or quota, thus lead to less active age diversity management at the organisational level. Evidently, the literature on age diversity has limited findings on age discrimination policy other than the US. US was the first country to release the unprecedented public policy in 1960 with the intention to promote employment of older persons based on their ability rather than age (Rothenberg and S. Gardner, 2011; Lahey, 2008). The 'Age Discrimination in Employment Act (ADEA) 1967' prohibits discrimination against workers (ages 40 – 65 in a firm with 20 or more workers) in hiring, laying off, firing and compensating to avoid employers' incorrect perception towards the older workers (Lahey, 2008).

Limited policy on age diversity has led to more subtle or unconscious level of age stereotype in a firm, thus the subject of age diversity warrant additional attention. This study fills the gap in providing the link between age and disclosure. Age stereotype in a workplace is normally referred to inaccurate beliefs or perceptions about workers based on their age that may be derived from incorrect hearsay or unfounded assumptions (Posthuma and Campion, 2009). Research on age stereotypes, however, focuses mainly on older people, suggesting that people commonly believe older workers are poor performers (Finkelstein, Ryan and King, 2013), resistant to change (Ng and Feldman, 2012; Posthuma and Campion, 2009) and risk-averse (Kalyta, 2009). Consequently, these stereotypes are likely to influence judgements and behaviours towards an individual, thus creating problems such as lack of communication and less cohesiveness in age diversity. On the other hand, there is also positive age stereotype on older workers found in the literature such as experienced and dependable (Cheng, Chan and Leung, 2010) which eventually leads to board with wisdom and intelligence.

Previous studies in accounting have explored the relationship between age diversity and firm performance where mixed results were found. A significant and positive relationship was found on short-term financial performance (Mahadeo, Soobaroyen and Hanuman, 2012) as well as marketing performance (Kilduff, Angelmar and Mehra, 2000) for samples in Mauritius and European management institute, respectively. However, Simons, Hope Pelled and Smith (1999) found that age diversity is not significant in predicting both performance indicators using profit and change of sales. Apart from accounting literature, age diversity has also found to be significant in a decision-making process. For instance, top management team characterized by younger executives is found to lead higher level of international diversification (Herrmann and Datta, 2005) and actively involved in firms that undergone a strategic change (Wiersema and Bantel, 1992), providing support towards age stereotype of young workers who are more risk taker as compared to older workers. Hence, this study will add to the literature of age diversity and directors' remuneration disclosure.

Studies that specifically examine age diversity and disclosure behaviour have received less attention as compared to firm performance (W.H.NG and C.Feldman, 2010). A recent study by Ntim and Soobaroyen (2013) had shown evidence that board with diversified age is positively and significantly related to disclosure of BEE disclosure, using seven years of data among non-financial listed companies in South Africa. Hafsi and Turgut (2013) found a contradicting result of a significant but negative relationship between age diversity and social performance indicators that consist of disclosure on corporate governance, employee relations, environment and product-related social issues. An earlier study by W.H.NG and C.Feldman (2010) further confirm that age was significantly related to task-based attitudes, proxy by job control. Job control is defined as the perception of employee that they have the authority to make a decision.

In Malaysia, the percentage of the population increased among old people is higher than the young people, evidenced by 4.7 percent increase of people aged more than 65 as compared to only 1.5 percent increase of people aged less than 65 in 2010. Correspondingly, 5.1 percent of the increase is noted among people aged more than 65 in 2014 compared to only 1.4 percent increase among people aged less than 64 (Department of Statistics Malaysia, 2017a). Also, the lifespan among Malaysian population is reported averagely at 74.8 years in 2017, as compared to 74.3 in 2011, proving some support towards the high increase of old people in Malaysia (Department of Statistics Malaysia, 2017b). These statistics highlight that more people are available to work longer in the later stage of their career (as they get older), thus increasing the need to fully utilise their capabilities in providing a suitable career or post that will benefit both, the worker and the firm they work with.

At the organisational level, the government has recently introduced a new law stipulated in the Minimum Retirement Age Act 2012 to increase the minimum retirement age from 55 to 60 (Ministry of Human Resource, 2012). Interestingly, a recent survey by one of the world's largest recruitment service provider found that 76 percent of Malaysian employees expect to work longer, i.e. retire between 60 to 65 years old. The finding is reported to be higher than the percentages found in Singapore (59 percent) and Hong Kong (62 percent) (*The Star Online*, 2015). Among the factors that contribute to the survey result is the difficulties to retire with a comfortable pension and less planning is needed for retirement. With the increase in the lifespan and the determination of Malaysian employees towards working beyond the retirement age, this study fills the gap in the limited literature that link the age diversity and disclosure. Since age diversity is expected to benefit an organisation, this study proposes to the following hypothesis:

Hypothesis 3: There is positive association between the extent of directors' remuneration disclosure and the age diversity of the board of directors

2.2.1.4 Educational background

Individuals are impacted by the historical events which occur throughout their life. For example, individuals who have shared similar educational experiences tend to emerge with similar sets of values (Murray, 1989). Unlike gender, ethnicity and age, education of top management comparatively has received less attention in exploring its impact towards organisational performance (Mahadeo, Soobaroyen and Hanuman, 2012; Bell *et al.*, 2011). Nevertheless, the limited studies on educational background have given mixed results to date. In China Stock Market, chairpersons that possess higher education certificate (i.e. a university degree or above) manage to generate better financial performance and influence positive firm's growth (Cheng, Chan and Leung, 2010). On the other hand, Mahadeo, Soobaroyen and Hanuman (2012) found a contradicting result of boards that privilege a higher mix of education experience lower corporate performance. However, a similar study conducted in a developed country, Denmark shows that educational background does not impact firm performance (Rose, 2007).

Level of education reflects an individual's cognitive ability and skills (Wiersema and Bantel, 1992). Therefore, prior literature had further emphasized that education level is associated with open-mindedness in handling conflicts, tolerance in dealing with ambiguity, capacity in processing information and the ability in identifying multiple alternatives (Datta, Rajagopalan and Zhang, 2003; Herrmann and Datta, 2002; Bantel and Jackson, 1989). Furthermore, the education level of top executives is also seen as a general reflection of their intellectual competence as it refers to individual’s highest educational achievement. Diversity in the educational background among the TMT, however, is further argued to be even more crucial because it reflects the combination of a human and social capital of the upper echelons (Cheng, Chan and Leung, 2010). On top of that, educational background diversity is more important for managerial teams that highly involved in the strategic planning as compared to the operational teams that normally deal with production and services (Bell *et al.*, 2011).

Wiersema and Bantel (1992) have categorized the educational background into two aspects; (1) educational level and (2) education specialization. The former was measured using a number of years in school, and the later was represented by speciality subjects such as arts, sciences, engineering, business and law. Due to that, prior literature has shown mixed evidence in using the two types of educational measurement. Diversity in the level of education likely engages with a general mental ability and great tolerance of ambiguity (Herrmann and Datta, 2005; Jehn and Bezrukova, 2004; Bantel and Jackson,1989). On the other hand, diversity in education specialization is typically associated with individual’s personality and creativity. Manner (2010) found that CEO having a bachelor degree in humanities is more cooperative, thus leads to high level of corporate social performance as compared to CEO with an economics degree who are inclined to be more self-interest. Having different specialised directors on board provides an in-depth assessment of specific decisions like technical, financial, litigation and others (Mahadeo, Soobaroyen and Hanuman, 2012; Hambrick, Cho and Chen, 1996) but less helpful in delivering efficiency (Bell *et al.*, 2011).

Empirical research that links educational background and disclosure is limited in the past. Recently, Lewis, Walls and Dowell (2014) prove that educational background, represented by CEO who poses MBA degrees make more voluntarily disclosure on Carbon Disclosure Project (CDP) among the US companies. Correspondingly, the study further found that CEO with legal education tends only to disclose when being pressured. Bamber, Jiang and Wang (2010) have encountered similar result for directors with MBA degrees who tend to provide accurate disclosure as they are better at forecasting. Directors promoted from accounting and finance is found to be consistent with those from a legal background in terms of favouring towards downward disclosure style due to the elements of conservatism and sensitivity to litigation risk, respectively. Finally, using a sample of firms listed in the Johannesburg Stock Exchange (JSE), Ntim and Soobaroyen (2013) added into the literature with a significant disclosure influenced by the higher educational background directors towards the BEE disclosure.

In Malaysia, the trend of people who had enrolled in PhD programs has significantly increased by 56.3 percent from 2010 to 2013. This is followed by the masters level (inclusive of the MBA degree), where the enrolment increased by 31.7 percent during the same corresponding period (Economic Planning Unit, Prime Minister's Department, 2015). Enrolment for bachelor programmes in Malaysia surpassed half million in 2013, with the number of students enrolled in public and private universities is 560,000 and 490,000, accordingly. Since this study is intended to examine the impact of educational background towards disclosure of directors' remuneration, the level of education is being operationalised rather than education specialization. This is on the assumption that prior educational specification does not completely reflect a board members' attitude. Furthermore, previous scholars support the criticisms on specific MBA education which is lacking effective management skills (Slater and Dixon-Fowler, 2010). Therefore, this study considers the number of educational backgrounds present on the board to measure education diversity in determining disclosure. Consequently, the final hypothesis in this study is:

Hypothesis 4: There is positive association between the extent of directors' remuneration disclosure and the educational background diversity of the board of directors

In summary, Table 16 illustrates all four hypotheses employed in this chapter with the respective theory justification that will investigate the relationship between directors' remuneration disclosure and board diversity.

Table 16
Summary of hypotheses

Hypothesis statement		Theory justification	Expected sign
H1	There is positive association between the extent of directors' remuneration disclosure and the proportion of female directors on the board	Upper Echelon theory	(+) ve
H2	There is negative association between the extent of directors' remuneration disclosure and the proportion of board dominated by non-Malay	Upper Echelon theory	(-) ve
H3	There is positive association between the extent of directors' remuneration disclosure and the age diversity of the board of directors	Upper Echelon theory	(+) ve
H4	There is positive association between the extent of directors' remuneration disclosure and the educational background diversity of the board of directors	Upper Echelon theory	(+) ve

2.3 Research Methodology

2.3.1 Development of empirical models

A basic panel data regression is used to assess the extent to which variability in the extent of directors' remuneration disclosure is explained by board diversity mechanism. The multiple regression equation models are as follows:

$DISC_{it}$ = β0 + β1 $NONM\_\%_{it}$ + β2 FEM_DUM_{it}+ β3 $AGER_{it}$ + β4 $EDUR_{it}$ + β5 $SUBSHD_{it}$+ β6 $BSIZE_{it}$ + β7 $BIND_{it}$+ β8 $LGMV_{it}$+ β9 LEV_{it}+ β10 ROA_{it} + Year Effects + Industry Effects + ε_{it}

Where,

DISC	=	disclosure of directors' remuneration index;
β0	=	value of the constant;
NONM_%	=	proportion of non-Malay directors;
FEM_DUM	=	proportion of female directors;
AGER	=	age range;
EDUR	=	education range;
SUBSHD	=	substantial shareholders;
BSIZE	=	total number of directors on board;
BIND	=	percentage of independent board members;
LGMV	=	log market value;

LEV	=	leverage;
ROA	=	return on asset.

2.3.2 Variables measurement

2.3.2.1 Dependent variable

This chapter uses the same directors' remuneration disclosure scoring index (DISC) with the previous chapter.

2.3.2.2 Independent variables

The first independent variable in this study is gender diversity. Prior literature in the developed countries shows gender diversity is measured using percentage of female directors on board to account for disclosure, for instance, environmental reporting in Australia (Rao, Tilt and Lester, 2012) and GHG disclosure in UK (Liao, Luo and Tang, 2015) and Canada (Ben-Amar, Chang and McIlkenny, 2015). In view that this study is the first to examine the relationship between gender diversity and disclosure in Malaysia, the measurement to account for gender diversity is referred to previous study that relates gender diversity and firm performance. Therefore, this study adopts dummy variable for gender, where 1 is for number of female directors on board > 1 and 0, otherwise (Abdullah, Ismail and Nachum, 2016). Dummy variable is used instead of percentage is mainly because the number of female directors are higher in the developed countries as compared to a developing country like Malaysia.

The second independent variable used in this study to predict directors' remuneration disclosure is ethnicity. Previous studies that examine culture and disclosure in Malaysia have been consistently using a percentage of Malay directors to the total number of directors on board to measure the effect of culture and ethnicity (Norziana, Cotter and Mula, 2012; Haniffa and Cooke, 2005). A similar ratio is extensively being used to measure ethnic representation on boards in other counties such as a percentage of the non-white directors (Blacks and Asians) in South Africa and percentage of non-Kenyan directors in explaining the corporate reporting behaviour. Additionally, there are few studies in Malaysia using dummy variable of 1 for Malay while 0 for non-Malay (Wan-Hussin, 2009; Haniffa and Cooke, 2002). However, this study measures culture using the percentage of non-Malay directors (higher proportion of non-Malay indicates more diversify board) to derive the objective of how board diversity, represented by culture impact disclosure.

For the third independent variable, age diversity is measured as continuous variable in terms of the 6 age bands, i.e. (1) band 1: below 36 years old, (2) band 2: 36 – 45, (3) band 3: 46 – 55, (4) band 4: 56 – 65, (5) band 5: 66 – 75 and (6) band 6: 76 and above. The bands represent the diversity of age on company's board ranging from having only one band (1 = homogeneous board, not diverse at all) to having all age bands (6 = heterogeneous board, very diverse). Prior to classifying the directors' age into the respective bands above, the youngest and the oldest directors are identified in each firm for the period (8) years period. The age range between the youngest and oldest directors determines how diverse the board is and the study assigns the age band accordingly. For example, if the youngest and oldest director in a company is 27 and 66 years old, respectively, the company is classified under band 5, because the directors' age had crossed five (5) age bands and it shows that the company is almost very diverse. This approach is adopted in view that it is the most appropriate way to measure diversity (Ntim and Soobaroyen, 2013; Mahadeo, Soobaroyen and Hanuman, 2012).

A similar measurement is applied for the final independent variable, i.e. educational diversity – ranging from 1 (least diverse = only one educational background present on board) to 5 (most diverse = all educational backgrounds present in the board). This continuous variable consists of 5 main levels of educational qualifications, i.e. (1) professional (non-degree), (2) diploma (pre-degree), (3) degree, (4) masters and (5) PhD. For example, if the board of directors consist of 10 members, the study identifies 10 type of educational background for each of the directors according to educational band above. If there is 2 board with masters, 5 boards with a degree and 3 boards with professional papers, hence the company is classified under band 3, because it consists of 3 educational backgrounds, indicating that the board is moderately diverse. This approach represents the right method to measure the diversity of educational background (Ntim and Soobaroyen, 2013; Jehn and Bezrukova, 2004; Bantel and Jackson, 1989).

2.3.2.3 Control variables

This study controls for the effect of several variables which has been identified in the extant accounting literature to affect the firm's disclosure. On top of that, studies that specifically examine the relationship between the respective variables and remuneration disclosure are further reviewed. As a result, three types of control variables are being employed in this study; (1) ownership structure (2) corporate governance and (3) financial characteristics. Firstly, substantial shareholders have been proved to negatively influence disclosure (Ben-amar *et al.*, 2014; Muslu, 2010; Laksmana, 2008; Tosi and R. Gomez-Mejia, 1994). This is consistent with agency theory predictions that suggest ownership concentration reduce agency cost when less disclosure is required as a result of direct monitoring. Furthermore, findings in Chapter One support that substantial shareholders (i.e. government and family) have a significant influence towards disclosure of directors' remuneration.

Secondly, strong corporate governance is also agreed by the previous literatures to have a significant influence towards remuneration disclosure. Two variables of corporate governance utilised in this chapter are taken from the findings of Chapter One that are significant and positively related to disclosure, namely (1) board size and (2) board independence. Board size plays an essential role in monitoring the board's outcome. However, board size has been found to be both positively (Laksmana, 2008) and negatively (Hyun *et al.*, 2014; Hearn, 2013) associated with directors' remuneration disclosure. This is because an adequate number of board size would allow better distribution of workload that leads to more effective decisions but major drawbacks are identified with a larger board including ineffectiveness of decision-making process.

Board independence has also obtained mixed results on its influence towards directors' remuneration disclosure. Majority of independent directors is expected to be more responsive to investors' demand in terms of directors' remuneration disclosure. This is because investors need to access the pay for performance link that is only available from a transparent remuneration process in the annual report. Few studies found that board independence enhances the ability of the board in providing high-quality information about the compensation policies used to reward the executives (Hyun *et al.*, 2014; Ben-Amar and Zeghal, 2011). However, Muslu (2010) encountered a negative association in the European context. This is further justified by the fact that these relations are limited to countries with a strong level of investor protection.

Finally, the third control variable employed in this study is the financial characteristics, represented by (1) firm size (2) leverage and (3) profitability. Previous research shows that firm size is positively related to disclosure (Ben-Amar, Chang and McIlkenny, 2015; Ahmed and Courtis, 1999) due to available resources to make more disclosure. Apart from that, prior disclosure research also controls for financial leverage on disclosure practices (Liao, Luo and Tang, 2015; Ntim and Soobaroyen, 2013; Barako, Hancock and Izan, 2006). This suggests that companies' with high leverage ratio make more strategic pay disclosure to portray good reputation to the creditors in rewarding directors. This study further accounts the effect of profitability, measured using return on assets to control the remuneration disclosure. Like prior research (Hoang, Abeysekera and Ma, 2016; Chizema, 2008), profitability is positively associated with disclosure because profitable firms may want to differentiate themselves from others by disclosing more remuneration information.

2.4 Results Analysis

2.4.1 Univariate analysis

2.4.1.1 Analysis on board diversity

Based on data from 2007 – 2014 depicted in Table 17, it is noted that there is a range of 5 to 15 directors sitting on the board of FTSE30 companies in Malaysia. Interestingly, despite that the Malays are the dominating population in Malaysia, the average number of Malay directors is slightly lower than the average number of non-Malay directors. The maximum female directors are about 27 percent out of the total maximum number of board members, which is almost reaching the targeted policy in Malaysia to have 30 percent of female decision-makers in all sectors of the economy by 2016. In relation to age, this study found a majority of directors aged between 46 to 65, suggesting that most of the directors have prior experience from various companies who are now in the position to focus their directing role before retirement (Kang, Cheng and Gray, 2007). The final independent variable in this study is educational background, showing that the educational diversity among Malaysia directors is high (ranging from having only 1 education background, i.e. least diverse to have all 5 levels, i.e. most diverse).

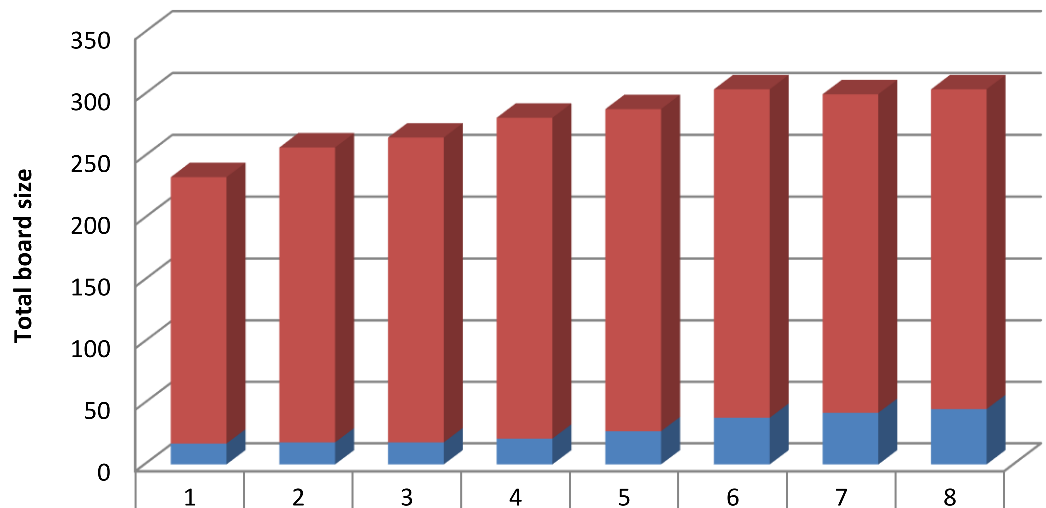
Table 17
Summary statistics for all variables from 2007 to 2014

Variable	Obs (n)	Mean	Std. Dev.	Min	Med	Max
Disclosure Index (DISC)	232	0.509	0.121	0.261	0.522	0.889
Number of Malay directors (MLY)	232	4.797	2.649	0	5	12
Percentage of Malay directors (MLY_%)	232	0.503	0.239	0	0.500	1.000
Number of Non-Malay directors (NONM)	232	4.823	2.448	0	5	10
Percentage of Non-Malay directors (NONM_%)	232	0.497	0.239	0	0.500	1.000
Number of female directors (FEM)	232	0.974	1.027	0	1	4
Percentage of female directors (FEM_%)	232	0.094	0.099	0	0.083	0.375
Age range (AGER)	232	3.767	0.856	2	4	5
Age average (AGEAV)	232	56.793	4.909	46	56	68
Educational background range (EDUR)	232	4.254	0.651	3	4	5
Substantial shareholders (SUBSHD)	232	0.613	0.126	0.254	0.608	0.845
Board Size (BSIZE)	232	9.629	2.435	5	9	15
Board Independence (BIND)	232	0.460	0.118	0	0.444	0.875
Log Market Value (LGMV)	232	10.610	0.511	9.436	10.578	11.824
Leverage ratio (LEV)	232	0.232	0.160	0.000	0.193	0.659
Return on asset (ROA)	232	7.672	11.750	-4.957	4.489	72.360

Obs (n) = Observation

Further analysis on board composition (by gender) illustrated in Figure 8 reveals that there is an increasing trend of female directors on board, evidenced by almost three (3) times of total female directors in 2014 as compared to 2007. This is consistent with an international study that named Malaysia as a country that has high rates of increase in appointing women on board among the Asia-Pacific Economic Cooperation (APEC) countries (Corporate Women Directors International, 2015). The frequency of female representation across the board in Figure 9 indicates that more female directors are qualified to be part of the decision-making team in a company. Thus, these statistics prove that gender diversity among Malaysian directors of the FTSE30 companies is influenced by the qualities of the individual, rather than being pressured to merely comply with the government's quota.

Figure 8
Board composition (by gender) from 2007 to 2014



	1	2	3	4	5	6	7	8
Male	216	239	247	260	261	266	258	259
Female	17	18	18	21	27	38	42	45

Figure 9
Female representation across board

Composition of the board	**Frequency (no. of companies)**	
	2007	**2014**
No female directors	13	7
1 female director	7	7
2 female directors	5	14
More than 2 female directors	0	3
Total companies	**25**	**31**

Board composition (by ethnicity) depicted in Figure 10 and 11 below show that the board members of FTSE30 companies in Malaysia are almost equally balanced. The higher percentage of non-Malay directors in 2007 is justified by the fact that the Chinese who are historically dominating the business in Malaysia. However, the reducing gap between the number of Chinese and Malays involve in the corporate world is a consequence of the government's effort that continues to develop the nation growth. This is evidenced by the recent national plan, called 'The Eleventh Malaysia Plan, 2016 – 2010' which is the latest stage in achieving a united Malaysian that shares a common commitment towards building a better Malaysia for all Malaysians (Economic Planning Unit, Prime Minister's Department, 2015). 'The Eleventh Malaysia Plan' is a continuation of the original New Economic Policy (NEP) introduced in 1970 with the intention to monitor the social imbalance in response to the historical ethnic rioting in 1969 (Johnson and Mitton, 2003).

Figure 10
Board composition (by ethnicity) in 2007

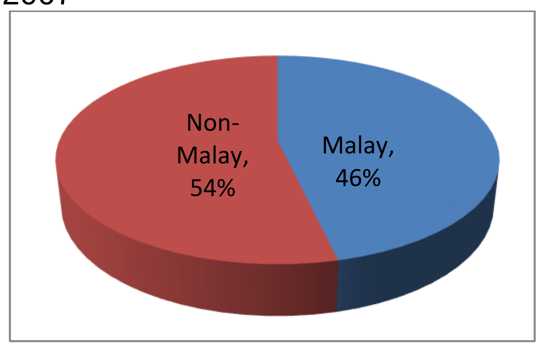
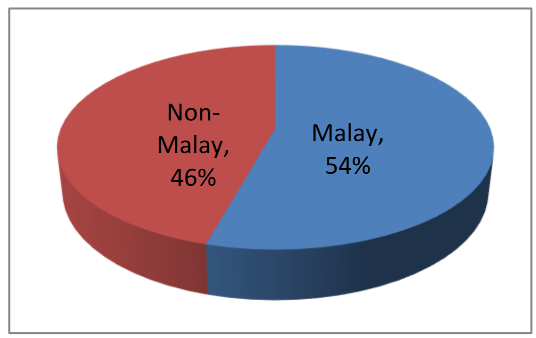


Figure 11
Board composition (by ethnicity) in 2014



This study notices that there are a total of 304 directors among the 31 companies, as shown in Panel B of Figure 12. This gives an average of 10 directors in each company, which is similar to result found by Mahadeo, Soobaroyen and Hanuman (2012) who performed an analysis of age diversity among directors in Mauritius. Panel A of Table 12 illustrates the result of age diversity in the form of age bands. The highest age diversity is noted across 4 age bands, indicating that most directors on board are aged between 56 to 65 years old, followed by directors aged between 46 to 55 years old. Similarly, Table13 discloses the result of educational background in the form of educational bands. This finding highlights that educational background of board members among the FTSE30 companies are highly diversified, with the minimum combination of three levels of education sitting on board.

Figure 12
Statistic of average age directors

Panel A:

Age band across companies	**Frequency (No of companies)**	**%**
Within 1 age band	0	0
Across 2 age bands	2	7
Across 3 age bands	10	32
Across 4 age bands	13	42
Across 5 age bands	6	19
Across 6 age bands	0	0
Total	**31**	**100%**

Panel B:

Average age (years old)	**Frequency (No of directors)**	**%**
Directors less than 50	24	8%
Directors more than 50	280	92%
Total	**304**	**100%**

Figure 13
Educational band across companies

Educational background of directors	**Frequency (no of companies)**	**%**
Within 1 educational band	0	0
Across 2 educational bands	0	0
Across 3 educational bands	4	13
Across 4 educational bands	16	52
Across 5 educational bands	11	35
	31	100

2.4.2 Bivariate analysis

As illustrated in Table 18, the bivariate correlations among the variables are relatively low, suggesting that multicollinearity problems do not appear to be statistically harmful in this model. The analysis reveals statistically significant associations between disclosure and the control variables. For instance, board size (BSIZE), firm size (LGMV) and leverage (LEV) are statistically significant and positively associated with the extent of directors' remuneration disclosure (DISC). Similarly, substantial shareholders (SUBSHD) are also found to be statistically significant in a negative direction as expected. By contrast, board diversity variables are not significantly related to DISC except for the proportion of female directors (FEM_DUM). In summary, this study does not find evidence that non-Malay directors (NONM_%), age diversity (AGER), educational diversity (EDUR), board independence (BIND) and profitability (ROA) have any significant effect on the DISC.

Table 18
Pearson's correlation for all variables (n = 232)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
DISC (1)	1.00										
NONM_% (2)	-0.03	1.00									
FEM_DUM (3)	0.23*	-0.12	1.00								
AGER (4)	-0.03	0.42*	0.06	1.00							
EDUR (5)	0.11	-0.32*	0.20*	0.05	1.00						
SUBSHD (6)	-0.17*	-0.18*	0.17*	-0.04	-0.12	1.00					
BSIZE (7)	0.46*	-0.09	0.52*	0.20*	0.33*	-0.12	1.00				
BIND (8)	-0.08	-0.22*	-0.17*	-0.25*	-0.06	-0.17*	-0.32*	1.00			
LGMV (9)	0.20*	0.10	0.14*	-0.02	-0.29*	0.00	0.24*	0.16*	1.00		
LEV (10)	0.21*	0.02	0.06	0.47*	0.17*	0.03	0.28*	-0.35*	-0.13*	1.00	
ROA (11)	0.08	0.24*	-0.14*	-0.08	-0.36*	-0.01	-0.30*	-0.11	-0.27*	0.03	1.00

Sample period is from 2007 to 2014
*Correlation is significant at 5 percent levels

2.4.3 Multivariate analysis

This section reports the result of the analyses conducted in this study. A disclosure of directors' remuneration equation was developed to test the hypotheses related to the variables identified in Table 16. The equation uses total disclosure index as a proxy to measure the extent of directors' remuneration disclosure in the annual report from 2007 to 2014. Using the equation developed in section 2.3.1, regression analysis is conducted whose results are reported in Table 19. This analysis, however, explains 36.9 percent of the variation in directors' remuneration disclosure level.

Table 19

Full regression result of directors' remuneration disclosure and board diversity

VARIABLES	DISC
FEM_DUM	0.00313
	(0.0181)
NONM_%	-0.00245
	(0.0352)
AGERANGE	-0.0288***
	(0.00994)
EDURANGE	0.0178
	(0.0138)
SUBSHD	-0.115*
	(0.0614)
BSIZE	0.0217***
	(0.00498)
BIND	0.0549
	(0.0839)
LGMV	0.0196
	(0.0226)
LEV	0.188***
	(0.0618)
ROA	0.00325***
	(0.000658)
Constant	0.0463
	(0.254)
Observations	232
R-squared	0.369
Industry Effects	Yes
Year Effects	Yes

Robust standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

2.4.3.1 Gender

The regulatory interest in board gender diversity has escalated over the last few years. Malaysia, being one of the developing countries and the first Asian government that has announced its gender policy in 2004 stipulating that 30 percent of the decision-makers in all sectors should be women (Government of Malaysia and United Nation Development Programme, 2006). Unlike Norway which manifested the policy as mandatory board quotas, this study is uniquely set in Malaysia because of its ‘soft’ regulatory approach that the environment is not mandatory but creates a strong external pressure to conform. For instance, Malaysian corporate sector has shown a positive reaction towards the government’s call by the increasing numbers of female directors on board from 12 percent in 2008 to 17 percent in 2014 (Ministry of Women Family and Community Development, 2015). As the objective of this study is to examine how directors’ demographic diversity influences disclosure, the first hypothesis posits that the proportion of female directors is positively related to the extent of directors’ remuneration disclosure. However, the result in Table 19 shows that the proportion of female directors are positive but insignificant, rejecting the prediction of the first hypothesis.

The finding contradicts with previous studies that found a positive and significant association between gender diversity with disclosure (Ben-Amar, Chang and McIlkenny, 2015; Liao, Luo and Tang, 2015; Rao, Tilt and Lester, 2012). One possible reason is the type of disclosure that differentiates this study from others. This study focuses on disclosure of directors’ remuneration in the annual report where the information is proprietary and need to be protected from competitors (Bamber, Jiang and Wang, 2010), as compared to environmental reporting by others. Consistent with upper echelon theory that highlights the moral influence of a woman in decision-making as compared to man, a female director has more tendency to comply towards all disclosure requirements, either mandatorily or voluntarily as a result of their ethical reporting behaviour (Isidro and Sobral, 2015;

Van Staveren, 2014). Given that the nature of directors' remuneration is highly confidential, the decision to disclose it requires further consideration like business strategy and personal security, apart from reporting it ethically. Hence, this study proves that female directors are not significant in influencing directors' remuneration disclosure even positive coefficient is noted.

Furthermore, this result belies some of the myths about cultural resistance towards women's progression in developing countries. The finding implies that the impact of female directors appears to be varied depending on the context that play a significant role in contributing to the firms' outcome, in both developed and developing countries. Abdullah, Ismail and Nachum (2016) have proven that board with at least one woman could lead to a higher return on assets (ROA), indicating that Malaysian society recognized the contribution of female directors in the listed companies. On the other hand, Adams and Ferreira (2009) found a statistically insignificant effect of the fraction of female directors on the total director compensation amount among the sample of US firms. These results prove that the decision to disclose is not bias towards gender depending on the respective institutional background but rather between the personal characteristic of the person towards the items to be disclosed.

Studies in the psychology and economics literature find that females tend to be more risk-averse than male (Croson and Gneezy, 2009; Byrnes, Miller and Schafer, 1999). Therefore, female directors are expected to fully comply with the disclosure requirements that manifest their risk-averse behaviour of being penalized for non-compliance. Directors' remuneration in Malaysia is governed by the mandatory requirements that set a minimum guideline of disclosure (for example MASB29, Para 24: Disclosure on short-term employee benefits state that '*although this standard does not require specific disclosures about short-term employee benefits, other standards may require disclosure such as related party* *disclosure*'). Voluntary requirements, on the other hand, highlight the best practices that are highly recommended by the Malaysian authority. Thus, this has given the opportunity for directors to report remuneration according to the risk that they perceived to bear. Indirectly, this study proves that female directors in Malaysia perceive director' remuneration disclosure as risky situation; hence they avoid to take part significantly.

This study also contradicts with the previous studies in Malaysia, where female directors are significantly affecting firms' performance (Abdullah, Ismail and Nachum, 2016; Ku Ismail and Abdul Manaf, 2016). The conflicting results speak for the importance of identifying the specific outcome in considering the performance of female directors. Thus, the implication of this study is to provide a guideline for the board members to carefully evaluate the performance of female directors by considering their unique personality in influencing the different type of disclosure. For example, on the one hand, female directors may significantly affect performance disclosure such as profitability, but on the other hand, they do not influence directors' remuneration disclosure as a result of their ethical reporting behaviour and risk-averse personality, accordingly. This consideration is more crucial in a country like Malaysia where the gender effect is pronounced and there is an increasing practice of appointing female on board in Malaysia (Ministry of Women Family and Community Development, 2015).

2.4.3.2 Culture/Ethnicity

Divergence in cultural values in Malaysia started in the middle of the 19th century where the industrial revolution in Europe took place. Malaysia (known as Malaya before) was deployed to respond to the world market by providing manufacturers. However, the British brought other Asian people from China and India into the country as contract labourers due to labour shortage when they colonialized Malaysia until the beginning of 20th century. As a result, the initial demand in obtaining additional labour have unintendedly contributed to the beginning of multi-ethnic society in Malaysia (Hirschman, 1987). Current ethnic population in Malaysia stands at 68.8 percent for Malay, 23.2 percent for Chinese and 7.0 percent for Indian and others (Department of Statistics Malaysia, 2017c). Since the objective of this study is to examine the influence of culture towards disclosure, it is hypothesised that there is a negative association between the extent of directors' remuneration disclosure and board dominated by non-Malay directors. As shown in Table 19, a board dominated by non-Malay directors shows a non-significant and negative result; thus hypothesis 2 is rejected.

This study employs the percentage of non-Malay directors on board to measure board diversity. The negative and insignificant result implies that non-Malay directors do not influence directors' remuneration disclosure. This finding agrees with the assumption that majority of Chinese directors are not transparent due to their family-oriented behaviour and highly individualistic personality (Rashid and Ho, 2003; Haniffa and Cooke, 2002). Therefore, it shows some support towards existing literature on the positive impact of Malay directors on disclosure as part of the Muslim business ethics (Abu-Tapanjeh, 2009). The insignificant relationship noted in this study is further justified by the equality of board ethnicity on board as well as the 'culture convergence' that has been developed in the Malaysian society including corporate market, particularly for the top 30 firms being scrutinized.

Firstly, the average number of Malay and non-Malay directors on board is found to be equal at 5, as illustrated in Table 19. This result is the most balance board members regarding the percentage of Malay directors on board at approximately 50 percent, as compared to the previous disclosure studies in Malaysia. Using a sample of the year ended 1996 and 2007, Haniffa and Cooke (2005) and Norziana, Cotter and Mula (2012) found that the Malay directors were dominated at 47 percent and 43 percent, respectively. Indirectly, this study further indicates that the percentage of the non-Malay board had decreased (an indication of becoming less diverse) from the previous two disclosure studies. Due to that, the insignificant result noticed in this study is fairly justified by an equal number of board members based on their ethnicity. This is followed by no dominating ethnic on board to prominently decide on directors' remuneration disclosure.

Secondly, the insignificant impact of either Malay or non-Malay directors towards disclosure in this study is further justified with the cultural convergence that has been believed to be assimilated among Malaysian society. This result complements prior research on cross-cultural working value that exists in Malaysia (Rashid and Ho, 2003). For instance, Sarachek, Hamid and Ismail (1984) claimed cultural convergence is an effect of modernization force that had converged Malay and Chinese traditional working attitude. However, the reason that contributes to the cultural convergence differs from the previous study where the religious factor is being highlighted in this context. By constitution, Malays in Malaysia are Islam (Muslim). Muslims generally demonstrated a high degree of religiousness as compared to the Chinese and Indians who are mainly Buddhists and Hindu (Goodwin and Goodwin, 1999). Among the Islamic corporate business principles are transparency (Abu-Tapanjeh, 2009; Baydoun and Willett, 2000) and the application of 'shuro', i.e. a consultative decision-making (Safieddine, 2009; Alam Choudhury and Ziaul Hoque, 2006; Lim, 2001).

Despite the proportion of Malay directors were less than 50 percent in the previous studies (an indication of a more diverse board with more non-Malay directors), the prior results prove that Malay directors still portray a higher level of transparency by positively and significantly influence disclosure. Transparency is regarded as accountability by providing fair disclosure. In Islamic business ethics, accountability is first of all to Allah (the God) and then to all individuals who have the right to know the truth (minority shareholders and other stakeholders). When the Muslims are in the controlling position (as evidenced in the current study of an equal percentage of board members between Malay and non-Malay), the concept of ‘shuro’ takes place. Islamic ethics of decision making not only comply in the hands of controlling party but demand the whole group to participate in arriving at any agreeable decision (Abu-Tapanjeh, 2009). Therefore, the negative and insignificant result found in this study is justified by the cultural convergence, as a result of religious and culture working ethics.

This finding leads to an important implication on whether the cultural convergence brings a positive value towards disclosure practices among the corporate business in Malaysia. The implications are evidenced by the type of disclosure that is mandatory and voluntary information, illustrated in Figure 14. Mandatory related information, which is normally financial figures, requires a high level of accuracy in terms of disclosure, such as performance or firm’s actual accounting results. Hence, the combinations of Malay directors who embrace the Islamic value of fear of God and Chinese directors who are mainly diligent will result in accurate financial information to be publicly disclosed. For voluntary information, which is normally non-financial related, requires a high level of justification, such as governance-related reporting that includes directors’ remuneration. Thus, the combinations of the two main ethnics further resulted in strategic and adequate disclosure due to the generosity of Malay directors and the harmony of Chinese directors. In summary, this study proves on the demographic impact of each director that formed cultural convergence and finally contributes to the extension of the disclosure.

Figure 14
The effect of cultural convergence towards extent of disclosure

Religion / Type of disclosure	Mandatory disclosure (e.g: firm's performance, financial statements)	Voluntary disclosure (e.g: governance voluntary reporting e.g. directors' remuneration)
Muslim	Fear of God	Generosity
Non-muslim	Diligent	Harmony
Extent of disclosure	Accurate / True	Fair / Reasonable

2.4.3.3 Age

Malaysia has no specific policy or guideline that addresses age discrimination, as highlighted by other developed countries. This is possibly due to the strong characteristics of Malaysian which is high in collectivism (opposite of individualism) and strong power distance (opposite of weak power distance), as highlighted by (Hofstede, 1984) in reviewing the differences of culture for 50 countries around the world. Collectivism stands for a preference towards a tight social framework where individuals can expect their relatives, clan or other people within the same group (an organization) to look after them (Gray, 1988; Hofstede, 1984). On the other hand, strong power distance represents a society that accepts a hierarchical order where everybody has their place and power equalities (Gray, 1988; Hofstede, 1984). The combination of these two cultural characteristics leads to a harmony corporate atmosphere in Malaysia, rejecting any age discrimination among workers. This is further justified by another unique Malaysian culture which has a high respect for elders (Rashid and Ho, 2003). At the organizational level, the scenario suggests that older workers are more likely to receive respect from the young workers, proving on the minimal occurrence of age discrimination in Malaysia.

The objective of this chapter is to examine the impact of age diversity towards disclosure of directors' remuneration in the annual report; thus the hypothesis says that there is a positive and significant association between age diversity on disclosure. However, the result in Table 19 shows a significant and negative coefficient of 0.03 (significant at 99 percent of confidence level), indicating that age diversity has a diverse relationship with directors' remuneration disclosure, thereby failing to provide respective support for H3. The finding reveals that board with highly diversified age directors tend to disclose less as compared to a board that has less diversified age directors (board with similar ages). In view that the result contradicts the assumption that board heterogeneity leads to a better perspective in handling strategic issues like directors' remuneration disclosure, the finding supports board homogeneity in disclosure practices. This is consistent with Tsui, Egan and O'Reilly (1992) who found that board homogeneity resulted in a higher level of psychological attachment and thus better off in forming a common attitude.

In the quest to explore attitude, it is crucial to define the boundaries of age groups as social entities so that the expected attitude can be generalised based on the age range. Finkelstein, Ryan and King (2013) had categorized workers into three age boundaries, (1) 18 to 30 years old for younger workers, (2) 31 to 50 years old for middle-aged workers and (3) 51 and over for older workers. The descriptive analysis in Table 17 shows that the average age for directors on board is 57 years old. On top of that, Panel B of Figure 12 further shows that 92 percent of average directors are more than 50 years old. The result implies that majority of the board members in the FTSE30 companies in Malaysia consists of older directors. Therefore, the significant negative result encountered in this study is fairly justified by the personality of old directors on board (in average) who tend to be more risk-averse in disclosing the remuneration information. This finding indirectly supports age stereotype literature on old workers and agrees with Hambrick and Mason (1984) who suggest that youthful managers are more inclined to undertake risky strategies. Disclosing directors' remuneration in public is considered as a risky strategy as it contains private information about the firm (Frantz, Instefjord and Walker, 2013).

Additionally, prior research on directors' remuneration disclosure agrees that less than full disclosure can be in the interest of an organisation (Costa *et al.*, 2016; Frantz, Instefjord and Walker, 2013b; Arya, Frimor and Mittendorf, 2013). Although it is true that increasing transparency is welfare improving when all else are assumed to be equal, these scholars agree that all else may not be equal.

Frantz, Instefjord and Walker (2013b) prove that no full disclosure equilibrium of executive compensation can be obtained because there is always the presence of a strategic opponent in the form of union, supplier or even a regulator. Therefore, the adverse disclosure behaviour noticed in this study is further justified by the characteristic of old directors who has a better view of the industry. It is because the ability of a firm to credibly withhold voluntary information and strategically disclose mandatory information on remuneration rest with the wisdom and intelligence of aged directors (Reed and Defillippi, 1990). Succinctly stated, this finding highlights the importance of age diversity that can be the firm's competitive advantage in making a complex decision, such as determining the extent of directors' remuneration disclosure.

Finally, the result leads to two major implications applicable in the Malaysian context. First, it shows strong support towards the recent effort by the government in increasing the minimum retirement age from 55 to 60 years old. At the managerial level, the significant values brought by the older directors found in this study provide a useful guideline to the board in determining the board composition. Since Malaysia is not known to have major age discrimination within the corporate world at this juncture, this result encourages companies to appoint new aged directors or to retain old directors on board without any hesitance. Secondly, this result is in agreement with the perception of Malaysian employees who prefer to work longer than the stipulated retirement age (*The Star Online*, 2015). At the operational level, older workers are believed to substantially affect companies in terms of loyalty, dependable, stable and committed to the job (Posthuma and Campion, 2009). Due to that, this result contributes to the significant influence of age diversity towards working attitude, particularly on disclosure practices but it is very much depending on the items to be publicly disclosed.

2.4.3.4 Educational background

Diversity is traditionally conceptualized in terms of visible differences, but individuals may also differ on less visible characteristics such as level of education. Prior research on the educational background has used two different type of educational measurement, i.e. level of education and education specializations. Based on the assumption that previous educational specialization does not completely reflect a board members' attitude, this study adopts level of education, i.e. the number of educational backgrounds present on board to measure educational diversity (Mahadeo, Soobaroyen and Hanuman, 2012). Specifically, this study is aimed at assessing the relationship between educational diversity and disclosure of directors' remuneration in the annual report as hypothesized by H4. However, the result illustrated in Table 19 shows that educational diversity is not significant in predicting directors' remuneration disclosure in this sample, thereby rejecting H4. This is consistent with Rose (2007) who noted that board members' educational background does not impact corporate performance.

One possible reason for a non-significant result in this study is that the decision to disclose directors' remuneration does not require any specific level of education. While the majority of studies that found a significant and positive effect of educational background has focused on various outcomes such as propensity to innovate, openness to change and environmental disclosure, very few scholars have addressed how a diversity of educational background affect directors' remuneration disclosure. Hence, the insignificant relationship encountered in this study contributes to a new finding that there is no significant effect of the educational background, measured using the level of education (professional, degree, masters and PhD qualification) towards directors' remuneration disclosure. This result is further justified by the nature of directors' remuneration which requires strategic consideration in terms of its disclosure. Although Datta, Rajagopalan and Zhang (2003) reveal that higher educated CEO are more likely to move the firm in the new strategic direction, this study argues on the basis of strategic disclosure that does not reflected by the diversity in the level of formal education.

This result also contributes to the literature of board diversity, particularly on the linkage between educational background and disclosure. Earlier, Tsui, Egan and O'Reilly (1992) have claimed that educational level received no support in the demographic board diversity as it is less salient in the self-categorization study, as compared to other traits. Therefore, this study modestly adds into the evidence that the educational background role is not a strong predictor of demographic board diversity when it comes to strategic disclosure. Because of the continuous support by the government towards promoting higher education in Malaysia, the implication of this study does not hinder the practice of hiring educated people on board or encouraging the existing board members to pursue higher education. Although prior studies have agreed on the advantages of having heterogeneous educational directors on board, this study proves a contradicting result when it comes to disclosure. Using the sample of FTSE30 companies in Malaysia, this study concludes that level of educational background is not significant in the extent of directors' remuneration disclosure.

2.4.3.5 Control variables

With respect to the control variables, there are four control variables that the coefficient estimates are statistically significant in this study. First, substantial shareholdings (SUBSHD) are found to be inversely associated to directors' remuneration disclosure (p-value < 0.10) and this is consistent with the prediction that ownership concentration reduces agency cost by increasing disclosure. This result also supports prior scholars that claimed directors' remuneration is a good instrument to address agency problem arising from the separation of ownership (Arye *et al.*, 2003). Second, the coefficient of board size (BSIZE) is positive and highly significant (p-value < 0.01), providing evidence that larger board members disclose more remuneration items as compared to a smaller board. Indirectly, this finding agrees with the notion which predicts board size as substitutability of alternative governance mechanism. Finally, two of the financial characteristics variables tested in this study are found to be positive and significant (p-value < 0.01) towards directors' remuneration disclosure. In line with previous studies, firms with a high leverage ratio (LEV) and profitability (ROA) make more strategic pay disclosure to convince shareholders and stakeholders on their reputation in rewarding the directors.

2.5 Conclusion

The findings indicate that demographic diversity among the board of directors may have potential benefits and drawbacks to the directors' remuneration disclosure behaviour. At this juncture, it is reasonable to claim that prior research has produced mixed results of top management heterogeneity on various firm's outcome, particularly on performance. Most importantly, in this study of directors' remuneration disclosure, the advantages of board diversity exceed the disadvantages. While age diversity is found to be significantly associated with directors' remuneration disclosure, the remaining board diversity variables such as gender, ethnicity and educational background are also significant in a condition when it is critically analysed using the upper echelon theory within the context of Malaysia.

This study belies some of the myths about cultural resistance towards women's progression in developing country, suggesting that female directors' behave differently depending on the type of disclosure. Female directors who prefer ethical reporting rather than male directors are found to be insignificant in influencing directors' remuneration disclosure. The behaviour is in confirmation with the nature of remuneration disclosure which is high risk, hence contradicts the personality of female directors who are risk-averse. For ethnic diversity, this study encounters an equally balanced board for the period under review that leads to no significant impact of ethnic diversity on directors' remuneration disclosure. The culture convergence that has been assimilated within the board members also contributes to the insignificant result, in view that both dominant ethnics may have exercised their own belief and unique traits (Malay and Chinese character) in determining the strategic pay disclosure.

On an important note, this study does not assert that board diversity is always beneficial. Majority of board members among the FTSE30 companies in Malaysia consists of senior directors; hence the significant and negative association between age diversity and directors' remuneration disclosure provide some support towards the literature on age stereotype. Older workers tend to be risk averse as compared to the younger workers, evidenced by the adverse disclosure behaviour found in this study. However, positive age stereotype acknowledges older directors as wise and knowledgeable. Thus, the adverse relation between age diversity and remuneration disclosure is further justified by the fact that no full disclosure equilibrium of directors compensation can be obtained due to the presence of strategic opponent. Indirectly, this study proves that the ability to credibly withhold voluntary information and strategically disclose mandatory information rest on the wisdom of aged directors. Finally, this study further noted that the decision to disclose directors' remuneration does not require any specific level of education.

Practically, this study is essential in providing a guideline for companies in determining a perfect board composition. For instance, the results suggest that companies that focus to benefit minority shareholders in an emerging country like Malaysia by providing a strategic pay disclosure may wish to ensure that their board of directors comprise members with diverse backgrounds. This study proves that the distinctive personality of each director can be a competitive advantage of a firm when it is properly transformed to make it congruent with firm's objective so that maximum efficiency in decision-making can be achieved. Overall, this result indicates the need to incorporate a diversified composition of the top decision-makers in attempts to make a strategic remuneration disclosure.

Empirical Chapter 3:

Value relevance of directors' remuneration disclosure

3.0 Introduction

Chapter one and two of this thesis have discussed on the determinants of directors' remuneration disclosure from statutory (corporate governance) and demographic (board diversity) characteristics point of views. Results from both empirical chapters have indicated that disclosure of directors' remuneration and the related process is regarded as confidential despite the control mechanisms that were identified among the largest 30 companies in Malaysia. Therefore, this chapter (Chapter three) complements the previous two chapters by investigating the incentive of disclosing directors' remuneration publicly in annual reports that could encourage the disclosing practice among directors.

Large numbers of empirical studies suggest a link between directors' remuneration disclosure and benefits, either financial (Chen, Feldmann and Tang, 2015; Botosan, 1997) or non-financial (Armitage and Marston, 2008; Hart, 1995). The economic theory suggests that a commitment to increase the levels of disclosure will be echoed by the increase in financial benefits in the form of lower cost of capital (Botosan and Plumlee, 2002) and higher in stock liquidity (Healy, Hutton and Palepu, 1999). On the other hand, the non-financial benefits from disclosure are associated with stronger corporate governance and better corporate reputation to maintain confidence among the shareholders and other stakeholders. For instance, Armitage and Marston (2008) found that the primary motive for voluntary disclosure among finance directors are to enhance the company's reputation for openness, instead of to reduce the cost of capital. Hence, an enhanced disclosure is agreed by the prior scholars to have value relevance on the disclosing firms.

Value relevance is interpreted as the ability of information in the financial statement to proxy for factors that affects share prices (Francis and Schipper, 1999). Earlier studies that have examined the value relevance were done in developed countries due to the richness of disclosure environment. Using a sample of German companies, Leuz and Verrecchia (2000) found that firms which adopt the international reporting standards, namely International Accounting Standards (IAS) or US GAAP are associated with better share turnover, as a result of substantially increased in firm's commitment to a greater disclosure requirement. Additionally, Daske *et al.*, (2008) noticed a similar effect on higher market liquidity among countries that adopt the mandatory International Financial Reporting Standards (IFRS), particularly for countries with relatively strict enforcement regimes. Unlike developing country, Hassan *et al.*, (2009) found a negative impact on firm value for Egyptian's listed firm adapted to mandatory IAS disclosure due to the limited penalties for non-compliance.

Apart from discovering the value relevance on financial reporting disclosure, recent studies have explored the effect of other type of disclosure in both developed and developing countries, such as corporate disclosure (Al-Akra and Ali, 2012), corporate governance (Ararat, Black and Yurtoglu, 2017; Ntim, Opong and Danbolt, 2012), risk disclosure (Elbannan and Elbannan, 2015; Maizatulakma *et al.*, 2015) as well as environmental and social disclosure (Qiu, Shaukat and Tharyan, 2016). These studies are believed responded to the research call by Botosan and Plumlee (2002) on the disaggregating different type of disclosure when the aim is to investigate the association between disclosure and financial benefits to avoid the erroneous conclusion. Botosan and Plumlee (2002) discovered different result on the cost of capital when an aggregated report is used as compared to individual report, emphasizing on the importance of specific disclosure testing to observe the impact on firm value.

In view of the above, there are two motivations that drive the exploration of this research. Firstly, the value relevance is tested in Malaysia, a developing country where the disclosure practices are still far below the best practices. The problem in developing countries is the market characteristics that are lenient when it comes to practicality and enforcement. Despite that these countries have their own mandatory and voluntary disclosure requirements, the lack of enforcement creates the opportunity to choose the level of mandatory disclosure by companies (Abdullah *et al.*, 2015; Hassan *et al.*, 2009; Ball, Robin and Wu, 2003). Thus, this study intends to investigate whether directors' remuneration disclosure is value relevant as well as distinguishing the impact on financial and non-financial sector due to the prominent role played by the banking institutions in encouraging growth, particularly among the FTSE30 companies in Malaysia (Ball, Robin and Wu, 2003; Andrew *et al.*, 1989).

Secondly, existing literature proves that there is a limited study that has examined the value relevance of directors' remuneration disclosure (Sheu, Chung and Liu, 2010). As mentioned earlier, recent studies have discovered value relevance of other types of disclosure including corporate governance. Being one of the core elements in corporate governance, this study aims to specifically examine the impact of directors' remuneration disclosure on firm value. It is believed that disclosure of directors' remuneration provides a window to the overall quality of governance of an organisation (Arye *et al.*, 2003). Unlike financial disclosure that forces companies to talk about cash flows to measure profitability, directors' remuneration disclosure signals board transparency to reduce the camouflage and agency problem. While Abdullah *et al.*, (2015) and Maizatulakma *et al.*, (2015) found mixed results of IFRS compliance disclosure and risk disclosure in Malaysia, this study is motivated to understand how disclosure of the most personal information of directors, i.e. their remuneration could impact firm's reputation, in the form of firm's value.

Furthermore, extant research addressing value relevance in corporate governance studies has also relied on accounting-based indicators to measure firm performance. Hence, apart from accessing the impact of directors' remuneration on firm value, this study aims to investigate the similar impact on the alternative firm performance as measured using accounting-based performance. Methodologically, this study proposes to address the potential endogeneity problem that has been ignored by typical accounting study by conducting the relevant robustness analysis. Taken together, the study has four objectives to be achieved, which are (1) to access the value relevant of directors' remuneration disclosure among the FTSE30 companies in Malaysia (2) to distinguish the impact of directors' remuneration disclosure on financial and non-financial sector (3) to investigate similar impact on alternative financial performance measure and finally (4) to address and justify the potential endogeneity issue that normally plague corporate governance studies.

3.1 Literature Review

3.1.1 Firm value vs disclosure

Prior research suggests that disclosure practices reduces information asymmetry, improves stock liquidity and reduced cost of capital (Leuz and Verrecchia, 2000; Diamond and Verrecchia, 1991). This is supported by general theories that assume under specific circumstances; firms disclose more information due to expected benefits that may exceed costs. For instance, agency theory predicts that managers are more likely to make suboptimal decisions when they are less monitored, as a result of less disclosure. Due to that, there are large numbers of empirical studies conducted in developed and developing countries, with the aim to uncover the relationship between disclosure and firm value that ranges from financial to non-financial information disclosure in the disclosure literature. However, results that prove the above assumption seem to be inconclusive until to date (Barth, 2003).

In a developed market, Dhaliwal *et al.*, (2011) and Gao *et al.*, (2016) found a positive impact of CSR disclosure on stock liquidity in the US and Amsterdam, respectively. In comparison, Qiu, Shaukat and Tharyan (2016) and Cormier and Magnan (2007) encountered that environmental disclosure does not affect firms' stock price in some of the European countries. Similar findings are noted in developing countries. However, it is important to highlight that disclosure on corporate governance has been received much attention in these countries. For example, a positive market value is noted for firms disclosing strong corporate governance-related index in studies conducted in Turkey (Ararat, Black and Yurtoglu, 2017), South Africa (Ntim, Opong and Danbolt, 2012) and some of the Asian countries (Mitton, 2002). In contrast, Wang, Ali and Al-Akra (2015) prove that more disclosure on governance elements do not enhance firm value in China. Consequently, these mixed findings had left the research to be open for further investigation.

Prior literature also debates on the consequences of non-disclosure towards firm value. On the one hand, non-disclosure has been argued by the prior scholars to reduce the stock price based on the scepticism of non-disclosure prediction (Teoh and Hwang, 1991). Hope and Thomas (2008) prove that non-disclosure requirements on geographic earnings among the U.S. multinational firms, post - Statement of Financial Accounting Standards No. 131 (SFAS 131) period are not only associated with the real economic loss but also with lower reported accounting performance. In the same vein, non-disclosing firms have a higher market beta and lower cash flows as compared to disclosing firms due to the uncertainty about the level of variance in the firm's future cash flow (Cheynel, 2013; Jorgensen and Kirschenheiter, 2003). On the other hand, Lev and Penman (1990) do not find that stock prices of non-disclosing firms are negatively affected by the non-disclosure practices. Taken together, the current study responds to reveal how directors' remuneration disclosure, a strategic and private information could contribute towards firms' value.

3.2 Hypothesis Development

3.2.1 Firm value vs directors' remuneration disclosure

Prior accounting literature largely assumes that disclosure is value relevant and argue that factors such as proprietary costs impede disclosure (Verrecchia, 2001). Importantly, this study emphasizes that directors avoid disclosing private information, namely their remuneration, because such disclosure reduces their private control benefits. For instance, Costa *et al.*, (2016) recently contradict the literature on the value relevance of directors' remuneration disclosure in the annual report by arguing that compensation related information is highly confidential and the personal security-related cost faced by the directors could be serious enough for firms not to comply with the full disclosure. This is because releasing such information would expose the directors to crimes such as kidnapping, thus will significantly increase the personal cost of the board and reduce the firm value. Moreover, Frantz, Instefjord and Walker (2013) highlight that directors' remuneration disclosure also incur indirect proprietary cost in the form of competitors, who may exploit the information released.

In view of the idiosyncratic security cost that it has, particularly when it may affect firms' competitive advantage as well as the boards' personal-related matters, it is reasonable for directors to be extra vigilant in disclosing their remuneration publicly. Indirectly, directors of most companies would rather not disclose things if they do not have to. Therefore, early studies of motives for disclosure emphasize that management must have the incentive to voluntarily disclose private information, mainly to increase market liquidity through information asymmetry reduction, which in turn lower the firm's cost of capital (Verrecchia, 2001; Levitt, 1998). Using Taiwan as institutional background, Sheu, Chung and Liu (2010) provide empirical evidence that highlights a significant positive impact on firms' market value as a result of comprehensive disclosure of directors' compensation. The study further found that even lower level of transparency, i.e. a disclosure more than the minimum mandatory requirements on overall compensation disclosure did contribute to the creation of market value.

Likewise, Chung, Judge and Li (2015) prove that comprehensive voluntary disclosure of directors' remuneration could improve corporate governance as it provides information that allows shareholders and outsiders to monitor the pay-performance principles in setting the compensation. This finding is consistent with other studies that recognize directors' remuneration disclosure as a significant part of corporate governance contributing to higher market value (Qiu, Shaukat and Tharyan, 2016; Ntim, Opong and Danbolt, 2012). An earlier study by Lo (2003) found that firms which had lobbied against the revised compensation regulation in the US had relatively improved their stock returns during the period of announcement and adoption. In summary, this literature leads to at least two main incentives cited as to why firms may choose to disclose directors' remuneration. First, the market highly values firms that are transparent in directors' remuneration and second, the disclosing firms aware that the benefits of disclosing outweigh the associated proprietary costs.

In addition to that, the literature on the value relevance of directors' remuneration disclosure also discussed the disadvantages of non-disclosing practices towards firm value. Morse, Nanda and Seru (2011) found that a rigged part of incentive pay gives a significant negative association with firm value and risk-adjusted returns. Therefore, an explicit disclosure of the compensation contract of a board of directors is highly required to solve the rigging activity by the powerful CEOs who use their power to manipulate the incentive contracts. This is supported by Laksmana, Tietz and Yang (2012) who experience difficulties to understand the 'Compensation Discussion and Analysis' (CD&A) report in the 2007 proxy season for listed US companies. The authors found that it is even more difficult to read CD&A report when CEO pay exceeds the benchmark, indicating that the management intentionally cloaks their compensation practices when the pay is not justified by the economic determinants.

This study is the first that examines the value relevance of directors' remuneration disclosure in the annual report in Malaysia. In fact, existing literature proves that there is a limited study that has examined the value relevance of directors' remuneration disclosure in other developing countries as well (Sheu, Chung and Liu, 2010). Prior studies on value relevance in Malaysia, however, encountered mixed results, suggesting that specific type of disclosure might give different impact on market reaction. Therefore, directors' remuneration disclosure, which is strategic and private in nature, is expected to lead to higher firm value as to compensate the high risk of its disclosure. This assumption is in line with Riaz *et al.*, (2015) who found that multinational companies (MNC) are willing to improve compliance towards directors' remuneration disclosure requirements, even if it is to incur the marginal cost of increasing disclosure when the commensurate benefits are clearly justified. Due to that, this study hypothesizes that:

H1: Firms disclosing the directors' remuneration process and practices have a significant and positive impact on firm value

3.2.2 Financial sector vs non-financial sector

Generally, prior scholars in economic agree on the theoretical link between financial sector development and economic growth, that the former has a positive impact on the latter (Ang and McKibbin, 2007; Arestic and Demetriades, 1997). This is because a well-developed financial system can channel financial resources to the most productive use which subsequently lead to a continuous growth of a country. Nevertheless, most of the empirical research in any field (including disclosure) was conducted by excluding the bank or financial institutions in the sample due to the notably different regulations attached to this sector as compared to others (Qiu, Shaukat and Tharyan, 2016; Hamid, 2004). As a result, studies that specifically examine the disclosure impact on financial sector have been left unattended. Furthermore, Griffin and Mahon (1997) had called for research on an individual industry as each industry operates within a distinctively different context and stakeholders' involvement. Therefore, this study fills the gap by investigating the impact of directors' remuneration disclosure in the financial and non-financial sector in Malaysia.

Malaysia is an interesting country to test on the value relevance of directors' remuneration disclosure towards financial sector because of two reasons. First, the financial sector in Malaysia has a rich history that begins in the 1960s, that was set up to establish the basis of economic growth (Suto, 2003; Andrew *et al.*, 1989). Until the Asian financial crisis in 1997-1998, the banking sector was badly jeopardized that a series of significant reforms were taken by the government, including the banking sector restructuring. Rigorous efforts by the Central Bank of Malaysia have transformed and strengthened the financial sector into a banking system which is resilient to economic and market shocks (International Monetary Fund, 2013). This shows the importance of the financial sector in Malaysia as a prominent supply of capital in maintaining the country's economic growth.

Second, recent statistic shows that directors in the financial sector received the highest remuneration amount as compared to other sectors, for the period between 2010 and 2014 (Minority Shareholder Watchdog Group, 2014). This is consistent with Slomka-Golebiowska (2013) who claimed that pay level do varies by industries, for example, CEO at electric utilities earn lower compensation than their counterparts in other industry, while CEO in financial services companies earns significant higher than the rest. The fact that directors in the banking sector receive higher remuneration is not completely a flaw but what is more important is to have it better-aligned with the interest of shareholders and depositors, which subsequently lead to the financial stability. However, Fahlenbrach and Stulz (2011) prove that banks with CEO who had better aligned incentives perform significantly worse than banks where the CEO had poorer incentives. Hence, the disclosure of directors' remuneration is undoubtedly essential to assess value relevant. Given limited prior studies and contradicting results as above, this study predicts the following hypotheses:

H2a: Firms disclosing the directors' remuneration process and practices in non-financial sector have a significant impact on firm value

H2b: Firms disclosing the directors' remuneration process and practices in financial sector have a significant impact on firm value

3.2.3 Financial performance vs directors' remuneration disclosure

Extant research addressing value relevance of corporate governance and firm value has also relied on accounting-based indicators to measure firm performance. In general, firm performance fits into two key categories, market-based measures and accounting-based measures. Market-based measures, which extensively measured using Tobin's Q and market to book ratio (MTBR), relate to the overall value placed on the firm by the market, where the valuations emphasized the expected future earnings and considered as a forward-looking indicator that reflects current strategies (Kiel and Nicholson, 2003). In contrast, accounting-based measures, which normally represented by return on assets (ROA) and return on equity (ROE), are historical in nature and considered as a backward or inward-looking indicator that reflects past successes of the board members and the management team. Previous studies that have employed both performance measurements justify that there is no consensus concerning the choice of the dependent variable in measuring firm performance and alternative measures will complement the robustness check of the results (Ntim, Opong and Danbolt, 2012; Haniffa and Hudaib, 2006; Dalton *et al.*, 1998).

Accounting-based measurement has its advantages as compared to the market-based measurement. Essentially, accounting returns manage to capture the wealth effects of internal governance mechanisms as it is fully under management control (Hambrick and Finkelstein, 1995). For instance, higher ROA implies the effective use of companies' assets by the management in serving shareholders' economic interests. Interestingly, previous literature has specifically debated on the choice between accounting and market performance focusing on directors' remuneration (Dalton *et al.*, 1998; Lambert and Larcker, 1987; Kerr and Bettis, 1987). Using a large sample of regulated companies over a 20 year period, Joskow *et al.*,(1993) found a stronger link between accounting returns and CEO remuneration as opposed to the link between shareholders' return and CEO remuneration. This corroborates the justification by prior scholars that accounting-based measures provide a better benchmark for the compensation committees in setting the performance target, rather than share prices that are affected by too many factors beyond management's control (Baber, Janakiraman and Kang, 1996; Hambrick and Finkelstein, 1995).

With regards to directors' remuneration disclosure, limited studies have been done to establish the relationship with accounting performance in both developed and developing countries. One possible reason is the challenge in matching the pay-performance link with the accounting measurement target that subjects to manipulation and distortion due to the accounting policies like depreciation and valuation (Dalton *et al.*, 1998). A recent study by Ntim, Opong and Danbolt (2012) show that firms disclosing good corporate governance practices that include board remuneration have a positive and significant impact on ROA among companies in South Africa. Additionally, specific disclosure on issued stock bonus is significantly positively associated with operating income in non-financial companies in Taiwan (Guo, Yang and Yu-Wen, 2006). An earlier study by Lo (2003) further emphasizes that companies that lobbied on the changes of directors' remuneration disclosure regulation by the U.S. Security and Exchange (SEC) had the ROA and ROE improved by 0.5 percent and 3 percent, respectively. Following the previous results, this study expects consistent hypothesis on the link between directors' remuneration disclosure and accounting performance as below:

H3: Firms disclosing the directors' remuneration process and practices have a positive and significant impact on financial performance

In summary, Table 20 illustrates all four hypotheses employed in this chapter that will investigate the impact of directors' remuneration disclosure towards firm value, in the market and financial performance.

Table 20
Summary of hypotheses

Hypothesis statement	
H1	Firms disclosing the directors' remuneration process and practices have a significant and positive impact on firm value
H2a	Firms disclosing the directors' remuneration process and practices in non-financial sector have a significant impact on firm value
H2b	Firms disclosing the directors' remuneration process and practices in financial sector have a significant impact on firm value
H3	Firms disclosing the directors' remuneration process and practices have a positive and significant impact on financial performance

3.3 Research Methodology

3.3.1 Development of empirical models

This study examines the impact of directors' remuneration disclosure in the annual report towards firm value. The impact is examined in two different ways. First, a univariate analysis is performed and continued by correlation analysis where the correlation coefficients between disclosure indices and firm value are estimated. Secondly, a multivariate analysis is undertaken by adopting several firm characteristics and profitability control variables to assess the effects of comprehensive disclosure of directors' remuneration. The disclosure index was extracted from the annual reports of the sampled companies where it is publicly available in the Bursa Malaysia website, while the remaining variables used in this study were obtained from Bloomberg database.

The signals of good governance from comprehensive disclosure of directors' remuneration in the annual report, along with the resultant effects on the reduced cost of capital and information asymmetry are readily perceived by the investors and the stakeholders. Therefore, this study expects to empirically discover the impact of disclosing directors' remuneration practices towards firm value in Malaysia, where the disclosure practices are very much voluntary basis and less enforcement is placed for the mandatory requirements. To facilitate this objective, normal OLS regression was employed using the equation below:

$$\text{Tobin's Q} = \propto + \beta_1 DISC + \beta_2 LGTA + \beta_3 LEV + \beta_4 GROW + \beta_5 EPS + \beta_6 IND + \beta_7 CRIS + \beta_8 YEAR + \acute{\varepsilon} \qquad (1)$$

Where,

Tobin’s Q	=	value of Tobin’s Q;
β0	=	value of the constant;
DISC	=	disclosure of directors’ remuneration index;
LGTA	=	log of total assets;
LEV	=	leverage;
GROW	=	sales growth;
EPS	=	earnings per share;
IND	=	industry dummy;
CRIS	=	crisis dummy;
YEAR	=	eight years dummies from 2007 to 2014 inclusive.

3.3.2 Variables measurement

3.3.2.1 Dependent variable

In line with the prior value relevance studies, firm value is extensively measured using Tobin’s Q which is defined as the sum of the firm’s market capitalization and the book value of debt, divided by the book value of total assets. This is consistent with Sheu, Chung and Liu (2010) who investigate value relevant of directors’ remuneration disclosure and other value relevant studies such as risk disclosure (Elbannan and Elbannan, 2015), corporate disclosure (Al-Akra and Ali, 2012) and mandatory disclosure (Abdullah *et al.*, 2015). For the alternative dependent variable, return on assets (ROA) is employed in this study as a proxy of accounting-based performance following Ararat, Black and Yurtoglu (2017), Qiu, Shaukat and Tharyan (2016) and Haniffa and Hudaib (2006). ROA is measured as earnings before interest and tax divided by total assets (EBIT/total assets).

3.3.2.2 Independent variable

Consistent with Sheu, Chung and Liu (2010) who investigate value relevant of directors' remuneration disclosure in Taiwan, the only independent variable tested in this study is directors' remuneration disclosure among FTSE30 companies in Malaysia (DISC). DISC refers to the information disclosure on directors' remuneration that has been converted into a disclosure index for measurement purposes.

3.3.2.3 Control variables

Based on previous research, control variables employed in this study come under two categories, i.e. firm characteristics and profitability (Abdullah *et al.*, 2015; Ntim, Opong and Danbolt, 2012; Sheu, Chung and Liu, 2010; Hassan *et al.*, 2009). Firm characteristics include firm size (LGTA), leverage (LEV) and growth (GROW) while profitability is proxy by earnings per share (EPS). Firm size has been used as the main control variable in the past value relevance studies in view that large firms have larger asset base, more established to secure external finance and higher number of employee, hence highly valued by the market (Uyar and Kiliç, 2012; Baek, Kang and Suh Park, 2004). However, past findings in the emerging countries show that smaller firms especially in weak legal system which highly in demand of external financing and have better growth opportunities adopt better governance that leads to higher market value (Ntim, Opong and Danbolt, 2012; Hassan *et al.*, 2009; Klapper and

Love, 2004). Given the mixed literature, this study predicts that firm size, measured using natural log of total assets will relate either positively or negatively to Tobin's Q.

Similar to firm size, leverage has a mixed literature on the value relevance studies. Traditionally, highly leveraged firms are associated with higher monitoring costs which subsequently reduce firm value (Jensen and Meckling, 1976). Some literature noticed a negative and significant relationship between highly leverage firms with firm value due to the financial risk such as lack of resources to cover the reporting costs (Maizatulakma *et al.*, 2015; Orens, Aerts and Lybaert, 2009). In contrast, certain scholars suggest that leverage helps to create firm value by allowing the management to signal its transparency in cash flow distribution and to be closely monitored by the financial institutions (Al-Akra and Ali, 2012; Jensen, 1983). Due to the mixed literature, this study expects either positive or negative relationship with Tobin's Q. Consistent with Eng and Mak (2003), leverage is computed by the ratio of the book value of total debt to the book value of total assets.

Unlike firm size and leverage, the literature on growth and profit in the value relevance studies provide a consistent positive impact on firm value (Abdullah *et al.*, 2015; Uyar and Kiliç, 2012; Hassan *et al.*, 2009; Beiner, Drobetz and Schmid, 2006). Consistent with the effort by the government of Malaysia on the continuation of Capital Market Masterplan 2.0 (CMP2) for a period from 2011 to 20121 that aim to ensure the stability and growth in the market, improving firm's growth indicates that the company has good prospects in the future. Hence, it is expected to be highly valued by the market. Similarly, profitable companies usually have a positive relationship with firm value since higher performance has better prospects than non-profitable companies. Specifically, previous studies on value-relevance prove that profits lead to higher market value (Sheu, Chung and Liu, 2010; Hassan *et al.*, 2009). In summary, growth which is measured using current year sales ratio to previous year's sales and profit, proxy by earning per share (net income as at year end over the respective share capital) is expected to be positively related to Tobin's Q.

On top of that, this study employs industry type (IND) as control variable following prior value relevance studies (Abdullah *et al.*, 2015; Al-Akra and Ali, 2012; Hassan *et al.*, 2009). Due to a small number of observations in the current study, the industry variable is measured using dummy variable, where 1 equals to the financial sector, while 0 equals to the non-financial sector. The significant role of a banking sector as the prominent suppliers of capital in Malaysia is expected to be valued differently by the investors (Ball, Robin and Wu, 2003). However, there seems to be limited prior studies on the value relevance of financial sector towards the firm value that hinders any prediction on the relationship. Thus, in consistent with Hassan *et al.*,(2009), this study predicts that industry variable will relate either positively or negatively towards Tobin's Q. Finally, the study includes year effect (YEAR) for the eight (8) years of sampling period and crisis effect (CRIS) for year 2007 and 2008 using dummy variable, where 1 refers to the crisis years of 2007 and 2008, while 0 refers to the non-crisis years (i.e. 2009 – 2014). As far as the data is concern, all variables are obtained from Bloomberg and DataStream terminals.

3.3.3 Robustness test/sensitivity analysis

3.3.3.1 The problem of endogeneity

Previous literature in management suggest that this research is plagued with endogeneity problems (Arora and Sharma, 2016; Abdallah, Goergen and O'Sullivan, 2015). Wintoki, Linck and Netter (2012) argue that this problem is exacerbated in corporate governance studies due to the uncertainty of causality between the variables tested, e.g. good governance contributes towards the performance, or the causation is reversed, i.e. high performance leads to better governance. Failure to consider this endogeneity issue in any empirical research could affect in producing biased and inconsistent results. For example Wintoki, Linck and Netter (2012) found a significant negative relation between board size and firm performance in using normal OLS but the result change to insignificant in the dynamic OLS model that takes into account the endogeneity concern. Therefore, addressing the endogeneity issue has been in the limelight among the current literature (Abdallah, Goergen and O'Sullivan, 2015; Antonakis *et al.*, 2014; Reeb, Sakakibara and Mahmood, 2012).

Theoretically, endogeneity may arise due to two conditions. First is due to the omission of explanatory variables in the regression which result in the error term being correlated with the explanatory variables. And secondly is due to the dependent variable being influenced by one or several explanatory variables which in turn are influenced by the dependent variable. The first type of endogeneity is where dependent and independent variables are in a question affecting each other while the second type is where past realizations of the dependent variable influence current realization of one or more of the explanatory variables. Further, this study utilizes a methodology that controls for the endogeneity of voluntary disclosure of directors' remuneration in assessing its impact on firm performance and applies panel data estimation technique in producing reliable results of value relevance tests with minimum ambiguity.

In addressing the potential problems that endogeneity poses, this study specifically follows the seven steps suggested by (Larcker and Rusticus, 2010). The first step is to precisely describe the nature of the endogeneity problem so that the issue becomes clearer. A clear description of the endogeneity problem assists the researcher in selecting the right empirical approach to potentially mitigate the problem and also help the readers to evaluate the appropriateness of the approach. The second step is to explore the various alternative ways of solving the endogeneity problem, including the econometric and non-econometric solutions (Ntim, 2009). The third step is to justify the choice of instruments. Larcker and Rusticus (2010) suggest that natural experiment, where the researchers try to find the natural events that influence the variable of interest is the ideal approach. However, it is rarely available. It is also suggested to conduct exogeneity test on the key explanatory variable to determine the existence of an endogeneity problem.

Once the first three steps have been clearly defined, the fourth and fifth steps are to evaluate the first-stage and second-stage results of the actual estimation. The first-stage result should be reported along with the diagnostics information that discusses whether the instruments have the expected signs, magnitudes that are reasonable and coefficients that are statistically significant at conventional levels (Larcker and Rusticus, 2010, p.197). If the first-stage results are considered adequate, the second-stage results can be better estimated. This is because when the instruments have low explanatory power in the first stage, it is common that the estimated coefficients on the instrumented variable will become unreasonably large or small in the second stage (Larcker and Rusticus, 2010, p.197). Thus, this condition could justify that the IV estimates are not reliable enough to replace the OLS estimates. The sixth step is to run the over-identifying restrictions test when multiple instruments are used (which is the preferred case) and finally, to compare the results between IV and OLS estimation methods in determining whether 2SLS results are preferred over the OLS results.

3.3.3.2 Test for endogeneity

(a) Step 1:

In this study, the endogeneity problem might arise because the independent variable is also simultaneously determined by the dependent variable (Wooldridge, 2003). While it is assumed that firms providing more information on their remuneration process and amount (proxy by high DISC scores) will be valued more highly, it may be that firms with higher market value (proxy by high Tobin's Q) are rather more likely to disclose more transparent information on their remuneration practices due to better investment opportunity (Ntim, Opong and Danbolt, 2012).

(b) Step 2:

In exploring various alternative ways to solve the endogeneity problem, both econometric and non-econometric methods can be employed. For a non-econometric solution, this study adopts two (2) approaches as suggested by the previous econometric studies, (1) panel data and (2) control variables. As mentioned in empirical chapter one, the sample of this study covers data from 2007 to 2014 (eight years) for the FTSE30 companies in Malaysia. This is consistent with prior scholars who suggest that panel data set is important because it helps in reducing the endogeneity problem (Larcker and Rusticus, 2007; Börsch-Supan and Köke, 2002). Further to that, there are four control variables (firm size, leverage, sales growth and profitability) included in this model to mitigate the possible omitted variable endogeneity problems (Larcker and Rusticus, 2010). With regard to an econometric solution, an instrumental variable (IV) model will be estimated to deal with the potential measurement error that caused by the endogeneity problem. Following Larcker and Rusticus (2010), this study addresses the endogeneity problems using the widely used two-stage least squares (2SLS) technique.

(c) Step 3:

Instrument variables method estimation begins with the selection of a set of variables that are assumed to be exogenous before using the two-stage-least-squares (2SLS) to estimate the coefficients in the regression model. In view that Malaysia has a relatively low governance index, this study adopts the internal governance mechanisms that consist of (1) ownership structure and (2) board composition as instruments variables to control the impact of endogeneity. A good instrument should correlate with DISC but should not be correlated with the error term in the equation. Ownership structure and board composition meet these requirements essentially because prior studies suggest that they are associated with DISC but not entirely endogenous to Tobin's Q. Ownership structure and board composition are not solely determined by the firm itself but also determined by other factors, such as country's governance regulation. This is consistent with Sheu, Chung and Liu (2010) who employs the same mechanism in Taiwan, an emerging country that has a similar low rating in governance index.

Ownership structure consists of government (GOV), family (FAM) and foreign (FOR) ownership. Literature on government ownership have always contributed to more disclosure (Ntim and Soobaroyen, 2013; Wang, O and Claiborne, 2008; Eng and Mak, 2003). These empirical studies suggest that firms with more government-owned shares disclosed more information voluntarily to the market than firms with less or no-government-owned shares. Khan, Muttakin and Siddiqui (2013) further found that foreign-owned firms make a higher amount of CSR disclosure. Barako, Hancock and Izan (2006) support this notion in view that most of the foreign-owned firms are multinational subsidiaries, hence they require higher reporting requirement standards. Family ownership, which is common to many Asian markets, proved that traditional influences of family control on the board of directors appear to have the strongest yet the negative effect on voluntary disclosure in emerging countries (Mohd Ghazali and Weetman, 2006; Ho and Shun Wong, 2001).

Prior studies also highlight that instruments determining disclosure are attributable to the board composition level. Laksmana (2008) and Sheu, Chung and Liu (2010) provide strong evidence that independent board (B_IND) and board size (B_SIZE) are positively related to directors' remuneration disclosure in the US and Taiwan, respectively. Moreover, Liao, Luo and Tang (2015) suggest that more independent directors on board show a higher tendency to be ecologic transparent. Finally, the last step in step 3 includes conducting an exogeneity test to identify the existence of an endogenous relationship between DISC and Tobin's Q. Following prior studies (Ntim, Opong and Danbolt, 2012; Elbannan and Elbannan, 2015; Beiner, Drobetz and Schmid, 2006) the widespread Durbin-Wu-Hausman exogeneity test is conducted. Subsequently, the next step is to specify a simultaneous system of equations that is going to test the hypothesized relations.

(d) Step 4 and 5:

As discussed earlier, DISC is endogenously related to firm value, either essential control variables have been omitted from equation (1) or that DISC itself has been imperfectly measured. According to Larcker and Rusticus (2010), the two potential endogeneity problems can be addressed by estimating an IV model. The IV technique involves a two-stage procedure. In the first stage, an appropriate instrument is determined for DISC which correlates highly with DISC but uncorrelated with the structural error term in the equation. The second stage estimation replaces DISC by the proxy variable (the instrument), as determined in the first stage. In this case, the coefficient on the DISC will be both consistent and unbiased. However, the IV technique has two main limitations that need to be noted by researchers. First, it is extremely difficult to find a set of instruments that fully satisfy to determine the investigated variable (in this case, DISC). Secondly, even if the instruments found are highly correlated with DISC, confirming its validity and relevance is not easy (Larcker and Rusticus, 2010).

Consistent with previous literature, larger firms are more likely to make transparent CG disclosure (Beiner, Drobetz and Schmid, 2006). This is because larger firms have more resources hence are better in producing comprehensive information on remuneration in the annual report. Therefore it is expected that firm size, measured using log of total asset to be positively associated with DISC. With regards to leverage, in countries where financial institutions are a primary source of funds, there is an expectation that firms with large sums of debt on their balance sheet will disclose more information in the annual reports to increase their chance of getting funds (Barako, Hancock and Izan, 2006). Leverage is computed as the ratio of the book value of total debt to the book value of total assets. Hence, disclosing voluntary information on directors' remuneration practices signal a better disclosure practice in terms of other financial information. With that, a positive association is expected between leverage and DISC.

Similar to leverage, firms with growth opportunities are also expected to make comprehensive CG disclosure in order to attract cheaper external capital. Hence, it is predicted that growth (measured using the variance of the current year and previous year's sales over previous year's sales) will correlate positively with DISC. The last control variable included in this first stage of 2SLS equation is profitability which is measured using EPS, derived from net income as at year end over the respective share capital. It is more likely that the management of a profitable company will be more transparent to the market in order to gain higher firm's value, especially in disclosing the remuneration process of compensating the directors (pay-performance relationship) (Barako, Hancock and Izan, 2006). Therefore, it is also predicted that EPS is positively associated with DISC. For the instrumented variables, ownership structure variables are measured using government, family and foreign shareholdings, i.e. the percentage of shares owned by the substantial shareholders disclosed in the annual report. Board size and board independence are the measured using the number of board members and the percentage of non-executive directors from the total board members, respectively.

Therefore, the first stage regression to be estimated is specified as:

$$P\_DISC = \propto + \beta_1 LGTA + \beta_2 LEV + \beta_3 GROW + \beta_4 EPS + \beta_5 GOV + \beta_6 FOR + B_7 FAM + \beta_8 B\_SIZE + \beta_9 B\_IND + \beta_{10} IND + \beta_{11} CRIS + \beta_{12} YEAR + \acute{\varepsilon} \qquad (2)$$

Using the above instruments that are based from previous literature, the second stage of regression involves the OLS estimation in the valuation model where everything remains the same as defined in equation (1) except that the predicted values of comprehensive DISC, i.e. P_DISC from equation (2) is used as the instrument for DISC:

$$Tobin's\ Q = \propto + \beta_1 P\_DISC + \beta_2 LGTA + \beta_3 LEV + \beta_4 GROW + \beta_5 EPS + \beta_6 IND + \beta_7 CRIS + \beta_8 YEAR + \acute{\varepsilon} \qquad (3)$$

(e) Step 6 and 7:

In case of over-identified models (i.e. where the number of instruments exceeds the number of endogenous regressors), this study follows Elshandidy, Fraser and Hussainey (2013) and Beiner, Drobetz and Schmid (2006) by using a Sargan and Basmann statistical tests to determine the appropriateness of the instruments under the assumption that at least one of the instruments is valid. Finally, a comparison between OLS and IV approach is further analysed in section 3.4.4.

3.4 Result Analysis

3.4.1 Univariate analysis

Table 21
Summary statistics for all variables from 2007 to 2014

Variable	Obs (n)	Mean	Std. Dev.	Min	Med	Max
Tobin's Q (Q)	232	2.109	2.321	0.675	1.247	15.068
Disclosure Index (DISC)	232	0.509	0.121	0.261	0.522	0.889
Return on asset (ROA)	232	7.672	11.750	-4.957	4.489	72.360
Leverage (LEV)	232	23.210	16.472	0.000	19.345	65.890
Log Total Asset (LTA)	232	10.457	0.636	8.378	10.471	11.806
Growth (GROW)	232	0.087	0.202	-0.670	0.070	1.250
Earnings Per Share (EPS)	232	1.827	3.366	-0.400	0.800	26.100

Obs (n) = Observation

Table 21 reports descriptive statistics of the variables included in the regression analyses. It shows that Tobin's Q range from 0.68 to a maximum of 15.07 with an average of 2.11, indicating wide variation in market valuation among the sampled firms. The disclosure index ranges from a minimum of 26 percent to a maximum of 89 percent with the average firm complying with 51 percent of the 15 items of directors' remuneration disclosure provisions analysed. The percentage indicates that a high heterogeneity exists when it comes to the importance that top 30 Malaysian firms attach to the required disclosure on directors' remuneration. The control variables suggest wide spreads that implies the disclosure provisions and the sampled firms have been appropriately selected, thus reduces the possibility of sample selection bias.

3.4.2 Bivariate analysis

Table 22
Pearson's correlation for all variables (n = 232)

Variables	Q	ROA	DISC	LGTA	LEV	GROW	EPS
Q	1.00						
ROA	0.81*	1.00					
DISC	0.21*	0.08	1.00				
LGTA	-0.50*	-0.53*	0.15*	1.00			
LEV	0.11	0.04	0.15*	-0.11	1.00		
GROW	-0.05*	-0.05	0.04	0.04	0.05	1.00	
EPS	0.59*	0.60*	-0.12	-0.28*	-0.01	-0.01	1.00

Sample period is from 2007 to 2014
*Correlation is significant at 5 percent levels

Table 22 contains the correlation matrix for the variables included in this study to investigate the potential of multicollinearity. Apart from the expected high and significant correlations between ROA and Q, the correlations among the other variables are relatively low indicating that no major multicollinearity problems exist. Of interest, the DISC is significant and positively related firm value proxy by Q in this study, suggesting that increased disclosure of directors' remuneration tend to be associated with a higher market value. Additionally, there are positive relationships between the control variables and firm performance, for instance, LEV and EPS while negative relationships are noted between LGTA and GROW to firm value. However, to draw a firm conclusion about the relationship between disclosure level and firm value, it is advisable to analyse the result from a multiple regression that controls for the influence of other variables affecting firm value.

3.4.3 Multivariate analysis

3.4.3.1 Overall sample

Given the panel nature of the data collected, the regression is estimated using the basic OLS regression model specified as follows:

$$\text{Tobin's Q} = \propto + \beta_1 DISC + \beta_2 LGTA + \beta_3 LEV + \beta_4 GROW + \beta_5 EPS + \beta_6 IND + \beta_7 CRIS + \beta_8 YEAR + \acute{\varepsilon} \qquad (1)$$

Table 23 contains OLS regression results for the model based on the market value (Tobin's Q). The variable of focus in this model is the directors' remuneration disclosure. Column 3 of Table 23 presents the results of a single regression of Tobin's Q on directors' remuneration disclosure index alone, whereas column 4 reports the multivariate regression of Tobin's Q on directors' remuneration disclosure index and control variables for the combined sample. Column 3 of Table 23 indicates that the F-value is statistically significant at the 1% level, suggesting that the null hypothesis that the coefficient of directors' remuneration disclosure is equal to zero can be rejected. The result implies that the regression model has explanatory power and it is a good model to work on. The adjusted R^2 is approximately 4%, which means that at least 4% of the variations in the sampled firms' market value can be explained by the directors' remuneration disclosure.

Table 23
OLS regression results of the model based on Tobin's Q

	Expected sign	Tobin's Q (Without CV)		Tobin's Q (full model)	
Adjusted R2		.042		.601	
F-value		10.25 (.000)	***	11.61 (.000)	***
No of observations		232		232	
Constant		.102 (.528)		19.828 (4.938)	***
DISC	+	3.942 (1.232)	***	5.864 (.960)	***
Firm size (LGTA)	+ / -			-2.105 (.507)	***
Debt (LEV)	+ / -			.014 (.007)	**
Growth (GROW)	+			-.455 (.314)	
Profitability (EPS)	+			.346 (.041)	***
Year					
2008				-.134 (.386)	
2009				-.100 (.360)	
2010				-.091 (.349)	
2011				.039 (.324)	
2012				.166 (.411)	
2013				.304 (.429)	
2014				.143 (.468)	
Industry	+ / -			1.389 (.496)	***
Crisis (2007, 2008)				.143 (.468)	

Robust standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Table 23 further indicates that F-value is statistically significant for the pooled sample. Including the control variable leads to substantially higher adjusted R2 of the pooled sample regression (approximately at 60%) implying that the observed difference in the ability of directors' remuneration disclosure to explain the variations in Tobin's Q ratio is accounted for by the contribution of the control variables. With respect to the directors' remuneration disclosure index, the regression results show some level of sensitivities when the control variables are added. This is evidenced by the higher coefficient from 3.94 to 5.86 (with the sign remains unchanged), emphasizing on the importance of control variables in providing a better explanatory model, particularly for directors' remuneration disclosure.

The coefficient of Tobin's Q on the regression model of Column 4 in Table 23 is significantly positive, thereby providing support for H1 in this chapter. The result posits that firms providing voluntary disclosure of directors' remuneration process and practices will lead to a higher market value. The economic significance of this is provided by the coefficient of 5.86 on comprehensive disclosure in Table 23, which indicates that ceteris paribus, if a firm discloses the remuneration practices and detail amounts paid to the board of directors, then this implies that a market value enhancement of 5.86 percentage points. Most corporate governance studies suggest that commitment to good governance in the form of greater transparency of corporate governance practices are rewarded with higher market valuation (Ararat, Black and Yurtoglu, 2017; Ntim, Opong and Danbolt, 2012; Baek, Kang and Suh Park, 2004; Mitton, 2002). More importantly, this result provides further evidence that committed firms in comprehensively disclosing the directors' remuneration amount and practices, being one part of the corporate governance framework, do have a discernible impact in the firm value.

Furthermore, disclosing directors' remuneration and its related process is important in allowing shareholders to assess the pay-performance link that highlights the managerial ability. Prior research has shown that firm value is also determined by the managerial ability, apart from non-managerial factors (Chang, Dasgupta and Hilary, 2010; Fee and Hadlock, 2003). Managerial ability derives from experience, tacit in nature and difficult to imitate, suggesting that it is a crucial resource for creating shareholders' value (Holcomb, Holmes and Connelly, 2009). Therefore, this result justifies the common questions on whether a large sum of remuneration paid to the top management team, particularly the CEO is sufficiently offset by their contribution in creating the firm's value. More specific evidence in Hayes and Schaefer (1999) emphasize that managerial ability is substantive, where firm losing their managers to other firms experience a detrimental in the abnormal return of 1.51 percent. In view that this percentage only represents the value of incumbent and the newly appointed manager, it is reasonable to predict that the total value of managerial ability reflected in the firm value is much higher.

From an emerging market perspective, the result complements prior literature that specific corporate governance disclosures are value relevant particularly in a weak investor protection country like Malaysia (Morris, Pham and Gray, 2011; Klapper and Love, 2004). Therefore, this study highlights the importance of disclosing directors' remuneration, being one of the most proprietary information reflecting the firm's internal strategy in gaining the market confidence that subsequently leads to higher firm value. Characterized by poor enforcement in the regulatory system, the market in Malaysia seems to be compensating firms that comply with the remuneration disclosure regulation, particularly on voluntary requirements. This is possibly evidenced by the current study where firms that continue to disclose individual directors' remuneration as recommended by the original Malaysian Code on Corporate Governance 2000 (MCCG 2000), even when the recommendation has been removed in the updated CG code, i.e. MCCG 2012, are greatly valued by the market. Consequently, the result implies that firms which continue to commit in providing disclosure on directors' remuneration including the voluntarily individual details managed to gain investors' trust in the context of emerging market.

On top of that, this finding is further justified by two major events that occurred during the period under review, i.e. 2007 to 2014. Both events had placed firms in a difficult situation especially in disclosing directors' remuneration-related matters. First, the global financial crisis in 2007-2008 that has increased the opportunity of managerial actions to react adversely towards minority shareholders by setting the directors' compensation that is unjustified by the performance (Morris, Pham and Gray, 2011). Hence, the result suggests that market rewards firms which disclose comprehensive information on directors' remuneration as it could be easily detectable if the management acts in ways, not in the interest of minority shareholders. Second, the 12th general election of Malaysia held in 2008 witnessed the government lost its two-thirds majority in parliament for the first time after 40 years which had led to a political hiccup (Fung, Gul and Radhakrishnan, 2015). Being transparent about how directors being remunerated and disclosing directors' remuneration amount in a period where the country's political atmosphere had its turning point exposed the directors to personal security risk. Thus, the market rewards firms that continue to be transparent on remuneration despite many firms in the Malaysian corporate sector has a close connection with the government, on either politically or individually basis.

Finding of this study should be of interest to the management team where they can consider allocating companies' resources towards a transparent disclosure of directors' remuneration in the annual report. Such investment will benefit the firms not only in a higher market value but for efficient utilisation of internal financial resource in the companies as well as being the remedy for information asymmetry between inside shareholders and stakeholders, including the minority shareholders. Likewise, the finding provides strong motivation for authorities in other developing countries to comprehensively and voluntarily disclose directors' remuneration as it conveys a signal that the firms have fewer agency problems and better governance structure.

Finally, the control variables depicted in Table 23 are generally consistent with the predicted signs and prior studies. For example, the firm size which is measured using log total assets (LGTA) is negative and significantly related to Tobin's Q in firms that comprehensively disclose their directors' remuneration (Sheu, Chung and Liu, 2010). The result is consistent with Maizatulakma *et al.*, (2015) who noted a negative association between firm size (proxy by total asset) and firm value in the risk disclosure studies among Malaysian firms. Amran and Che Ahmad (2009) also found a similar result in examining the corporate governance mechanism towards firm value for Malaysian firms in the earlier sample of the study period. This study also tests the firm size using log market value and log total sales for robustness purpose, and a similar result is noted.

Companies' debt (LEV) and profitability (EPS) are positively and significantly correlated with firm value as depicted in Table 23. This is consistent with Abdullah *et al.*, (2015) who also noticed a positive and significant association between LEV and Tobin's Q for firms that comply with FRS mandatory disclosure in Malaysia. The positive link between EPS and Tobin's Q is consistent with Hassan *et al.*, (2009) who suggest that profitable companies provide better signal to the shareholders, hence highly valued by the market. Unlike LGTA, LEV and EPS, growth opportunity (GROW) is insignificant in this sample of study, contrasting the expectation that fast-growing companies receive a higher valuation from the market. The result is consistent with prior studies that found no effect of growth on and firm value (Qiu, Shaukat and Tharyan, 2016; Uyar and Kiliç, 2012). On the same note, crisis effect tested in this study also shows insignificant association with firm value. Lastly, the result for industry type is positive and significant, which will be further discussed in the next section.

3.4.3.2 Sub-samples (Financial sector vs non-financial sector)

The literature shows that it is important to take into account the industry categories since different industries may have different stakeholders (Chen, Feldmann and Tang, 2015; Griffin and Mahon, 1997). Therefore this study further considers industry effect towards firm value for companies that disclose the directors' remuneration in the annual report. Due to the small sample, the industries are divided into financial and non-financial companies. Column 3 of Table 24 portrays the regression model of directors' remuneration disclosure for non-finance companies with 176 observations while Colum 4 is for finance companies with 56 observations. Results for non-finance companies are mostly consistent with the overall sample with the adjusted R^2 are approximately at 59%. The R^2 value is higher from Sheu, Chung and Liu (2010) who reported adjusted R^2 of 36% for the pooled regression of the Tobin's Q value on directors' remuneration disclosure and control variables, suggesting that the current study has higher variation in the sampled firms' market value that can be explained by similar variables.

Table 24
OLS regression results for financial and non-financial sectors using Tobin's Q

	Expected sign	Non-financial		Financial	
Adjusted R2		.590		.564	
F-value		9.26 (.000)	***	5.75 (.000)	***
No of observations		176		56	
Constant		18.939 (5.090)	***	.194 (.252)	
DISC	+	7.010 (1.236)	***	.090 (.052)	*
Firm size (LGTA)	+ / -	-2.080 (.516)	***	.082 (.025)	***
Gearing (LEV)	+ / -	.014 (.001)	**	-.006 (.002)	***
Growth (GROW)	+	-.626 (.375)	*	-.018 (.028)	
Profitability (EPS)	+	.350 (.042)	***	.019 (.014)	
Year Effects		Yes		Yes	
Industry Effects		-		-	
Crisis Effects		Yes		Yes	

Robust standard errors in parentheses
*** $p<0.01$, ** $p<0.05$, * $p<0.1$

Remarkably, DISC index for the non-financial sector has a higher coefficient of 7.01 as compared to 5.86 in the full sample. The result implies that ceteris paribus, non-financial firms that disclose comprehensive disclosure of directors' remuneration with the detail amounts paid to the board enjoy higher market value by 7.01 percentage points. The result is comparatively higher than other value relevance studies that employ disclosure as the explanatory variable among the non-financial industry in Malaysia. For instance, Maizatulakma *et al.* (2015) found that risk management disclosure has a positive and significant ($p < 0.01$) coefficient of 0.004 towards firm value in non-financial firms listed on Bursa Malaysia, suggesting that the Malaysian market prefers remuneration disclosure. Importantly, this finding supports Sheu, Chung and Liu (2010) who emphasized that a low commitment to the overall disclosure of compensation are of very little help in the creation of market value among non-financial institutions in Taiwan. In summary, providing support for H2a, this finding provides strong motivation for non-financial firms in other emerging market to commit on remuneration disclosure as it conveys that the firm has a better governance structure even in a country where the shareholders' protection is weak.

Result for finance industry with 56 observations in Table 24 shows 56 percent of R^2, which means that is 56 percent of the variation in the firm value of Q is explained by the disclosure of directors' remuneration and the four control variables. However, findings for finance industry in this sample provide a different result of coefficients as compared to the full sample and non-finance industry. As depicted in Table 24, DISC has a positive and significant impact towards Tobin's Q at a very small coefficient, i.e. approximately at 0.09, indicating that DISC contributes less on firm value among the banking sector, as compared to the non-banking sector. Indirectly, the result suggests that the market for banking industry highly value other types of disclosure rather than information disclosed on directors' remuneration in the annual report. This is consistent with the prior studies that investors in the financial sector prefer information that demonstrates the bank's stability to continue to survive such as capital adequacy ratio and non-performing loan ratio (Bai and Elyasiani, 2013; Shehzad, de Haan and Scholtens, 2010; Ahmad, Ariff and Skully, 2008). Furthermore, the result is also justified by the investors for banking industry who expect the financial institutions to comply with the regulatory requirement like the Basel Committee recommendation on the minimum capital ratio.

On top of that, the very minimal impact of DISC on Tobin's Q encountered in this study is further justified by the decreasing disclosure trend of stock options during the sample period investigated (from 2007 to 2014), thus limiting the bank regulators, deposit insurers and other potential investors to scrutinize the pay-performance link among banking companies. The finding supports previous studies that recognized stock-based compensation as a preferable incentive in the banking industry as compared to short-term compensation in tying the bank management towards long-term performance (Bhagat and Bolton, 2014; Bebchuk, Cohen and Spamann, 2010; Chen, Steiner and Whyte, 2006). Since the central issue in the banking literature is risk-taking behaviour, it is vital for the bank regulators to actively monitor the disclosure of stock option in mitigating the risk-taking incentive of managerial compensation. This implication is more crucial to be conducted among the banks included in the FTSE30 list as they are the largest banks that significantly contribute to the stability of the overall financial system in Malaysia. In summary, the result supports H2b that DISC has a slight impact on firm value among the financial sector companies.

For control variables, this study discusses the impact of financial and non-financial sectors comparatively. This is because the result for the non-financial sector is consistent with the overall sample in Table 23. However, the findings for financial sector provide a different result as compared to the non-financial sector. For example, LGTA is still significant at 99 percent level of confidence, but the direction has become positive in the financial sector. The result implies that larger banks are highly valued by the market since they are more able to afford a better and costly financial management system. Unlike non-finance industry, LEV for finance companies is significant but negatively related to Tobin's Q. This is consistent with the expectation that highly leverage banks provide negative signals to the shareholders and stakeholders in a country that highly dependent on funds from the banks. Hence it is rated as low firm value. The remaining control variables of GROW and EPS are found to be significantly related to Tobin's Q for the non-financial industry. The result implies that profitability is only significant in influencing firm value among the non-banking sector, but not for firms in the banking sector.

DISC is also found to be positive and significant at 10 percent level for the banking industry as depicted in Table 24. Although the coefficient is small, the result still proves that disclosure of directors' remuneration amount and practices (DISC) is value relevant in the banking sector. Based on the industrial difference between finance and non-finance analysis above, DISC is found to have a significant and positive impact towards firm value. The finding implies that disclosing a consistent directors' compensation contribute to higher Q. Hence it is value relevant to the major industry in Malaysia, i.e. the banking and non-banking sectors for the sample of this study.

3.4.3.3 Alternative analysis (Financial performance)

The empirical model for the alternative analysis using Return on Assets (ROA) is as below:

$$ROA = \propto + \beta_1 DISC + \beta_2 SIZE + \beta_3 LEV + \beta_4 GROW + \beta_5 EPS + \beta_6 IND + \beta_7 CRIS + \beta_8 YEAR + \acute{\varepsilon} \qquad (4)$$

Pool OLS regression results for the model based on the accounting variable, i.e. ROA is reported in Table 25. Similarly, the independent variable investigated in this model is directors' remuneration disclosure (DISC). Column 3 of Table 25 reports the results of a single regression of ROA on DISC index alone, whereas column 4 reports the multivariate regression of ROA on DISC index and control variables for the combined model. Unlike the result for Tobin's Q, Column 3 of Table 25 reports that F-value is not statistically significant and this is consistent with the insignificant P values for the individual coefficients in this model, which are DISC and the constant. Therefore, to test whether the observed theoretically relationships could be spuriously caused by some omitted variables, the control variables are included in the regression model in Column 4 of Table 25.

Table 25
OLS regression results of the model based on ROA

	Expected sign	ROA (without CV)	ROA (full model)	
Adjusted R2		.006	.553	
F-value		1.61 (.206)	16.16 (.000)	***
No of observations		232	232	
Constant		3.774 (2.757)	89.143 (26.007)	***
DISC	+	7.658 (6.038)	20.881 (4.474)	***
Firm size (LGTA)	+ / -		-8.862 (2.706)	***
Gearing (LEV)	+ / -		-.007 (.046)	
Growth (GROW)	+		-2.946 (1.510)	*
Profitability (EPS)	+		1.751 (.226)	***
Year				
2008			-2.414 (2.929)	
2009			-3.658 (2.906)	
2010			-3.309 (2.925)	
2011			-2.913 (2.997)	
2012			-3.395 (3.085)	
2013			-3.150 (3.149)	
2014			-3.268 (3.342)	
Industry	+ / -		2.518 (2.769)	
Crisis (2007, 2008)			-3.268 (3.342)	

Robust standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

The adjusted R^2 of the combined model in Column 4 of Table 25 (55%) is very much higher than the adjusted R^2 for the model without control variables in Column 3 of Table 25 (less than 1%). The statistic shows that in the combined model, 55% of the variations in the sampled firms' accounting performance (ROA) can be explained by the directors' remuneration disclosure. Regarding the independent variable, i.e. DISC, the sign of the coefficient remain unchanged from the single regression to the multiple regressions, but DISC becomes significant in the full sample of 20.881 ($p < 0.01$). The economic significance indicates that ceteris paribus, if a firm discloses the remuneration practices and detail amounts paid to the board of directors, then this implies that there is an improvement on the ROA by approximately 21 Malaysian Ringgit. Significant and positive coefficient encountered in this model is supported by prior corporate governance literature that accounting-based measure captures the effectiveness of governance mechanisms from the perspective of internal company's management (Haniffa and Hudaib, 2006; Hambrick and Finkelstein, 1995).

A recent study by Ntim, Opong and Danbolt (2012) prove that disclosing good corporate governance practices impacts positively on ROA, being robust to the alternative firm value of Tobin's Q. Therefore, this study corroborates the findings with a specific element of governance disclosure, namely the directors' remuneration and the related factors that determine it. Moreover, the findings highlight the importance of remuneration transparency that it leads to a better financial performance as compared to firm value. This is consistent with Lo (2003) who found similar impact for the US companies that had lobbied against the SEC's regulation of executive compensation disclosure. Lo (2003) observed that operating performance of the lobbying companies was lower before the regulation and subsequently improved their ROA by 0.5% after the regulation. Finally, the result complements prior corporate governance study in Malaysia by Haniffa and Hudaib (2006) who only found large board and ownership structure as part of the corporate governance elements that have a positive impact on ROA. Higher ROA found in this study also suggest that there is no potential evidence of contract rigging by the companies' CEO (Morse, Nanda and Seru, 2011).

3.4.4 Robustness test (2SLS technique)

There is no proof way to deal with the issue on endogeneity in any empirical accounting research. Hence this study closely follows the steps suggested by Larcker and Rusticus, (2010) in using the 2SLS technique to mitigate the undesirable impact of endogeneity on the reported result. To ensure that 2SLS is appropriate, this study conducted the Durbin-Wu-Hausman exogeneity test to test for the existence of an endogenous relationship between DISC and Q. The test rejects the null hypothesis that variables are exogenous at the 5 percent level as depicted in Table 27; hence the relationship is endogenous. Table 27 further reports the results of the validity of instruments using over-identifying restrictions (Sargan and Basmann statistics), and it indicates that the current instruments are valid and appropriate for use in the model. Thus, the result suggests that instrumental variable (IV) and 2SLS models are appropriate methodology to be used for estimations.

In the first stage, DISC is assumed to be determined by four (4) control variables and five (5) instrumented variables. However, correlation result shown in Table 26 between Tobin's Q and the remaining ten variables used in this chapter show that government ownership (GOV) and family ownership (FAM) are highly correlated at 76 percent, and this could lead to multicollinearity issue. Based on the variance inflation factor (VIF) testing, there is no severe multicollinearity noted in this study. Consistent with the previous chapter, two separate regressions are carried out to identify the individual effect of GOV (Model 1) and FAM (Model 2) in determining DISC in the first stage of the equation, as reported in Table 27.

Table 26

Pearson's correlation for all variables (n = 232)

Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Tob Q (1)	1.00										
DISC (2)	0.21*	1.00									
GOV (3)	-0.20*	0.17*	1.00								
FAM (4)	-0.16*	-0.39*	**-0.76***	1.00							
FOR (5)	0.53*	0.23*	-0.39*	-0.06	1.00						
B_SIZE (6)	-0.16*	0.47*	0.05	0.00	-0.09	1.00					
B_IND (7)	-0.17*	-0.08	0.17*	-0.20	-0.24	-0.33*	1.00				
LGTA (8)	-0.50*	0.15*	0.12*	0.01	-0.16*	0.37*	0.15*	1.00			
LEV (9)	0.11	0.15*	-0.22*	0.24*	0.25*	0.24*	-0.32*	-0.11	1.00		
GROW (10)	-0.05	0.04	-0.08	0.07	0.04	0.10	-0.10	0.04	0.05	1.00	
EPS (11)	0.59*	-0.12	-0.23*	-0.09	0.48*	-0.36*	-0.11	-0.28*	-0.01	-0.01	1.00

Sample period is from 2007 to 2014

*Correlation is significant at 5 percent levels

Model 1 of Table 27 represents the 1st stage of 2SLS equation using government ownership (GOV), foreign ownership (FOR), board size (BSIZE) and board independent (BIND) as the instrument variables to determine DISC. The 1st stage equation for model 1 is:

$$P\_DISC = \propto + \beta_1 LGTA + \beta_2 LEV + \beta_3 GROW + \beta_4 EPS + \beta_5 GOV + \beta_6 FOR$$

$$+ \beta_7 B\_SIZE + \beta_8 B\_IND + \beta_9 IND + \beta_{10} CRIS + \beta_{11} YEAR + \acute{\varepsilon} \quad (5)$$

Table 27
Effect of instrumental variables on firm value: Controlling for Endogeneity

Variables	Model 1				Model 2			
	(1) 1st Stage (DISC)		(2) 2nd Stage (Tobin's Q)		(3) 1st Stage (DISC)		(4) 2nd Stage (Tobin's Q)	
DICS / P_DISC	-		8.577 (1.432)	***	-		8.281 (1.305)	***
LGTA	-0.022 (0.016)		-2.131 (0.231)	***	-0.014 (0.015)		-2.128 (0.230)	***
LEV	0.000 (0.000)		0.0105 (0.007)		0.000 (0.000)	*	0.011 (0.007)	
GROW	0.020 (0.033)		-0.550 (0.510)		0.022 (0.031)		-0.540 (0.507)	
EPS	-0.003 (0.002)		0.354 (0.031)	***	-0.005 (0.002)	**	0.354 (0.031)	***
GOV	0.126 (0.025)	***	-		-		-	
FOREIGN	0.298 (0.047)	***	-		0.192 (0.045)	***	-	
BSIZE	0.026 (0.003)	***	-		0.022 (0.003)	***	-	
BIND	0.149 (0.065)	**	-		0.061 (0.063)		-	
FAMILY	-		-		-0.183 (0.025)	***	-	
Constant	0.320 (0.158)	**	18.94 (2.373)	***	0.391 (0.150)	***	19.041 (2.355)	***
Durbin	-		5.796	**	-		6.138	**
Wu-Hausman	-		5.561	**	-		5.898	**
Sargan statistics	-		6.422		-		6.506	
Basmann statistics	-		6.121		-		6.204	
Observations	232		232		232		232	
R-squared	-		0.583		-		0.587	
Industry effects	Included		Included		Included		Included	
Year effects	Included		Included		Included		Included	

Robust standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

The regression results under Column (1) in Table 27 for the 1st stage are consistent with the initial expectation, especially on the instruments variables that have been employed based on the previous corporate governance study and in line with Malaysian institutional environment. In particular, various monitoring mechanisms, including higher government ownership, higher foreign ownership, bigger board size and more independent board are found to lead to higher level of transparency. The result suggests that in a scenario when firms are given the discretion to choose the level of transparency, firms with higher level of shares owned by government and foreigners, as well as firms with bigger board members and higher board independence will provide better disclosure of directors' remuneration, thereby leading to higher market value. Therefore, the value relevance of Tobin's Q is re-estimated using equation (3) specified as:

$$\text{Tobin's Q} = \propto + \beta_1 P\_DISC + \beta_2 SIZ + \beta_3 LEV + \beta_4 GROW + \beta_5 EPS + \beta_6 IND$$
$$+ \beta_7 CRIS + \beta_8 YEAR + \acute{\varepsilon} \qquad (3)$$

Statistically significant and positive effect of P_DISC on Tobin's Q is discernible in Model 1 under Column (2) of Table 27, implying that the evidence of a positive association between directors' remuneration disclosure and firm value is not significantly sensitive to endogeneity problems. On top of that, a higher coefficient is noticed on P_DISC of 8.577 as compared to DISC of 5.864 in Table 23 using basic OLS technique. This finding supports the previous evidence that instrumented parts of comprehensive directors' remuneration disclosure to predict Tobin's Q is stronger than the un-instrumented parts (Ntim, Opong and Danbolt, 2012).

Model 2 of Table 27 represents family ownership (FAM) replacing GOV due to the potential multicollinearity between FAM and GOV. Therefore, similar equation (5) is used to determine DISC in the 1st stage, except for variable GOV is replaced by FAM as below:

$$P\_DISC = \propto + \beta_1 LGTA + \beta_2 LEV + \beta_3 GROW + \beta_4 EPS + \beta_5 FAM + \beta_6 FOR + \beta_7 B\_SIZE + \beta_8 B\_IND + \beta_9 IND + \beta_{10} CRIS + \beta_{11} YEAR + \acute{\varepsilon} \quad (6)$$

The result of Model 2 under Colum (3) in Table 27 shows that most of the instrumented variables and some control variables are consistent with the initial expectation. For instance, instrumental variables represented by foreign ownership and board size are significant and positive in determining DISC as expected. Consistent with expectation, family ownership is also found to be significant and negatively affecting DISC. For control variables, higher leverage and growth companies are found to lead better level of transparency. The consistency of coefficients with the expected signs and good regression diagnostics, including fairly adjusted R^2 in Model 2 appears to suggest that the predicted P_DISC (i.e. the instrumented part of DISC) is an appropriate instrument of DISC. Moreover, the result suggests that in a scenario when firms are given the discretion to choose the level of transparency, firms with higher level of foreign-owned shares, lower level of family-owned shares, bigger board members and better sales growth will provide better disclosure of directors' remuneration, thereby leading to higher market value.

The 2nd stage of model equation examines the value relevance of Tobin's Q, re-estimated using equation (3) but employing the predicted DISC (P_DISC) derived from equation (6). As shown in Column (4) of Model 2 in Table 27, a statistically significant and positive effect of P_DISC on Q is noted. The result implies that the positive relationship between directors' remuneration disclosure and firm value using family ownership as part of the instrument variables is not significantly sensitive to endogeneity problems. A higher coefficient is also noted on P_DISC of 8.281 as compared to DISC of 5.864 in Table 23 using the basic OLS in predicting Tobin's Q, indicating that employing 2SLS technique as instrumented parts of directors' remuneration disclosure to predict Q is better than the using the basic OLS as encountered in this study.

3.5 Conclusion

This study examines the impact on market value of disclosing comprehensive directors' remuneration practices and amount paid to individual directors using FTSE30 companies in Malaysia from 2007 to 2014, a period during which the authorities in Malaysia provided firms with discretion with regards to the level of transparency in the directors' remuneration disclosure using voluntary and mandatory requirements. As far as this study is concern, the current research is the first that examines the impact of directors' remuneration disclosure in the annual report in Malaysia. Directors' remuneration disclosure, which is highlighted as a strategic and high risk in prior studies might lead to the most favourable condition, where it is highly valued by stakeholders. It could also possibly lead to the most unfavourable condition in the form of proprietary cost via adverse action by the strategic opponent.

The findings demonstrate that disclosing directors' remuneration-related matters is value relevant among the largest 30 companies in Malaysia for the eight years period reviewed. Similar findings are further encountered in all sub-samples tested in this study, where minimal impact of firm value is noted for financial companies as compared to higher impact of firm value for non-financial companies. Given that the sampling period covers the global financial crisis in 2007 and the political hiccups due to the unpredicted result of the Malaysian general election in 2008, the positive and significant impact on firm value indicates that the market rewards firms from both sectors, which continue to provide transparency in directors' remuneration process and practices during the difficult period. Moreover, firms either in the financial sector or non-financial sector, which continue to provide information on individual directors' remuneration even after the recommendation has been removed from the regulation in 2012 are also greatly valued by the market as it signals better governance structure.

This study complements previous literature on the debate of choice on the performance measure. The empirical result found that companies disclosed directors' remuneration comprehensively in the annual report are echoed by higher ROA, suggesting that directors' remuneration disclosure impact positively on both market and accounting-based performance measures. Furthermore, this chapter explicitly addresses and justifies the potential endogeneity problem that has been ignored by typical accounting study. Using the two-stage least squares (2SLS) technique to control for the endogeneity of voluntary remuneration disclosure in assessing its impact on firm value, finding from the robustness analysis carried out suggest that the empirical results reported are robust to potential endogeneity problems.

In conclusion, the study contributes to the importance of disclosing directors' remuneration in a country where the disclosure practice is still inefficient and far below the best practice. Practically, the finding discards the doubt among directors in disclosing their remuneration publicly when it proves that directors' remuneration disclosure is value relevant, as evidence in Tobin's Q value, both in financial and non-financial sectors. Further, the finding of this study should be of interest for the management where they can consider allocating companies' resources towards a transparent disclosure of directors' remuneration in the annual report. Such investment will benefit the firms not only in higher market value but for efficient utilisation of internal financial resource in the companies as well as being the remedy for information asymmetry between inside shareholders and stakeholders, including the minority shareholders. Likewise, the finding provides strong motivation for authorities in other developing countries to comprehensively and voluntarily disclose directors' remuneration as it conveys a signal that the firms have fewer agency problems and better governance structure.

Conclusion

Concluding remarks

This study contributes to the corporate governance literature and specifically to the literature and empirical studies on directors' remuneration disclosure. The unique feature of directors' remuneration as proprietary internal information in a firm and also being a remedy to agency problem between shareholders and directors have motivated this study to comprehensively examine the overall issue on remuneration disclosure. Using Malaysia as a backdrop, this study provides a distinctive research setting different from other developing countries since Malaysia has a disclosure exercise that is still far below best practice as well as a unique Malaysian cultural and institutional environment. Thus, the unusual combination of politics (government) dominated by Malays and business dominated by the minority Chinese provides an interesting background to explore the determinants and consequences of directors' remuneration disclosure.

In the introduction chapter, Malaysia is known as an advanced emerging market with a diversified and strong economic base, particularly after the Asian and global financial crisis. The robust growth was achieved through vigorous regulatory oversight that underpinned investor confidence in the capital market through the series of action taken by the Malaysian government including the Capital Market Masterplan and strengthening the Malaysian regulatory framework. However, Malaysia is still rated by the international survey agencies as among below the average concerning of its governance practices and transparency due to the institutional setting which is high ownership concentration, weak enforcement of regulation and poor investors' protection including the minority shareholders. Hence, this study provides some evidence suggesting that directors' remuneration transparency leads to higher market confidence as well as highlighting the relevant determinants that influence the level of disclosure, from statutory (corporate governance mechanism) and demographic (board diversity) perspectives.

The first empirical chapter investigates the association between corporate governance mechanism, represented by governance structure and ownership structure and its association with directors' remuneration disclosure. This chapter concludes that ownership structure has a significant influence on disclosure as compared to the governance structure. However, a negative association between family ownership and remuneration disclosure is noted, suggesting that the traditional family control in Malaysia continue to be dominating outweighing the necessity of public disclosure. Moreover, this study encountered a non-linear relation between government ownership and remuneration disclosure, indicating that the disclosure of directors' remuneration is positive up to a certain level of government ownership but reduce as government ownership increase. Evidently, directors in government-owned companies are extra vigilant in disclosing their remuneration due to the political and personal security reason, particularly post the 12th general election of Malaysia in 2008 that witnessed the government lost its two-thirds majority in parliament for the first time after 40 years.

The second empirical chapter examines how board diversity influences disclosure. This chapter concludes that demographic diversity among the board of directors may have potential benefits and drawbacks to the directors' remuneration disclosure behaviour. While age diversity is found to be significantly associated with directors' remuneration disclosure, the remaining board diversity variables such as gender, ethnicity and educational background are also significant in a condition when it is critically analysed using the upper echelon theory within the context of Malaysia. Therefore, this chapter supports the age stereotype that characterised old directors who are wise and wisdom, as the adverse disclosure behaviour can be explained by their ability to credibly withhold voluntary information and strategically disclose mandatory information on remuneration. Contrary to prior studies, this study found that ethnic diversity does not have a significant influence on directors' remuneration disclosure possibly due to the equal number of Malay and non-Malay directors on board and the cultural convergence that has been assimilated between the two ethnics.

The third empirical chapter aims to assess the extent to which directors' remuneration disclosure reflect information that is relevant to firm value. By using Tobin's Q, this chapter concludes that directors' remuneration disclosure is value relevant in both financial and non-financial sectors among the FTSE30 companies. This implies that the market highly values directors' remuneration disclosure as it signals board transparency and provides a window to overall governance quality of an organisation. This chapter proposes that commitment to directors' remuneration disclosure has potential benefits that outweigh the risk of disclosing directors' remuneration during two significant events between 2007 and 2014, which are the global financial crisis and the Malaysian 12th general election that contribute to a political hiccups due to the unpredictable results, both in 2007 and 2008, respectively. Furthermore, finding from the robustness analysis carried out suggest that the empirical results reported are robust to potential endogeneity problems.

Finally, this study provides two practical implications. First, it offers a disclosure incentive for directors to make better remuneration disclosure in the annual report. Despite that there is evidence of hesitancy to disclose due to the political volatility in 2008, the market significantly values directors' remuneration disclosure as it signals good governance practice by the company as well as great reputation portrayed by the board members. More specifically, this study encourages disclosure on directors' remuneration as it positively affects firm value, in both financial and non-financial sectors. Secondly, this study offers an essential guideline for companies in determining the board composition. It suggests that distinctive personality of each director can be a competitive advantage of a firm when it is properly transformed to make it congruent with the firm's objective, in achieving maximum efficiency of decision-making. Overall, the study indicates the need to incorporate a diversified composition of the top decision-makers in deciding a strategic remuneration disclosure.

Limitation of study

There are three (3) limitations of this study. Firstly, the overall limitation is regarding the directors' remuneration disclosure index that is manually scoring of annual reports. This method is prone to subjectivity and bias on the part of the researcher. However, relevant testing has been carried out to ensure the reliability and validity of the disclosure index to limit the potential bias and errors. For instance, the annual reports were read in entirety before being scored in the second reading to carefully scrutinize the disclosure items. Samples of annual reports were scrutinized by two qualified independent coders with a set of decision rules that was produced for the coders' reference. Both coders are qualified Chartered Accountants from the Big Four accounting firms with specific knowledge of Malaysian accounting reporting standards (MFRS). Furthermore, this study employs the percentage of agreement index and Cohen's kappa index, and the results meet the appropriate minimum acceptable levels of 80 percent and 0.7, respectively.

Secondly, the study may be constrained by the omitted variables that may influence the level of disclosure of executive directors' remuneration in the first and second empirical chapters. For example, in chapter one, the study did not include all governance structure that a company can implement, such as the audit committee, number of the board meeting and others. The reason is that this chapter focuses on governance structures that have a key role in disclosing practices, as compared to others which might have indirectly relationship with directors' remuneration disclosure. In the second chapter, this study did not include all board diversity measurement that a company has, for example, the board tenure, the functional background and others. This approach is further justified by the prior research on the main demographic characteristics that contribute to disclosure.

Another limitation of the study is the sample which only covers FTSE30 companies in Malaysia, justified by the largest market capitalization of these companies. In view that some of the data are obtained from database like Bloomberg and DataStream, this study is not able to extend the sample due to the unavailability of information (missing data) for the FTSE100 companies. Moreover, the specific data collected manually from the annual report on directors' remuneration information requires more time to derive to a comprehensive disclosure index; hence the result, justification and implication provided are geared towards the large companies, rather than to be generalised in all companies in Malaysia.

Future research

Future studies may consider expanding the disclosure scoring index with other types of disclosure instead of solely from the annual reports, such as external remuneration surveys, press releases and any informal channels like the interim reports. The inclusion of remuneration information retrieved from alternative channels may improve the empirical findings as information on private incentive received by directors might not be assessable from the public reported data but can only be detected using the informal channels. The external remuneration survey, if accessible, may provide information on the benchmark used by the companies in determining the pay-performance link for each of the directors.

Finally, in view that the latest updated MCCG 2017 has included a new dimension of requirement on directors' remuneration disclosure, i.e. "stakeholders should be able to assess whether the remuneration of directors is commensurate with their individual performance" (refer Table 2), it would be of interest for future research to broaden this study by including this recommendation. This work is essential for the researcher to support Malaysian regulators who are serious in ensuring directors' remuneration to be transparent up to the level of stakeholders.

Appendix 1
Directors' remuneration disclosure scoring index

Disclosure items / Score	Scoring Value			Source of requirements/ references
	0	1	2	
(1) Disaggregated remuneration (directors' fee, salaries, bonus, benefits	Not disaggregated	Disaggregated		BMLR
(2) Distinguishing executive and non-executive	No	Yes		BMLR
(3) Disclosure by individual director	No	Yes		MCCG 2007
(4) Narrative statement on pay to performance (PTP) link (e.g. justification by comparison of current and last year's firms'	No discussion	Partly (general disclosure)	Extensive (detailed explanation)	MCCG 2000 & 2007

performance, quantitative and qualitative targets, others)				
(5) Discussion on principles of remuneration Remuneration Policy (RP) should include: [1] Key factors influencing RP (firms' performance, experience, seniority, skills, potential, others) [2] Benchmarking against other companies [3] Explanation on salary increases [4] Explanation for any proposed changes in the RP in the	No discussion	Partly (general disclosure)	Extensive (detailed explanation, disclosing more than 1 suggested items)	MCCG 2000 & 2007

following financial year [5] Additional info on the remuneration, for e.g. employee reward, specific award for performing director, priority accorded to internal filling for vacancies (% of vacancies occupied within Group), others)				
(6) Specific sections for directors' remuneration (too many sections disclosing on directors' remuneration info), for e.g: [1] Directors' Report	More than 3 sections	More than 2 sections	All in one section	Melis, Gaia, & Carta (2015)

[2] Statement of CG [3] Notes to FS (few different notes) [4] Related parties transactions				
(7) Disclosure on primary benefits / short-term employee benefits [1] Definition of short-term benefit [2] Recognition of short-term benefit [3] Detailed on short term accumulate and short-term non-accumulate	No discussion	Partly (general disclosure)	Extensive (including amount and companies' policy on short-term benefits offered to employee)	MFRS 119 & MFRS 124
(8) Disclosure on other long-term	No discussion	Partly (general disclosure)	Extensive (including amount and	MFRS 119 &

employee benefits: [1] long-term paid absences such as long-service or sabbatical leave; [2] jubilee or other long-service benefits; [3] long-term disability benefits; [4] profit-sharing and bonuses; and [5] deferred remuneration			companies' policy on long-term benefits offered to employee)	MFRS 124
(9) Disclosure on post-employment benefits – retirement benefits (defined contribution plan) All FTSE30 firms in Malaysia are mandated to contribute to	No discussion	Partly (general disclosure)	Extensive (including percentage of contribution)	MFRS 119 & MFRS 124

Employee Provident Fund (EPF), however the amount ranges depending on the individual firms according to the guideline given by EPF.				
(10) Disclosure on other post-employment – retirement benefits (defined benefit plans): [1] Characteristics of its DBP [2] Description of risk [3] Net defined liability amount in FS (DBO) the recon/ movement of shares from the opening to	No discussion	Partly (disclose 1 to 4 items required)	Extensive (disclose more than 4 items required)	MFRS 119 & MFRS 124

current closing balance [4] Recon for plan assets [5] Actuarial assumptions [6] Accounting estimates used in assumptions [7] Sensitivity analysis				
(11) Disclosure on compensation / termination benefits: The conditions and method of recognition.	No discussion	Extensive (general disclosure)		MFRS 119 & MFRS 124
(12) Disclosure on share-based payment / employee stock option (ESO): [1] Background - Salient T&C of	No discussion	Partly (disclose 1 to 4 items required)	Extensive (disclose more than 4 items required)	MFRS 2

the scheme and general terms [2] The movement of shares from beginning until current – outstanding (granted, forfeited, exercised, expired, exercisable) [3] Pricing model determining the fair value (Black Scholes valuation model, Trinomial, etc) [4] Input used in the model [5] Basis used for the input [6] Total expenses recognized for the period [7] Disclosure of individual				

directors' ESO under directors' report				
(13) Directors' fee are subject to board review and approval (ordinary resolution)	No	Yes		MCCG 2000 & 2007
(14) Boards should appoint t/ establish a remuneration committee	No	Yes		MCCG 2000 & 2007
(15) RC consist of wholly or mainly of non-executive directors	No	Yes		MCCG 2000 & 2007

Appendix 2
Decision rules

NO	DISCLOSURE INDEX	KEY WORD SEARCH	SECTION IN ANNUAL REPORT	SCORING	MAX SCORE
1	Directors' remuneration are disaggregated into the following categories (RM'000): - Directors’ fee - Salaries - Bonus - Benefit in Kind	Directors' remuneration	- Statement of Corporate Governance - Notes to the Financial Statements	0 = aggregated 1 = disaggregated	1
2	Directors' remuneration are distingushed according to Exec Director (ED) and Non-Exec Director (NED) (RM'000)	Directors' remuneration	- Statement of Corporate Governance - Notes to the Financial Statements	0 = aggregated 1 = disaggregated	1
3	Directors' remuneration are disclosed individually or by bands (RM50,000)	Directors' remuneration	- Statement of Corporate Governance - Notes to the Financial Statements	0 = by bands 1 = by individual	1

4	Narrative statement of how the pay performance linkage [1] Pay-performance linkage is mentioned in one-liner statement (e.g. "Remuneration Committee evaluates the executive director's performance against the objectives set by the Board, thereby *linking the remuneration to performance*" [2] Pay-perfomance linkage is justified by company's performance (e.g shareholders' return for current	Directors' remuneration	- Statement of Corporate Governance	0 = not mentioned 1 = remuneration link to performance is broadly disclosed 2 = remuneration link to performance is disclosed in details (e.g justified with numbers)	2

	year vs previous year, specific KPI mentioned, or any additional method/calculation used to assess performance)				
5	Discussion on Remuneration Policy (RP) Remuneration Policy should include: [1] Factors influencing remuneration for ED (e.g. coy's performance) & NED (e.g. experience, seniority, level of responsibilities, potential) [2] Benchmarking of rem package against other companies/industry peers	Remuneration policy	- Statement of Corporate Governance	0 = no explanation 1 = general explanation (includes factor 1&2) 2 = extended explanation (includes 1,2 and other factors e.g. programs under CG to review on remuneration, market rate.	2

	[3] Explanation on remuneration structure/package (ED & NED) [4] Explanation on changes (changes in current/proposed RP, reason for salary increases, etc) [5] Adhere to Code of Industry's Conduct [6] Distintive initiative to maintain competitiveness of remuneration (e.g special prog under CG, etc)				
6	Specific sections for remuneration for Director's Report Directors remuneration related info are discussed in several sections in annual report	Directors' remuneration	- Statement of Corporate Governance - Notes to the Financial Statements - Directors Report	0 = more than 3 sections 1 = 2 sections only 2 = only 1 section for all	2

	such as: [1] Statement of CG (pay performance link, policy, etc) [2] Directors Rem (notes to FS) [3] Related Party Disclosure (notes to FS) - key mngt [4] Directors report (interest in companies)				
7	Disclosure on primary benefits / short term employee benefits [1] Definition/Components of short term benefit [2] Period of recognition [3] Explanation on short-term accumulate vs short-term non-accumulate compensation	Employee benefit	- Summary of Significant Accounting Policies - Notes to the Financial Statements	0 = not disclosed 1 = generally disclosure (item 1 & 2 only) 2 = extensive disclosure (item 1,2 & 3)	2

8	Disclosure on other long-term employee benefits (1) long-term paid absences such as long-service or sabbatical leave;(2) jubilee or other long-service benefits;(3) long-term disability benefits;(4) profit-sharing and bonuses; and(5) deferred remuneration	Employee benefit	- Summary of Significant Accounting Policies- Notes to the Financial Statements	0 = not disclosed1 = generally disclosed2 = disclosed with amount	2
9	Disclosure on post-employment benefits - Defined Contribution Plan (DCP) i.e. Employee Provident Fund (EPF) [1] Fixed contribution to the state pension scheme, EPF [2] Period of	Defined contribution plan	- Summary of Significant Accounting Policies - Notes to the Financial Statements	0 = not disclosed 1 = generally disclosure 2 = extensive disclosure [disclosed the % of EPF]	2

	recognition [3] % or amount of contribution				
10	Disclosure on other post-employment benefits - Defined Benefit Plans e.g. retirement benefit, post-employment life insurance, pension plan, gratuity [1] Descriptions of its DBP (final salary plan, contribution based plan with guarantee, etc) [2] Description of risk (that the plan may exposed to e.g. property market risk, etc) [3] Reconciliation for net defined liability amount (defined benefit obligation) / movement of fair	Defined benefit plan (DBP)	If DBP is mentioned in the "Summary of Significant Accounting Policies" for the description part, there is a detail calculation on DBP disclosed in the "Notes to the Financial Statements" for the computation. Item [2]-[7] can be found in the specific Notes for DBP (kindly use "find" button for a quick search)	0 = not disclosed 1 = generally disclosed (disclose 1-3 items) 2 = detailed disclosure (disclose 4 items or more)	2

	value from the opening to current closing balance [4] Reconciliation for plan assets [5] Actuarial assumptions (for e.g. discount rate, expected rate, etc) [6] Accounting estimates used in assumptions [7] Sensitivity analysis				
11	Disclosure on compensation/termination benefits [1] Definition/Components of termination benefits [2] Period of recognition	Termination benefit	- Summary of Significant Accounting Policies	0 = not disclosed 1 = disclosed	1

12	Disclosure on share-based payment/compensation - Employee Share Option Scheme [1] Description of ESOS - general terms, salient features of the scheme, etc [2] Movement of shares from beginning until current - for e.g. outstanding, granted,forfeited, exercised,expired, exercisable, etc [3] Pricing model used to determine the Fair Value (e.g. Black Scholes valuation model, Trinomial, etc) [4] Input used in the model (e.g. weighted average price, expected volatility, expected	Share-based payment/compensation (Varieties depending on company's share option scheme)	- Summary of Significant Accounting Policies - Notes to the Financial Statements	0 = not disclosed 1 = generally disclosed (disclose item 1-3) 2 = detailed on how ESOS is calculated (disclose item 4 - 6)	2

	dividend yield, etc) [5] Basis used for the input (historical, market condition, etc) [6] Total expenses recognised for the period				
13	Disclosure about shareholders' participation - Directors' fee are approved in the annual general meeting	Annual general meeting	- Notice of Annual General Meeting (AGM)	0 = not disclosed 1 = approved in the AGM	1
14	Existence of Remuneration Committee (RC)	Remuneration committee	- Statement of Corporate Governance	0 = not disclosed 1 = disclosed	1
15	Disclosure on independence of the RC (i.e. RC consists of exclusively or majority of non-executive directors)	Remuneration committee	- Statement of Corporate Governance	0 = Majority is Executive Director 1 = All/majority is NED	1
	TOTAL SCORE				23

Appendix 3
List of FTSE100 companies in Malaysia

No	Constituent Name	Country Code	ISO Code	Note
1	RHB Capital	MAL	MYR	Top 30
2	British American Tobacco (Malaysia)	MAL	MYR	Top 30
3	Axiata Group Bhd	MAL	MYR	Top 30
4	Maxis Bhd	MAL	MYR	Top 30
5	Genting	MAL	MYR	Top 30
6	Kuala Lumpur Kepong	MAL	MYR	Top 30
7	Malayan Banking	MAL	MYR	Top 30
8	MMC	MAL	MYR	Top 30
9	PPB Group	MAL	MYR	Top 30
10	Sime Darby Bhd	MAL	MYR	Top 30
11	Hong Leong Financial	MAL	MYR	Top 30
12	IOI	MAL	MYR	Top 30
13	Berjaya Corp	MAL	MYR	Top 30
14	Genting Malaysia BHD	MAL	MYR	Top 30
15	Telekom Malaysia	MAL	MYR	Top 30
16	Tenaga Nasional	MAL	MYR	Top 30
17	AMMB Holdings	MAL	MYR	Top 30
18	CIMB Group Holdings	MAL	MYR	Top 30
19	Hong Leong Bank	MAL	MYR	Top 30
20	Tanjong	MAL	MYR	Top 30
21	UMW Holdings	MAL	MYR	Top 30
22	YTL Corp	MAL	MYR	Top 30
23	Petronas Gas	MAL	MYR	Top 30
24	YTL Power International	MAL	MYR	Top 30
25	Digi.com	MAL	MYR	Top 30
26	Petronas Dagangan Bhd	MAL	MYR	Top 30
27	MISC	MAL	MYR	Top 30
28	Public Bank BHD	MAL	MYR	Top 30
29	Petronas Chemical	MAL	MYR	Top 30
30	KLCC Property Holdings	MAL	MYR	Top 30
31	Hap Seng Plantations Holdings	MAL	MYR	Top 100
32	Hartalega Holdings Bhd	MAL	MYR	Top 100
33	Boustead Holdings	MAL	MYR	Top 100
34	IGB	MAL	MYR	Top 100
35	Nestle (Malaysia)	MAL	MYR	Top 100
36	IJM	MAL	MYR	Top 100
37	Berjaya Sports Toto	MAL	MYR	Top 100
38	DRB-Hicom	MAL	MYR	Top 100

39	Malaysia Airports	MAL	MYR	Top 100
40	Parkson Holdings	MAL	MYR	Top 100
41	Genting Plantations BHD	MAL	MYR	Top 100
42	Carlsberg Brewery Malaysia	MAL	MYR	Top 100
43	Dialog Group	MAL	MYR	Top 100
44	Hap Seng Consolidated	MAL	MYR	Top 100
45	KPJ Healthcare	MAL	MYR	Top 100
46	Lingkaran Trans Kota Holdings	MAL	MYR	Top 100
47	Aeon (M)	MAL	MYR	Top 100
48	Fraser & Neave Holdings	MAL	MYR	Top 100
49	OSK Holdings	MAL	MYR	Top 100
50	Wah Seong	MAL	MYR	Top 100
51	Puncak Niaga Holdings	MAL	MYR	Top 100
52	IJM Plantations Bhd	MAL	MYR	Top 100
53	Boustead Heavy Industries	MAL	MYR	Top 100
54	Media Prima	MAL	MYR	Top 100
55	SP Setia	MAL	MYR	Top 100
56	WCT Bhd	MAL	MYR	Top 100
57	POS Malaysia	MAL	MYR	Top 100
58	Gamuda	MAL	MYR	Top 100
59	Top Glove Corp	MAL	MYR	Top 100
60	Bintulu Port Holdings Bhd	MAL	MYR	Top 100
61	Mah Sing Group BHD	MAL	MYR	Top 100
62	KNM Group	MAL	MYR	Top 100
63	Malaysian Bulk Carriers	MAL	MYR	Top 100
64	Mudajaya Group	MAL	MYR	Top 100
65	Media Chinese International	MAL	MYR	Top 100
66	AirAsia	MAL	MYR	Top 100
67	Bursa Malaysia	MAL	MYR	Top 100
68	UEM Land Holdings Bhd	MAL	MYR	Top 100
69	Lafarge Malayan Cement	MAL	MYR	Top 100
70	Tan Chong Motor Hlds	MAL	MYR	Top 100
71	Malaysian Pacific Industries	MAL	MYR	Top 100
72	Malaysian Resources	MAL	MYR	Top 100
73	TA Enterprise	MAL	MYR	Top 100
74	Affin Holdings	MAL	MYR	Top 100
75	Amway Malaysia	MAL	MYR	Top 100
76	Ann Joo Resource	MAL	MYR	Top 100
77	Batu Kawan Bhd	MAL	MYR	Top 100
78	QI Resources Bhd	MAL	MYR	Top 100
79	IJM Land Bhd	MAL	MYR	n/a
80	Tradewinds Plantation	MAL	MYR	n/a

81	JT International	MAL	MYR	n/a
82	KFC Holdings	MAL	MYR	n/a
83	Kulim Malaysia	MAL	MYR	n/a
84	Alliance Financial Group	MAL	MYR	n/a
85	Sunway City Bhd	MAL	MYR	n/a
86	Star Publication Malaysia	MAL	MYR	n/a
87	SapuraCrest Petroleum	MAL	MYR	n/a
88	UBG	MAL	MYR	n/a
89	Plus Expressways	MAL	MYR	n/a
90	Titan Chemicals	MAL	MYR	n/a
91	Starhill Real Estate Investment Trust	MAL	MYR	n/a
92	Kencana Petroleum Bhd	MAL	MYR	n/a
93	Guinness Anchor BHD	MAL	MYR	n/a
94	Multi-Purpose Holdings	MAL	MYR	n/a
95	Bimb Holdings	MAL	MYR	n/a
96	Shell Refining Co (Malaysia)	MAL	MYR	n/a
97	Proton Holdings	MAL	MYR	n/a
98	EON Capital	MAL	MYR	n/a
99	YTL Cement	MAL	MYR	n/a
100	Malaysia Airline System	MAL	MYR	n/a

Source: FTSE International Limited.

(n/a = annual reports are not available in the Bursa Malaysia website as of 14 May 2018)

References

Abdallah, W., Goergen, M. and O'Sullivan, N. (2015) 'Endogeneity: How Failure to Correct for it can Cause Wrong Inferences and Some Remedies', *British Journal of Management*, 26(4), pp. 791–804. doi: 10.1111/1467-8551.12113.

Abdullah, M., Evans, L., Fraser, I. and Tsalavoutas, I. (2015) 'IFRS Mandatory disclosures in Malaysia: the influence of family control and the value (ir)relevance of compliance levels', *Accounting Forum*. Elsevier Ltd, 39(4), pp. 328–348. doi: 10.1016/j.accfor.2015.05.003.

Abdullah, S. N., Ismail, K. N. I. K. and Nachum, L. (2016) 'Does having women on boards creates value? The impct of societal perceptions and corporate governance in emerging markets', *Strategic Management Journal*, 37, pp. 466–476. doi: 10.1002/smj.

Aboody, D. and Kasznik, R. (2000) 'CEO stock option awards and the timing of corporate voluntary disclosures', *Journal of Accounting and Economics*, 29, pp. 73–100. doi: 10.1016/S0165-4101(00)00014-8.

Abu-Tapanjeh, A. M. (2009) 'Corporate governance from the Islamic perspective: A comparative analysis with OECD principles', *Critical Perspectives on Accounting*, 20, pp. 556–567. doi: 10.1016/j.cpa.2007.12.004.

Adams, R. B. *et al.* (2015) 'Board Diversity: Moving the Field Forward', *Corporate Governance: An International Review*, 5(2), pp. 77–82. doi: 10.1111/corg.12106.

Adams, R. and Ferreira, D. (2009) 'Women in the boardroom and their impact on governance and performance', *Journal of Financial Economics*, 94, pp. 291–309. doi: 10.1016/j.jfineco.2008.10.007.

Ahmad, R., Ariff, M. and Skully, M. J. (2008) 'The determinants of bank capital ratios in a developing economy', *Asia-Pacific Financial Markets*, 15, pp. 255–272. doi: 10.1007/s10690-009-9081-9.

Ahmed, K. and Courtis, J. K. (1999) 'Associations Between Corporate Characteristics and Disclosure Levels in Annual Reports: a Meta-Analysis', *The British Accounting Review*, 31(1), pp. 35–61. doi: 10.1006/bare.1998.0082.

Al-Akra, M. and Ali, M. J. (2012) 'The value relevance of corporate voluntary disclosure in the Middle-East: The case of Jordan', *Journal of Accounting and Public Policy*. Elsevier Inc., 31(5), pp. 533–549. doi: 10.1016/j.jaccpubpol.2011.10.007.

Alam Choudhury, M. and Ziaul Hoque, M. (2006) 'Corporate governance in Islamic perspective', *Corporate Governance: The international journal of business in society*, 6(2), pp. 116–128. doi: 10.1108/14720700610655132.

Ali, M., Ng, Y. L. and Kulik, C. T. (2013) 'Board Age and Gender Diversity: A Test of Competing Linear and Curvilinear Predictions', *Journal of Business Ethics*, 125(3), pp. 497–512. doi: 10.1007/s10551-013-1930-9.

Alnabsha, A. *et al.* (2017) 'Corporate Boards, Ownership Structures and Corporate

Disclosures: Evidence from a Developing Country', *Journal of Applied Accounting Research*, (August), pp. 1–46. doi: 10.1108/JAAR-01-2016-0001.

Amir, E. and Lev, B. (1996) 'Value-relevance of nonfinancial information: The wireless communications industry', *Journal of Accounting and Economics*, 22(1–3), pp. 3–30. doi: 10.1016/S0165-4101(96)00430-2.

Amran, A. and Devi, S. S. (2008) 'The impact of government and foreign affiliate influence on corporate social reporting: The case of Malaysia', *Managerial Auditing Journal*, 23(4), pp. 386–404.

Amran, A. and Devi, S. S. (2008) 'The impact of government and foreign affiliate influence on corporate social reporting: The case of Malaysia', *Managerial Auditing Journal*, 23(4), pp. 386–404. doi: 10.1108/S1479-3563(2012)000012B005.

Amran, N. A. and Che Ahmad, A. (2009) 'Family Business , Board Dynamics and Firm Vaiue : Evidence from Malaysia', *Journal of Financial Reporting & Accounting*, 7(1), pp. 53–74. doi: 10.1108/19852510980000641.

Andreoni, J. and Vesterlund, L. (2001) 'Which is the Fair Sex ? Gender Differences in Altruism', *The Quarterly Journal of Economics*, 116(1), pp. 293–312.

Andrew, B. H. *et al.* (1989) 'A note on corporate social disclosure practices in developing countries: The case of Malaysia and Singapore', *The British Accounting Review*, 21(4), pp. 371–376. doi: 10.1016/0890-8389(89)90034-6.

Ang, J. B. and McKibbin, W. J. (2007) 'Financial liberalization, financial sector development and growth: Evidence from Malaysia', *Journal of Development Economics*, 84, pp. 215–233. doi: 10.1016/j.jdeveco.2006.11.006.

Annuar, H. A. and Rashid, H. M. A. (2015) 'An investigation of the control role and effectiveness of independent non-executive directors in Malaysian public listed companies', *Managerial Auditing Journal*, 30(6/7), pp. 582–609.

Antonakis, J. *et al.* (2014) 'Causality and endogeneity: Problems and solutions', *The Oxford handbook of leadership and organizations*, 1, pp. 93–117. doi: 10.1093/oxfordhb/9780199755615.013.007.

Ararat, M., Aksu, M. and Tansel Cetin, A. (2015) 'How Board Diversity Affects Firm Performance in Emerging Markets: Evidence on Channels in Controlled Firms', *Corporate Governance: An International Review*, 23(2), pp. 83–103. doi: 10.1111/corg.12103.

Ararat, M., Black, B. S. and Yurtoglu, B. B. (2017) 'The effect of corporate governance on firm value and profitability: Time-series evidence from Turkey', *Emerging Markets Review*. Elsevier B.V., 30(August 2013), pp. 113–132. doi: 10.1016/j.ememar.2016.10.001.

Arestic, P. and Demetriades, P. (1997) 'Financial Development and Economic Growth : Assessing the Evidence', *The Economic Journal*, 107(442), pp. 783–799.

Armitage, S. and Marston, C. (2008) 'Corporate disclosure, cost of capital and reputation: Evidence from finance directors', *British Accounting Review*. Elsevier Ltd, 40(4), pp. 314–336. doi: 10.1016/j.bar.2008.06.003.

Arora, A. and Sharma, C. (2016) ‘Corporate Governance and Firm Performance in Developing Countries: Evidence from India’, *Corporate Governance: The International Journal of Business in Society*, 16(2), pp. 420–436. doi: 10.1108/CG-01-2016-0018.

Arya, A., Frimor, H. and Mittendorf, B. (2013) ‘Compliance with segment disclosure initiatives: Implications for the short and long run’, *Managerial and Decision Economics*, 34, pp. 488–501. doi: 10.1002/mde.

Arye, L. *et al.* (2003) ‘Executive Compensation as an Agency Problem’, *Journal of Economic Perspectives*, 3(3), pp. 71–92.

Baber, W. R., Janakiraman, S. N. and Kang, S.-H. (1996) ‘Investment opportunities and the structure of executive compensation’, *Journal of Accounting and Economics*, 21, pp. 297–318.

Baek, J.-S., Kang, J.-K. and Suh Park, K. (2004) ‘Corporate governance and firm value: evidence from the Korean financial crisis’, *Journal of Financial Economics*, 71, pp. 265–313. doi: 10.1016/S0304-405X(03)00167-3.

Bai, C. E. *et al.* (2004) ‘Corporate governance and market valuation in China’, *Journal of Comparative Economics*, 32, pp. 599–616. doi: 10.1016/j.jce.2004.07.002.

Bai, G. and Elyasiani, E. (2013) ‘Bank stability and managerial compensation’, *Journal of Banking and Finance*. Elsevier B.V., 37(3), pp. 799–813. doi: 10.1016/j.jbankfin.2012.10.026.

Ball, R., Robin, A. and Wu, J. S. (2003) ‘Incentives versus standards: Properties of accounting income in four East Asian countries’, *Journal of Accounting and Economics*, 36(1–3 SPEC. ISS.), pp. 235–270. doi: 10.1016/j.jacceco.2003.10.003.

Bamber, L. S., Jiang, J. and Wang, I. Y. (2010) ‘What’s my style? The influence of top managers on voluntary corporate financial disclosure’, *Accounting Review*, 85(4), pp. 1131–1162. doi: 10.2308/accr.2010.85.4.1131.

Bantel, K. A. and Jackson, S. E. (1989) ‘Top Management and Innovations in Banking : Does the Composition of the Top Team Make a Difference ?’, *Strategic Management Journal*, 10, pp. 107–124.

Bar-Yosef, S. and Livnat, J. (1984) ‘Auditor Selection: An Incentive-Signalling Approach’, *Accounting and Business Review*, pp. 301–309. doi: 10.1080/00014788.1984.9729223.

Barako, D. G., Hancock, P. and Izan, H. Y. (2006) ‘Factors influencing voluntary corporate disclosure by Kenyan companies’, *Corporate Governance : An International Review*, 14(2), pp. 107–125. doi: 10.1111/j.1467-8683.2006.00491.x.

Barth, M. E. (2003) ‘Discussion of “compensation policy and discretionary disclosure”’, *Journal of Accounting and Economics*, 34, pp. 311–318. doi: 10.1016/S0165-4101(02)00076-9.

Bassett, M., Koh, P. S. and Tutticci, I. (2007) ‘The association between employee stock option disclosures and corporate governance: Evidence from an enhanced disclosure regime’, *British Accounting Review*, 39(4), pp. 303–322. doi: 10.1016/j.bar.2007.06.003.

Baydoun, N. and Willett, R. (2000) ‘Islamic Corporate Reports’, *Abacus*, 36(1), pp. 71–90. doi: 10.1111/1467-6281.00054.

Beattie, V., McInnes, B. and Fearnley, S. (2004) ‘A methodology for analysing and evaluating narratives in annual reports: A comprehensive descriptive profile and metrics for disclosure quality attributes’, *Accounting Forum*, 28(3), pp. 205–236. doi: 10.1016/j.accfor.2004.07.001.

Beattie, V. and Thomson, S. J. (2007) ‘Lifting the lid on the use of content analysis to investigate intellectual capital disclosures’, *Accounting Forum*, 31(2), pp. 129–163. doi: 10.1016/j.accfor.2007.02.001.

Bebchuk, L. A., Cohen, A. and Spamann, H. (2010) ‘The Wages of Failure: Executive Compensation at Bear Stearns and Lehman 2000-2008’, *Yale Journal of Regulation*, 27(2), pp. 258–282. doi: 10.3868/s050-004-015-0003-8.

Bebchuk, L. A., Fried, J. M. and Walker, D. I. (2002) *Managerial Power and Rent Extraction in the Design of Executive Compensation*.

Beech, P. N. *et al.* (2017) *Delevering Diversity: Race and ethnicity in the management pipeline*.

Beiner, S., Drobetz, W. and Schmid, M. (2006) ‘An integrated framework of corporate governance and firm valuation’, *European Financial Management*, 12(2), pp. 249–283. doi: 10.1111/j.1354-7798.2006.00318.x.

Bell, S. T. *et al.* (2011) ‘Getting Specific about Demographic Diversity Variable and Team Performance Relationships: A Meta-Analysis’, *Journal of Management*, 37(3), pp. 709–743. doi: 10.1177/0149206310365001.

Ben-amar, W. *et al.* (2014) ‘Corporate Social Responsibility And The Quality Of Executive Compensation Disclosures’, *Journal of Applied Business Research*, 30(2), pp. 625–632.

Ben-Amar, W. *et al.* (2013) ‘What Makes Better Boards? A Closer Look at Diversity and Ownership’, *British Journal of Management*, 24(1), pp. 85–101. doi: 10.1111/j.1467-8551.2011.00789.x.

Ben-Amar, W., Chang, M. and McIlkenny, P. (2015) ‘Board Gender Diversity and Corporate Response to Sustainability Initiatives: Evidence from the Carbon Disclosure Project’, *Journal of Business Ethics*. Springer Netherlands, 125(3), pp. 497–512. doi: 10.1007/s10551-015-2759-1.

Ben-Amar, W. and Zeghal, D. (2011) ‘Board of directors’ independence and executive compensation disclosure transparency: Canadian evidence’, *Journal of Applied Accounting Research*, pp. 43–60. doi: 10.1108/09675421111130603.

Betancourt, H. and López, S. R. (1993) ‘The study of culture, ethnicity, and race in

American psychology', *American Psychologist*, 48(6), pp. 629–637. doi: 10.1037/0003-066X.48.6.629.

Bhagat, S. and Bolton, B. (2014) 'Financial crisis and bank executive incentive compensation', *Journal of Corporate Finance*. Elsevier B.V., 25, pp. 313–341. doi: 10.1016/j.jcorpfin.2014.01.002.

Boesso, G. and Kumar, K. (2007) 'Drivers of corporate voluntary disclosure: A framework and empirical evidence from Italy and the United States', *Accounting, Auditing & Accountability Journal*, 20(2), pp. 269–296. doi: http://dx.doi.org/10.1108/MRR-09-2015-0216.

Bohren, O. and Strom, R. O. (2010) 'Governance and Politics: Regulating Independence and Diversity in the Board Room', *Journal of Business Finance and Accounting*, 37(9–10), pp. 1281–1308. doi: 10.1111/j.1468-5957.2010.02222.x.

Bolton, P., Mehran, H. and Shapiro, J. (2015) 'Executive Compensation and Risk Taking', *Review of Finance*, 19(6), pp. 2139–2181. doi: 10.1093/rof/rfu049.

Börsch-Supan, A. and Köke, J. (2002) 'An applied econometricians' view of empirical corporate governance studies', *German Economic Review*, 3(3), pp. 295–326. doi: 10.1111/1468-0475.00061.

Botosan, C. a. (1997) 'Disclosure level and the cost of equity capital', *Accounting Review*, 72(3), pp. 323–349. doi: 10.1002/mde.1256.

Botosan, C. a. and Plumlee, M. a. (2002) 'A Re-examination of Disclosure Level and the Expected Cost of Equity Capital', *Journal of Accounting Research*, 40(1), pp. 21–40. doi: 10.1111/1475-679X.00037.

Boyd, B. K., Franco Santos, M. and Shen, W. (2012) 'International Developments in Executive Compensation', *Corporate Governance : An International Review*, 20(6), pp. 511–518. doi: 10.1111/j.1467-8683.2012.00934.x.

Bozzolan, S., Favotto, F. and Ricceri, F. (2003) 'Italian annual intellectual capital disclosure: An empirical analysis', *Journal of Intellectual Capital*, 4(4), pp. 543–558. doi: http://dx.doi.org/10.1108/VINE-10-2013-0063.

Brammer, S., Millington, A. and Pavelin, S. (2007) 'Gender and Ethnic Diversity Among UK Corporate Boards', *Corporate Governance : An International Review*, 15(2), pp. 393–403. doi: 10.1111/j.1467-8683.2007.00569.x.

Brick, I. E., Palmon, O. and Wald, J. K. (2006) 'CEO compensation, director compensation, and firm performance: Evidence of cronyism?', *Journal of Corporate Finance*, 12(3), pp. 403–423. doi: 10.1016/j.jcorpfin.2005.08.005.

Buhr, N. and Freedman, M. (2001) 'Culture, Institutional Factors and Differences in Environmental Disclosure Between Canada and the United States', *Critical Perspectives on Accounting*, 12(3), pp. 293–322. doi: 10.1006/cpac.2000.0435.

Bushman, R. *et al.* (2004) *Financial accounting information, organizational complexity and corporate governance systems*, *Journal of Accounting and Economics*. doi: 10.1016/j.jacceco.2003.09.005.

Byrnes, J. P., Miller, D. C. and Schafer, W. D. (1999) 'Gender differences in risk taking: A meta-analysis.', *Psychological Bulletin*, 125(3), pp. 367–383. doi: 10.1037/0033-2909.125.3.367.

Campbell, K. and Minguez-Vera, A. (2008) 'Gender diversity in the boardroom and firm financial performance', *Journal of Business Ethics*, 83, pp. 435–451. doi: 10.1007/s10551-007-9630-y.

Carter, D. a., Simkins, B. J. and Simpson, W. G. (2003) 'Corporate Governance, Board Diversity, and Firm Value', *The Financial Review*, 38, pp. 33–53. doi: 10.1111/1540-6288.00034.

Cerbioni, F. and Parbonetti, A. (2007) *Exploring the Effects of Corporate Governance on Intellectual Capital Disclosure: An Analysis of European Biotechnology Companies*, *European Accounting Review*. doi: 10.1080/09638180701707011.

Certo, S. T. (2003) 'Influencing Initial Public Offering Investors with Prestige: Signaling with Board Structures', *The Academy of Management Review*, 28(3), pp. 432–446.

De Cesari, A. (2012) 'Expropriation of minority shareholders and payout policy', *British Accounting Review*. Elsevier Ltd, 44(4), pp. 207–220. doi: 10.1016/j.bar.2012.09.002.

Chanchani, S. and Willett, R. (2004) 'An empirical assessment of Gray's accounting value constructs', *The International Journal of Accounting*, 39, pp. 125–154. doi: 10.1016/j.intacc.2004.02.003.

Chaney, P. K., Faccio, M. and Parsley, D. (2011) 'The quality of accounting information in politically connected firms', *Journal of Accounting and Economics*. Elsevier, 51(1–2), pp. 58–76. doi: 10.1016/j.jacceco.2010.07.003.

Chang, Y. Y., Dasgupta, S. and Hilary, G. (2010) 'CEO Ability, Pay, and Firm Performance', *Management Science*, 56(10), pp. 1633–1652.

Chapple, L. and Humphrey, J. E. (2014) 'Does Board Gender Diversity Have a Financial Impact? Evidence Using Stock Portfolio Performance', *Journal of Business Ethics*, 122, pp. 709–723. doi: 10.1007/s10551-013-1785-0.

Chapter 9 Continuing Disclosure (2014). Available at: http://www.bursamalaysia.com/market/regulation/rules/listing-requirements/main-market/listing-requirements.

Chau, G. and Gray, S. J. (2010) 'Family ownership, board independence and voluntary disclosure: Evidence from Hong Kong', *Journal of International Accounting, Auditing and Taxation*. Elsevier Inc., 19(2), pp. 93–109. doi: 10.1016/j.intaccaudtax.2010.07.002.

Chen, C. R., Steiner, T. L. and Whyte, A. M. (2006) 'Does stock option-based executive compensation induce risk-taking? An analysis of the banking industry', *Journal of Banking and Finance*, 30(3), pp. 915–945. doi: 10.1016/j.jbankfin.2005.06.004.

Chen, L., Feldmann, A. and Tang, O. (2015) 'The relationship between disclosures of corporate social performance and financial performance: Evidences from GRI reports in manufacturing industry', *International Journal of Production Economics*. Elsevier, 170, pp. 445–456. doi: 10.1016/j.ijpe.2015.04.004.

Cheng, E. C. M. and Courtenay, S. M. (2006) 'Board composition, regulatory regime and voluntary disclosure', *International Journal of Accounting*, 41(3), pp. 262–289. doi: 10.1016/j.intacc.2006.07.001.

Cheng, L. T. W., Chan, R. Y. K. and Leung, T. Y. (2010) 'Management demography and corporate performance: Evidence from China', *International Business Review*. Elsevier Ltd, 19(3), pp. 261–275. doi: 10.1016/j.ibusrev.2009.12.007.

Cheynel, E. (2013) 'A theory of voluntary disclosure and cost of capital', *Review of Accounting Studies*, 18(4), pp. 987–1020. doi: 10.1007/s11142-013-9223-1.

Chizema, A. (2008) 'Institutions and Voluntary Compliance: The Disclosure of Individual Executive Pay in Germany', *Corporate Governance: An International Review*, 16(4), pp. 359–374. doi: 10.1111/j.1467-8683.2008.00689.x.

Christie, A. A., Joye, M. P. and Watts, R. L. (2003) 'Decentralization of the firm: theory and evidence', *Journal of Corporate Finance*, 9, pp. 3–36. doi: 10.1016/S0929-1199(01)00036-0.

Chung, H., Judge, W. Q. and Li, Y.-H. (2015) 'Voluntary disclosure, excess executive compensation, and firm value', *Journal of Corporate Finance*. Elsevier B.V., 32(1001), pp. 64–90. doi: 10.1016/j.jcorpfin.2015.04.001.

Cohen, J. *et al.* (2011) 'Retail investors' perceptions of the decision-usefulness of economic performance, governance, and corporate social responsibility disclosures', *Behavioral Research in Accounting*, 23(1), pp. 109–129. doi: 10.2308/bria.2011.23.1.109.

Connelly, B. L., Ireland, R. D. and Reutzel, C. R. (2011) 'Signaling Theory : A Review and Assessment', *Journal of Management*, 37(1), pp. 39–67. doi: 10.1177/0149206310388419.

Conyon, M. and Sadler, G. (2010) 'Shareholder Voting and Directors ' Remuneration Report Legislation : Say on Pay in the UK', *Corporate Governance : An International Review*, 18(4), pp. 296–312. doi: 10.1111/j.1467-8683.2010.00802.x.

Cormier, D. and Magnan, M. (2007) 'The revisited contribution of environmental reporting to investors' valuation of a firm's earnings: An international perspective', *Ecological Economics*, 62(3–4), pp. 613–626. doi: 10.1016/j.ecolecon.2006.07.030.

Corporate Women Directors International (2015) *2015 CWDI Report : Women Board Directors in APEC Economies*.

Costa, C. M. *et al.* (2016) 'Non-compliance in Executive Compensation Disclosure: The Brazilian Experience', *Journal of Business Finance and Accounting*, 43(3–4), pp. 329–369. doi: 10.1111/jbfa.12177.

Cox, T. H. and Blake, S. (1991) 'Managing Cultural Diversity: Implications for

Competitiveness Organizational', *The Executive (Academy of Management)*, 5(3), pp. 45–56.

Croson, R. and Gneezy, U. (2009) 'Gender Differences in Preferences', *Journal of Economic Literature*, 47(2), pp. 448–474. doi: 10.1257/jel.47.2.448.

Dalton, D. R. *et al.* (1998) 'Meta-Analytic Reviews of Board Composition, Leadership Structure and Financial Performance', *Strategic Management Journal*, 19(3), pp. 269–290.

Darmadi, S. (2011) 'Board diversity and firm performance: the Indonesian evidence', *Corporate Ownership and Control*, 8, pp. 1–39.

Daske, H. *et al.* (2008) 'Mandatory IFRS reporting around the world: Early evidence on the economic consequences', *Journal of Accounting Research*, 46(5), pp. 1085–1142. doi: 10.1111/j.1475-679X.2008.00306.x.

Datta, D. K., Rajagopalan, N. and Zhang, Y. (2003) 'New CEO Openness to Change and Strategic Persistence: The Moderating Role of Industry Characteristics', *British Journal of Management*, 14(2), pp. 101–114. doi: 10.1111/1467-8551.00268.

Davis, J. H., Schoorman, F. D. and Donaldson, L. (1997) 'Toward a Stewardship Theory of Management', *Academy of Management Review*, 22(1), pp. 20–47.

DeAngelo, L. E. (1981) 'Auditor size and audit quality', *Journal of Accounting and Economics*, 3, pp. 183–199. doi: 10.1016/0165-4101(81)90002-1.

Department of Statistics Malaysia (2017a) *Population Estimates by Age Group, 2010 - 2017 (Malaysia)*.

Department of Statistics Malaysia (2017b) *Press Release: Abridged Life Tables, Malaysia 2015-2017*. Available at: https://www.statistics.gov.my.

Department of Statistics Malaysia (2017c) *Press Release: Vital Statistics Current Population Estimates, Malaysia, 2016-2017*.

Depoers, F. (2000) 'A Cost Benefit Study of Voluntary Disclosure: Some Empirical Evidence from French Listed Companies', *European Accounting Review*, 9(2), pp. 245–263. doi: 10.1080/09638180050129891.

Desai, M. (2005) 'The degradation of reported corporate profit', *Journal of Economic Perspectives*, 19(4), pp. 171–192. doi: 10.2307/2225251.

Dhaliwal, D. S. *et al.* (2011) 'Voluntary nonfinancial disclosure and the cost of equity capital: The initiation of corporate social responsibility reporting', *Accounting Review*, 86(1), pp. 59–100. doi: 10.2308/accr.00000005.

Diamond, D. W. and Verrecchia, R. E. (1991) 'Disclosure, Liquidity and the Cost of Capital', *The Journal of Finance*, 46(5), pp. 1325–1359.

Donaldson, L. and Davis, J. H. (1991) 'Stewardship Theory or Agency Theory: CEO Governance and Shareholder Returns', *Australian Journal of Management*, 16(June), pp. 49–66. doi: 10.1177/031289629101600103.

Donnelly, R. and Mulcahy, M. (2008) 'Board structure, ownership, and voluntary disclosure in Ireland', *Corporate Governance : An International Review*, 16(5), pp. 416–429. doi: 10.1111/j.1467-8683.2008.00692.x.

Ebrahim, A. and Fattah, T. A. (2015) 'Corporate governance and initial compliance with IFRS in emerging markets: The case of income tax accounting in Egypt', *Journal of International Accounting, Auditing and Taxation*. Elsevier Inc., 24, pp. 46–60. doi: 10.1016/j.intaccaudtax.2015.02.003.

Economic Planning Unit, Prime Minister's Department, M. (2015) *Eleventh Malaysia Plan 2016-2020 (Anchoring Growth on People)*, *Percetakan Nasional Malaysia Berhad*. Available at: http://rmk11.epu.gov.my/book/eng/Elevent-Malaysia-Plan/RMKe-11 Book.pdf.

Efferin, S. and Hopper, T. (2007) 'Management control, culture and ethnicity in a Chinese Indonesian company', *Accounting, Organizations and Society*, 32(3), pp. 223–262. doi: 10.1016/j.aos.2006.03.009.

Eisenhardt, K. M. (1989) 'Agency Theory : An Assessment and Review', *The Academy of Management Review*, 14(1), pp. 57–74. doi: 10.2307/258191.

Elbannan, M. A. and Elbannan, M. A. (2015) 'Economic Consequences of Bank Disclosure in the Financial Statements Before and During the Financial Crisis: Evidence From Egypt.', *Journal of Accounting, Auditing & Finance*, 30(2), pp. 181–217. doi: 10.1177/0148558X14552723.

Elmagrhi, M. H., Ntim, C. G. and Wang, Y. (2016) 'Antecedents of voluntary corporate governance disclosure: a post-2007/08 financial crisis evidence from the influential UK Combined Code', *Corporate Governance: The international journal of business in society*, 16(3), pp. 507–538. doi: 10.1108/CG-01-2016-0006.

Elshandidy, T., Fraser, I. and Hussainey, K. (2013) 'Aggregated, voluntary, and mandatory risk disclosure incentives: Evidence from UK FTSE all-share companies', *International Review of Financial Analysis*. Elsevier Inc., 30, pp. 320–333. doi: 10.1016/j.irfa.2013.07.010.

Eng, L. L. and Mak, Y. T. (2003) 'Corporate governance and voluntary disclosure', *Journal of Accounting and Public Policy*, 22(4), pp. 325–345. doi: 10.1016/S0278-4254(03)00037-1.

Erhardt, N. L., Werbel, J. D. and Shrader, C. B. (2003) 'Board of director diversity and firm financial performance', *Corporate Governance: An International Review*, 11(2), pp. 102–111. doi: 10.1111/1467-8683.00011.

Ernst & Young (2015) 'Accounting for share-based payments under IFRS 2 - the essential guide', (April).

Ernst & Young (2017) 'Companies Act 2016 - Shaping the Malaysian corporate regulatory landscape', *Ernst & Young*, pp. 1–16.

Ernstberger, J. and Grüning, M. (2013) 'How do firm- and country-level governance mechanisms affect firms' disclosure?', *Journal of Accounting and Public Policy*.

Elsevier Inc., 32(3), pp. 50–67. doi: 10.1016/j.jaccpubpol.2013.02.003.

Esa, E. and Mohd-Ghazali, N. A. (2012) 'Corporate social responsibility and corporate governance in Malaysian government-linked companies', *The international journal of business in society*, 12(3), pp. 292–305. doi: 10.1111/j.1468-0270.2009.01940.x.

Faccio, M. (2006) 'Politically Connected Firms', *The American Economic Review*, 96(1), pp. 369–386.

Fahlenbrach, R. and Stulz, R. M. (2011) 'Bank CEO incentives and the credit crisis', *Journal of Financial Economics*, 99(1), pp. 11–26. doi: 10.1016/j.jfineco.2010.08.010.

Fama, E. F. and Jensen, M. C. (1983) 'Separation of Ownership and Control', *Journal of Law and Economics*, 26(2), pp. 301–325.

Fan, J. P. H. and Wong, T. J. (2002) 'Corporate ownership structure and the informativeness of accounting earnings in East Asia', *Journal of Accounting and Economics*, 33(3), pp. 401–425. doi: 10.1016/S0165-4101(02)00047-2.

Farmer, M., Archbold, S. and Alexandrou, G. (2013) 'CEO Compensation and Relative Company Performance Evaluation: UK Evidence', *Compensation & Benefits Review*, 45(2), pp. 88–96. doi: 10.1177/0886368713492116.

Fee, C. E. and Hadlock, C. J. (2003) 'Raids, Rewards, and Reputations in the Market for Managerial Talent', *Review of Financial Studies*, 16(4), pp. 1315–1357. doi: 10.1093/rfs/hhg031.

Ferreira, D. (2010) *Board Diversity*.

Finkelstein, L. M., Ryan, K. M. and King, E. B. (2013) 'What do the young (old) people think of me? Content and accuracy of age-based metastereotypes', *European Journal of Work and Organizational Psychology*, 22(November), pp. 633–657. doi: 10.1080/1359432X.2012.673279.

Finkelstein, S. (1992) 'Power in Top Management Teams: Dimensions, Measurement and Validation', *Academy of Management Journal*, 35(3), pp. 505–538.

Firth, M., Fung, P. M. Y. and Rui, O. M. (2007) 'Ownership, two-tier board structure, and the informativeness of earnings - Evidence from China', *Journal of Accounting and Public Policy*, 26(4), pp. 463–496. doi: 10.1016/j.jaccpubpol.2007.05.004.

Forker, J. J. (1992) 'Corporate Governance and Disclosure Quality', *Accounting and Business Research*, 22(86), pp. 111–124. doi: 10.1080/00014788.1992.9729426.

Forum for a new World Governance (2011) *World Governance Index*.

Francis, J. and Schipper, K. (1999) 'Have Financial Statements Lost Their Relevance?', *Journal of Accounting Research*, 37(2), pp. 319–352.

Francoeur, C. *et al.* (2017) 'Green or Greed? An Alternative Look at CEO Compensation and Corporate Environmental Commitment', *Journal of Business Ethics*. Springer Netherlands, 140, pp. 439–453. doi: 10.1007/s10551-015-2674-5.

Frantz, P., Instefjord, N. and Walker, M. (2013) 'Executive Compensation: A Model of Disclosure Choice', *Journal of Business Finance & Accounting*, 40(9–10), pp. 1184–1220. doi: 10.1111/jbfa.12041.

FTSE Group (2015) *FTSE BURSA MALAYSIA INDEX SERIES*.

Fung, S. Y. K., Gul, F. a. and Radhakrishnan, S. (2015) 'Corporate political connections and the 2008 Malaysian election', *Accounting, Organizations and Society*. Elsevier Ltd, 43, pp. 67–86. doi: 10.1016/j.aos.2015.04.001.

G.Carmines, E. and A.Zeller, R. (1979) *Reliability and validity assessment*. Sage Publications, London.

G.Ntim, C. *et al.* (2015) 'Executive compensation, corporate governance and corporate performance: A simultaneous equation approach', *Managerial and Decision Economics*, 36, pp. 67–96. doi: 10.1002/mde.

Gao, F. *et al.* (2016) 'Determinants and Economic Consequences of Non-financial Disclosure Quality', *European Accounting Review*. Taylor & Francis, 25(2), pp. 287–317. doi: 10.1080/09638180.2015.1013049.

García-Meca, E. and Sánchez-Ballesta, J. P. (2010) 'The Association of Board Independence and Ownership Concentration with Voluntary Disclosure: A Meta-analysis', *European Accounting Review*, 19(3), pp. 603–627. doi: 10.1080/09638180.2010.496979.

Gomulya, D. and Boeker, W. (2014) 'How Firms Respond To Financial Restatement: Ceo Successors and External Reactions', *Academy of Management Journal*, 57(6), pp. 1579–1785. Available at: http://10.0.21.89/amj.2012.0491%0Ahttp://widgets.ebscohost.com/prod/customerspecific/ns000290/authentication/index.php?url=http%3A%2F%2Fsearch.ebscohost.com%2Flogin.aspx%3Fdirect%3Dtrue%26AuthType%3Dip%2Ccookie%2Cshib%2Cuid%26db%3Dbth%26AN%3D99846864%26la.

Goodwin, J. and Goodwin, D. (1999) 'Ethical Judgments Across Cultures : A Comparison between Business Students from Malaysia and New Zealand', *Journal of Business Ethics*, 18, pp. 267–281.

Government of Malaysia and United Nation Development Programme (2006) *Towards Achieving at Least 30 Percent Participation of Women at Decision Making Levels in Malaysia*.

Gray, S. J. (1988) 'Towards a Theory of Cultural Influence on the Development of Accounting Systems Internationally', *Abacus*, 24(1), pp. 1–15.

Greiling, D. and Spraul, K. (2010) 'Accountability and The Challenges of Information Disclosure', *Public Administrative Quarterly*, 34(3), pp. 338–377.

Griffin, J. J. and Mahon, J. F. (1997) 'The Corporate Social Performance and Corporate Financial Performance Debate. Twenty-five years of incomparable research', *Business & Society*, 36(1), pp. 5–31.

Griffith, D. a and Harvey, M. G. (2001) 'A Resource Perspective of Dynamic Global Capabilities', *Journal of International Business Studies*, 32(3), pp. 597–606.

Gul, F. A. (2006) ‘Auditors’ response to political connections and cronyism in Malaysia’, *Journal of Accounting Research*, 44(5), pp. 931–963. doi: 10.1111/j.1475-679X.2006.00220.x.

Guo, W.-C., Yang, S.-R. S.-H. and Yu-Wen (2006) ‘Stock bonus compensation and firm performance in Taiwan’, *Managerial Finance*, 32(11), pp. 862–885. doi: 10.1108/03074350610703821.

Guthrie, J. and Petty, R. (2000) ‘Intellectual capital: Australian annual reporting practices’, *Journal of Intellectual Capital*, 1(3), pp. 241–251. doi: 10.1108/14691930010350800.

Hafsi, T. and Turgut, G. (2013) ‘Boardroom Diversity and its Effect on Social Performance: Conceptualization and Empirical Evidence’, *Journal of Business Ethics*, 112(3), pp. 463–479. doi: 10.1007/s10551-012-1272-z.

Hail, L. (2002) ‘The Impact of Voluntary Corporate Disclosures on the Ex ante Cost of Capital for Swiss Firms’, *European Accounting Review*, 11(4), pp. 741–773.

Hambrick, D. C. (1997) ‘Corporate coherence and the top management team’, *Strategy & Leadership*, 25(5), pp. 24–29.

Hambrick, D. C. (2007) ‘Upper Echelons Theory : An Update’, *Academy of Management Review*, 32(2), pp. 334–343.

Hambrick, D. C., Cho, T. S. and Chen, M.-J. (1996) ‘The influence of top management team heterogeneity on firms’ competitive moves.’, *Administrative Science Quarterly*, 41(4), pp. 659–684. doi: 10.2307/2393871.

Hambrick, D. C. and Finkelstein, S. (1995) ‘The Effects of Ownership Structure on Conditions at the Top : The Case of CEO Pay Raises’, *Strategic Management Journal*, 16(3), pp. 175–193.

Hambrick, D. C. and Mason, P. A. (1984) ‘Upper Echelons : The Organization as a Reflection of Its Top Managers’, *Academy of Management Journal*, 9(2), pp. 193–206.

Hamid, F. Z. A. (2004) ‘Corporate social disclosure by banks and finance companies: Malaysian evidence’, *Corporate Ownership and Control*, 1(4), pp. 118–130. doi: 10.22495/cocv1i4p10.

Haniffa, R. and Hudaib, M. (2006) ‘Corporate governance structure and performance of Malaysian listed companies’, *Journal of Business Finance & Accounting*, 33 (7) & ((September/October 2006), pp. 1034–1062. doi: 10.1111/j.1468-5957.2006.00594.x.

Haniffa, R. M. and Cooke, T. E. (2002) ‘Culture , Corporate Governance and Disclosure in Malaysian Corporations’, *Abacus*, 38(3), pp. 317–349.

Haniffa, R. M. and Cooke, T. E. (2005) ‘The impact of culture and governance on corporate social reporting’, *Journal of Accounting and Public Policy*, 24(5), pp. 391–430. doi: 10.1016/j.jaccpubpol.2005.06.001.

Harris, M. and Raviv, A. (1979) 'Optimal incentive contracts with imperfect information', *Journal of Economic Theory*, 20, pp. 231–259. doi: 10.1016/0022-0531(79)90073-5.

Hart, S. L. (1995) 'A Natural-Resource-Based View of the Firm', *Academy of Management Review*, 20(4), pp. 986–1014. doi: 10.2307/258963.

Hasnan, S., Rahman, R. A. and Mahenthiran, S. (2013) 'Management Motive, Weak Governance, Earnings Management, and Fraudulent Financial Reporting: Malaysian Evidence', *Journal of International Accounting Research*, 12(1), pp. 1–27. doi: 10.2308/jiar-50353.

Hassan, O. A. G. *et al.* (2009) 'The value relevance of disclosure: Evidence from the emerging capital market of Egypt', *International Journal of Accounting*. University of Illinois, 44(1), pp. 79–102. doi: 10.1016/j.intacc.2008.12.005.

Hassan, O. and Marston, C. (2010) *Disclosure Measurement in the Empirical Accounting Literature - A Review Article*, *Economics and Finance Working Paper Series*. doi: 10.2139/ssrn.1640598.

Hayes, R. M. and Schaefer, S. (1999) 'How much are differences in managerial ability worth?', *Journal of Accounting and Economics*, 27, pp. 125–148. doi: 10.1016/S0165-4101(99)00007-5.

Healy, P. M., Hutton, A. P. and Palepu, K. G. (1999) 'Stock Performance and Intermediation Changes Surrounding Sustained Increases in Disclosure', *Contemporary Accounting Research*, 16(3), pp. 485–520. doi: 10.1111/j.1911-3846.1999.tb00592.x.

Hearn, B. (2013a) 'The determinants of director remuneration, executive tenure and individual executive disclosure in North African IPO firms', *Research in International Business and Finance*. Elsevier B.V., 27(1), pp. 162–182. doi: 10.1016/j.ribaf.2011.11.002.

Hearn, B. (2013b) 'The determinants of director remuneration, executive tenure and individual executive disclosure in North African IPO firms', *Research in International Business and Finance*. Elsevier B.V., 27, pp. 162–182. doi: 10.1016/j.ribaf.2011.11.002.

Herrmann, P. and Datta, D. K. (2002) 'CEO Successor Characteristics and the Choice of Foreign Market Entry Mode: An Empirical Study', *Journal of International Business Studies*, 33(3), pp. 551–569. doi: 10.1057/palgrave.jibs.8491031.

Herrmann, P. and Datta, D. K. (2005) 'Relationships between top management team characteristics and international diversification: An empirical investigation', *British Journal of Management*, 16, pp. 69–78. doi: 10.1111/j.1467-8551.2005.00429.x.

Hidalgo, R. L., Garcia-Meca, E. and Isabel Martinez (2011) 'Corporate governance and intellectual capital disclosure', *Journal of Business Ethics*, 200, pp. 483–495. doi: 10.1007/s10551-010-0692-x.

Hillman, A. J. (2015) 'Board Diversity: Beginning to Unpeel the Onion', *Corporate*

Governance: An International Review, 23(2), pp. 104–107. doi: 10.1111/corg.12090.

Hillman, A. J. and Thomas, D. (2003) 'Boards of Directors and Firm Performance : Integrating Agency and Resource Dependence Perspectives', *Academy of Management Review*, 28(3), pp. 383–396. doi: 10.5465/AMR.2003.10196729.

Hirschman, C. (1987) 'The Meaning and Measurement of Ethnicity in Malaysia : An Analysis of Census Classifications', *The Journal of Asian Studies*, 46(3), pp. 555–582.

Ho, P.-L. and Taylor, G. (2013) 'Corporate governance and different types of voluntary disclosure: Evidence from Malaysian listed firms', *Pacific Accounting Review*, 25(1), pp. 4–29. doi: http://dx.doi.org/10.1108/09564230910978511.

Ho, S. S. . and Shun Wong, K. (2001) 'A study of the relationship between corporate governance structures and the extent of voluntary disclosure', *Journal of International Accounting, Auditing and Taxation*, 10(2), pp. 139–156. doi: 10.1016/S1061-9518(01)00041-6.

Hoang, T. C., Abeysekera, I. and Ma, S. (2016) 'Board Diversity and Corporate Social Disclosure: Evidence from Vietnam', *Journal of Business Ethics*. Springer Netherlands. doi: 10.1007/s10551-016-3260-1.

Hofstede, G. (1984) 'Cultural dimensions in management and planning', *Asia Pacific Journal of Management*, pp. 81–99. doi: 10.1007/BF01733682.

Hofstede, G. and Bond, M. H. (1988) 'The Confucius connection: From cultural roots to economic growth', *Organizational Dynamics*, 16, pp. 5–21. doi: 10.1016/0090-2616(88)90009-5.

Holcomb, T. R., Holmes, R. M. and Connelly, B. L. (2009) 'Making the most of what you have: Managerial ability as a source of resource value creation', *Strategic Management Journal*, 30(5), pp. 457–485. doi: 10.1002/smj.747.

Hölmstrom, B. (1979) 'Moral hazard and observability', *Bell Journal of Economics*, 10, (1), pp. 74–91. doi: 10.2307/3003320.

Hope, O. (2003) 'Firm-level Disclosures and the Relative Roles of Culture and Legal Origin', *Journal of International Financial Management and Accounting*, 14(3), pp. 218–248.

Hope, O. K. and Thomas, W. B. (2008) 'Managerial empire building and firm disclosure', *Journal of Accounting Research*, 46(3), pp. 591–626. doi: 10.1111/j.1475-679X.2008.00289.x.

Hummel, K. and Schlick, C. (2016) 'The relationship between sustainability performance and sustainability disclosure - Reconciling voluntary disclosure theory and legitimacy theory', *Journal of Accounting and Public Policy*. Elsevier Inc., 35, pp. 455–476. doi: 10.1016/j.jaccpubpol.2016.06.001.

Hurst, D. K., C.Rush, J. and White, R. E. (1989) 'Top Management Teams and Organizational Renewal', *Strategic Management Journal*, 10, pp. 87–105.

Hyun, J.-H. *et al.* (2014) 'The Effects of Corporate Governance, Competition, and Political Costs on Strategic Executive Pay Disclosure: Evidence from Korea', *Journal of Management Accounting Research*, 26(2), pp. 195–220. doi: 10.2308/jmar-50730.

International Monetary Fund (2013) *Malaysia: Financial System Stability Assessment*.

Isidro, H. and Sobral, M. (2015) 'The Effects of Women on Corporate Boards on Firm Value, Financial Performance, and Ethical and Social Compliance', *Journal of Business Ethics*, 132(1), pp. 1–19. doi: 10.1007/s10551-014-2302-9.

Jalila, S. and Devi, J. (2012) 'Ownership Structure Effect on the Extent of Segment Disclosure: Evidence from Malaysia', *Procedia Economics and Finance*, 2(Af), pp. 247–256. doi: 10.1016/S2212-5671(12)00085-8.

Jamali, D., Safieddine, A. M. and Rabbath, M. (2008) 'Corporate governance and corporate social responsibility synergies and interrelationships', *Corporate Governance: An International Review*, 16(5), pp. 443–459. doi: 10.1111/j.1467-8683.2008.00702.x.

Jehn, K. A. and Bezrukova, K. (2004) 'A field study of group diversity, workgroup context, and performance', *Journal of Organizational Behavior*, 25(6), pp. 703–729. doi: 10.1002/job.257.

Jensen, M. C. (1983) 'Organization Theory and Methodology', *The Accounting Review*, 58(2), pp. 319–339. Available at: http://papers.ssrn.com/sol3/paper.taf?ABSTRACT_ID=94036.

Jensen, M. C. and Meckling, W. H. (1976) 'Theory of the firm: Managerial Behavior, Agency Costs and Ownership Structure', *Journal of Financial Economics*, 3, pp. 305–360.

Joecks, J., Pull, K. and Vetter, K. (2013) 'Gender Diversity in the Boardroom and Firm Performance: What Exactly Constitutes a "Critical Mass?"', *Journal of Business Ethics*, 118(1), pp. 61–72. doi: 10.1007/s10551-012-1553-6.

Johnson, S. G., Schnatterly, K. and Hill, A. D. (2013) 'Board Composition Beyond Independence: Social Capital, Human Capital and Demographics', *Journal of Management*, 39(1), pp. 232–262. doi: 10.1177/0149206312463938.

Johnson, S. and Mitton, T. (2003) 'Cronyism and capital controls: evidence from Malaysia', *Journal of Financial Economics*, 67, pp. 351–382. doi: 10.1016/S0304-405X(02)00255-6.

Jorgensen, B. N. and Kirschenheiter, M. T. (2003) 'Discretionary risk disclosures', *Accounting Review*, 78(2), pp. 449–469. doi: 10.2308/accr.2003.78.2.449.

Joskow, P. *et al.* (1993) 'Regulatory Constraints on CEO Compensation', *Brookings Papers on Economic Activity. Microeconomics.*, 1, pp. 1–72.

Kalyta, P. (2009) 'Compensation transparency and managerial opportunism: A study of supplemental retirement plans', *Strategic Management Journal*, 30, pp. 405–423. doi: 10.1002/smj.

Kang, H., Cheng, M. and Gray, S. J. (2007) 'Corporate governance and board composition: Diversity and independence of Australian boards', *Corporate Governance: An International Review*, 15(2), pp. 194–207. doi: 10.1111/j.1467-8683.2007.00554.x.

Kerr, J. and Bettis, R. A. (1987) 'Boards of Directors , Top Management Compensation and Shareholder Returns', *Academy of Management Journal*, 30(4), pp. 645–664.

Khan, A., Muttakin, M. B. and Siddiqui, J. (2013) 'Corporate Governance and Corporate Social Responsibility Disclosures: Evidence from an Emerging Economy', *Journal of Business Ethics*, 114(2), pp. 207–223. doi: 10.1007/s10551-012-1336-0.

Kiel, G. C. and Nicholson, G. J. (2003) 'Board Composition and Corporate Performance: how the Australian experience informs contrasting theories of corporate governance', *Corporate Governance: An International Review*, 11(3), pp. 189–205. doi: 10.1111/1467-8683.00318.

Kilduff, M., Angelmar, R. and Mehra, A. (2000) 'Top Management-Team Diversity and Firm Performance: Examining the Role of Cognitions', *Organization Science*, 11(1), pp. 21–34. doi: 10.1287/orsc.11.1.21.12569.

Kim, S. Y., Lee, K. R. and Shin, H.-H. (2017) 'The enhanced disclosure of executive compensation in Korea', *Pacific-Basin Finance Journal*. Elsevier B.V., 43, pp. 72–83. doi: 10.1016/j.pacfin.2017.02.005.

Klapper, L. F. and Love, I. (2004) 'Corporate governance, investor protection, and performance in emerging markets', *Journal of Corporate Finance*, 10, pp. 703–728. doi: 10.1016/S0929-1199(03)00046-4.

Kor, Y. Y. and Sundaramurthy, C. (2009) 'Experience-Based Human Capital and Social Capital of Outside Directors', *Journal of Management*, 35(4), pp. 981–1006. doi: 10.1177/0149206308321551.

KPMG (2005) *The KPMG Guide: FRS 2, Share-based Payment & FRS 5, Non-current Assets Held for Sale and Discontinued Operations*.

KPMG Malaysia (2005) *The KPMG Guide: Improvements to FRS 101, 108, 116, 117 and 124*.

Krippendorff, K. (1989) *Content Analysis*, *International Encyclopedia of Communications*.

Krishnan, H. A. and Park, D. (2005) 'A few good women - On top management teams', *Journal of Business Research*, 58, pp. 1712–1720. doi: 10.1016/j.jbusres.2004.09.003.

Ku Ismail, K. N. I. and Abdul Manaf, K. B. (2016) 'Market reactions to the appointment of women to the boards of Malaysian firms', *Journal of Multinational Financial Management*. Elsevier B.V., 36, pp. 75–88. doi: 10.1016/j.mulfin.2016.04.004.

Kunze, F., Boehm, S. A. and Bruch, H. (2011) 'Age diversity, age discrimination climate and performance consequences-a cross organizational study', *Journal of*

Organizational Behavior, 32(2), pp. 264–290. doi: 10.1002/job.698.

Lahey, J. (2008) ‘State Age Protection Laws and the Age Discrimination in Employment Act’, *The Journal of Law and Economies*, 51(3), pp. 433–460.

Laksmana, I. (2008) ‘Corporate Board Governance and Voluntary Disclosure of Executive Compensation Practices’, *Contemporary Accounting Research*, 25(4), pp. 1147–1182. doi: 10.1506/car.25.4.8.

Laksmana, I., Tietz, W. and Yang, Y. W. (2012) ‘Compensation discussion and analysis (CD&A): Readability and management obfuscation’, *Journal of Accounting and Public Policy*. Elsevier Inc., 31(2), pp. 185–203. doi: 10.1016/j.jaccpubpol.2011.08.003.

Lambert, R. A. and Larcker, D. F. (1987) ‘An Analysis of the use of Accounting and Market Measures of Performance in Executive Compensation Contracts’, *Journal of Accounting Research*, 25, pp. 85–125. doi: 10.2307/2491081.

Lan, L. L. and Heracleous, L. (2010) ‘Rethinking Agency Theory: The View from Law’, *Academy of Management Review*, 35(2), pp. 294–314. doi: 10.5465/AMR.2010.48463335.

Lang, M. H., Lins, K. V. and Miller, D. P. (2004) ‘Concentrated control, analyst following, and valuation: Do analysts matter most when investors are protected least?’, *Journal of Accounting Research*, 42(3), pp. 589–623. doi: 10.1111/j.1475-679X.2004.t01-1-00142.x.

Larcker, D. F., Richardson, S. A. and Tuna, I. (2007) ‘Corporate governance, accounting outcomes and organizational performance’, *Accounting Review*, 82(4), pp. 963–1008.

Larcker, D. F. and Rusticus, T. O. (2007) ‘Endogeneity and Empirical Accounting Research’, *European Accounting Review*, 16(1), pp. 207–215. doi: 10.1080/09638180701269905.

Larcker, D. F. and Rusticus, T. O. (2010) ‘On the use of instrumental variables in accounting research’, *Journal of Accounting and Economics*. Elsevier, 49(3), pp. 186–205. doi: 10.1016/j.jacceco.2009.11.004.

Laws of Malaysia (1997) *Financial Reporting Act 1997*.

Lazarides, T. and Elektra, P. (2010) ‘Disclosure Factors of Executive Managers Remuneration : A Probit Model’, *American Journal of Economics and Business Administration*, 2(4), pp. 341–349.

Leuz, C. and Verrecchia, R. E. (2000) ‘The Economic Consequences of Increased Disclosure’, *Journal of Accounting Research*, 38, pp. 91–124.

Lev, B. and Penman, S. H. (1990) ‘Voluntary forecast disclosure, nondisclosure, and stock prices’, *Journal of Accounting Research*, 28(1), pp. 49–76. doi: 10.2307/2491217.

Lev, B. and Zarowin, P. (1999) ‘The Boundaries of Financial Reporting and How to

Extend Them', *Journal of Accounting Research*, 37(2), pp. 353–385. doi: 10.2307/2491413.

Levitt, A. (1998) 'The importance of high quality accounting standards', *Accounting Horizons*, 12(1), pp. 79–82.

Lewis, B. W., Walls, J. L. and Dowell, G. W. S. (2014) 'Difference in degrees: CEO characterisctics and firm environmental disclosure', *Strategic Management Journal*, 35, pp. 712–722. doi: 10.1002/smj.

Liao, L., Luo, L. and Tang, Q. (2015) 'Gender diversity, board independence, environmental committee and greenhouse gas disclosure', *British Accounting Review*. Elsevier Ltd, 47(4), pp. 409–424. doi: 10.1016/j.bar.2014.01.002.

Liew, P. K. (2007) 'Corporate governance reforms in Malaysia: The key leading players' perspectives', *Corporate Governance: An International Review*, 15(5), pp. 724–740. doi: 10.1111/j.1467-8683.2007.00618.x.

Lim, L. (2001) 'Work related values of Malay and Chinese Malaysians', *International Journal of Cross Cultural Management*, 1(2), pp. 209–226.

Lim, M., How, J. and Verhoeven, P. (2014) 'Corporate ownership, corporate governance reform and timeliness of earnings: Malaysian evidence', *Journal of Contemporary Accounting and Economics*. Elsevier Ltd, 10(1), pp. 32–45. doi: 10.1016/j.jcae.2013.11.001.

Linsley, P. M. and Shrives, P. J. (2006) 'Risk reporting: A study of risk disclosures in the annual reports of UK companies', *British Accounting Review*, 38, pp. 387–404. doi: 10.1016/j.bar.2006.05.002.

Liu, J. and Taylor, D. (2008) 'Legitimacy and corporate governance determinants of executives' remuneration disclosures', *Corporate Governance: The international journal of business in society*, 8(1), pp. 59–72. doi: 10.1108/14720700810853400.

Lo, K. (2003) 'Economic consequences of regulated changes in disclosure: the case of executive compensation', *Journal of Accounting and Economics*, 35(3), pp. 285–314. doi: 10.1016/S0165-4101(03)00035-1.

London Stock Exhange plc (2007) *A Guide to Capital Markets - Your Route to the Heart of Global Finance*. Available at: http://www.londonstockexchange.com/companies-and-advisors/listing/markets/guide-to-capital-markets.pdf.

Low, D. C. M., Roberts, H. and Whiting, R. H. (2015) 'Board gender diversity and firm performance: Empirical evidence from Hong Kong, South Korea, Malaysia and Singapore', *Pacific-Basin Finance Journal*. Elsevier B.V., 35, pp. 381–401. doi: 10.1016/j.pacfin.2015.02.008.

Lubatkin, M. H. *et al.* (2006) 'Ambidexterity and Performance in Small-to Medium-Sized Firms: The Pivotal Role of Top Management Team Behavioral Integration', *Journal of Management*, 32(5), pp. 646–672. doi: 10.1177/0149206306290712.

Lundholm, R. and Lang, M. (1993) 'Cross-Sectional Determninants of Analyst

Ratings of Corporate Disclosures', *Journal of Accounting Research*, 31(2), pp. 246–271.

Mahadeo, J. D., Soobaroyen, T. and Hanuman, V. O. (2012) 'Board Composition and Financial Performance: Uncovering the Effects of Diversity in an Emerging Economy', *Journal of Business Ethics*, 105, pp. 375–388. doi: 10.1007/s10551-011-0973-z.

Maizatulakma, A. *et al.* (2015) 'Risk management disclosure: A study on the effect of voluntary risk management disclosure toward firm value', *Journal of Applied Accounting Research*, 16(3), pp. 400–432. doi: http://dx.doi.org/10.1108/JEIM-07-2014-0077.

Malak, S. S. D. A. (2012) *The Impact of Changes in Malaysian Regulatory Framework on the Disclosure of Executive Directors' Remuneration*.

Malak, S. (2015) "The determinants of disclosure of individual executive directors' remuneration: A Malaysian perspective"*, Procedia-Social and Behavioral Sciences, v.172, p.666-673.*

Malaysian Accounting Standards Board (2002) *MASB Standard 29: Employee Benefits*.

Malaysian Accounting Standards Board (2010) *Financial Reporting Standard 124: Related Party Disclosures*.

Malaysian Accounting Standards Board (2011) 'Malaysian Financial Reporting Standard 119', 119(June).

Mallin, C. and Farag, H. (2017) *Balancing the board: Directors' skills and diversity*. Available at: https://www.icas.com/__data/assets/pdf_file/0010/289189/Mallin-And-Farag-ICAS-report-May-2017.pdf.

Manner, M. H. (2010) 'The impact of CEO Characteristics on Coporate Social Performance', *Journal of Business Ethics*, 93(2010), pp. 53–72. doi: 10.1007/s10551-010-0626-7.

Marston, C. L. and Shrives, P. J. (1991) 'The use of disclosure indices in accounting research: A review article', *The British Accounting Review*, 23(3), pp. 195–210. doi: 10.1016/0890-8389(91)90080-L.

Matsa, D. A. and Miller, A. R. (2013) 'A female style in corporate leadership? Evidence from quotas', *American Economic Journal: Applied Economics*, 5(3), pp. 136–169. doi: 10.1257/app.5.3.136.

Mcguire, R. H. (1982) 'The Study of Ethnicity in Historical Archaeology', *Journal of Anthropological Archaeology*, 1, pp. 159–178. doi: 10.1080/13600810500099592.

Melis, A., Gaia, S. and Carta, S. (2015) 'Directors' remuneration: A comparison of Italian and UK non-financial listed firms' disclosure', *The British Accounting Review*, 47(1), pp. 66–84. doi: 10.1016/j.bar.2014.08.004.

Miller, T. and Triana, M. (2009) 'Demographic Diversity in the Boardroom : Mediators of the Board Diversity – Firm Performance Relationship Toyah Miller and María del

Carmen Triana’, *Journal of Management Studies*, 46(July), pp. 755–786. doi: 10.1111/j.1467-6486.2009.00839.x.

Milliken, F. J. and Martins, L. L. (1996) ‘Searching for Common Treads: Undertanding the Multiple Effects of Diversity in Organizational Groups’, *Academy of Management Review*, 21(2), pp. 402–433.

Milne, M. J. and Adler, R. W. (1999) ‘Exploring the reliability of social and environmental disclosures content analysis’, *Accounting, Auditing & Accountability Journal*, 12(2), pp. 237–256.

Miner, L. (2015) ‘The unintended consequences of internet diffusion: Evidence from Malaysia’, *Journal of Public Economics*. Elsevier B.V., 132, pp. 66–78. doi: 10.1016/j.jpubeco.2015.10.002.

Minhat, M. and Abdullah, M. (2014) ‘Executive compensation in government-linked companies: evidence from Malaysia’, *Applied Economics*, 46(16), pp. 1861–1872. doi: 10.1080/00036846.2014.887192.

Ministry of Human Resource (2012) *Law of Malaysia: Minimum Retirement Age Act 2012 [Act 753]*. Available at: http://minretirementage.mohr.gov.my/wp-content/uploads/2013/07/AKTA-753_BI_MINIMUM-RETIREMENT-AGE-ACT-2012.pdf.

Ministry of Women Family and Community Development (2012) *Press Release: 208 Women Directors Are Ready for Board Directorships on Malaysian Public Listed Companies*.

Ministry of Women Family and Community Development (2015) *Statistics on Women, Family and Community Malaysia 2014*. doi: 10.1017/CBO9781107415324.004.

Minority Shareholder Watchdog Group (2014) *Malaysia-Asean Corporate Governance 2014 Report*. Available at: www.mswg.org.my.

Minority Shareholder Watchdog Group (2015) *MSWG-Asean Corporate Governance Transparency Index, Findings and Recognition 2015 (The Malaysian Chapter)*.

Mitton, T. (2002) ‘A cross-firm analysis of the impact of corporate governance on the East Asian financial crisis’, *Journal of Financial Economics*, 64(2), pp. 215–241. doi: 10.1016/S0304-405X(02)00076-4.

Mohd Ghazali, N. a. and Weetman, P. (2006) ‘Perpetuating traditional influences: Voluntary disclosure in Malaysia following the economic crisis’, *Journal of International Accounting, Auditing and Taxation*, 15, pp. 226–248. doi: 10.1016/j.intaccaudtax.2006.08.001.

Morck, R., Wolfenzon, D. and Yeung, B. (2005) ‘Corporate Governance, Economic Entrenchment, and Growth’, *Journal of Economic Literature*, 43(3), pp. 655–720. doi: doi: 10.1257/002205105774431252.

Morris, R. D., Pham, T. and Gray, S. J. (2011) ‘The Value Relevance of Transparency and Corporate Governance in Malaysia Before and After the Asian Financial Crisis’, *Abacus*, 47(2), pp. 205–233. doi: 10.1111/j.1467-6281.2011.00339.x.

Morse, A., Nanda, V. and Seru, A. (2011) ‘Are Incentive Contracts Rigged by Powerful CEOs?’, *Journal of Finance*, LXVI(5), pp. 1779–1821.

Murray, A. I. (1989) ‘Top management group heterogeneity and firm performance’, *Strategic Management Journal*, 10(Special Issue: Stratregic Leaders and Leadership (Summer, 1989)), pp. 125–141. doi: 10.1002/smj.4250100710.

Muslu, V. (2010a) ‘Executive Directors , Pay Disclosures , and Incentive Compensation in Large European Companies’, *Journal of Accounting, Auditing & Finance*, 25, pp. 569–605. doi: 10.1177/0148558X1002500406.

Muslu, V. (2010b) ‘Executive Directors , Pay Disclosures and Incentive Compensation in Large European Companies’, *Journal of Accounting, Auditing & Finance*, 25(4), pp. 569–605. doi: 10.1177/0148558X1002500406.

Nelson, J., Gallery, G. and Percy, M. (2010) ‘Role of corporate governance in mitigating the selective disclosure of executive stock option information’, *Accounting and Finance*, 50(3), pp. 685–717. doi: 10.1111/j.1467-629X.2009.00339.x.

Ng, T. W. H. and Feldman, D. C. (2012) ‘Evaluating Six Common Stereotypes About Older Workers with Meta-Analytical Data’, *Personnel Psychology*, 65(4), pp. 821–858. doi: 10.1111/peps.12003.

Niederle, M. and Vesterlund, L. (2007) ‘Do Women Shy Away from Competition ? Do Men Compete Too Much’, *The Quarterly Journal of Economics*, 122(3), pp. 1067–1101.

Nielsen, S. (2010) ‘Top management team diversity: A review of theories and methodologies’, *International Journal of Management Reviews*, 12(3), pp. 301–316. doi: 10.1111/j.1468-2370.2009.00263.x.

Norziana, L., Cotter, J. and Mula, J. (2012) ‘Corporat Governance Quality, Incentive Factors and Voluntary Corporate Governance Disclosures in Annual Reports of Malaysian Public Listed Companies’, *Corporate Ownership and Control*, 10(1), pp. 329–352.

Ntim, C. G. (2009) *Internal corporate governance structures and firm financial performance : Evidence from South African listed firms*, *PhD Thesis*.

Ntim, C. G., Opong, K. K. and Danbolt, J. (2012) ‘The relative value relevance of shareholder versus stakeholder corporate governance disclosure policy reforms in South Africa’, *Corporate Governance : An International Review*, 20(1), pp. 84–105. doi: 10.1111/j.1467-8683.2011.00891.x.

Ntim, C. G. and Soobaroyen, T. (2013) ‘Black Economic Empowerment Disclosures by South African Listed Corporations: The Influence of Ownership and Board Characteristics’, *Journal of Business Ethics*, 116(1), pp. 121–138. doi: 10.1007/s10551-012-1446-8.

Ntim, C. G., Soobaroyen, T. and Broad, M. J. (2017) ‘Governance Structures, Voluntary Disclosures and Public Accountability: The Case of UK Higher Education Institution’, *Accounting, Auditing & Accountability Journal*, 30(1), pp. 65–118. doi:

http://dx.doi.org/10.1108/MRR-09-2015-0216.

Ohlott, P. J. and King, S. N. (2002) 'Benefits of Multiple Roles for Managerial Women', *Academy of Management Journal*, 45(2), pp. 369–386.

Oliveira, J., Rodrigues, L. L. and Craig, R. (2011) 'Risk-related disclosures by non-finance companies: Portuguese practices and disclosure characteristics', *Managerial Auditing Journal*, 26(9), pp. 817–839. doi: 10.1108/IJBM-07-2013-0069.

Orens, R., Aerts, W. and Lybaert, N. (2009) 'Intellectual capital disclosure, cost of finance and firm value', *Management Decision*, 47(10), pp. 1536–1554. doi: 10.1108/IJBM-07-2013-0069.

Orij, R. (2010) 'Corporate social disclosures in the context of national cultures and stakeholder theory', *Accounting, Auditing & Accountability Journal*, 23(7), pp. 868–889. doi: 10.1108/09513571011080162.

Palmberg, J., Eklund, J. and Wiberg, D. (2009) 'Ownership Structure , Board Composition and Investment Performance', *Corporate Ownership and Control*, 7(1), pp. 117–127.

Park, Y. W., Nelson, T. and Huson, M. R. (2001) 'Executive Pay and the Disclosure Environment: Canadian Evidence', *Journal of Financial Research*, 24(3), pp. 347–365. doi: 10.1111/j.1475-6803.2001.tb00774.x.

Patell, J. M. (1976) 'Corporate Forecasts of Earnings Per Share and Stock Price Behavior: Empirical Test', *Journal of Accounting Research*, 14(2), pp. 246–276.

Penman, S. (1980) 'An empirical investigatio voluntary disclosure of corporate earnings forecasts', *Journal of Accounting Research*, 18(1), pp. 132–160.

Pepper, A. and Gore, J. (2015) 'Behavioral Agency Theory: New Foundations for Theorizing About Executive Compensation', *Journal of Management*, 41(4), pp. 1045–1068. doi: 10.1177/0149206312461054.

Pettigrew, A. M. (1979a) 'On Studying Organizational Cultures', *Administrative Science Quarterly*, 24(4), pp. 570–581.

Pettigrew, A. M. (1979b) 'On Studying Organizational Cultures Author', *Administrative Science Quarterly*, 24(4), pp. 570–581.

Plöckinger, M. *et al.* (2016) 'The influence of individual executives on corporate financial reporting: A review and outlook from the perspective of upper echelons theory', *Journal of Accounting Literature*. Korea Institute of Oriental Medicine, 37, pp. 55–75. doi: 10.1016/j.acclit.2016.09.002.

Posthuma, R. A. and Campion, M. A. (2009) 'Age Stereotypes in the Workplace: Common Stereotypes, Moderators, and Future Research Directions', *Journal of Management*, 35(1), pp. 158–188. doi: 10.1177/0149206308318617.

Putrajaya Committee (2015) *GLCs SUCCESSFULLY COMPLETE AND GRADUATE FROM 10- YEAR GLC TRANSFORMATION PROGRAMME*.

Putrajaya Committee on GLC High Performance (2006) *Catalysing GLC*

Transformation to Advance Malaysia's Development (Summary of Transformation Manual). Available at: http://www.pcg.gov.my.

Qiu, Y., Shaukat, A. and Tharyan, R. (2016) 'Environmental and social disclosures: Link with corporate financial performance', *British Accounting Review*. Elsevier Ltd, 48(1), pp. 102–116. doi: 10.1016/j.bar.2014.10.007.

Qu, W. and Leung, P. (2006) 'Cultural impact on Chinese corporate disclosure – a corporate governance perspective', *Managerial Auditing Journal*, 21(3), pp. 241–264. doi: http://dx.doi.org/10.1108/09564230910978511.

Rao, K. K., Tilt, C. A. and Lester, L. H. (2012) 'Corporate governance and environmental reporting : an Australian study', *The International Journal of Business i Society*, 12(2), pp. 143–163. doi: 10.1108/14720701211214052.

Rao, K. and Tilt, C. (2015) 'Board Composition and Corporate Social Responsibility: The Role of Diversity, Gender, Strategy and Decision Making', *Journal of Business Ethics*, pp. 1–21. doi: 10.1007/s10551-015-2613-5.

Rao, K. and Tilt, C. (2016) 'Board Composition and Corporate Social Responsibility: The Role of Diversity, Gender, Strategy and Decision Making', *Journal of Business Ethics*. Springer Netherlands, 138(2), pp. 327–347. doi: 10.1007/s10551-015-2613-5.

Rashid, M. Z. A. and Ho, J. A. (2003) 'Perceptions of Business Ethics in a Multicultural Community : The Case of Malaysia', *Journal of Business Ethics*, 43(1/2), pp. 75–87.

Reeb, D., Sakakibara, M. and Mahmood, I. P. (2012) 'From the Editors: Endogeneity in international business research', *Journal of International Business Studies*, 43(3), pp. 211–218. doi: 10.1057/jibs.2011.60.

Reed, R. and Defillippi, R. J. (1990) 'Causal Ambiguity, Barriers to Imitation and Sustainable Competitive Advantage', *Academy of Management Journal*, 15(1), pp. 88–102.

Riaz, Z. *et al.* (2015) 'Disclosure practices of foreign and domestic firms in Australia', *Journal of World Business*. Elsevier Inc., 50(4), pp. 781–792. doi: 10.1016/j.jwb.2015.04.001.

Riley, R. A., Pearson, T. A. and Trompeter, G. (2003) 'The value relevance of non-financial performance variables and accounting information: The case of the airline industry', *Journal of Accounting and Public Policy*, 22, pp. 231–254. doi: 10.1016/S0278-4254(03)00021-8.

Roberts, N. C. and King, P. J. (1989) 'The stakeholder audit goes public', *Organizational Dynamics*, 17(3), pp. 63–79. doi: 10.1016/0090-2616(89)90037-5.

Rodríguez Bolívar, M. P., Alcaide Muñoz, L. and López Hernández, A. M. (2013) 'Determinants of Financial Transparency in Government', *International Public Management Journal*, 16(4), pp. 557–602. doi: 10.1080/10967494.2013.849169.

Rose, C. (2007) 'Does female board representation influence firm performance? The Danish evidence', *Corporate Governance: An International Review*, 15(2), pp. 404–

413. doi: 10.1111/j.1467-8683.2007.00570.x.

Rothenberg, J. Z. and S. Gardner, D. (2011) 'Protecting Older Workers: The Failure of the Age Discrimination in Employment Act of 1967', *Journal of Sociology & Social Welfare*, XXXVIII(1), pp. 8–30. doi: 10.3868/s050-004-015-0003-8.

Ryan, H. E. and Wiggins, R. A. (2004) 'Who is in whose pocket? Director compensation, board independence, and barriers to effective monitoring', *Journal of Financial Economics*, 73(3), pp. 497–524. doi: 10.1016/j.jfineco.2003.11.002.

Safieddine, A. (2009) 'Islamic financial institutions and corporate governance: New insights for agency theory', *Corporate Governance: An International Review*, 17(2), pp. 142–158. doi: 10.1111/j.1467-8683.2009.00729.x.

Sakawa, H., Moriyama, K. and Watanabel, N. (2012) 'Relation between Top Executive Compensation Structure and Corporate Governance: Evidence from Japanese Public Disclosed Data', *Corporate Governance : An International Review*, 20(6), pp. 593–608. doi: 10.1111/j.1467-8683.2012.00928.x.

Salter, S. B. and Niswander, F. (1995) 'Cultural influence on the development of accounting systems internationally: A test of Gray's 1988 theory', *Journal of International Business Studies*, 26(2), pp. 379–397.

Samaha, K., Khlif, H. and Hussainey, K. (2015) 'The impact of board and audit committee characteristics on voluntary disclosure: A meta-analysis', *Journal of International Accounting, Auditing and Taxation*. Elsevier Inc., 24, pp. 13–28. doi: 10.1016/j.intaccaudtax.2014.11.001.

Sarachek, B., Hamid, A. A. and Ismail, Z. bin (1984) 'An Opinion Survey of Malaysian Middle Level Managers and Professionals', *Asia Pacific Journal of Management*, pp. 181–189. doi: 10.1007/BF01733483.

Saudagaran, S. M. and Diga, J. G. (1997) 'Financial Reporting in Emerging Capital Markets: Ctiaracteristics and Policy Issues', *Accounting Horizons*, 11(2), pp. 41–64.

Schiehll, E., Terra, P. R. S. and Victor, F. G. (2013) 'Determinants of voluntary executive stock option disclosure in Brazil', *Journal of Management & Governance*, 17, pp. 331–361. doi: 10.1007/s10997-011-9179-0.

Securities Commission Malaysia (2007) *Malaysian Code on Corporate Governance (Revised 2007)*. doi: 10.1007/s13398-014-0173-7.2.

Securities Commission Malaysia (2011) *Capital Market Masterplan 2*.

Securities Commission Malaysia (2017) *Malaysian Code on Corporate Governance*. Available at: https://www.sc.com.my/wp-content/uploads/eng/html/cg/mccg2017.pdf.

Sengupta, P. and Zhang, S. (2015) 'Equity-Based Compensation of Outside Directors and Corporate Disclosure Quality', *Contemporary Accounting Research*, 32(3), pp. 1073–1098. doi: 10.1111/1911-3846.12115.

Shehzad, C. T., de Haan, J. and Scholtens, B. (2010) 'The impact of bank ownership concentration on impaired loans and capital adequacy', *Journal of Banking and*

Finance. Elsevier B.V., 34, pp. 399–408. doi: 10.1016/j.jbankfin.2009.08.007.

Sheu, H.-J., Chung, H. and Liu, C.-L. (2010) 'Comprehensive Disclosure of Compensation and Firm Value: The Case of Policy Reforms in an Emerging Market', *Journal of Business Finance & Accounting*, 37(9–10), pp. 1115–1144. doi: 10.1111/j.1468-5957.2010.02213.x.

Shleifer, A. and Vishny, R. W. (1997) 'A Survey of Corporate Governance', *Journal of Finance*, 52(2), pp. 737–783.

Simons, T., Hope Pelled, L. and Smith, K. A. (1999) 'Making Use of Difference: Diversity , Debate and Decision Comprehensiveness in Top Management Teams', *Academy of Management Journal*, 42(6), pp. 662–673.

Skinner, D. J. and Srinivasan, S. (2012) 'Audit quality and auditor reputation: Evidence from Japan', *Accounting Review*, 87(5), pp. 1737–1765. doi: 10.2308/accr-50198.

Slater, D. J. and Dixon-Fowler, H. R. (2010) 'The future of the planet in the hands of MBAs: An examination of CEO MBA education and corporate environmental performance', *Academy of Management Learning and Education*, 9(3), pp. 429–441. doi: 10.5465/AMLE.2010.53791825.

Slomka-Golebiowska, A. (2013) 'Uniform regulation of executive pay at banks : Will it make a difference? The case study of Poland', *International Journal of Disclosure and Governance*, 10, pp. 135–154. doi: 10.1057/jdg.2013.4.

Song, S., Hoof, H. B. Van and Park, S. (2017) 'The impact of board composition on firm performance in the restaurant industry: A stewardship theory perspective', *International Journal of Comtemporary Hospitality Management*, 29(8), pp. 2121–2138.

Spence, M. (1973) 'Job Market Signaling', *The Quarterly Journal of Economics*, 87(3), pp. 355–374.

Srinidhi, B., Gul, F. A. and Tsui, J. (2011) 'Female Directors and Earnings Quality', *Contemporary Accounting Research*, 28(5), pp. 1610–1644. doi: 10.1111/j.1911-3846.2011.01071.x.

Van Staveren, I. (2014) 'The Lehman Sisters hypothesis', *Cambridge Journal of Economics*, 38(5), pp. 995–1014. doi: 10.1093/cje/beu010.

Stiglitz, J. E. (2002) 'Information and the Change in the Paradigm in Economics', *The American Economic Review*, 92(3), pp. 460–501.

Sun, J. *et al.* (2016) 'Ownership, capital structure and financing decision: Evidence from the UK', *British Accounting Review*. Elsevier Ltd, 48(4), pp. 448–463. doi: 10.1016/j.bar.2015.04.001.

Suto, M. (2003) 'Capital Structure and Investment Behaviour of Malaysian Firms in the 1990s: a study of corporate governance before the crisis', *Corporate Governance: An International Review*, 11(1), pp. 25–39. doi: 10.1111/1467-8683.00299.

Taj, S. A. (2016) ‘Application of signaling theory in management research: Addressing major gaps in theory’, *European Management Journal*. Elsevier Ltd, 34, pp. 338–348. doi: 10.1016/j.emj.2016.02.001.

Tam, O. K. and Tan, M. G. S. (2007) ‘Ownership, governance and firm performance in Malaysia’, *Corporate Governance: An International Review*, 15(2), pp. 208–222. doi: 10.1111/j.1467-8683.2007.00555.x.

Teoh, S. H. and Hwang, C. Y. (1991) ‘Nondisclosure and Adverse Disclosure as Signals of Firm Value’, *Review of Financial Studies*, 4(2), pp. 283–313.

Terjesen, S. and Singh, V. (2008) ‘Female presence on corporate boards: A multi-country study of environmental context’, *Journal of Business Ethics*, 83(1), pp. 55–63. doi: 10.1007/s10551-007-9656-1.

The New York Times (2013) 'Wave of high-profile crimes has put Malaysians on the defensive'. Available at https://www.nytimes.com/2013/10/20/world/asia/soaring-crime-rate-takes-a-growing-malaysia-by-surprise.html

The Star Online (2015) ‘Most Malaysian employees see retirement between 60 and 65’. Available at: http://www.thestar.com.my/Business/Business-News/2015/03/12/Most-Malaysian-employees-see-retirement-between-60-and-65/?style=biz.

The World Bank (2005) *Report on the Observance of Standards and Codes (ROSC) - Corporate Governance Country Assessment (Malaysia)*, *The World Bank*.

The World Bank (2012) *Report on the Observance of Standards and Codes (ROSC) - Corporate Governance Country Assessment (Malaysia)*, *The World Bank*. doi: 10.1016/B978-185617444-2/50004-1.

Torchia, M. and Calabrò, A. (2016) ‘Board of directors and financial transparency and disclosure. Evidence from Italy’, *The International Journal of Business in Society*, 16(3), pp. 593–608. doi: 10.1108/CG-01-2016-0019.

Tosi, H. L. and R. Gomez-Mejia, L. (1994) ‘CEO Compensation Monitoring and Firm Performance’, *Academy of Management Journal Management*, 37(4), pp. 1002–1016.

Transparency International (2016) *Corruption Perceptions Index 2016*, *Transparency International Secretrariat, Germany*. doi: 978-3-943497-18-2.

Trueman, B., Wong, M. H. F. and Zhang, X. (2000) ‘The Eyeballs Have It: Searching for the Value in Internet Stocks’, *Journal of Accounting Research*, 38, pp. 137–162.

Tsui, A. S., Egan, T. and O’Reilly, C. (1992) ‘Being Different: Relational Demography and Organizational Attachment’, *Administrative Science Quarterly*, 37(4), pp. 549–579. doi: 10.5465/AMBPP.1991.4976867.

US Department of State (2015) *Malaysia Investment Climate Statement 2015*.

Uyar, A. and Kiliç, M. (2012) ‘Value relevance of voluntary disclosure: evidence from Turkish firms’, *Journal of Intellectual Capital*, 13(3), pp. 363–376. doi:

10.1108/14691931211248918.

Verrecchia, R. E. (2001) ‘Essays on disclosure’, *Journal of Accounting and Economics*, 32(1–3), pp. 97–180. doi: 10.1016/S0165-4101(01)00025-8.

W.H.NG, T. and C.Feldman, D. (2010) ‘The relationships of age with job attitudes: A meta-analysis’, *Personnel Psychology*, 63, pp. 677–718.

Wahab, E. a. A., How, J. C. Y. and Verhoeven, P. (2007) ‘The Impact of the Malaysian Code on Corporate Governance: Compliance, Institutional Investors and Stock Performance’, *Journal of Contemporary Accounting & Economics*. Elsevier Ltd, 3(2), pp. 106–129. doi: 10.1016/S1815-5669(10)70025-4.

Wallace, R. S. O. and Naser, K. (1995) ‘Firm-specific determinants of the comprehensiveness of mandatory disclosure in the corporate annual reports of firms listed on the stock exchange of Hong Kong’, *Journal of Accounting and Public Policy*, 14(4), pp. 311–368. doi: 10.1016/0278-4254(95)00042-9.

Wan-Hussin, W. N. (2009) ‘The impact of family-firm structure and board composition on corporate transparency: Evidence based on segment disclosures in Malaysia’, *International Journal of Accounting*. University of Illinois, 44(4), pp. 313–333. doi: 10.1016/j.intacc.2009.09.003.

Wang, K., O, S. and Claiborne, M. C. (2008) ‘Determinants and consequences of voluntary disclosure in an emerging market: Evidence from China’, *Journal of International Accounting, Auditing and Taxation*, 17(1), pp. 14–30. doi: 10.1016/j.intaccaudtax.2008.01.001.

Wang, Z., Ali, M. J. and Al-Akra, M. (2015) ‘Value relevance of voluntary disclosure and the global financial crisis: evidence from China’, *Managerial Auditing Journal*, 28(5), pp. 444–468. doi: 10.1108/EL-01-2014-0022.

Wiersema, M. F. and Bantel, K. A. (1992) ‘Top Management Team Demography and Corporate Strategic Change’, *Academy of Management Journal*, 35(1), pp. 91–121.

Wintoki, M. B., Linck, J. S. and Netter, J. M. (2012) ‘Endogeneity and the dynamics of internal corporate governance’, *Journal of Financial Economics*. Elsevier, 105(3), pp. 581–606. doi: 10.1016/j.jfineco.2012.03.005.

Xiao, J. Z., Yang, H. and Chow, C. W. (2004) ‘The determinants and characteristics of voluntary Internet-based disclosures by listed Chinese companies’, *Journal of Accounting and Public Policy*, 23(3), pp. 191–225. doi: 10.1016/j.jaccpubpol.2004.04.002.

Yatim, P., Kent, P. and Clarkson, P. (2006) ‘Governance structures, ethnicity, and audit fees of Malaysian listed firms’, *Managerial Auditing Journal*, 21(7), pp. 757–782. doi: 10.1108/02686900610680530.

Yazid, A. P. D. M. N. M. (2014) ‘Colonial Policy and the Impact to the Politico-Economy Stability after Independence: The case of Indonesia under the Dutch and Malaysia under the British’, *Review of History and Political Science*, 2(3&4), pp. 69–84. doi: 10.15640/rhps.v2n3-4a4.

Yekini, K. C. *et al.* (2015) 'Impact of board independence on the quality of community disclosures in annual reports', *Accounting Forum*. Elsevier Ltd, 39(4), pp. 249–267. doi: 10.1016/j.accfor.2015.05.004.

Young, M. N. *et al.* (2008) 'Corporate Governance in Emerging Economies : A Review of the Principal – Principal Perspective', *Journal of Management Studies*, 45(January), pp. 196–220. doi: 10.1093/oxrep/gri010.

Zhang, Y. and Wiersema, M. F. (2009) 'Stock Market Reaction to CEO Certification: The Signalling Role of CEO Background', *Strategic Management Journal*, 30, pp. 693–710. doi: 10.1002/smj.