

# THE EFFECT OF CORPORATE GOVERNANCE MECHANISMS ON LEVEL OF RISK DISCLOSURE: EVIDENCE FROM MALAYSIAN GOVERNMENT LINKED COMPANIES

**Mohd Amirrul Muhminin, Universiti Teknologi MARA**

**Mazurina Mohd Ali, Universiti Teknologi MARA**

**Erlane K Ghani, Universiti Teknologi MARA**

**Ardi Gunardi, Universitas Pasundan**

## ABSTRACT

*This study examines the effect of corporate governance mechanisms on level of risk disclosure among the Malaysian Government-Linked Companies (GLCs). Specifically, this study examines the effect of risk management committee, board independence, board financial expertise, multiple directorships and board size on level of risk disclosure among the GLCs. This study utilises the agency theory in linking the corporate governance mechanisms and level of risk disclosure. Content analysis on the 2014 annual reports involving 36 GLCs companies was adopted. This study shows that multiple directorships and board size influence the level of risk disclosure among the GLCs. However, this study shows that risk management committee, board independence and board expertise do not influence the level of risk disclosure among the GLCs. Contrary to the expectation that board independence and board financial expertise would influence the level of risk disclosure, this study fails to provide such evidence. The findings of this study indicate that the board of directors need to consider appointing board members with multiple directorships and expanding their board size for greater risk disclosure. This study provides evidence on the effect of corporate governance mechanisms on level of risk disclosure among the GLCs. The findings in this study assist the GLCs in strategizing ways to improve their risk disclosure practices, thus improving their transparency and accountability to their stakeholders.*

**Keywords:** Risk Disclosure, Corporate Governance, Government-Linked Companies, Malaysia.

## INTRODUCTION

Corporate scandals such as the Transmile Group, CMS Corporation and Satyam Systems have jeopardized the trust of the stakeholders on the reliability of financial reporting. Such scandals are often caused by accounting irregularities which led the stakeholders to raise concern on the financial reporting reliability. The stakeholders have also raised concern on corporate governance and risk management among the companies (Linsley & Shrivies, 2005). Following such concerns, many stakeholders have emphasized on the importance of good corporate

governance and more relevant risk disclosure in the annual reports of the companies. Cabedo and Tirado (2004) suggested that insufficient relevant risk information have led the stakeholders to demand for more transparency and disclosure in annual reports. The stakeholders believe that the current level of disclosure is insufficient for them to make informed decisions (Kelly, 1998). Particularly, the risk disclosure in the annual reports seems to be vague, too simple and inadequate in assisting the stakeholders to make informed decisions (Amran et al., 2009; Helliard et al., 2001). The lack of risk disclosure has subsequently, led the regulatory bodies to encourage the companies to provide risk disclosure (Linsley & Shrives, 2006). This is particularly important in enhancing the transparency and accountability of the companies' annual reports to their stakeholders. The Government Linked Companies (GLCs) is not an exception to this scenario.

In Malaysia, the Asian Financial Crisis in 1997 had caused the collapse of many Malaysian companies (Sufian, 2010). One of the reasons behind this crisis is the ineffectiveness of corporate governance practices in the companies (Allegrini & Greco, 2013; Ben-Amar & McIlkenny, 2015). Corporate governance is a vital element to a company's prospect. Good corporate governance can assist the companies in identifying risks and forecast the future. Companies that have good corporate governance would be able to avoid financial crisis or at least, minimise the damage caused by the financial crisis. Studies have suggested that there are factors that can influence the level of risk disclosure such as the accounting standards, company-specific characteristics and corporate governance mechanisms (Spira & Page, 2003). However, most of these studies have focused on examining the factors influencing risk disclosure among the public listed companies. In addition, most of the risk-related studies were conducted in the developed countries, leaving the study using a developing country setting such as Malaysia largely unexplored (Atan et al., 2010).

This study aims to examine the effect of corporate governance mechanisms on the level of risk disclosure among the GLCs in Malaysia. This study focuses on the effect of risk management committee, board independence, board finance expertise, multiple directorships and board size in examining the level of risk disclosure among the GLCs. The findings in this study assist the GLCs in strategizing ways to improve their risk disclosure practices, thus improving their transparency and accountability to their stakeholders. The remainder of this paper is structured as follows. The next section, Section 2 provides the literature review. Section 3 presents the research framework and hypotheses development. This is followed by an outline of the research design of this study in Section 4. Section 5 presents the results of the data analyses. The last section concludes this study.

## **LITERATURE REVIEW**

### **Definition of Risk Disclosure**

There are many definitions of risk disclosure. Often, the definition of risk disclosure depends on the research objectives of a study which consequently, resulting to different findings. Studies that have examined risk disclosure in companies often faced difficulties in recognising information that is considered as risk information (Linsley & Shrives, 2006). According to the ICAEW (2002), risk reporting in the annual reports should contain:

*“Information about risk in the broadest sense, about actions to manage them and relevant measures.”*

Linsley and Shrives (2006) defined risk disclosure as:

*“If the reader is informed of any opportunity or prospect or of any hazard, danger, harm, threat, or exposure, which has already impacted upon the company or may impact upon the company in the future or of the management of any such opportunity prospect, hazard, harm, threat or exposure”.*

On the other hand, Hassan (2009) defined risk disclosure as:

*“The financial statements inclusion of information about manager’s estimate’s, judgment’s, reliance on market-based accounting policies such as impairment, derivative hedging, financial instruments and fair value as well as the disclosure of concentrated operations, non-financial information about corporation’s plan’s, recruiting strategy and other operational, economic, political and financial risks”.*

A group of studies have provided the definitions of risk disclosure from the perspective of performance. Dobler (2005) defined risk reporting as:

*“Forecast disclosure, where the information can be used to predict the outcome”.*

Similarly, Jorgensen and Kirschenheiter (2003) defined risk disclosure as the formal disclosure that emphasizes on the firm cash variances. These studies found the importance of risk disclosure to the investors in making decision. For example: Rajgopal (1999) examined the usefulness of risk disclosure information among investors. He found that there are association of oil price sensitivity with commodity price risk and concluded that risk disclosure is useful to the investors. According to the ICAEW (2008), there are several benefits of providing risk disclosure. Among the benefits are improving risk management, providing useful information for forecasting activities, increasing the quality of accountability for stewardship and increasing investor’s value? Additionally, risk disclosure provides benefits to the investors by providing more risk information that could reduce their uncertainty and decision-making (Ventakachalam, 1996; Linsmeier et al., 2002; Ali and Taylor, 2014a).

Another body of the literature has examined the effect of stakeholders’ awareness on the level of risk disclosure among the companies (Kelly, 1998; Beretta & Bozzolan, 2004). For example: Kelly found that the stakeholder’s awareness on the importance of risk disclosure has put pressure on the companies to provide more risk disclosure whilst Beretta and Bozzolan (2004) found that the financial regulators and the policy makers have forced the companies to include risk information on their annual reports. Beretta and Bozzolan (2004) in their study found that institutional investors are asking for more disclosure from the companies in order to help them improve their investment decisions. The findings of these studies indicate the importance of companies in improving their risk disclosure since it is significant to their stakeholders. In order to improve the risk disclosure, the factors influencing the risk disclosure practices need to be examined.

A review of the literature also shows that there are factors influencing level of risk disclosure among the companies. Several studies found that accounting standards can influence

the level of risk disclosure among the companies. These studies show that accounting standards can encourage the companies to disclose more information voluntarily (Spira & Page, 2003; Dobler, 2005; Linsley & Shrives, 2006; Ali and Taylor, 2014b). These studies also suggested that accounting standards may increase the quality of risk disclosure and improve the comparability of risk reporting. Other studies have also found company's specific characteristics can influence risk disclosure (Cooke, 1989; Linsley & Shrives, 2006). One of the characteristics is company size (Cooke, 1989; Allegrini & Greco, 2013). Cooke (1989) found that the bigger the size of a company, the more attention that the company will get from the stakeholders such as the government, media and politicians. Thus, this increases the political costs. Cooke (1989) stated that political costs could be reduced by disclosing more information to the stakeholders. Another factor is corporate governance mechanisms. According to Spira and Page (2003) and Haque (2017), corporate governance is important to manage risks through monitoring mechanisms of audit and internal control. Ho and Wong (2001) noted that directors should act in the best interest of the shareholders. Thus, corporate governance mechanisms can align the director's interest to act on behalf of the shareholders.

## **Agency Theory**

The agency theory is often used to link the corporate governance and risk disclosure. Agency theory discusses the conflict of interest between the managers and the shareholders. Jensen and Meckling (1976) suggested that the relationship between the managers and the shareholders can be seen as a contract between both parties where the shareholder is the principal and the manager is the agent. The principal will delegate the decision-making power to the agent and the agent is responsible to act on the best interest of the principal. However, there may be a conflict of interest whereby the agent places his interest above the principal's best interest. This could happen when the agent wants to maximise his own interest, thus breaching the contract between the agent and the principal. The principal can protect his interest by establishing monitoring system such as providing incentives to the agent known as monitoring cost. Jensen and Meckling (1976) recommended a solution based on an optimal contract between both parties, where the principal and the agent should aim to align the agent's interest with the stakeholder's interest.

Based on the agency theory, disclosure is considered as a monitoring mechanism. Disclosure may be the right solution to the agency cost problem. Healy and Palepu (2001) suggested that the solution to solve the agency problem is the manager should disclose any relevant information that can assist the investors in monitoring the manager's action to act on behalf of their interest. The investors can also assess the manager's ability in managing the company's resources in their best interest. Linsley and Shrives (2005) explained the connection between the agency theory and risk disclosure. They proposed that people from the internal (manager) should disclose information to the external (shareholders) in order to solve conflicts, as disclosure from the internal can reduce information asymmetry. That is, the manager can provide risk disclosure and information on risk management. The shareholders often view risk disclosure as a necessary disclosure. Shrives and Linsley (2003) stated that the manager's action

to disclose risk information voluntarily can be explained by the agency theory since the manager would want to assure his shareholders that the company has a risk management system.

### **Corporate Governance Mechanisms and Risk Disclosure**

In recent years, corporate governance has become an important agenda and has turned into a vital part in the corporate and organisational structure. Sharman and Copnell (2002) and Haque (2017) stated that a company is bound to corporate governance. That is being controlled and directed by the corporate governance in creating the company's value and sustaining the shareholders' value (Yasar, 2013). Furthermore, corporate governance concerns on the effectiveness of the management structure and on risk management systems. Solomon and Solomon (2004) stated that:

*"Corporate governance is the system of checks and balances, both internal and external to companies, which ensure that companies discharge their accountability to all stakeholders and act in a socially responsible way in all areas of their business activities".*

Following this, many studies have been conducted to determine the effect of corporate governance on risk disclosure practices. Previous studies believed that corporate governance is a system that can control the company's performance, management structure, information disclosure and risk management system (Sharman & Copnell, 2002). In addition, the corporate governance system can assist the company in monitoring and controlling the internal and external factors of the company. Such belief was evidenced by several studies that found corporate governance characteristics influence risk disclosure (Sharman & Copnell, 2002; Dobler, 2008).

The theoretical link between corporate governance and risk disclosure has been argued using the agency theory by focusing on the accountability and information asymmetry that can affect a company's performance. In order to control the agency issue and to ensure that the manager acts on behalf of the shareholders, the corporate governance mechanisms were introduced (Ho & Wong, 2001). The conflict of interest between the manager and the shareholders can be controlled by monitoring the activities (Jensen & Meckling, 1976). Solomon, Solomon, Norton and Joseph (2000) have also highlighted that proper risk reporting, risk management and internal control arises from good corporate governance. Ghazali (2008) argued that voluntary disclosure could be influenced by the element of accountability. Therefore, corporate governance is a vital component in reflecting the degree of accountability and transparency. In addition,

*"Corporate governance codes and their recommendations undoubtedly contribute towards increased transparency and disclosures (Mallin, 2002)."*

Solomon et al. (2000) found that corporate governance has increased the emphasis on corporate risk disclosure. However, Lopes and Rodrigues (2007) found that corporate governance has a weak influence on companies' risk disclosure.

Based on the agency theory, the corporate governance mechanisms include risk management committee, board independence, board finance expertise, multiple directorships and

board size. These mechanisms are being used in this study to determine the effect of corporate governance mechanisms on risk disclosure among the GLCs in Malaysia.

### **Risk Management Committee**

In general, most companies combined audit management and audit risk into one committee. However, studies have suggested that a stand-alone risk management committee is more relevant (Alles et al., 2005; Tao & Hutchinson, 2013). These studies supported the role of a risk management committee in making decisions on risk disclosure (Tao & Hutchinson, 2013). A stand-alone risk management committee is viewed as a tool that can improve the disclosure or relevant risk information. Furthermore, a stand-alone risk management committee is more effective compared to a combined audit risk committee in terms of identifying and managing corporate risks (Alles et al., 2005). The process of monitoring, identifying and managing corporate risk is complicated, thus having a risk management committee stand-alone can help the board of directors to be more focused on the various threats and opportunities faced by the company compared to a combined audit risk committee (Dobler, 2008). The combined audit risk committee would not be able to focus on the risk management's role due to other commitments such as focusing on financial reporting and related audit oversight as well (Alles et al., 2005). Therefore, separating the risk management committee from the audit risk committee is more efficient and effective in handling risk management. Therefore, this study proposes the following hypothesis:

*H1: There is a positive relationship between a stand-alone risk management committee and risk disclosure.*

### **Board Independence**

Based on the agency theory, the board of directors plays an important role in the corporate governance as an element for monitoring activities and controlling decisions (Chen & Jaggi, 2000; Cheng & Courtenay, 2006). The agency theory believes that a majority of independent directors on the board can effectively reduce the agency conflict as the independent directors are outsiders. They could provide an effective monitoring tool for the board (Fama & Jensen, 1983). In addition, independent directors can increase the quality of corporate reporting, as they are the key elements of corporate governance quality. Abraham and Cox (2007) stated that the agency theory believes that the combination of independent directors and non-independent directors could bring different perspectives regarding risk disclosure. Similarly, Lopes and Rodrigues (2007) stated that independent directors are important in monitoring and controlling the corporate governance. In other words, the higher the number of independent directors on the board of directors, the more disclosure can be expected from the companies. Chen and Jaggi (2000) and Abraham and Cox (2007) also found that when a majority of independent directors sit on the board, the company's risk disclosure would improve significantly.

Other studies however provided different findings. For example: Lopes and Rodrigues (2007) found no positive association between board independence and level of risk disclosure.



The Bursa Malaysia Listing Requirement views independent directors as being free from any business and other relationships that could interfere with the exercise of the independent ability or judgment of the applicant. KLSE listing requirement 2001 stated that at least one-third of the board should consist of independent directors, which is considered a positive and a favourable practice. According to the Malaysian Code on Corporate Governance 2007, the board must comprise of a majority of independent directors where the chairman of the board is not an independent director. Therefore, this study proposes the following hypothesis:

*H2: There is a positive relationship between board independence and risk disclosure.*

### **Board Financial Expertise**

Based on the revised Malaysian Code on Corporate Governance 2007, the board must ensure that it has the right combination of members equipped with appropriate knowledge, experience and skills to deal with today's environment change in business complexities and competition. Sarbanes-Oxley Act (SOX) provided a very broad definition of financial expertise to show its efforts in increasing the financial expertise on the board. Kirkpatrick (2009) and Walker (2009) argued that the lack of financial expertise among the board members contributes to the financial crises of the companies. In order to identify risks, the board members must have appropriate knowledge to help them identify and manage the risks. Adams and Ferreira (2007) explained that a board with financial experts may influence the company's disclosure policies to disclose more relevant disclosure in the annual reports. Board members with financial expertise can increase the probability of the board to identify relevant risk issues to the company and then disclose these risks in the annual reports. Jackson (1992) found members of the board that have financial expertise could affect the board's decision-making process. He believed that the board member's financial expertise might support the board members in the decision-making process, thus increasing their quality of risk disclosure. Therefore, this study proposes the following hypothesis:

*H3: There is a positive relationship between board financial expertise and risk disclosure.*

### **Multiple Directorships**

Based on the agency theory, there is a link between multiple directorships and corporate governance effectiveness (Fama & Jensen, 1983). In addition, Fich and Shivdasani (2006) stated that multiple directors have positive relationships with the effectiveness of corporate governance and financial reporting due to the experience that the directors gained from other boards. Similarly et al. (2000) and Westphal and Khanna (2003) suggested that directors with multiple directorships may gain diverse experiences due to directorships on other unrelated industries and these experiences could improve board monitoring in disclosing information. However, Haniffa and Hudaib (2006) hypothesized that multiple directorships would give a negative impact on monitoring activities, since board members with multiple directorships would be busy with other commitments. On the other hand, Ferris et al. (2003) found no significant relationship between

multiple directorships and the level of risk disclosure. Therefore, this study proposes the following hypothesis:

*H4: There is a positive relationship between multiple directorships and risk disclosure.*

## **Board Size**

The agency theory argues that board size can affect the quality of the monitoring activities. Therefore, companies with large board size are more likely to disclose more relevant information. This is supported by Healy and Palepu (2001) that stated in general, the higher the number of the board members, the better the monitoring and control activities, which is an important element for risk disclosure. Besides that, a larger board size may reduce information asymmetry problems between the board and the shareholders and at the same time, increase disclosure (Chen & Jaggi, 2000). However, Jensen (1993) stated that a large board size may be less effective due to the large number of members on the board. In addition, Cheng and Courtenay (2006) indicated that a large board may develop a free rider problem, whereby there will be an increase in decision time making that can lead to ineffective corporate governance. However, there are studies that provided contrasting findings. For example: Akhtaruddin et al. (2009) and Abeysekera (2010) found positive relationship between board size and risk disclosure. On the other hand, Cheng and Courtenay (2006) found no significant relationship between board size and risk disclosure. Therefore, this study proposes the following hypothesis:

*H5: There is a positive relationship between board size and risk disclosure.*

## **Government-Linked Companies (GLCs)**

Most countries such as China, Korea, Singapore and Malaysia, have governments invested in companies. If the government holds majority of the shares in the companies, then the government will have the power to make decisions for the companies. The GLCs are established by the Malaysian government using the privatisation process. The first process of privatisation involving transforming the government departments into private companies and subsequently, transform into wholly-owned government companies (Lau & Tong, 2008). The main purpose of establishing the GLCs is to decrease the government department's financial burden and transform into high quality and effective public service companies. The establishment of GLCs is also to attain the goals of the New Economic Policy (Mokhtar, 2005).

GLCs contributes more than 30 percent of the market capitalisation of the country (Mokhtar, 2005), an indication that these companies have a significant impact on the Malaysian economy. According to the Companies Act 1965, GLCs are companies that receive loans or grants from the government and the government held 50 percent or more paid-up share capital in the companies. The Federal Government-Link Investment Companies (GLICs) is the body that is responsible in controlling the GLCs' commercial objectives. The government has the power to appoint the board of directors and the top management of the GLCs. The main service of GLCs is to provide the nation with strategic services and utilities such as electricity, public transport, airport, water and financial services. GLCs is considered successful in Malaysia since it drives



the economic growth by increasing the Gross Domestic Product (GDP) by 2 percent in 2005 (Mokhtar, 2005) and held 49 percent of the market capital (Zin & Sulaiman, 2011). However, the GLCs' performance may also fail if the companies are not being managed effectively such as poor corporate governance.

### **Risk Disclosure in GLC's**

A large body of the GLC literature have mainly emphasized on profit and privatisation (Monteduro, 2014; Haque, 2017). Only a few studies have examined risk disclosure for GLC's. Calabrò et al. (2013) and Hodges et al. (1996) stated that GLC's are responsible for the taxpayers' money and thus, should manage the companies with the purpose to achieve the social goals. Ferguson et al. (2002) stated that GLC's transparency and accountability disclosure are not only for their shareholders only, but also to the public who are using their services and the public who pay the tax. The agency theory can be used to link the Malaysian GLC's agency problems. According to Argento et al. (2010), when the government is in control of the company's matters, the other shareholders will become a minority and the government's interest will lead to a conflict of interest between the majority shareholders and the minority shareholders.

The majority shareholders can influence the board's decision-making process (Calabro et al., 2013). Apart from the conflict of interest between the majority shareholders and minority shareholders, there is also a possibility of an agency conflict between the public and the GLCs (Broadbent & Laughlin, 2003). Since the public are the ones who voted for the government, the agency theory is also applied in this situation, thus the government should act on the best interest of the public (Batley & Larbi, 2004). According to Hinna et al. (2010) and Lane (2005), the government (the agent) tends to act based on its own interest rather than on behalf of the public who voted for them. Gnan et al. (2011) stated that conflict of interest situation exists between the government and the public and therefore, the public will demand the GLC's to disclose more information in order to safe guard their interest as taxpayers. Based on the agency theory, greater disclosure can minimise the information asymmetry between the government (agent) and the public (principal) (Verrecchia, 2001).

According to (Linsley & Shrives, 2005), the signalling theory can also be used to explain voluntary risk disclosure. Companies that are performing better tend to disclose more in order to signal to the stakeholders that they are better in terms of risk disclosing compared to other companies (Shrives & Linsley, 2003). In the context of GLC's, the board will disclose more as a signal that they can manage the risks (Elshandidy & Neri, 2014). In addition, Oliveira et al. (2011) found companies that voluntarily disclose their risks can signal to their stakeholders that they are performing well, thus this will increase their legitimacy.

## **RESEARCH DESIGN**

### **Sample Selection**

The sample of this study consist the GLC's that are listed on the main board of Bursa Malaysia in 2014. Eight industries are selected as the sample in this study. The eight industries

are plantation, trading and services, constructions, properties, industrial product, consumer product, technology and Infrastructure Project Company (IPC). The total population of GLC's in 2014 was 47 (Focus Malaysia, 2014). However, only 36 GLC's are chosen in this study as the remaining 11 companies are excluded since they are under the finance industry. The companies under the finance industry are subjected to different regulations and have different nature of business to the other industries. Subsequently, the annual reports of the 36 GLC's are relied upon for data collection.

## **Variable Measurement**

### **Risk disclosure level**

Risk disclosure level is the dependent variable in this study. To obtain data on risk disclosure level, the content analysis was employed to measure the level of risk disclosure in the annual reports. This study adopts Linsley and Shrives's (2006) measurement of risk disclosure. In their study, risk disclosure is measured based on the risk-related sentences. Therefore, sentences are to be coded as risk disclosure if the reader is informed of *"any opportunity or prospect, harm, threat or exposure or of any hazard and danger that has already impacted or may impact upon the company, as well as the management of any such opportunity, prospect, hazard, harm, threat or exposure"*. The disclosure should be explicitly stated and cannot be implied, so any disclosure is not recorded as a risk disclosure when it is vague (Linsley & Shrives, 2006). However, any disclosure that is repeated is considered as a risk disclosure sentence each time it is mentioned (Linsley & Shrives, 2006). There are six types of risk drawn from the literature. The six types of risk are: (1) financial risk; (2) operational risk; (3) empowerment risk; (4) integrity risk; (5) information processing and technology risk; (6) strategic risk.

### **Risk management committee**

The risk management committee is one of the independent variable. This variable is treated as a dummy variable; 1 is assigned if there is a stand-alone risk management committee in the company and 0 is assigned if otherwise.

### **Board independence**

The second independent variable is the board independence. Board independence is measured by the proportion of independent directors to the total of directors on the board. Data on independent directors was obtained from the statement on corporate governance of the companies.

**Board financial expertise**

The third independent variable is board financial expertise. Board financial expertise is measured by the proportion of directors on the board with financial expertise to the total number of directors on the board of the company.

**Multiple directorships**

The fourth independent variable is multiple directorships. Multiple directorships are measured by the proportion of directors on the board with directorship in the other companies to the total number of directors on the board of the company.

**Board size**

The last independent variable is board size. Board size is measured by the total number of directors on the board of the company.

**Leverage**

Leverage is the control variable in this study. Leverage is measured by the ratio of total liabilities to total assets.

**Audit quality**

Audit quality is the second control variable in this study. Audit quality is treated as a dummy variable where 1 is assigned if the company is audited by Big-4 audit firms and 0 if otherwise.

**Industry classification**

Industry classification is dichotomous of: 1 if the firm is in the trading and services sector, 2 if the firm is in the construction sector, 3 if the firm is in the consumer product sector, 4 if the firm is in the industrial product sector, 5 if the firm is in the plantation sector, 6 if the firm is in the properties sector, 7 if the firm is in the infrastructure and technology sector, and 8 if the firm is in the IPC sector and 0 if otherwise.

**The Regression Model**

This study used the multiple regression analysis in assessing the variability of risk disclosure. Multiple regression analysis is widely used in previous studies (Cooke, 1998; Haniffa & Cooke, 2005; Amran et al., 2008). The dependent variable is the risk disclosure and the independent variables are corporate governance mechanisms; risk management committee, board independence, board finance expertise, multiple directorships and board size. The control variable for this study is the firm characteristics; the leverage, audit quality and industries classification.

The following regression model is developed:

$$RD = \beta_0 + \beta_1 RMC + \beta_2 BIND + \beta_3 BFINEXP + \beta_4 MDIREC + \beta_5 BSIZE + \beta_6 LEV + \beta_7 BIG4 + \beta_8 IND + e$$

Where,

***RD***=Risk disclosure, measured by the number of sentence.

***RMC***=Dichotomous variable; 1 for firms that have standalone *RMC*, 0 for none.

***BIND***=Proportion of the independent non-executive directors to the total number of directors on the board of the company.

***BFINEXP***=Proportion of directors on the board with financial expertise to the total number of directors on the board of the company.

***MDIREC***=Proportion of directors on the board with directorship in the other companies to the total number of directors on the board of the company.

***BSIZE***=Total number of directors on the board of the company.

***LEV***=Ratio of total liabilities to the total assets.

***BIG4***=Dichotomous with 1 if the company is audited by the Big 4 audit firm and 0 otherwise.

***IND***=Dichotomous of 1 if the firm is in the trading and services sector, 2 if the firm is in the construction sector, 3 if the firm is in the consumer product sector, 4 if the firm is in the industrial product sector, 5 if the firm is in the plantation sector, 6 if the firm is in the properties sector, 7 if the firm is in the infrastructure and technology sector, and 8 if the firm is in the IPC sector and 0 otherwise.

## RESULTS

### Descriptive Statistics

Table 1 shows the descriptive statistics of the categorical variable and continuous variable, which consists of risk disclosure, risk management committee, board independent, board finance expertise, multiple directorships, board size, leverage, big 4 and the industries. As shown in the table, risk disclosure's maximum sentences are 156 and its minimum sentence is 17, with an average of 68.47 sentences. Meanwhile, the board independent proportion shows that the maximum number of independent directors is 100 percent and the minimum independent directors in the board is 18 percent, with an average of 53 percent. Board finance expertise's maximum proportion in the board is 70 percent; its minimum proportion is 0 percent, with an average of 26.16 percent. For multiple directorships, the maximum proportion of directors with multiple directorships or cross board is 100 percent and the minimum is 0 percent, with an average of 65.64 percent of the proportion of directors that have multiple directorships in two or more boards. The board size's maximum number of members is 17 people, with a minimum of 5 people and an average of 9 people. The average of leverage is 41.31 percent.

**Table 1**  
**DESCRIPTIVE STATISTICS OF CONTINUOUS VARIABLE**

	<b>Minimum</b>	<b>Maximum</b>	<b>Mean</b>	<b>Std. Deviation</b>
Risk disclosure	17	156	68.47	33.016
Board Independent	0.18	1	0.53	0.12767
Board finance expertise	0	0.70	0.2616	0.13912
Multiple directorships	0	1	0.6564	0.22268
Board size	5.00	17	9.1111	2.71796
Leverage	0.00	0.73	0.4131	0.19511
Valid N (listwise)				
<b>N=36</b>				

**Table 2**  
**DESCRIPTIVE STATISTICS OF DICHOTOMOUS VARIABLE**

<b>Dichotomous Variable</b>	<b>1</b>	<b>0</b>
Risk Management Committee (RMC)	(52.8%) 19	(47.2%) 17
Audit Quality (BIG 4)	(88.9%) 32	(11.1%) 4
Trading and Services (IND 1)	(47.2%) 17	(52.8%) 19
Construction (IND 2)	(2.8%) 1	(97.2%) 35
Consumer Product (IND 3)	(2.8%) 1	(97.2%) 35
Industrial Product (IDN 4)	(11.1%) 4	(88.9%) 32
Plantation (IDN 5)	(13.9%) 5	(86.1%) 31
Property (IDN 6)	(16.7%) 6	(83.3%) 30
Technolgy (IDN 7)	(2.8%) 2	(97.2%) 35
IPC (IDN )	(2.8%) 1	(97.2%) 35
<b>N=36</b>		

Table 2 shows the descriptive statistics for the dichotomous variables, which are the risk management committee, audit quality and industry classification. A total of 19 companies have a standalone risk management committee, while 17 companies do not have standalone risk management committees.

Thirty two companies appointed big 4 as their external auditors, while the other 4 companies appointed the non-big 4. The industry classification shows trading and services sector, industrial product sector, plantation sector and property sector, which are 47.2 percent, 11.1 percent, 13.9 percent and 16.7 percent respectively. The remaining balances are from minority industries, which are the consumer product sector, construction sector, technology sector and IPC sector, which all have 2.8 percent.

### Correlation Analysis

Table 3 displays the results of the correlation analysis. As reported in the table, there is a positive relationship between risk disclosure and RMC:  $r=0.075$ . These findings support *H1* whereby there are possibilities that standalone risk management committee has a positive relationship with risk disclosure. These findings are consistent with Dobler (2008), where the standalone RMC can help the board to focus on risks and other threats and this can lead to more disclosure. For board independent, there is a positive relationship to risk disclosure:  $r=0.89$ . This supports *H2* whereby there is possibility of a positive relationship between risk management committees and risk disclosure with a high proportion of independent directors. This is consistent with previous studies by Abraham and Cox (2007) who found that the majority of independent directors could improve risk disclosure. Table 3 shows that the board finance expertise shows a negative relationship to risk disclosure and this result does not support *H3*, whereby the proportion of directors with finance expertise will have a positive relationship with risk disclosure and risk management committees.

<p><b>Table 3</b> <b>CORRELATION ANALYSIS</b></p>									
Model 1	RD	RMC	BIND	BFINEXP	MDIREC	BSIZE	Leverage	Big 4	Industry
RD	1	0.075	0.089	-0.055	0.299	0.399*	0.293	0.355*	-0.234
RMC		1	0.373*	-0.101	0.057	0.050	0.177	0.020	-0.142
BIND			1	0.119	0.167	-0.262	0.057	0.166	-0.140
BFINEXP				1	0.311	-0.244	-0.141	0.209	-0.015
MD					1	-0.138	0.290	0.056	-0.205
BSIZE						1	0.128	-0.018	-0.288
Leverage							1	-0.093	-0.149
Big 4								1	-0.471**
Industry									1
*Correlation is significant at the 0.05 level (2-tailed).									
**Correlation is significant at the 0.01 level (2-tailed).									



As reported in Table 3, there is a positive relationship between risk disclosure and multiple directorships:  $r=0.299$ . This result is consistent with *H4*, whereby multiple directorships have a positive relationship with risk disclosure. In addition, Shvidansi (2006) stated that directors with multiple board positions could improve the corporate governance and affect risk disclosure. In terms of board size, it appears that board size has a significant positive relationship towards risk disclosure. Therefore, *H5* is supported. This result is consistent with Allgerini and Greco (2013) and Haque (2017), whereby a larger board size has a positive relationship with risk disclosure and risk management committee.

The first control variable's result of  $r=0.355$  shows that there is a significant positive relationship between audit quality and risk disclosure. This result is consistent with previous studies, in which according to De Angelo (1981) and Teoh and Wong (1993), the big four auditors provide high quality audit. In addition, Francis and Yu (2009) found that the big four auditors are better in detecting material misstatements. However, the finding in this study is inconsistent with Yasar (2013) that found audit size do not influence the audit quality on disclosure. The second control variable, which is leverage, also shows a positive relationship to risk disclosure, with a result of  $r=0.299$ . This result can be explained by Ahn and Lee (2004), who stated that creditors might demand for more disclosures if they have a high proportion of debt in the capital structure.

In sum, a majority of the results display a positive relationship between variables. This indicates that corporate governance has a significant relationship to risk disclosure. In addition, the normality test of this data is normally distributed.

## Multiple Regression Analysis

Table 4 displays the regression result for the GLCs corporate governances and other control variables on risk disclosure. From the hypothesis relating to GLC, only two variables have significant results;  $p<0.05$  and  $p<0.01$ , which are multiple directorship ( $p=0.031$ ) and the board size (0.03). This result can relate to Table 3, where the overall model that was tested earlier showed that multiple directorships influence risk disclosure. In the matter of multiple directorships, the result ( $p=0.031$ ) supports *H4*, whereby the numbers of directors who hold multiple directorships in other boards have an effect on risk disclosure. This indicates that the directors with multiple directorships have possible influence on risk disclosure due to their experience gained from multiple directorships (Fich and Shivdasani, 2006). In addition, Haniffa and Cooke (2002) and Chiang and He (2010) stated that members who have cross directorship have wide knowledge and experiences in business, thus they will ensure the company discloses more information. Furthermore, Westphal and Milton (2000) and Westphal and Khanna (2003) suggested that directors with multiple directorships may gain diverse experiences due to directorships on other unrelated industries and these experiences could improve board monitoring in disclosing information. However, the findings in this study contradict with the previous studies that show that there is no relationship between multiple directorships and the level of risk disclosure (Ferris et al., 2003).

Meanwhile, the result of the board size of GLC ( $p=0.03$ ) can be explained by the overall model where the board size has an impact on risk disclosure. The result of the board size for GLC supports *H5*, whereby the bigger the size of the board, the higher the level of risk disclosure. This result is consistent with the previous study by Healy and Palepu (2001). In general, the higher the number of the board members, the better the monitoring and control, this is an important element for risk disclosure. In addition, previous studies showed a positive result of the association between board size and risk disclosure (Akhtaruddin et al., 2009; Abeysekra, 2010). Chen and Jaggi (2000) explained that a larger board might reduce the information asymmetry problem between the board and shareholder, and at the same time, the large board can increase more disclosure.

Another variable of corporate governance for GLC did not show any significant result, which is risk management committee ( $p=0.783$ ). This result is consistent with a previous study by Elsayhndidy and Neri (2015), who found that there are no significant results between the existence of risk management committee and risk disclosure. The result for board independence ( $p=0.836$ ) indicates no significant result, which is consistent with a previous study by Lopes and Rodrigues (2007) where they found out that there are no significant result between independent directors and risk disclosure.

The last variable, board finance expertise with a result of  $p=0.386$ , also indicates an insignificant result between the number of directors who have finance expertise and risk disclosure. This result is in contrast with Jackson (1992) who stated that finance expertise may support board members in the decision-making process, thus increasing their quality of risk disclosure. The results in Table 4 show that the value of adjusted  $R^2$  is 34.9% with F-value of 3.349, an indication that 34.9% of the variation in the level of risk disclosure is explained by the model.

**Table 4**  
**MULTIPLE REGRESSION ANALYSIS**

Model	Unstandardized Coefficients B	Unstandardized Coefficients Standard Error	Standardized Coefficients Beta	t	Sig
(Constant)	-106.584	43.112		-2.472	0.020
RMC	-2.757	9.898	-0.042	-0.279	0.783
BIND	35.927	41.020	0.139	0.876	0.389
BFINEXP	-32.340	36.675	-0.136	-0.882	0.386
MDIREC	53.809	23.590	0.363	2.281	0.031
BSIZE	6.239	1.923	0.514	3.245	0.003
Leverage	31.420	25.545	0.186	1.230	0.229
Big 5	50.665	16.941	0.489	2.991	0.006
Industry	3.719	2.512	0.257	1.480	0.150
$R^2=0.349$ F value=3.349					

## CONCLUSION

This study examines the effect of corporate governance mechanisms on level of risk disclosure among the GLCs in Malaysia. Specifically, this study examines the effect of risk management committee, board independence, board financial expertise, multiple directorships and board size on level of risk disclosure among the GLCs. Using content analysis on the annual reports of 36 GLCs in Malaysia, this study shows that two corporate governance mechanisms namely, multiple boards and board size influence risk disclosure. The implication is that the firm board that wants to improve their risk disclosure should consider appointing the board member with multiple directorships and the board must consider expanding their board size for greater disclosure. In other words, the appointment of the new board member should emphasize on the experience of the member and the cross directorship that the candidate holds. The board also needs to increase their numbers in order to bring more opinion on the governance in terms of disclosure. In addition, the findings on other variables; risk management committee, board independence and the board expertise, did not reflect any association with risk disclosure. However, this study shows that the risk management committee, board independence and board finance expertise do not clearly affect risk disclosure in the context of Malaysian GLCs. This study suggests that risk disclosure in GLCs should be assessed in different perspectives as the factors that influence risk disclosure problems may be caused by other factors that are not examined in this study.

This study is not without limitations. The main limitation of this study is the interim of the sample size, which is relatively small even though all GLCs in the public listed companies were considered. In addition, focusing only on the narrative part of the annual reports may not be sufficient in detecting risks. Thus, the method of data collection should be expanded to other sections of the annual reports. GLCs' risk disclosure should be investigated deeper and various perspectives on the corporate governance' influence on risk disclosure needs to be studied on. Secondly, the number of GLCs as the sample in this study is small. Future study can increase the sample by conducting a comparative study between two countries such as between Malaysia and Indonesia. Finally, there are other factors that have been identified in previous studies such as board diversity and board gender that are not examined in this study. Future study could include these variables to identify the effect of corporate governance mechanisms on the level of risk disclosure among the GLCs in Malaysia. In sum, the finding in this study highlights the important factors influencing risk disclosure practices among the GLCs. The findings in this study could provide guidelines to the GLCs in strategizing ways to improve their risk disclosure practices, thus improving their transparency and accountability to their stakeholders.

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## REFERENCES

- Abeysekera, I. (2010). The influence of board size on intellectual capital disclosure by Kenyan listed firms. *Journal of Intellectual Capital*, 11(4), 504-518.
- Abraham, S., & Cox, P. (2007). Analysing the determinants of narrative risk information in UK FTSE 100 annual reports. *The British Accounting Review*, 39(3), 227-248.
- Adams, R.B., & Ferreira, D. (2007). A theory of friendly boards. *Journal of Finance*, 62(1), 217-250.
- Akhtaruddin, M., Hossain, M. A., Hossain, M., & Yao, L. (2009). Corporate governance and voluntary disclosure in corporate annual reports of Malaysian listed firms. *Jamar*, 7(1), 1-20.
- Ali, M.M., & Taylor, D. (2014a). Corporate risk disclosure in Malaysia: The influence of pre-dispositions of chief executive officers and chairs of audit committee. *Research Journal of Finance and Accounting*, 5(2), 92-106.
- Ali, M.M., & Taylor, D. (2014b). Content analysis of corporate risk disclosures in Malaysia. *Proceedings of the 4<sup>th</sup> International Conference of Accounting and Finance*, 15-24.
- Alles, M.G., Datar, S.M., & Friedland, J.H. (2005). Governance-linked D&O coverage: Leveraging the audit committee to manage governance risk. *International Journal of Disclosure and Governance*, 2(2), 114-129.
- Allegrini, M., & Greco, G. (2013). Corporate boards, audit committees and voluntary disclosure: Evidence from Italian Listed Companies. *Journal of Management & Governance*, 17(1), 187-216.
- Amran, A., Bin, M.R., & Hassan, B.C.H.M. (2009). Risk reporting: An exploratory study on risk management disclosure in Malaysian annual reports. *Managerial Auditing Journal*, 24(1), 39-57.
- Argento, D., Grossi, G., Tagesson, T., & Collin, S.O. (2010). The externalisation of local public service delivery: Experience in Italy and Sweden. *International Journal of Public Policy*, 5(1), 41-56.
- Atan, R., Nurdin, E., Maruhun, S., Abdul, W.H., & Jusoff, K. (2010). Annual risk reporting of listed companies in Malaysia. *Journal of Modern Accounting and Auditing*, 6(8), 26-38.
- Batley, R.A., & Larbi, G.A. (2004). *The changing role of government: The reform of public services in developing countries*. Palgrave, Houndmills and New York.
- Ben-Amar, W., & McIlkenny, P. (2015). Board effectiveness and the voluntary disclosure of climate change information. *Business Strategy and the Environment*, 24(8), 704-719.
- Beretta, S., & Bozzolan, S. (2004). A framework for the analysis of firm risk communication. *International Journal of Accounting*, 39(3), 265-288.
- Broadbent, J., & Laughlin, R. (2003). Control and legitimation in government accountability processes: The private finance initiative in the UK. *Critical Perspectives on Accounting*, 14(1), 23-48.
- Cabedo, J.D., & Tirado, J.M. (2004). The disclosure of risk in financial statements. *Accounting Forum*, 28(2), 181-200.
- Calabrò, A., Torchia, M., Pukall, T., & Mussolino, D. (2013). The influence of ownership structure and board strategic involvement on international sales: The moderating effect of family involvement. *International Business Review*, 22(3), 509-523.
- Chen, C.J.P., & Jaggi, B. (2000). Association between independent non-executive directors, family control and financial disclosures in Hong Kong. *Journal of Accounting and Public Policy*, 19(4-5), 285-310.
- Cheng, E.C.M., & Courtenay, S.M. (2006). Board composition, regulatory regime and voluntary disclosure. *International Journal of Accounting*, 41(3), 262-289.
- Cooke. (1989). Disclosure in the Corporate Annual Reports of Swedish Companies.
- Cooke. (1998). Regression analysis in accounting disclosure studies.
- De-Angelo, L.E. (1981). Auditor size and audit quality. *Journal of Accounting and Economics*, 3(3), 183-199.
- Dobler. (2005). How informative is risk reporting? A review of disclosure models. *Munich: Munich School of Management*.
- Dobler, M. (2008). Incentives for risk reporting: A discretionary disclosure and cheap talk approach. *The International Journal of Accounting*, 43(2), 184-206.
- Elshandidy, T., & Neri, L. (2015). corporate governance, risk disclosure practices and market liquidity: Comparative Evidence from the UK and Italy. *Corporate Governance: An International Review*, 20(3), 1-26.
- Fama, E.F., & Jensen, M.C. (1983). Separation of ownership and control. *The Journal of Law and Economics*, 26(2), 301-348.

- Ferris, S.P., Jagannathan, M., & Pritchard, C. (2003). Too busy to mind the business? Monitoring by directors with multiple board appointments. *Journal of Finance*, 58(3), 1087-1111.
- Fich, E.M., & Shivdasani, A. (2006). Are busy boards effective monitors? *Journal of Finance*, 61(2), 689-724.
- Francis, J.R., & Yu, M.D. (2009). Big 4 office size and audit quality. *Accounting Review*, 84(5), 1521-1552.
- Ghazali, N.M. (2008). Voluntary disclosure in Malaysian corporate annual reports: Views of stakeholders. *Social Responsibility Journal*, 4(4), 504-516.
- Gnan, L., Hinna, A., Monteduro, F., & Scarozza, D. (2011). SOEs ownership and control: Independence and competence of board's members. *Corporate Ownership & Control*, 8(1), 720-739.
- Haniffa, R.M., & Cooke, T.E. (2005). The impact of culture and governance on corporate social reporting. *Journal of Accounting and Public Policy*, 24(5), 391-430.
- Haniffa, R., & Hudaib, M. (2006). Corporate governance structure and performance of Malaysian listed companies. *Journal of Business Finance & Accounting*, 33(7-8), 1034-1062.
- Haque, F. (2017). The effects of board characteristics and sustainable compensation policy on carbon performance of UK firms. *The British Accounting Review*, 49(3), 347-364.
- Hassan, M.K. (2009). UAE corporations-specific characteristics and level of risk disclosure. *Managerial Auditing Journal*, 24(7), 668-687.
- Healy, P.M., & Palepu, K.G. (2001). Information asymmetry, corporate disclosure and the capital markets: A review of the empirical disclosure literature. *Journal of Accounting and Economics*, 31(1-3), 405-440.
- Helliar, C., Lonie, A., Power, D., & Sinclair, D. (2001). Attitudes of UK managers to risk and uncertainty. *Balance Sheet*, 9(4), 7-10.
- Hinna, A., Nito, E.D., & Mangia, G. (2010). Board of directors within public organisations: A literature review. *International Journal of Business Governance and Ethics*, 5(3), 131-158.
- Ho, S.S.M., & Wong, S.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(1), 139-156.
- Hodges, R., Wright, M., & Keasey, K. (1996). Corporate governance in the public services: Concepts and issues. *Public Money & Management*, 16(2), 7-13.
- ICAEW. (2002). No surprises: The case for better risk reporting. *Balance Sheet*, 10(4), 18-21.
- ICAEW. (2008). The auditors liability conundrum. *Journal of Accountancy*, 142(4), 112-113.
- Jackson, S.E. (1992). Consequences of group composition for the interpersonal dynamics of strategic issue processing. *Advances in Strategic Management*, 8(1), 345-382.
- Jensen, M.C., & Meckling, W.H. (1976). Theory of the firm: Managerial behaviour, agency costs and ownership structure. *Journal of Financial Economics*, 3(4), 305-360.
- Jensen, M.C. (1993). The modern industrial revolution, exit and the failure of internal control systems the failure of internal control systems. *Journal of Finance*, 48(3), 831-880.
- Jorgensen, B.N., & Kirschenheiter, M.T. (2003). Discretionary risk disclosures.
- Kelly, J. (1998). Fix that broken clock, London. *London, Financial Times*.
- Kirkpatrick, G. (2009). *Corporate governance : Lessons from the Crisis*. Financial Market Trends/OECD.
- Lane, J.E. (2005). Public administration and public management: The principal-agent perspective. *Public Administration*, 85(3), 871-874.
- Lau, Y.W., & Tong, C.Q. (2008). Are Malaysian Government-Linked Companies (GLCs) creating value? *International Applied Economics and Management Letters*, 1(1), 9-12.
- Linsley, P.M., & Shrivess, P.J. (2005). Examining risk reporting in UK public companies. *The Journal of Risk Finance*, 6(4), 292-305.
- Linsley, P.M., & Shrivess, P.J. (2006). Risk reporting: A study of risk disclosures in the annual reports of UK companies. *British Accounting Review*, 38(4), 387-404.
- Linsmeier, T.J., Thornton, D.B., Venkatachalam, M., & Welker, M. (2002). The effect of mandated market risk disclosures on trading volume sensitivity to interest rate, exchange rate and commodity price movements. *The Accounting Review*, 77(2), 343-377.
- Lopes, P.T., & Rodrigues, L.L. (2007). Accounting for financial instruments: An analysis of the determinants of disclosure in the Portuguese stock exchange. *International Journal of Accounting*, 42(1), 25-56.
- Mallin, C. (2002). The relationship between corporate governance, transparency and financial disclosure. *Corporate Governance: An International Review*, 10(1), 253-255.



- Mokhtar. (2005). The Malay way of business change. *Economist*, 376(8440), 50-70.
- Monteduro, F. (2014). Public-private versus public ownership and economic performance: Evidence from Italian local utilities. *Journal of Management and Governance*, 18(1), 29-49.
- Rajgopal, S. (1999). Early evidence on the informativeness of the SEC's market risk disclosures: The case of commodity price risk exposure of oil and gas producers. *Accounting Review*, 74(3), 251-280.
- Sharman, R., & Copnell, T. (2002). Performance from conformance: The practical application of corporate governance and risk management. *Performance from Conformance: The Practical Application of Corporate Governance and Risk Management*.
- Shrives, P.J., & Linsley, P.M. (2003). *Risk disclosures in UK and German annual reports: A comparative study*. Paper presented at the European Accounting Association 26th Annual Conference.
- Solomon, J.F., Solomon, A., Norton, S.D., & Joseph, N.L. (2000). A conceptual framework for corporate risk disclosure emerging from the agenda for corporate governance reform. *The British Accounting Review*, 32(4), 447-478.
- Spira, L.F., & Page, M. (2003). Risk management: The reinvention of internal control and the changing role of internal audit. *Accounting, Auditing & Accountability Journal*, 16(4), 640-661.
- Sufian, F. (2010). The impact of the Asian financial crisis on bank efficiency: The 1997 experience of Malaysia and Thailand. *Journal of International Development*, 22(7), 866-889.
- Teoh, S.H. & Wong, T.J. (1993). Perceived auditor quality and earnings response coefficient. *The Accounting Review*, 68(2), 346-367.
- Ventakachalam, M. (1996). Value-relevance of banks derivatives disclosures. *Journal of Accounting and Economics*, 20(2), 327-355.
- Verrecchia, R.E. (2001). Essay on disclosure. *Journal of Accounting and Economics*, 32(2), 97-180.
- Walker. (2009). *A review of corporate governance in UK banks and other financial industry entities*. Consultation Paper.
- Westphal, J.D., & Milton, L.P. (2000). How experience and network ties affect the influence of demographic minorities on corporate boards. *Administrative Science Quarterly*, 45(1), 366-398.
- Westphal, J.D., & Khanna, P. (2003). Keeping directors in line: Social distancing as a control mechanism in the corporate elite. *Administrative Science Quarterly*, 48(1), 361-398.
- Yasar, A. (2013). Big four auditors audit quality and earnings management: Evidence from the Turkish stock market. *International Journal of Business and Social Science*, 4(17), 153-163.
- Zin, N.M., & Sulaiman, S. (2011). Government-linked companies blue book (GLCs Blue Book) as a complement to balanced scorecard (BSC) in the government-linked companies transformation program. *International Conference on Business and Economics Research*, 20(1), 294-297.