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# THE IMPACT OF NEW REGULATIONS ON EARNINGS QUALITY AMONG MALAYSIAN FIRMS

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## ABSTRACT

The main purpose of this study is to examine the impact of the establishment of the Audit Oversight Board (AOB) on audit effort and the effect of the introduction of provisions 317A and 320A of the Capital Markets and Services Act (CMSA) and earnings management. Specifically, it is argued that the monitoring role of the AOB leads to auditors being more rigorous in conducting audits so as to achieve high compliance with auditing standards. Thus, auditors have to put in more effort, which requires them to increase audit fees to compensate the increase in hours spent on an engagement. This study hypothesizes that an increase in audit effort should mitigate earnings management due to consequent higher detection of earnings management. As for Sections 317A and 320A of the CMSA, the objective is to ensure the independent directors are more effective in discharging their monitoring roles. It is also hypothesized that the level of earnings management should be reduced as a result of the more effective monitoring by independent boards of directors and audit committees. The data sample comprises 2,124 observations collected from the annual reports of 708 firms for three years from 2009–2011, which covers the periods before and after the establishment of the AOB. The results indicate that there is an increase in audit effort from pre- to post-AOB. This suggests that the monitoring role of the AOB makes auditors more proper in carrying out the audit process and in collating supporting documentation. The regression analyses reveal the role of board independence in reducing earnings management after the new regime was enforced. This study contributes to the corporate governance literature by examining the effect on financial reporting quality after the changes in rules and legislation, especially in respect of the audit regulatory system with the establishment of the AOB and the issuance of Sections 317A and 320A of the CMSA.

JEL Classification: G34 and M41

Keywords: Audit oversight board, Monitoring, Independent directors, Earnings Management, Malaysia

## 1. INTRODUCTION

The issue of earnings quality has been the focus of extensive academic research since Ball and Brown's (1968) study on the informativeness of earnings because it involves the reliability and relevance of published accounting data. The issue of earnings quality surfaced again in the early 2000s when accounting irregularities were discovered in a number of large companies (for example, Enron and WorldCom in the US, Parmalat in Italy and Satyam in India). All these companies went bankrupt. Malaysia did not escape this type of scandal because two companies, Transmile Group Berhad and Megan Media Berhad, were also found to have used aggressive accounting practices to mislead investors. Transmile was found to have inflated its 2005 and 2006 revenues by RM400 million (Ex-Transmile, 2011), while Megan Media was found to have falsified its financial statements by RM1 billion in 2007 (Mahalingam, 2007). The share prices of these companies plunged following these disclosures. Megan Media went bankrupt in 2008, while Transmile's shares were delisted on 24 May 2011. While the shareholders of these firms lost billions of dollars and perhaps their life savings, the employees lost their jobs.

In the US, to curb aggressive accounting practices, the Sarbanes Oxley Act (SOX) was passed by the US Congress in 2002 and the Public Company Accounting Oversight Board (PCAOB) was formed. The major role of the PCAOB is to oversee the auditors of public companies. Its main objective is to protect the interests of investors and further the public interest in the preparation of informative, fair and independent audit reports (Public Company Accounting Oversight Board [PCAOB], 2013). Following the

Transmile and Megan Media scandals, Malaysia also established its version of the PCAOB, the Audit Oversight Board (AOB) on 1 April 2010, as a result of Malaysian Parliament passing Part IIIA of the Securities Commission (Amendment) Act 2010 in December 2009, which specified the establishment and functions of the AOB (Securities Commission, 2011a). The AOB is empowered to investigate the audit process and documentation of auditors who audit the public interest entities (PIEs).

Since establishment, two audit partners were reprimanded in 2012, six in 2013 and two in 2014 (Securities Commission, 2014). The offences mainly concern breaches of the AOB's registration condition under Section 310 (4) of the Securities Commission Act (SCA) 1993 (Securities Commission, 2014), which relate to the failure of auditors to comply with certain requirements of the International Standards on Auditing in discharging their professional duties in the performance of an audit of a PIE. The AOB expects that, as a result of its investigations, audit firms will improve audit quality by ensuring that sufficient efforts are made during an engagement (Securities Commission, 2012a).

However, the production of high-quality financial reports is not only dependent on the quality of the audit service provided by external auditors, but also on a sound corporate governance mechanism where there is effective interaction between the actors in that mechanism. These actors include those charged with governance, namely, the board of directors and the audit committee; the management of the company; and the external auditors of the company (Majella, 2012). After various notable corporate scandals involving such companies as Enron, Worldcom and Xerox, the focus has been on strengthening the corporate governance mechanism in order to prevent earnings manipulation (Garcia-Meca and Sanchez-Ballesta, 2009). As suggested by Watts and Zimmerman (1986), corporate governance is one of the mechanisms that can improve the reliability and integrity of financial reporting by reducing the asymmetric information between managers and owners. At the same time, the importance of the audit committee in monitoring the external auditor's performance has been raised in relation to the collapse of some large companies (Majella, 2012).

Although many research studies have been conducted on the relationship between corporate governance and earnings management in developed economies, the results are mixed. Studies in the Malaysian setting also show mixed findings. Based on their review of various empirical findings, Garcia-Meca and Sanchez-

Ballesta (2009) suggest that the contradictory results could be due to the fact that only certain dimensions of corporate governance have been tested (e.g., only testing internal governance without considering other external factors) or that diverse measurements have been used for some variables and/or that there is a variation in legal contexts. Thus, it is implied that changes in legislation should have an impact on corporate governance practices; as suggested by Hill and Jones (1992), the high credibility and strict enforcement of legislation should act as deterrence. The two new provisions in 2010, namely Sections 317A and 320A, which were incorporated into CMSA empower the Securities Commission: 1) to prosecute directors and officers of listed firms for causing wrongful loss to a company; and 2) to prosecute anyone who coerces or influences the person responsible for preparing the financial statements of listed firms causing them to be materially misstated. Hence, these two provisions will ensure independent directors to discharge their statutory duties, more specifically on the aspect of financial reporting process.

There are many factors that have been identified to influence audit quality. One of the factors is on the work done by auditors in order to form an appropriate audit opinion (Gul, 2006). Hence, auditors have to follow a suitable audit methodology to ensure that the evidence collected is appropriate and sufficient in order for them to provide a reasonable opinion that the financial statement is a true and fair representation of a company's financial condition. Thus, the purpose of an inspection by the AOB is to ensure that the audit process has been conducted properly by the auditors and that the appropriate evidence has been documented in audit working papers as a proof of audit work done. These new provisions require directors, especially the independent directors on the board and audit committee, of a firm to discharge their role more vigilantly. Failure to do so can result in a severe penalty.

Hence, the objectives of this paper are as follows: First, it aims at determining whether audit efforts are increased following the establishment of the AOB. Second, it seeks determine whether independent boards of directors and audit committees are more effective in mitigating earnings management following the introduction of Sections 317A and 320A of the CMSA in 2010. The remaining of the paper is organized in the following manner. Next, we will discuss the prior literature on corporate governance and financial reporting quality. Specifically, it focuses on previous literature in the context of legislation on audit quality, board independence and audit committee independence and the impact on earnings management. Subsequently, we explain the theoretical framework and hypotheses development. This section discusses agency theory, which is the most significant theory in earnings management and corporate governance. Then it elaborates on the expected relationship between the dependent variable (i.e., earnings management) and the independent variables (audit effort, board independence and audit committee independence). In the following section, we present the sample selection and research design. This section also explains the measurement of each variable utilized in the study. The ensuing section will present the results and the discussion of the results. Finally, we provide the conclusion of the study.

## 2. THE FRAMEWORK OF CORPORATE GOVERNANCE AND FINANCIAL REPORTING QUALITY

This study focuses on the new regulatory regime established in Malaysia and its impact on auditors, boards of directors and audit committees and the consequent, if any, effect on financial reporting quality. Thus it is important to mention the corporate governance framework as suggested by Cohen, Krishnamorthy and Wright (2004). In their framework, they identify two mechanisms, an internal and an external mechanism. The internal mechanism comprises board of directors, audit committee, internal auditors, external auditors and management (Cohen et al., 2004). The external mechanism comprises courts and the legal system, regulators, financial analysts, stock exchanges, legislators and stockholders (Cohen, Krishnamorthy and Wright, 2004). In the context of this study, the AOB and new provisions under the CMSA (i.e., 317A and 320A) are regarded as the external mechanism, while external auditors, audit committee and board of directors are regarded as the internal mechanism.

It is envisaged that bringing into force the AOB as an independent, external oversight body would strengthen the role of the external auditors by ensuring that they would adhere to auditing standards in order to produce high-quality audits. In addition, the new provisions encapsulated in Sections 317A and 320A of the revised CMSA are expected to enhance the role of independent directors in monitoring public companies. Based on Cohen, Krishnamorthy and Wright's (2004) framework, because auditors are part of the financial value chain, auditors act as the gatekeepers of financial information. While audit committee's main responsibility is to oversee the external audit processes and external auditors' performance (Cohen, Krishnamorthy and Wright, 2004), the oversight activities should take into account the external auditors' technical competencies and professional integrity in carrying out the assurance function. Therefore, it is important for independent members of boards and audit committees to be independent from management to enable them to discharge their role effectively. In addition, Cohen, Krishnamorthy and Wright (2002) argued that high-quality boards would be willing to purchase high audit quality by paying higher audit fees. This is because they would demand more extensive and higher quality auditing. Moreover, Carcello and Neal (2000) examined the impact of an independent audit committee on the auditor and found that the auditor is subject to pressure from management if the audit committee is less independent. Cohen, Krishnamorthy and Wright (2004) also suggested that to enhance financial reporting quality, it is important to have an independent audit committee because auditors will be more vigorous in restraining aggressive management behaviour to manage earnings. In relation to this finding, Cohen et al. (2004) also state that it would be useful to examine the impact of stringent laws and inspections by regulators on the actors involved in corporate governance.

### 2.1 AUDIT OVERSIGHT BOARD

The AOB was set up under the Securities Act in April 2010. Based on the experience of other economies, it is important to have an independent oversight board in order to improve the quality of audits and promote investor confidence (Securities Commission, 2011a). Prior to the establishment of the AOB, public accountants in Malaysia were under the purview of the Malaysian Institute of Accountants (MIA). The establishment of the AOB was in line with the formation of the PCAOB in the US. The PCAOB is a non-profit corporation established by the US Congress. Basically, the PCAOB's role is to oversee the audits of public companies in order to protect investors' interests by ensuring that auditors produce informative, accurate and independent audit reports (PCAOB, 2013). Thus, similar to the PCAOB, the main role of the AOB is to oversee the auditors of PIEs, which include public listed firms, and to increase the quality and reliability of PIEs' audited financial statements (Securities Commission, 2011a). The AOB ensures that those who want to audit the financial statements of PIEs are registered annually with the AOB. In addition, the SCA provides for a range of administrative-type sanctions that can be taken by the AOB such as: i) reprimanding the registered auditor, (ii) assigning a reviewer to oversee the audit undertaken by the registered auditor, (iii) prohibiting the registered auditor from accepting any new PIE clients, (iv) imposing a monetary penalty not exceeding RM500,000 or (v) suspending the registration of an auditor with the AOB (Securities Commission, 2011a). It is considered an offence if auditors of PIEs do not register with the AOB. The AOB also carries out inspections on the audit working papers of auditors of PIEs. Any wrongdoings found by an inspection could lead to suspension or revocation of the auditor's licence.

Under this new enforcement regime, the engagement partner of an accounting firm is held responsible for any non-conformity with the conditions imposed after registering with the AOB (Securities Commission, 2011a). There have been a few cases where audit partners have been charged under the new rules, such as the audit partner from UHY Malaysia (Securities Commission, 2012a). One of the offences under the new regime is non-compliance with the requirements of the recognized auditing standards in Malaysia (i.e., the International Standards on Auditing) (Securities Commission, 2012a). It is the responsibility of the engagement partner involved in auditing a PIE to ensure that the performance of the audit and the issuance of the audit report after the audit work is done comply with these standards. A reprimand from the AOB to an auditor gives a signal to all auditors to perform audit work appropriately.

In its first year of operation, the AOB inspected 55 individual audit engagements by six major audit firms in Malaysia (Securities Commission, 2011a). These six audit firms audited 73 per cent of PIEs in Malaysia, which represents 93 per cent of the Bursa Malaysia market capitalization (Securities Commission, 2011a). These inspections found that audit documentation and evidence were lacking especially in areas where significant audit judgements were required. In addition, auditors are also required to have systems of quality control in compliance with ISQC 1. The AOB has the power to reprimand registered auditors who fail to comply with ISQC 1. Under the requirements of ISQC 1, to maintain a high level of performance in terms of audits on listed firms, accounting firms have to produce a model consisting of manuals, templates, checklists and working papers (MIA, 2010). Also, to ensure that sufficient training is provided to audit staff, ISQC 1 also requires yearly planning for staff training by audit firms and monthly human resources reports for training analysis (MIA, 2010).

These stringent requirements are in place in response to the findings of a practice review conducted by the MIA which found evidence of poor management in audit firms. In the review, the MIA examined around 280 audit firms, but only nine per cent of firms were rated satisfactorily and others were found to need major improvements in order to reach a good standard of management (Jayaseelan, 2010). The MIA review found that there were major audit deficiencies due to improper documentation of audit working papers. Proper documentation is important as it is a proof that the audit procedures have been performed appropriately to obtain proper audit evidence (Securities Commission, 2011a).

The AOB also noted that audit firms need to price their services to reflect the risk undertaken and the quality of the audit work. Therefore, it is anticipated that the cost of audit work on public listed firms will rise because compliance with stringent procedures will require more efforts as there will be more processes involved. The costs that will be affected include professional fees, documentation processing, professional training and infrastructure (Jayaseelan, 2010).

## 2.2 SECTION 317A AND SECTION 320A OF THE CMSA

The issuance of two new provisions (317A and 320A) by the Securities Commission in 2010 was intended to make independent directors more vigilant and accountable. With these provisions, the Securities Commission is empowered "to prosecute directors and officers of listed firms for causing wrongful loss to a company" (317A, CMSA, 2010), and "anyone who coerces or influences the person responsible for preparing the financial statements of listed firms causing them to be materially misstated" (320A, CMSA, 2010). While the board of directors has the ultimate authority over the issuance of the firm's financial statements, it is the audit committee that is responsible for overseeing the process of financial reporting. However, unless the board and the audit committee are independent of management, they will not be able to carry out their oversight role effectively (Beasley, 1996; Klein, 2002).

The prosecutions that have been brought against directors who have failed to discharge their duties diligently indicate the serious attention that the regulators in Malaysia are giving to strengthen the corporate governance mechanism in the country. The on going trials involving directors of Transmile, Megan Media and other companies should make directors, especially independent directors, be more conscientious in the performance of their duties. Furthermore, the sentencing of two audit committee members of Transmile in 2011 (Securities Commission, 2011b) should warn audit committee members to be more diligent in carrying out their accounting oversight role. The judge in this case said that:

> A director or audit company member is not a decorative piece of a company. He is a vital organ of the company, in particular when it comes to corporate governance. They have specific duties, functions and responsibilities and investing public shareholders rely on them (Securities Commission, 2011b).

He also stressed that:

> … the evidence showed a blatant disregard of the seriousness of the concerns on the contra transactions when the audit committee was told by Deloitte that the contra transactions were very unusual and lacked commercial justification. These were sufficient warning bells and as audit committee members they should have raised these issues to the board but instead failed to do so (Securities Commission, 2011b).

The judge's remarks therefore clarify the role of the members of the audit committee and their responsibility to raise at board meetings any issues that come to their knowledge.

## 2.3 AUDITING AND EARNINGS MANGEMENT

Audit quality is fundamental in maintaining the credibility of corporate governance and in ensuring the reliability of the financial reporting process (Abdullah, Ismail and Jamaluddin, 2008). Becker et al. (1998) show that a lower audit quality is associated with more accounting flexibility. They argue that to prevent earnings management, it is vital to ensure the high-quality audit takes place because it will more likely be able to discover evidence of any misappropriate act that would result in a loss of reputation and reduce the firm's value (Becker et al., 1998). However, an evaluation of the quality of an auditor also depends on whether the extent of an auditor's scope of work is able to produce reasonable evidence that the auditee's financial statement is presented in a true and fair manner. For example, Hanlon, Krishnan and Mills (2012) found that a higher risk of earnings management could be reflected in large book-tax differences which then would increase the audit effort spent on the audit. Besides, the assessment of audit risk is important in determining the extent of audit work (Xu et al., 2013). Consistent with the arguments presented in a few prior studies, this study believes that more audit effort should enhance audit quality. This view was supported by Hoitash, Markelevich and Barragato (2007), who suggested that higher auditor fees may increase the effort exerted by auditors, hence, increasing audit quality. Caramanis and Lennox (2008) revealed that low audit effort in terms of hours worked provides the opportunity for managers to aggressively manage earnings. Therefore, to reduce income smoothing, more audit efforts are necessary to curb the intention of management to manage earnings (Caramanis and Lennox, 2008).

In addition to the above, prior studies have also found that a high risk of litigation is an influencing factor that may heighten the concern of auditors in respect of managing their audit quality. Chen et al. (2011) reveal that the value of auditing increases when enforcement is stricter. They claimed that, in China, the strict legal environment incentivizes larger Chinese auditing firms to provide a better-quality audit service and to comply with auditing regulations. They found that several reforms in regulation, which were initiated at the end of the 1990s, have induced larger audit firms in China to differentiate themselves from smaller audit firms in order to maintain their quality. They found that larger auditors also became more concerned about the risk of litigation and damage to reputation if they violated any of the auditing regulations (Chen et al., 2011). Hence, this study in China shows that regulations encourage auditors to improve the quality of their work.

Consistent with Chen et al. (2011), Khurana and Raman (2004) also found that in the US the fear of litigation risk is the major factor that leads to perceived audit quality instead of the risk to the auditor's reputation. They argued that it is important to distinguish whether it is the potential threat of litigation or concern about loss of reputation that drives the perceived higher audit quality because the two factors have different implications for regulators (Khurana and Raman, 2004). They suggested that there should be no opposing effects if reducing litigation exposure on auditor when the reputation is deemed to lead to a higher audit quality. However, there is an unexpected impact on audit quality if concerns about litigation influence audit quality. Thus, their study implies that, if audit quality increases due to fear of litigation, regulators should ensure the enforcement applied is consistent to avoid any inadvertent effect on audit quality. Hence, this finding should encourage the AOB to be consistent in monitoring auditors in order to sustain high audit quality.

Cohen, Krishnamorthy and Wright (2011) examined the outcome of an investigation by the PCAOB on the audit quality of the Big 4.

Their result shows that inspections by the PCAOB enhance audit quality, which is indicated by a reduction in earnings management. In addition, Gunny and Zhang (2013) found that auditors who receive poor reports from the PCAOB have clients with considerably higher abnormal accruals and greater propensity to restate. However, Lennox and Pittman (2010) found that an audit firm's market share is insensitive to the content of a PCAOB inspection report, which implies that the public know less about audit quality under the new regulatory regime. Therefore, they concluded that it is unclear whether the PCAOB is discharging its regulatory role effectively. These contradictory findings show that the establishment of the AOB warrants further examination to ensure that it does benefit the overall financial reporting regime.

## 2.4 THE INDEPENDENCE OF THE BOARD OF DIRECTORS AND AUDIT COMMITTEES IN RELATION TO EARNINGS MANAGEMENT

There have been several court cases that relate to the failure of directors. The collapse of Satyam in India and Megan Media in Malaysia were due to fraudulent activity. The collapse of Enron in the US and Transmile in Malaysia was due to aggressive accounting policies. Two previous independent directors of Transmile, who were also audit committee members, were each jailed for a year for providing misleading information and were also fined RM300,000 each for the offence, and in default six months' imprisonment by a Sessions Court (Securities Commission, 2011b). The two were charged with authorizing the furnishing of a misleading statement to Bursa Malaysia in Transmile's quarterly report on unaudited consolidated results for the financial year ending 31 December 2006 (Securities Commission, 2011b). The Securities Commission also charged Megan Media's executive chairman and financial controller for their involvement in furnishing false financial statements for the financial year ended 31 January 2007 and this case is on going (Mahalingam, 2007). The above examples indicate that the Securities Commission is very serious about ensuring the quality of the financial statements of PIEs. Furthermore, the message that the Securities Commission is trying to stress is that it is important for independent directors to perform their roles effectively.

Independent directors are defined as those who are not executive directors and who are not related to the corporation, a spouse or family members, or any individual that would impede independent judgement (Bradbury, Mak and Tan, 2006). Prior studies in developed countries have shown that the presence of a greater proportion of independent directors adds more value to the board monitoring process (Baysinger and Butler, 1985; Beasley, 1996; Klein, 2002). Haniffa and Cooke (2002) claim that independent directors have more power to force management to improve the quality of financial statement disclosure when the majority of them are non-executive directors. Similarly, Davidson, Goodwin-Stewart and Kent (2005) documented that in Australian firms with a majority of non-executive directors on the board and audit committee there is a lower likelihood of earnings management. Moreover, Fama and Jensen (1983) argued that, although executive directors have proficiency and deep knowledge about the activities of companies, a greater role in monitoring management would be attained by having more independent non-executive directors.

Besides independent directors on the board, independent audit committees also play an important role in ensuring the quality and credibility of financial reporting. They act as part of the governance mechanism to improve the operations and economic profit of the firms. As suggested by Carcello and Neal (2000), the audit committee is an important mechanism in corporate governance and has prominent role in ensuring financial reporting quality. The audit committee can enrich the corporate governance mechanism by facilitating better communication among other monitoring roles such as with external auditors, boards and internal auditors (Bradbury, Mak and Tan, 2006). Similarly, Cohen, Krishnamorthy and Wright (2004) highlighted the importance of the audit committee in ensuring effective interaction between players in corporate governance, which is essential for effective governance. Likewise, DeZoort et al. (2002) recognize the important role of the audit committee as a subcommittee of the board of directors in safeguarding the shareholders' interests by monitoring the actions of management in the areas of financial reporting, risk management and internal control. Garcia-Meca and Sanchez-Ballesta (2009) conducted a meta-analysis on the findings in prior studies on the relation between audit committee independence and earnings management. They noted that although there were mixed findings, the results of the meta-analysis support the negative association between an independent audit committee and earnings management (Garcia-Meca and Sanchez-Ballesta, 2009).

A number of research studies on the effect of corporate governance mechanisms on earnings management have been carried out in the Malaysian setting as well (see Abdul Rahman and Mohamed Ali, 2006; Abdullah and Mohd Nasir, 2004; Hashim, 2011; Mohd Saleh, Iskandar and Rahmat, 2005, 2007). The findings in the Malaysian context were also mixed. Both Abdul Rahman and Mohamed Ali (2006) and Abdullah and Mohd Nasir (2004) found that neither board nor audit committee independence is associated with earnings management. Similarly, no significant relationship was found by Mohd Saleh, Iskandar and Rahmat (2005) between earnings quality and an independent board of directors. In contrast, Hashim (2011) provided mixed evidence on the effect of board independence on earnings management. It has been suggested by Abdul Rahman and Mohamed Ali (2006) that insufficient knowledge about a company's affairs and the dominance of management on board matters are among the factors that lead to weak control by independent boards and audit committees over earnings management. In addition, Garcia-Meca and Sanchez-Ballesta (2009) suggested that the effects of corporate governance on earnings management should take into consideration the legal and institutional setting. Given the flexibility in accounting standards, regulators have no authority to restrict managerial opportunistic behaviour to manipulate earnings. The flexibility in accounting standards allows managers to use their discretion to justify the chosen accounting methods. Therefore, regulators focus on strengthening corporate governance as a mechanism to control the negative effects of earnings management that may threaten financial reporting quality. In Malaysia, the listing requirements issued by Bursa Malaysia regulate the governance practices of listed firms in order to ensure that they comply with the principles set out in the MCCG (Mat Yasin, 2012).

It has been claimed that, in Malaysia, some independent directors, despite their lack of qualifications, have been appointed based on their relationship with the chief executive officer (CEO) (Hashim and Devi, 2008). Therefore, the accountability and independence of some boards of directors is questionable because a number of independent directors are not truly independent of management and inside directors' dominance on boards (Vethanayagan, Yahya and Haron (2006). This view is also supported by Bradbury, Mak and Tan. (2006), who found that when a CEO is also the board chair, there is no relation between independent boards and abnormal accruals. When the MCCG came into force in 2007, it strongly encouraged the separation of the roles of CEO and board chair, but where these roles are combined, it states that the firm should have a strong independent element on the board

(Securities Commission, 2007). Thus, as a result of the significant steps made by regulators to improve the corporate governance regime, i.e., by strengthening the MCCG and the latest issuance of new provisions (317A and 320A) under the CMSA, it is expected that independent directors will be more effective in carrying out their duties. Therefore, these developments are a viable research area through which to further examine the role of independent directors given the current strict enforcements in place for those who fail to perform their duties diligently.

## 3. HYPOTHESES DEVELOPMENT

### 3.1 AGENCY THEORY AND INFORMATION ASYMMETRY

Jensen and Meckling (1976) suggested that a company consists of a nexus of contracts between the principals who are the owners of capital and economic resources and the agents who are responsible for managing and controlling the capital and resources provided by the owners. These relationships are fundamental in business and are called the agent-principal relationship or the agency relationship. In this relationship, the principals delegate some of the decision-making authority to the agent in order to take action on their behalf. Due to the separation between the ownership and control of the corporation, the agents tend to have the ability to operate in their own self-interest rather than in the best interest of owners. This agency conflict happens as a result of information asymmetry.

Schipper (1989) explained that when managers know something that others do not, this may lead to asymmetric information, whereby the other parties may not know that managers have acted only in their own self-interest. This information asymmetry in the agency relationship may allow an agent to engage in opportunistic behaviour. This opportunistic behaviour may lead to the problem of earnings management. The persistence of information asymmetry may occur because of blocked communication, which refers to a situation where only some information can be disclosed by managers (Schipper, 1989). However, Dye (1988) claimed that where information is disclosed, the public and future shareholders can assess this information and then there will be no earnings management because there are no constraints blocking communication with others. However, often principals do not know whether an agent has acted in the best interest of the firm because they are not able to access all the available information whenever a decision is made by the agent. Based on agency theory, in order to reduce opportunistic action by the agent, the principal incurs some monitoring costs (Hill and Jones, 1992). Thus, this implies that auditing and corporate governance as monitoring mechanisms play a vital role in reducing the problem of the opportunistic behaviour of managers.

Moreover, audited financial reporting is an important mechanism because it can reduce the asymmetry of information (Healy and Palepu, 2001). If there is an auditor, independent board of directors and audit committee, the quality of the financial information reported by management should be enhanced. These parties should ensure that all material information is properly included in the financial report by managers. To achieve this may necessitate more extensive work by the auditor as well as more effective monitoring by the audit committee and independent board in order to reveal any activities managers might have concealed. This is because any misleading information disclosed would jeopardize the decisions made by the shareholders or stakeholders. Although earnings management is not implemented and does not necessarily violate accounting standards, it may lead to inaccurate information about the company (Abdul Rahman and Mohamed Ali, 2006). Thus, it is important to ensure that there is an effective corporate governance mechanism in place in order to protect the right of investors to have true and fair information about the company they have or want to invest in (Abdul Rahman and Mohamed Ali, 2006).

Nevertheless, even though trust is placed in those taking on corporate governance roles to monitor the actions of top management, there are also cases of wrongdoing by those in the monitoring bodies. Thus, this problem with the monitoring function has led to the evolution of institutional structures that are enshrined in legislation (Hill and Jones, 1992). Enforcement mechanisms should act as deterrence; however, their success depends on their credibility which is important to avoid costs that outweigh the benefits (Hill and Jones, 1992). Thus without credibility, legislation would not be an effective deterrent.

## 3.2 THE AOB AND EARNINGS MANAGEMENT

It is predicted that audit quality will have improved after the establishment of the AOB because the AOB is empowered to inspect the working papers of auditors. Auditors who fail to comply with the relevant auditing standards faces the risk of their licence being suspended or revoked. Given the strict enforcement regime, auditors will need to be more diligent in conducting audits and in ensuring that they have proper documentation as evidence that they have complied with the guidance for producing a high-quality audit. Therefore, in order to comply with this new enforcement, auditors will need to do more extensive audit work, which will increase the number of audit hours spent on an audit engagement. Besides, ISQC 1 requires the audit firm to provide adequate training for audit staff to ensure that they are continuously updating their knowledge of current standards. Therefore it is foreseen that more costs will be incurred by an audit firm in order to provide high-quality audits and maintain this high level of performance.

In line with the auditing profession changing from being self-regulated to being subject to a new inspection regime and the full-force of the law to make them comply with auditing standards, the recommended guide to audit fee charges (RPG 7) was revised and became effective on 1 March 2010 (MIA, 2013). The revised RPG 7 is used as the benchmark to establish a reasonable level of remuneration because it takes into account the increase in the compliance burden due to higher auditing standards requirements, e.g., ISQC 1. Therefore having a reasonable benchmark for audit fees will encourage auditors to continuously upgrade their skills and then the quality of the audits rendered will be improved by ensuring that the appropriate audit effort has been made. As claimed by Blankley, Hurtt and MacGregor (2012), regulators need to monitor audit fee structures because these reflect the extent of audit effort and consequently the quality of audit work. Moreover, Ghosh and Pawlewicz (2009) found that the increase in audit fees reflected the significant increase in audit effort after the SOX came into force due to the increase in the audit workload and higher exposure to legal liability. Thus, consistent with Ghosh and Pawlewicz's (2009) findings, it is hypothesized that:

*$H_1$: Audit effort is increased following the establishment of the AOB.*

The presence of the AOB leads to auditors being more detailed with their audit work as the AOB may audit their working paper. This is due to the increase in the audit workload and higher exposure to legal liability (Ghosh and Pawlewicz, 2009). Hence, to compensate this, audit fees are increased. Therefore, the establishment of the AOB together with more audit efforts leads to lower earnings management as the chances of auditors' finding accounting manipulations or irregularities increase. Hence,

*$H_2$: The establishment of the AOB interacts with audit effort to reduce earnings management.*

### 3.3 BOARD INDEPENDENCE

Many studies have examined the role of the board as a monitoring mechanism and have mostly found that the board contributes to enhancing accounting information quality and integrity (see Beasley, 1996; Dechow, Sloan and Sweeney, 1996; Klein, 2002). This is in line with agency theory, which suggests that agency conflicts would be reduced if the majority of board members were outside directors (Fama and Jensen, 1983). A similar suggestion is made by Li (1994), who states that outside directors have a powerful potential to reduce agency costs and protect shareholders' wealth because normally they are experts from other big corporations who have more expertise, independence and legal power.

Furthermore, the MCCG requires that one third of board of directors should be independent non-executive directors in order to provide independent judgements in the decision-making process (Securities Commission, 2007). The Higgs Report (Higgs, 2003) indicates that efficient monitoring by non-executive directors is able to improve the quality of information because they are free from the influence of management. In addition, empirical results from Taiwan (Kao and Chen, 2004) and Hong Kong (Jaggi and Leung, 2007) also show that the majority of outside directors on boards provide better oversight of management to reduce earnings management practices.

Nevertheless, there are also studies that have not found any significant association between board independence and earnings management. For instance, Park and Shin (2004) found no relationship between independent directors and earnings management in Canadian firms. Also, empirical evidence on Malaysian firms by Abdul Rahman and Mohamed Ali (2006), Abdullah and Mohd Nasir (2004), Hashim and Devi (2008) and Mohd Saleh, Iskandar and Rahmat (2005) does not support a link between board independence and earnings management.

This study posits that the presence of independent directors will be able to mitigate earnings management practices following the introduction of the new provisions 317A and 320A of the CMSA in 2010. This is because with these provisions, the Securities

Commission is empowered "to prosecute directors and officers of listed firms for causing wrongful loss to a company and anyone who coerces or influences the person responsible for preparing the financial statements of listed firms causing them to be materially misstated" (Securities Commission, 2013). Furthermore, the on going trials involving directors of Transmile, Megan Media and other companies should make directors, especially independent directors, be more conscientious about their duties. Thus, the hypothesis is as follows:

*$H_3$: Board independence is associated with lower earnings management following the issuance of 317A and 320A of the CMSA.*

### 3.4 AUDIT COMMITTEE INDEPENDENCE

The audit committee has the responsibility to ensure that financial statements are reliable and that they comply with applicable financial reporting standards, and so this committee has to assess the suitability and independence of external auditors (Securities Commission, 2012b). Furthermore, in the case of disputes between auditor and management, the independence of the audit committee is important because it has a role to play in safeguarding auditor independence and supporting the auditor (Bronson et al., 2009). Previous research on audit committee independence has found that an independent audit committee are associated with enhanced effectiveness (Bronson et al., 2009; Carcello and Neal, 2000; Klein, 2002).

A study by Mohd Saleh, Iskandar and Rahmat (2007) in the Malaysian context found that the presence of a fully independent audit committee reduces earnings management activities. This implies that all audit committee members should be independent from management for the committee to act effectively (Bradbury, Mak and Tan, 2006; Mohd Saleh, Iskandar and Rahmat, 2007). Moreover, Klein (2002) and Jamil and Nelson (2011) also found that there is a reduction in earnings management when the majority of members on the audit committee are independent. This suggests that independent audit committees are effective in controlling earnings management practices. Furthermore, the new provisions of 317A and 320A should make independent directors on audit committees more vigilant. Hence, the following hypothesis is formulated:

*$H_4$: Audit committee independence is associated with lower earnings management following the issuance of 317A and 320A.*

## 3.5 CONTROL VARIABLES

*Auditor independence*. An audit carries no value if the auditors have no independence (Vanasco, Skousen and Santagato, 1997). Ye, Carson and Simnett (2011) agreed that auditor independence is the crucial element in the audit process and adds value to audited financial statements. As stated by Caramanis and Lennox (2008), the likelihood of any misleading information being found during audit work and being reported by auditors depends on auditor independence. Highly independent auditors are important because they are able to maintain professional scepticism when collecting audit evidence without being influenced by management. Ye, Carson, and Simnett (2011) found that auditor independence tends to be impaired when they associated with low agency costs' client, as a consequence having problem to issue a going-concern opinion. Thus, based on these prior findings, this study expects that the presence of a highly independent auditor will reduce the tendency to manipulate earnings.

*Audit committee expertise*. The MCCG 2007 requires that all audit committee members should be financially literate and that at least one audit committee member must be a member of an accounting body such as the MIA. A professional audit committee that possesses accounting and financial expertise is better able to understand auditing risk and procedures as well as accounting judgements than a financially inexpert audit committee.

Mohd Saleh, Iskandar and Rahmat (2007) documented that when audit committee members are more knowledgeable, there is a lower incidence of earnings management practices. They also suggested that it is important to have an effective audit committee in a country with inadequate legal protection such as Malaysia compared to developed countries in order to minimize agency costs (Mohd Saleh, Iskandar and Rahmat, 2007). Additionally, Mat Yasin (2012) found that audit committees that have members with postgraduate qualifications have a significant positive association with audit quality, which leads to high financial reporting quality. Xie, Davidson and DaDalt (2003) also suggest that financial experience and training would enable audit committee members to understand more about earnings management and would enable them to act accordingly.

The main role of the audit committee is to oversee the financial reporting process; therefore the need to have financially literate audit committee members is important (Abdul Rahman and Mohamed Ali, 2006). This view is supported by DeZoort and Salterio (2001), who find that the likelihood of material misstatements being detected and reported in a timely manner increases when the audit committee is comprised of members with financial expertise. The action taken by regulators to continuously improve the MCCG and the Bursa Malaysia Listing Requirement demonstrates that regulators are concerned about firms having effective audit committees in order to improve the monitoring of the financial reporting process. Furthermore, given the strict punishments that are provided for in Sections 317A and 320A of the CMSA, this should make directors more concerned about appointing a highly competent and knowledgeable audit committee.

*Frequency of audit committee meetings*. Previous researchers have used the number of meetings as a proxy for diligence. Mohd Saleh, Iskandar and Rahmat (2007) revealed that the audit committee is more effective when it meets frequently. By having frequent meetings, audit committee members will be more informed about current auditing issues and more diligent in discharging their duties (Mat Yasin, 2012), which should improve financial reporting quality.

Mohd Saleh, Iskandar and Rahmat (2007) also found that firms that hold more audit committee meetings record fewer earnings management practices. Studies in other countries such as that of Xie, Davidson and DaDalt (2003) on the situation in the US indicate that there are lower discretionary accruals when audit committee meetings are held frequently. Meanwhile Anderson, Mansi and Reeb (2004) document a reduced cost of debts when the audit committee is more active. This suggests that an active audit committee may devote time to rectifying any immediate issues and that this may deter earnings management (Abdul Rahman and Mohamed Ali, 2006). The findings in these prior studies are in line with best practice specified in the MCCG, which suggests that audit committee meetings should be held at least four times a year without the presence of executive board members. Also, based on the findings in the literature and given the strict regulations now available to punish negligence in the conduct of fiduciary duties, this study posits that audit committee members will be more concerned about being more effective and have more regular meetings.

*CEO Duality.* The MCCG recommends that the role of chair of the board and CEO should be carried out by different individuals in order to prevent the concentration of power (Securities Commission, 2007). Besides, these different roles are essential to provide checks and balances with respect to management's performance. Agency theory also suggests that these two roles should be segregated to empower board independence. Fama and Jensen (1983) claimed that when the top management's decisions are not controlled, this means that the board of directors is ineffective due to the existence of CEO duality. Furthermore, where there is no separation of these roles, it heightens the ability of the CEO to make discretionary judgements to influence the financial reports while jeopardizing the monitoring function of the board in relation to earnings management (Finkelstein and D'Aveni, 1994 as cited in Mohd Saleh, Iskandar and Rahmat, 2005).

Abdullah's (2004) study on the Malaysian capital market finds that although the vast majority of Malaysian listed companies are in favour of the separation of the roles of CEO and board chair, the minority who adopt dual leadership have a tendency to have a lower level of board independence. This shows that when there is CEO duality, the role of the board of directors is likely to be minimal. Then, due to the high influence of management, the board will be incapable of protecting the shareholders' interests (Abdullah, 2004). Due to heightened concerns about the negative effect of having CEO duality in boards, MCCG 2012 emphasizes the need to separate the roles of CEO and board chair. The aim of having a non-duality-based leadership is to allow the chair and the CEO to focus on their respective areas of responsibility and to increase the independent judgements of the independent directors by removing the influence of management (Securities Commission, 2012b).

Although most studies on Malaysia have found evidence for a negative relationship firm performance and CEO duality, they have failed to find a significant relationship (Abdullah, 2004; Abdullah, Ismail and Jamaluddin, 2008; Hashim and Devi, 2008). However, the study by Mohd Saleh, Iskandar and Rahmat (2005), who examined the relationship between CEO duality and earnings management, shows that CEO duality has a significant positive relationship with earnings management. Thus, they indicate that duality leads to more earnings management practices in Malaysia. Hence, due to the mixed results and given the stricter requirements regarding the need for independent boards of directors, the issue of the impact of CEO duality on board independence warrants further examination.

*Firm Leverage.* Mohd Saleh, Iskandar and Rahmat (2007) found that the tendency to manage earnings is high in higher leverage firms because these firms tend to have a less active audit committee and bad performance. The finding is in line with the debt covenant hypothesis that posits that firms near to breaching their debt covenant tend to adopt income-increasing accruals in order to avoid a covenant violation (DeFond and Jiambalvo, 1994; Mohd Saleh, Iskandar and Rahmat, 2005; Watts and Zimmerman, 1986). Chen et al. (2011) also found that earnings management practices are higher when firms have more debts because these firms are less likely to appoint high-quality auditors.

*Firm Performance*. Prior studies have found that better firm performance has a positive association with earnings quality, which is reflected in lower earnings management (see for example Dechow, Sloan and Sweeny, 1995; Mohd Saleh, Iskandar and Rahmat, 2007). This is in line with Mohd Saleh, Iskandar and Rahmat (2005), who show that firms with better performance have lower leverage and this reduces the tendency to manipulate earnings.

*Firm Size*. Mohd Saleh, Iskandar and Rahmat (2007) found that a larger firm size is positively associated with earnings quality, which is indicated by better performance, an active audit committee and a larger audit committee than that of smaller firms. Moreover, Hashim and Devi (2008) suggest that larger companies are monitored more strictly by regulators than smaller firms, which induces the former to report better earnings quality. This finding is similar Xie, Davidson and DaDalt (2003), who found that smaller firms are more likely to manipulate earnings because they are subject to less scrutiny by the authorities. The finding in Abdul Rahman and Mohamed Ali's (2006) study also supports this argument. Thus, in this study, it is expected that firm size will have a negative association with discretionary accruals.

## 4. METHODS

Short selling has long been considered undesirable in the eyes of the Most previous studies conducted in Malaysia have utilized annual reports of companies listed on main board of Bursa Malaysia as their study sample (e.g., Abdullah and Mohd Nasir, 2004; Bradbury, Mak and Tan, 2006; Hashim, 2011; Hashim and Devi, 2008; Mohd Saleh, Iskandar and Rahmat, 2007). Following the prior studies on earnings quality, this study also gathered information from secondary data as the main source of information for the analysis. Data was collected from the Datastream database and any missing information was hand-collected from annual reports of the non-finance firms listed on Bursa Malaysia for the 2009, 2010 and 2011 financial years, involving a total of 2,388 firm years (2009:809, 2010:802, and 2011:777). Audit committee and directors' information was hand-collected from annual reports. All finance-related firms were excluded from the population because they are governed by different requirements, rules and regulations (Abdul Rahman and Mohamed Ali, 2006; Nelson, 2010).

## 4.1 MEASUREMENT OF THE VARIABLES

The dependent variable in this study is absolute discretionary accruals, which is a proxy for earnings quality. This study employs the modified Jones model as proposed by Kothari et al. (2005) because the measurement includes firm performance by using the return on assets (ROA). This inclusion has been favoured by recent studies on earnings management (e.g., Carcello, Hollingsworth and Mastrolia, 2011; Chen et al., 2011; Sun et al., 2010) because it enhances the reliability of inferences from earnings management when the hypothesis tested does not imply that earnings management will vary with performance (Kothari, Leone and Weasley, 2005). In addition, the model developed by Kothari, Leone and Weasley (2005) reduces the problem of heteroscedasticity and mis-specification issues that exist in other aggregate accruals models (Sun et al., 2010).

Total accruals are first used as a measure of accrual management. Total accruals (TACC) are measured as the difference between net income (before taxes, extraordinary income and discontinued operations plus depreciation and amortization) and cash flow from operations, deflated by lagged total assets. Assets are used as the deflator in order to mitigate heteroscedasticity in residuals (Kothari, Leone and Weasley, 2005). The relevant equations are as follows:

(1) $TACC_{i,t} = EARN_{i,t} - CFO_{i,t}$

(2) $TACC_{i,t}/TA_{i,t-1} = \alpha_1(1/TA_{i,t-1}) + \alpha_2(\Delta REV_{i,t} - \Delta REC_{i,t}/TA_{i,t-1}) + \alpha_3(\Delta PPE_{i,t}/TA_{i,t-1}) + \alpha_4 ROA_{i,t-1} + \varepsilon_{i,t}$

Where, TACC is total accruals for company *i* at time *t*; $EARN_{i,t}$ is net income (before taxes, extraordinary income and discontinued operations plus depreciation and amortization); $CFO_{i,t}$ is cash flow from operations; $ROA_{i,t-1}$ is prior year's EBIT over prior year's total assets. $TACC_{i,t}/TA_{i,t-1}$ is total accruals deflated by lagged total assets; $\Delta REV_{i,t}$ - $\Delta REC_{i,t}$ is change in sales adjusted by the change in accounts receivables to avoid endogenous bias (Jeter and Shivakumar, 1999) and $\alpha_1$, $\alpha_2$, $\alpha_3$, $\alpha_4$ are computed for each Bursa Malaysia sectorial classification for 2009, 2010 and 2011 separately. Subsequently, non-discretionary accruals (NDACC) for each firm for each year are computed by fitting the values into equation 3. Thus,

(3) $NDACC_{i,t} = \alpha_1(1/TA_{i,t-1}) + \alpha_2(\Delta REV_{i,t} - \Delta REC_{i,t}/TA_{i,t-1}) + \alpha_3(\Delta PPE_{i,t}/TA_{i,t-1}) + \alpha_4 ROA_{i,t-1}$

Finally, discretionary accruals (DACC) are the residual (ε):

(4) $DACC_{i,t} = TACC_{i,t}/TA_{i,t-1} - NDACC_{i,t}/TA_{i,t-1}$

Consistent with prior studies, this study uses the absolute value of discretionary accruals rather than signed abnormal accruals as a proxy for the mixed effect of upward or downward earnings (Carcello, Hollingsworth and Mastrolia, 2011; Sun et al., 2010). Furthermore, a movement from positive to negative discretionary accruals does not essentially demonstrate enhanced earnings quality (Carcello, Hollingsworth and Mastrolia, 2011).

### 4.2 INDEPENDENT VARIABLES

The three independent variables in this study, audit effort, board of directors' independence and audit committee independence, are explained below.

*Audit effort*. Audit effort is proxied by the audit fees. Audit fees indicate the extent of the audit work; the more extensive the audit work the higher the audit fees and vice versa (see Abdullah, Ismail and Jamaluddin, 2008; Gul, Chen and Tsui, 2003; Mat Yasin, 2012). The Companies Act 1965 of Malaysia under Schedule (9) para (1) (q) requires companies to disclose their audit fees and non-audit fees in the notes to their financial statements. Furthermore, RPG7 on the charging of audit fees was revised and became effective on 1 March 2010. This is because it was recognized that the need for a high level of compliance with ISQC 1 would increase auditors' working hours, which may indicate a significant increase in audit quality. Ghosh and Prelewicz (2009) find that there was an increase in audit fees after the introduction of the SOX due to the increase in the time spent on audit work. They also agree that audit fees are usually charged based on the extent of audit effort and exposure to legal liability (Ghosh and Prelewicz, 2009). Thus, it seems necessary to employ audit fees as a proxy for audit effort. The audit fees were hand-collected from the annual reports.

*Board of directors' independence*. Prior studies (e.g., Abdul Rahman and Mohamed Ali, 2006; Abdullah and Mohd Nasir, 2004; Abdullah, Ismail and Jamaluddin, 2008; Bradbury, Mak and Tan, 2006; Mohd Saleh, Iskandar and Rahmat, 2005; Sahlan, 2011) use the percentage of independent non-executive members to total board members as the measure for board independence. This study also adopted the same method for measuring board independence.

*Audit committee independence*. Consistent with recent studies on the audit committee (Bliss, Muniandy and Majid, 2007; Bradbury, Mak and Tan, 2006; Bronson, Carcello and Hollingsworth, 2009; Nelson, 2010; Sahlan, 2011), this study measures audit committee independence as the ratio of independent members to total members of the audit committee.

## 4.3 CONTROL VARIABLES

*Auditor independence*. It is claimed that large-size audit firms are not as financially dependent on a single client as smaller firms (Sulaiman, 2011). A survey by Abu Bakar et al. (2005) of the Malaysian market also found that audit firm size is the most significant aspect that determines auditor independence. Therefore, this study considers that being a Big 4 or non-Big 4 firm indicates whether the audit firm is a large- or small-size audit firm and this acts as a proxy for auditor independence. Furthermore, it is appropriate to use the measure of Big 4 or non-Big 4 because the Big 4 audit firms cover about 93% of the PLCs in Malaysia (Securities Commission, 2011a). Moreover, the AOB initially focused on inspecting these major audit firms and they are subject to annual inspections. Also, the high risk of exposure to legal liability and the high loss of audit reputation in the case of a low-quality audit should ensure that the Big 4 are more concerned with maintaining independence from management compared to non-Big 4 audit firms. This supposition is consistent with Sulaiman (2011), who claims that large-size audit firms exercise a high degree of independence to restrict the aggressive behaviour of managers compared to smaller firms when there is high litigation risk if earnings management goes undetected. Hence, based on the stricter monitoring by the AOB of large audit firms as well as prior findings, auditor independence is measured as 1 for Big 4 and 0 otherwise.

*Audit committee expertise*. Audit committee expertise is measured based on the proportion of audit committee members who possess any professional qualification, postgraduate qualification or managerial experience to the total number of audit committee members, as used in prior studies (e.g. Jamil and Nelson, 2011; Mat Yasin, 2012; Nelson, 2010).

*Frequency of Audit Committee Meetings*. The MCCG requires listed firms to disclose the number of audit committee meetings per year, thus the frequency of audit committee meetings in a year is measured based on the number of reported audit committee meetings held during the financial year. This is similar to the approach adopted in prior studies such as Abdul Rahman and Mohamed Ali (2006), Mat Yasin (2012) and Mohd Saleh, Iskandar and Rahmat (2007).

*CEO Duality*. Similar to previous studies (e.g., Abdullah, 2004; Bradbury, Mak and Tan, 2006), the measure for CEO duality is a binary variable; 1 if the CEO is also the chair of the board or related to the chair, and 0 otherwise.

*Firm Leverage*. Firm leverage is measured using the percentage of total debt to total assets, which is consistent with prior studies on Malaysia such as Abdul Rahman and Mohamed Ali (2006), Abdullah and Mohd Nasir (2004) and Mohd Saleh, Iskandar and Rahmat (2007). This percentage measures how close a company is to breaching debt covenants (Abdullah and Mohd Nasir, 2004).

*Firm Performance*. Consistent with prior studies (e.g., Abdul Rahman and Mohamed Ali, 2006; Mohd Saleh, Iskandar and Rahmat, 2007), this study measures firm performance using the ratio of earnings before interest and tax (EBIT) to total assets. Most findings in the literature indicate that a firm with good performance is less inclined to manage earnings.

*Firm Size*. Prior studies have found that large-size firms have a lower level of earnings management because the complexity of their operations necessitates that they use high technology systems that result in better control. They are also more likely to engage a high-quality auditor, which also results in lower earnings management. Following prior studies (e.g., Abdul Rahman and Mohamed Ali, 2006; Mohd Saleh, Iskandar and Rahmat, 2007), the log of total assets is used to measure firm size.

## 4.4 DATA ANALYSIS

Multiple regression analysis is used to explain and predict a dependent variable against more than one independent variable. It can explain how the typical value of the dependent variable changes when any one of the independent variables varies. In this study, multiple regression analysis is used to test the association between the dependent variable of the absolute value of discretionary accruals for company *i* at time *t* and the independent variables of audit fee, audit firm size, board of directors characteristics and audit committee characteristics. The model also includes the various variables that have been used in prior studies to control for cross-sectional differences associated with firm leverage, firm performance and firm size. The model for the multiple regression analysis is as follows:

$$\text{ABSDACC}_{i,t} = \beta_0 + \beta_1\text{AOB}_{i,t} + \beta_2\text{AFEE}_{i,t} + \beta_3\text{AOB.AFEE}_{i,t} + \beta_4\text{BIND}_{i,t} + \beta_5\text{ACIND}_{i,t} + \beta_6\text{BIG4}_{i,t} + \beta_7\text{ACFIN}_{i,t} + \beta_8\text{ACMEET}_{i,t} + \beta_9\text{CEODL}_{i,t} + \beta_{10}\text{GRG}_{i,t} + \beta_{11}\text{ROA}_{i,t} + \beta_{12}\text{FSIZE}_{i,t} + \varepsilon_{i,t} \tag{5}$$

The definitions of the dependent variable, independent variables and control variables used are summarized in Table 1 below.

TABLE 1
Summary of Variables

| Variable | Operational Measure |
|---|---|
| *Dependent variable* | |
| ABSDACC | Absolute discretionary accruals using model Kothari, Leone and Weasley (2005) |
| *Independent variables* | |
| AOB | A dummy variable: 1 for post-AOB period, 0 for pre-AOB period |
| AFEE | Audit fee as a proxy of audit effort |
| AOB.AFEE | Interaction between AOB and audit fees |
| BIND | Board independence, measured by the proportion of independent directors on the board |
| ACIND | Audit committee independence, measured as the proportion of independent audit committee members to the total number of audit committee members |
| *Control variables* | |
| BIG4 | Audit firm size, Big 4 or non-Big 4 as a proxy of auditor independence, using a binary variable; '1' if the company is audited by a Big 4 audit firm, and '0' otherwise |
| ACFIN | Proportion of audit committee members who possess any professional qualification, postgraduate qualification or managerial experience to the total number of audit committee members |
| ACMEET | Frequency of audit committee meetings in a year |
| CEODL | Binary variable, '1' if the CEO is also the chair of the board or related to the chair, and '0' otherwise |
| GRG | Ratio of total debt to total assets |
| ROA | Ratio of EBIT to total assets |
| FSIZE | Log of total assets |

## 5. RESULTS AND DISCUSSION

All non-finance firms listed on Bursa Malaysia for the 2009, 2010 and 2011 financial years, were included in the study, resulting in a total of 2,388 firm years (2009:809, 2010:802, and 2011:777). The data of these 2,388 companies was scrutinized to ensure that abnormal accruals could be calculated for three years, 2009, 2010 and 2011. Hence, as a result, the study arrived at a total of 2,124 firm years after excluding those companies with non-availability of data (for instance, some companies' annual reports were not available for the years 2010 and 2011). The year 2009 is defined as the pre-AOB period, i.e., before the establishment of the AOB and introduction of Sections 317A and 320A of the CMSA, while 2010 is the period when these two regulatory changes were being enforced. The year 2011 is defined as the post-AOB period when it is expected that the effects of these changes will be seen.

The descriptive analysis provides a general overview of the dependent variable, ABSDACC, and the independent variables, which consist of Audit Oversight Board (AOB), audit fees as a proxy of audit effort (AFEE), board independence (BIND), AC (audit committee) independence (ACIND), audit firm size; Big 4 or non-Big 4, as a proxy of auditor independence, AC financial literacy (ACFIN), AC meetings (ACMEET), CEO duality (CEODL), firm leverage (GRG), return on assets (ROA) and firm size (FSIZE).

Table 2 describes the descriptive statistics for all the variables used in this study for the period 2009–2011. From the 2,124 firm years, it is found that the mean for earnings management is 0.02, which is close to zero and positive. This figure is consistent with Abdul Rahman and Mohamed Ali (2006) at 0.0132, Abdullah and Mohd Nasir (2004) at 0.00752, Klein (2002) at 0.004 and Nelson (2010) at 0.0374. The average audit fees are RM300,695 with a range between RM8,000 to RM22,200,000.

TABLE 2
Descriptive Statistics (N=2,124)
Panel A: Continuous Variables

| Variable | Minimum | Maximum | Mean | Std. Dev. |
|---|---|---|---|---|
| DACC | -0.85 | 1.15 | 0.02 | 0.10 |
| ABSDACC | 0.00 | 1.15 | 0.06 | 0.08 |
| AFEE (RM) | 8,000 | 22,200,000 | 300,695 | 939,860 |
| BIND | 0.14 | 1.00 | 0.46 | 0.13 |
| ACIND | 0.00 | 1.00 | 0.87 | 0.17 |
| ACFIN | 0.00 | 1.00 | 0.53 | 0.23 |
| ACMEET | 1 | 15 | 5 | 1 |
| GRG | 0.00 | 4.66 | 0.41 | 0.25 |
| ROA | -1.24 | 1.39 | 0.06 | 0.12 |
| FSIZE ($\log_{10}$) | 6.87 | 10.87 | 8.57 | 0.61 |

Panel B: Dummy Variables

| Variable | AOB | | BIG4 | | CEODL | |
|---|---|---|---|---|---|---|
| | Frequency | % | Frequency | % | Frequency | % |
| 0 | 708 | 33.33 | 955 | 44.96 | 1,762 | 82.96 |
| 1 | 1,416 | 66.67 | 1,169 | 55.04 | 362 | 17.04 |
| Total | 2,124 | 100.00 | 2,124 | 100.00 | 2,124 | 100.00 |

Panel D: T-test Results

| Variable | Mean | p-value (2-tailed) |
|---|---|---|
| DACC2009 | 0.003 | 0.00*** |
| DACC2011 | 0.025 | |
| ABSDACC2009 | 0.064 | 0.29 |
| ABSDACC2011 | 0.068 | |
| AFEE2009 | 279,813 | 0.00*** |
| AFEE2011 | 324,548 | |

***significant at 1% level, **significant at 5% level, *significant at 10% level

On average, the result shows that about 46 per cent of the boards of directors in PLCs are independent. This is good sign as it shows that most PLCs in Malaysia are following the recommendations of MCCG (2007), which requires that at least one third of directors on the board are independent in order to provide unbiased judgements in the decision-making process. As for audit committee independence, the result indicates that almost 87 per cent of AC members are independent. This shows that PLCs in Malaysia are augmenting the AC monitoring function and that the majority of them are in compliance with the MCCG, which requires that the majority of AC members are independent.

About half of the AC members in PLCs are financially literate. This shows that the majority of PLCs in Malaysia are still far behind the MCCG requirement, which specifies that all AC members should be able to read, analyse and interpret financial statements in order to effectively discharge their role. Meetings of the AC are held on average five times during the year. The average of the gearing ratio in PLCs in Malaysia is 40.7 per cent and the mean firm performance as measured by ROA is 5.8 per cent. The average firm size of PLCs in Malaysia as represented by the logarithm of total assets is 8.575.

The result for the dichotomous variable shows that Big 4 audit firms are slightly larger by around 10 per cent than non-Big 4 audit firms. This means that only 55 per cent of PLCs in Malaysia are audited by highly independent auditors. As for CEO duality, only 17 per cent of chairs are also the CEO of the company and thus quite a large proportion of PLCs in Malaysia prefer to separate the roles of CEO and board chair. This finding is consistent with an earlier study on CEO duality by Abdullah (2002), who found that even before the MCCG recommended this separation of roles, the majority of Malaysian companies already had a non-dual leadership structure.

The descriptive statistics indicate that the magnitude of earnings management increases over the period 2009–2011. The increase in audit fees from pre- to post-AOB periods may provide some indication of an increase in audit effort. However, it provides an initial indication that the increase in audit effort is not able to reduce earnings management. The slight increase in the number of independent boards of directors and audit committees from year to year may suggest that boards and ACs are becoming more effective in discharging their roles.

$H_1$ proposed that audit effort would increase following establishment of the AOB. Yearly descriptive statistics show that there has been an increase in audit fees, which indicates that there has been an increase in audit effort over the years studied. The results from the t-test show that the increase is significant indicating that the difference between audit fees pre- and post-AOB is significant. This, hence, shows that the AOB has had an impact on audit effort. A further test conducted using one-way repeated measures Analysis of Variance (ANOVA) (results are not reported here) confirms that the increase in audit effort after the establishment of the AOB is significant. Taken together, the evidence suggests that there has been an increase in audit effort after the formation of the AOB. Therefore, $H_1$ is supported. This finding is also consistent with Ghosh and Pawlewicz (2009), who found a significant increase in audit fees which indicated that there was an increase in audit effort after the SOX due to stringent monitoring of audit quality as well as higher exposure to legal liability for audit failure. This indicates that auditors extended their scope of work after the establishment of the AOB. This may have occurred because of fear of litigation in the case of audit failure as well as the need to have proper documentation of audit evidence or risk being subject to AOB action. Hence, $H_1$ is supported.

## 5.1 CORRELATION ANALYSIS

Correlation analysis is used to test the strength and direction of the relationship between the variables of the study (Pallant, 2010). The purpose of the test is to check whether the multicollinearity problem exists among the variables. As suggested by Tabachnick and Fidell (2007), if the correlation values exceed 0.9 this indicates that there is a serious multicollinearity problem. The highest correlation in this study is 0.42 between audit fees and firm size.

The correlation between ABSDACC and AFEE is significant; the negative and significant association between ABSDACC and AFEE provide an initial indication that higher audit quality in terms of audit effort is able to mitigate earnings management effectively.

BIG4 and ABSDACC are negatively and significantly correlated. This provides an initial indication that BIG4, as proxy for audit independence, is more effective in mitigating earnings management. Although AOB and BIG4 are not significantly related, the negative sign may indicate that there is a possibility that auditor independence was reduced after the establishment of the AOB. There is a positive and significant correlation between BIG4 and AFEE, which indicates that the more independent the auditors the higher the audit effort, as reflected in audit fees. It may also indicate that auditor independence and effort significantly interacts in order to produce high audit quality.

BIND, ACIND, ACFIN, ACMEET and CEODL, nevertheless, do not have any significant relationship with ABSDACC. The positive and significant association between BIND and ACIND and between BIND and ACMEET suggests that the independence and activeness of AC members is dependent on the independence of the board of directors. The negative correlation between ACFIN and BIND and between ACFIN and BIG4 indicates that a company has a lower tendency to have a high number of AC members who are financially literate when it has a highly independent board of directors and is audited by a highly independent auditor. ACMEET is strongly positively associated with AFEE, which may suggest that active AC members demand high-quality audits.

The insignificant positive association between CEODL and ABSDACC as well as the insignificant negative association between CEODL and AFEE may weakly indicate that CEO duality results in high earnings management and that the board does not demand a high effort from auditors. Furthermore, the negative association between CEODL and BIG4 may provide some indication that it is less preferable to have highly independent auditors when there is CEO duality. Again, this may weakly support the initial assumption that audit effort and independence interact, for instance when there is duality of leadership, which results in a low-quality audit as indicated by the high level of earnings management.

The strongly positive significant associations between CEODL and BIND and between CEODL and ACFIN gives some indication that when there is duality of leadership, there is a need to have greater board of directors independence and more AC members who are financially literate. This is inconsistent with earlier study by Abdullah (2004), who found that there are fewer outside directors when a firm adopts a dual leadership structure. This may indicate that Malaysian capital market is moving some way towards upgrading the value of independent boards of directors.

In terms of the relationship between ABSDACC and firm characteristics, there is a significant negative correlation between ABSDACC and ROA and between ABSDACC and FSIZE. This indicates that higher firm performance and size reduces the likelihood of earnings management. Meanwhile, ABSDACC and GRG is significantly positively correlated, which suggests that the higher the leverage the lower the earnings quality. Firm leverage is significantly associated at the 1% level with almost all of the variables, except with AOB and CEODL. Also, other than AOB and BIND, firm size is correlated significantly with other variables at the 1% level. Meanwhile, ROA has a positive and significant relationship with AFEE, BIG4 and AOBBIG4 as well as a significant negative association with BIND, ACMEET, and GRG.

TABLE 3
Pearson's Correlation Analyses for 2009 to 2011 (N = 2,124)

| Probability | ABSDACC | AOB | AFEE | BIND | ACIND | BIG4 | ACFIN | ACMEET | CEODL | GRG | ROA | FSIZE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ABSDACC | 1.00 | | | | | | | | | | | |
| AOB | 0.01 | 1.00 | | | | | | | | | | |
| AFEE | -0.05** | 0.02 | 1.00 | | | | | | | | | |
| BIND | 0.02 | 0.02 | 0.02 | 1.00 | | | | | | | | |
| ACIND | -0.02 | 0.02 | 0.00 | 0.40*** | 1.00 | | | | | | | |
| BIG4 | -0.11*** | -0.02 | 0.11*** | -0.02 | -0.03 | 1.00 | | | | | | |
| ACFIN | 0.03 | 0.01 | -0.02 | -0.04* | -0.02 | -0.04* | 1.00 | | | | | |
| ACMEET | -0.02 | 0.00 | 0.14*** | 0.11*** | 0.03 | 0.00 | -0.05** | 1.00 | | | | |
| CEODL | 0.02 | 0.01 | -0.03 | 0.05** | 0.04* | -0.04* | 0.06*** | 0.01 | 1.00 | | | |
| GRG | 0.10*** | -0.02 | 0.07*** | 0.07*** | 0.07*** | -0.08*** | -0.04* | 0.13*** | -0.01 | 1.00 | | |
| ROA | -0.08*** | 0.01 | 0.04* | -0.05** | -0.01 | 0.15*** | -0.01 | -0.06*** | 0.02 | -0.15*** | 1.00 | |
| FSIZE | -0.15*** | 0.03 | 0.42*** | 0.02 | 0.05** | 0.32*** | -0.08*** | 0.20*** | -0.08*** | 0.16*** | 0.17*** | 1.00 |

***significant at 1% level, **significant at 5% level, *significant at 10% level

## 5.2 PANEL REGRESSION ANALYSIS

Panel data is the most appropriate method for a combination of time series and cross-sectional data. Panel data refer to the pooling of observations from a cross-section of companies over several time periods (Baltagi, 2001). Table 3 presents the results from regression analyses.

TABLE 4
Regression results
Panel regression analysis (N=2,124) for independent and control variables (Fixed effects)

| Variable | Coefficient | Std. Error | t-Statistic | p-value |
|---|---|---|---|---|
| Constant | -0.60 | 0.19 | -3.14 | 0.00 |
| AOB | -0.00 | 0.00 | -0.34 | 0.37 |
| AFEE | -0.00 | 0.00 | -0.05 | 0.48 |
| AOB.AFEE | -0.00 | 0.00 | -0.10 | 0.46 |
| BIND | -0.06 | 0.04 | -1.56 | 0.06* |
| ACIND | -0.01 | 0.03 | -0.49 | 0.31 |
| BIG4 | -0.03 | 0.01 | -2.51 | 0.01*** |
| ACFIN | 0.01 | 0.03 | 0.33 | 0.37 |
| ACMEET | -0.00 | 0.00 | -0.50 | 0.31 |
| CEODL | 0.11 | 0.02 | 5.46 | 0.00*** |
| GRG | 0.07 | 0.01 | 5.18 | 0.00*** |
| ROA | -0.08 | 0.02 | -3.71 | 0.00*** |
| FSIZE | 0.08 | 0.02 | 3.60 | 0.00*** |
| $R^2$ | 0.49 | F-statistic | 1.85 | |
| Adjusted $R^2$ | 0.22 | p-value | 0.00*** | |

***significant at 1% level (1-tailed); **significant at 5% level (1-tailed); *significant at 10% level (1-tailed).

Results in all panels are generally consistent. Hypothesis 2 ($H_2$) posits that the establishment of the AOB together with audit effort to reduce lower earnings management activities. However, the results as shown in Table 3 reveal a non-significant relationship between AOB, AFEE and AOBAFEE and ABSDACC. This indicates that the establishment of the AOB has not had an impact on earnings management. Therefore, $H_2$ is not supported. One possible explanation for this result is that this study only examined a one-year period after the AOB was formed. The AOB also stated in their report (Securities Commission, 2011a) that it was too premature to assess the effectiveness of its role at such an early stage. Despite the insignificant relationship with ABSDACC, the coefficients of AOB, AFEE and the interaction between AOB and AFEE are negative, which show that even though the impact is weak, there is some indication that the establishment of AOB does not mitigate earnings management.

With regards to the new provisions under the CMSA related to the independence of boards of directors and audit committee members, this study hypothesized that earnings management would reduce due to fear of litigation and make directors and audit committees more diligent in monitoring financial reporting. Based on the results in Table 3, BIND improves earnings quality. Therefore, $H_3$ is supported. This is consistent with Jaggi and Leung (2007) and Kao and Chen (2004), who found that having a majority of outside directors mitigates earnings management. This finding, thus, provides support for the new provisions 317A and 320A which have some significant influence in ensuring that directors are more independent from management because most prior studies on Malaysian PLCs have been unable to reveal that there is a strong and negative relationship between an independent board of directors and earnings management (Abdul Rahman and Mohamed Ali, 2006; Abdullah and Mohd Nasir, 2004; Hashim and Devi, 2008; Mohd Saleh, Iskandar and Rahmat, 2005).

As for the audit committee, but there is no significant association that shows that ACIND is able to lower the magnitude of earnings management; hence $H_4$ is not supported even though on average 87 per cent of audit committee members in PLCs were independent members. This finding is consistent with some prior studies (Abdul Rahman and Mohamed Ali, 2006; Anderson, Mansi and Reeb, 2004; Lin, Li and Yang, 2006; Xie, Davidson and DaDalt, 2003) but inconsistent with others (Jamil and Nelson, 2011; Mohd Saleh, Iskandar and Rahmat, 2007).

Auditor independence, which is represented by BIG4, has a significant negative relationship with ABSDACC. This suggests that highly independent auditors are able to mitigate earnings management. This significant result is in line with Vanasco, Skousen and Santagato (1997), who claim that the independence of the auditor is important as it adds value to the auditing process. It may also imply that extending the audit effort would not help in improving the audit and financial reporting quality if the auditor were influenced by management and were not able to maintain their professional scepticism due to lack of independence.

This study also expected that AC financial literacy (ACFIN) and AC meeting frequency (ACMEET) would be negative and significantly related with earnings management. However, the results found a non-significant relationship between ABSDACC and ACFIN and ACMEET. ACFIN has a positive and non-significant association with earnings management, which is consistent with prior studies (Abdul Rahman and Mohamed Ali, 2006; Ismail, Iskandar and Rahmat, 2008; Jamil and Nelson, 2011). The descriptive result shows that, on average, only about 53 per cent of audit committee members in PLCs are able to interpret financial statements. The finding shows that most PLCs in Malaysia do not meet the MCCG (2007) specification, which requires all the members of an audit committee to be financially literate. It is necessary to ensure that its members have an adequate level of financial literacy as well. This finding supports Abdul Rahman and Mohamed Ali (2006), who suggest that though companies may follow the MCCG and Bursa Malaysia Listing Requirements, the ultimate purpose of having an audit committee may not be realized if its members do not have adequate knowledge, skills and experience because this results in high reliance on management for information. Hence, the action taken by the regulators to enhance the competency and professionalism of directors in discharging their roles via a Mandatory Accreditation Programme and Continuing Education Programme is seen as the right move (Abdul Rahman and Mohamed Ali, 2006; Jamil and Nelson, 2011). ACMEET also does not show a significant association with earnings management despite the majority of PLCs conducting around five meetings per year at least. Previous studies on Malaysia also did not find a significant association between earnings management and the frequency of audit committee meetings (Abdul Rahman and Mohamed Ali, 2006; Jamil and Nelson, 2011; Lin, Li and Yang, 2006).

This study also predicted that the separation of roles of CEO and board chair would lead to lower earnings management. The result shows a positive and significant relationship between ABSDACC and CEODL. In addition, the regression analysis provides further support for a positive significant correlation between board of directors' independence and CEO duality. The results thus support prior studies that argue that duality may jeopardize the board's monitoring of earnings management (Mohd Saleh, Iskandar and

Rahmat, 2005; Roodposhti and Chashmi, 2011). It also implies that when the CEO is also the board chair, the need for an independent board of directors is more crucial in the monitoring of the financial reporting process to ensure that quality is not jeopardized. The descriptive statistics show that more than 82 per cent of PLCs in Malaysia have maintained a separation of these two roles. This is consistent with the earlier study by Abdullah (2004), who found that only 20 per cent PLCs have CEO duality but that these tend to have lower board independence. Thus, this study found some improvement in the Malaysian capital market, whereas the tendency to have an independent board is high when CEO duality is practised. These findings are in line with agency theory, which suggests that these two roles should be segregated to empower the monitoring role of the board of directors and their independence.

For firm leverage (GRG), the results show that higher firm leverage increases earnings management activities; this implies that the higher the firm leverage, the more likely it is that earnings management is triggered. The result is consistent with prior findings (Mohd Saleh, Iskandar and Rahmat, 2007; Roodposthi and Chashmi, 2011). The finding is also in line with the debt covenant hypothesis whereby firms near their debt covenant tend to adopt income-increasing accruals in order to avoid covenant violation (Mohd Saleh, Iskandar and Rahmat, 2005; Watts and Zimmerman, 1986). Chen et al. (2011) also found that earnings management practices are higher when firms have more debts due to firms having less intent to engage high-quality auditors.

The results for firm size show that larger firm size significantly involves in earnings management practices. This indicates that the larger the firm size, the tendency to involve in earnings management is increased. Some authors found that larger firm size is positively associated with earnings quality, which is indicated by better performance, an active and large audit committee as well as strict monitoring by regulators that induces larger firms to report better earnings quality than smaller firms (Abdul Rahman and Mohamed Ali, 2006; Abdullah and Mohd Nasir, 2004; Hashim and Devi, 2008; Nelson, 2010; Roodposthi and Chashmi, 2011). It has been suggested that high political costs lead large companies to report low earnings by manipulating accruals (Abdullah and Mohd Nasir, 2004). Nevertheless, our evidence is inconsistent with other studies (Abdul Rahman and Mohamed Ali, 2006; Hashim and Devi, 2008; Mohd Saleh, Iskandar and Rahmat, 2007; Xie, Davidson and DaDalt, 2003). The negative and significant relationship between ABSDACC and ROA is consistent with Mohd Saleh, Iskandar and Rahmat (2005, 2007). The companies' financial characteristics in terms of gearing ratio, ROA and firm size (measured by total assets) are found to have a significant association with the extent of earnings management. The finding shows that firm leverage is positively associated with earnings management.

Finally, firm performance, which is measured by ROA, is negatively related with earnings management. This implies that companies with good performance have a lower tendency to practise earnings management compared to bad- performing companies. The finding supports prior studies (Dechow, Sloan and Sweeney, 1995; Mohd Saleh, Iskandar and Rahmat, 2005, 2007) who found that better firm performance has positive association with earnings quality.

## 6. SUMMARY AND CONCLUSION

After the collapse of a few large companies in Malaysia, it became apparent that there was a strong need to monitor auditors, boards of directors and audit committees in order to ensure that they act would diligently in the interests of companies and stakeholders. Hence the Audit Oversight Board was established to oversee audit firms and individual auditors and to fulfil a mission to foster the practice of high-quality auditing in order to produce high-quality, reliable financial statements for public interest entities in Malaysia (Securities Commission, 2011a). There was also clear intent to take action to reduce the failure or ignorance of independent directors and audit committee members in discharging their duties effectively, which led to the incorporation of two new provisions (317A and 320A) into the CMSA. This study sought to examine the impact of these developments on the audit effort and earnings quality of public listed companies in the Malaysian capital market.

By utilizing agency theory as the underlying theory, it suggested that agency conflict could be reduced if there were a credible independent legislative body to monitor those involved in corporate governance roles to ensure they were acting in the *bona fide* interests of owners (i.e., shareholders). Auditors play an important role in enhancing overall audit quality, while the independence of the board of directors and audit committee is important in making critical decisions on behalf of shareholders and other stakeholders. It was also posited that in the process of ensuring audit quality as well as guarding against the implications of a higher level of legal liability for low audit quality and audit failure, there would be a tendency to increase audit effort by extending the scope of audit work.

Hence, in relation to these new developments, this study hypothesized that the audit effort would increase following the formation of the AOB and that, as a result, this would enhance earnings quality. This study employed audit fees to indicate the extent of auditor audit effort in conducting audit work. This study also predicted that independent boards of directors and audit committees would be more effective in discharging their roles, which would be represented by an improvement in earnings quality.

The univariate statistical tests on audit fees before and after the establishment of the AOB provided significant results, which partially supported the argument that there would be an increase in audit effort in the post-AOB formation period. However, in the bivariate analysis, the AOB and audit fees are positively but only weakly associated. Thus, it is not conclusive that the increase in audit fees after the establishment of the AOB is due to the AOB itself. This result is consistent with the prior study by Ghosh and Pawlewicz (2009) on the impact of the Sarbanes-Oxley Act on audit fees as a result of the increase in audit effort.

The regression analysis showed that the AOB and audit effort were not significantly related with earnings management. The result showed that audit effort did not have any significant association with earnings management except that it was negatively related. The interaction of AOB and AFEE, i.e., AOBAFEE, also did not provide evidence of any significant relationship with ABSDACC. This insignificant relationship may be explained by the fact that this study only covers one year before and after the establishment of the AOB. Despite the insignificant association, these three variables are all negatively related with earnings management. This may provide some evidence that the existence of the AOB may help in enhancing audit quality, and as a consequence in financial reporting quality. However, it may take some time to fully realize the benefit of the AOB monitoring auditors.

The significant analysis between auditor independence, as proxy to Big 4, and earnings management indicates that the independence of auditors plays an important role in ensuring that they report any misappropriate action by management. This result may suggest that instead of audit effort, the independence of auditors is the most significant factor that may impact overall financial reporting quality. In other words, increasing audit effort would not lead to better audit quality if the auditors were unable to exercise their professional scepticism when collecting the audit evidence; professional scepticism is dependent on the level of auditor independence.

This study also found some evidence that showed that the introduction of Sections 317A and 320A of the CMSA was able to enhance the role of independent boards of directors. Those companies that have a duality leadership (i.e., the CEO and board chair is the same person) also have a tendency to ensure that there is a sufficient number of independent board members. Nevertheless, the vast majority of PLCs in Malaysia practice the separation of these two roles. This finding supports agency theory, which suggests that segregating these two roles would empower the role of independent directors on the board. Other than board independence and CEO duality, the results did not show any significant relationship between the audit committee's independence, financial literacy and frequency of meetings with earnings management. The non-significant association of the audit committee variables may be due to the limited number of qualified independent audit committee members who able to read, interpret and analyse financial reporting, which is important to discharge their roles diligently.

Firm leverage, firm performance and firm size were found to have a significant association with earnings management. As expected, the study found that management was less inclined to practise earnings management when performance is good, but there was a high tendency to do so if the company has high debts. Only firm size, measured by total assets, showed an unexpected relationship with earnings management. The result indicates that the larger the firm size, the magnitude of earnings management is also increase. This may be due to the establishment of the AOB because the initial focus of the AOB's inspections in earlier years was on major audit firms who audit more than 40 public interest entities and have more than 10 partners in the audit firm partnership structure. As is commonly known, big-size audit firms normally audited large PLCs, hence fears of being inspected by the AOB and a desire to reduce political visibility may have induced these large companies to manage their earnings, and this aspect warrants further study to confirm the result.

Overall, the findings provide some evidence on the impact of the AOB on auditors and new punishment via 317A and 320A of the CMSA for directors on the quality of the financial reporting regimes of PLCs in the Malaysian capital market. Prior literature (Chen et al., 2011; Cohen, Krishnamoorthy and Wright, 2004; Garcia-Meca and Sanchez-Ballesta, 2009; Khurana and Raman, 2004; Tendeloo and

Vastraelen, 2008) has shown that rules and regulation is one of the external mechanisms that improve the financial reporting regime. Thus, the present study attempted to investigate the impact of the establishment of the AOB in 2010 in monitoring the quality of external auditors in Malaysia. Also in 2010, new provisions were introduced under the CMSA to enable regulators to take action against directors and audit committees if found negligent in discharging their roles. Generally, the results of this study suggest that the presence of the AOB does have an impact on audit effort and earnings quality. The findings suggest that audit quality and hence financial reporting quality would be improved by not only increasing audit effort, but also ensuring that auditors have a high level of independence from management. In addition, having a board of directors with a separate CEO and board chair may also improve financial reporting quality. In addition, firm characteristics do appear to have a significant influence on the magnitude of earnings management.

## REFERENCES

Abdul Rahman, R., and F. H. Mohamed Ali. "Board, Audit Committee, Culture and Earnings Management: Malaysian Evidence." *Managerial Auditing Journal* 21, no. 7 (2006): 783-804.

Abdullah, S. N. "Audit Commitee Establishment in Malaysia: Some Insights prior to the Asian 1997 Financial Crisis." *Malaysian Management Journal* 3, no. 1 (2002): 1-17.

Abdullah, S. N. "Board Composition, CEO Duality and Performance among Malaysian Listed Companies." *Corporate Governance* 4, no. 4 (2004): 47-61.

Abdullah, S. N., and N. Mohd Nasir. "Accrual Management and the Independence of the Board of Directors and Audit Committee." *IIUM Journal of Economics and Management* 12, no. 1 (2004): 49-80.

Abdullah, W.W., S. Ismail, and N. Jamaluddin. "The Impact of Board Composition, Ownership and CEO Duality on Audit Quality: The Malaysian Evidence." *Malaysian Accounting Review* 7, no. 2 (2008): 17-28.

Anderson, R.C., S.A. Mansi, and D.M. Reeb. "Board Characteristics, Accounting Report Integrity, and Cost of Debt." *Journal of Accounting and Economics* 37 (2004): 315-42.

Ball, R., and P. Brown. "An Empirical Evaluation of Accounting Income Number." *Journal of Accounting Research* Autumn 6 (1968): 159-78.

Baltagi, B.H. *Econometric Analysis of Panel Data (2nd ed.)*. London: John Wiley and Sons, 2001.

Baysinger, B.D., and H.N. Butler. "Corporate Governance and the Board of Directors: Performance Effects of Changes in Board Composition." *Journal of Law, Economics, and Organization* 1, no. 1 (1985): 101-24.

Beasley, M. "An Empirical Analysis of the Relation between the Board of Director Composition and Financial Statement Fraud." *The Accounting Review* 71 (1996): 443-65.

Becker, C. L., M.L. DeFond, J. Jiambalvo, and K.R. Subramanyam. "The Effect of Audit Quality on Earnings Management." *Contemporary Accounting Research* 15, no. 1 (1998): 1-24.

Bliss, M.A., B. Muniandy, and A. Majid. "CEO Duality, Audit Committee Effectiveness and Audit Risks: A Study of the Malaysian Market." *Managerial Auditing Journal* 22, no. 7 (2007): 716-28.

Bradbury, M., Y.T. Mak, and S.M. Tan. "Board Characteristics, Audit Committee Characteristics and Abnormal Accruals." *Pacific Accounting Review* 18, no. 2 (2006): 47-68.

Bronson, S.N., J.V. Carcello, C.W. Hollingsworth, and T.L. Neal. "Are Fully Independent Audit Committees Really Necessary?" *Journal of Accounting and Public Policy* 28, no. 4 (2009): 265-80.

Caramanis, C., and C. Lennox. "Audit Effort and Earnings Management." *Journal of Accounting and Economics* 45, no. 1 (2008): 116-38.

Carcello, J.V., and T.L. Neal. "Audit Committee Composition and Auditor Reporting." *The Accounting Review* 75, no. 4 (2000): 453-67.

Carcello, J.V., C. Hollingsworth, and S.A. Mastrolia. "The Effect of PCAOB Inspections on Big 4 Audit Quality." *Research in Accounting Regulation* 23, no. 2 (2011): 85-96.

Chen, H., J.Z. Chen, G.J. Lobo, and Y. Wang. "Effects of Audit Quality on Earnings Management and Cost of Equity Capital: Evidence from China." *Contemporary Accounting Research* 28, no. 3 (2011): 892-925.

Cohen, J., G. Krishnamoorthy, and A.M. Wright. "Corporate Governance and the Audit Process." *Contemporary Accounting Research* 19, no. 4 (2002): 573-94.

Cohen, J., G. Krishnamoorthy, and A.M. Wright. "The Corporate Governance Mosaic and Financial Reporting Quality." *Journal of Accounting Literature* 23 (2004): 87-152.

Davidson, R., J. Goodwin-Stewart, and P. Kent. "Internal Governance Structures and Earnings Management." *Accounting and Finance* 45, no. 2 (2005): 241-67.

Dechow, P.M., R.G. Sloan, and A.P. Sweeney. "Detecting Earnings Management." *Accounting Review* 70, no. 2 (1995): 193-225.

Dechow, P.M., R.G. Sloan, and A.P. Sweeney. "Causes and Consequences of Earnings Manipulation: An Analysis of Firms Subject to Enforcement Actions by the SEC." *Contemporary Accounting Research* 13, no. 1 (1996): 1-36.

DeFond, M.L., and J. Jiambalvo. "Debt Covenant Violation and Manipulation of Accruals." *Journal of Accounting and Economics* 17, no. 1 (1994): 145-76.

DeZoort, F.T., D.R. Hermanson, D.S. Archambeault, and S. Reed. "Audit Committee Effectiveness: A Synthesis of the Empirical Audit Committee Literature". *Journal of Accounting Literature* 21 (2002): 38–75.

DeZoort. F.T., and S.E. Salterio. "The Effects of Corporate Governance and Financial Reporting, and Audit Knowledge on Audit Committee Members' Judgment. *Auditing A Journal of Practice and Theory* 20, no. 2 (2001): 31-47.

Dye, R.A. "Earnings Management in an Overlapping Generations Model." *Journal of Accounting Research* 26, no. 2 (1988): 195-235.

"Ex-Transmile Independent Directors Jailed, Fined." *The Edge Malaysia*, October 29, 2011. Accessed April 20, 2013. http://www.theedgemalaysia.com/first/195339-ex-transmile-independent-directors-fined-jailed.html.

Fama, E.F., and M.C. Jensen. "Separation of Ownership and Control." *Journal of Law and Economics* 26, no. 2 (1983): 301-25.

Garcia-Meca, E., and J.P. Sanchez-Ballesta. "Corporate Governance and Earnings Management: A Meta-Analysis." *Corporate Governance: An International Review* 17, no. 5 (2009): 594-610.

Ghosh, A., and R. Pawlewicz. (2009). "The Impact of Regulation on Auditor Fees: Evidence from the Sarbanes-Oxley Act." *Auditing: A Journal of Practice and Theory* 28, no. 2 (2009): 171-97.

Gul, F.A. "Auditors' Response to Political Connections and Cronyism in Malaysia." *Journal of Accounting Research* 44, no. 5 (2006): 931–63.

Gul, F.A., C.J. Chen, and J.S. Tsui. "Discretionary Accounting Accruals, Managers' Incentives, and Audit Fees." *Contemporary Accounting Research* 20, no. 3 (2003): 441-64.

Gunny, K.A., and T.C. Zhang. "PCAOB Inspection Reports and Audit Quality." *Journal of Accounting and Public Policy* 32 (2013): 136-60.

Haniffa, R.M., and T.E. Cooke. "Culture, Corporate Governance and Disclosure in Malaysian Corporations." *Abacus* 38, no. 3 (2002): 317-49.

Hanlon, M., G.V. Krishnan, and L.F. Mills. "Audit Fees and Book-Tax Differences." *Journal of the American Taxation Association* 34, no. 1 (2012): 55-86.

Hashim, H.A. "Corporate Disclosures by Family Firms: Malaysian Evidence." *Journal of Business and Policy Research* 6, no. 2 Special Issue (2011): 111-25.

Hashim, H.A., and S. Devi. "Board Characteristics, Ownership Structure and Earnings Quality: Malaysian Evidence." *Research in Accounting in Emerging Economies* 8 (2008): 97-123.

Healy, P.M., and K.G. Palepu. "Information Asymmetry, Corporate Disclosure, and the Capital Markets: A Review of the Empirical Disclosure Literature." *Journal of Accounting and Economics* 31, no. 1 (2001): 405-440.

Higgs, D. *Review of the Role and Effectiveness of Non-Executive Directors*. London: DTI, 2003.

Hill, C.W., and T.M. Jones. "Stakeholder-Agency Theory." *Journal of Management Studies* 29, no. 2 (1992): 131-54.

Hoitash, R., A. Markelevich, and C.A. Barragato. "Auditor Fees and Audit Quality." *Managerial Auditing Journal* 22, no. 8 (2007): 761-86.

Ismail, H., T.M. Iskandar, and M.M. Rahmat. "Corporate Reporting Quality, Audit Committee and Quality of Audit." *Malaysian Accounting Review* 7, no. 1 (2008): 21-42.

Jaggi, B., and S. Leung. "Impact of Family Dominance on Monitoring of Earnings Management by Audit Committees: Evidence from Hong Kong." *Journal Of International Accounting, Auditing And Taxation* 16, no. 1 (2007): 27-50.

Jamil, N.N., and S.P. Nelson. "An Investigation on the Audit Committees Effectiveness: The Case for GLCs in Malaysia." *Gadjah Mada International Journal of Business* 13, no. 3 (2011): 287-305.

Jayaseelan, R. "Implications of the Audit Oversight Board." *The Star Online,* January 9, 2010. Accessed April 20, 2013. http://biz.thestar.com.my/news/story.asp?file=/2010/1/9/business/5438265andsec=business.

Jensen, M.C., and H.W. Meckling. "Theory of the Firm: Managerial Behavior, Agency Costs and Ownership Structure." *Journal of Financial Economics* 3, no. 4 (1976): 305-360.

Kao, L., and Chen, A. "The Effects of Board Characteristics on Earnings Management." *Corporate Ownership and Control* 1, no. 3 (2004): 96-107.

Khurana, I.K., and K.K. Raman. "Litigation Risk and the Financial Reporting Credibility of Big 4 versus Non-Big 4 Audits: Evidence from Anglo-American Countries." *The Accounting Review* 79, no. 2 (2004): 473-495.

Klein, A. "Audit Committee, Board of Director Characteristics and Earnings Management." *Journal of Accounting and Economics* 33 (2002): 57-81.

Kothari, S.P., A.J. Leone, and C.E. Weasley. "Performance Matched Discretionary Accruals Measures." *Journal of Accounting and Economics* 39 (2005): 137-97.

Lennox, C., and J. Pittman. "Auditing the Auditors: Evidence on the Recent Reforms to the External Monitoring of Audit Firms." *Journal of Accounting and Economics* 49, no. 1 (2010): 84-103.

Lin, J.W., J.F. Li, and J.S. Yang. "The Effect of Audit Committee Performance on Earnings Quality." *Managerial Auditing Journal* 21, no. 9 (2006): 921-33.

Mahalingam, E. "Two Megan Media Directors Charged." *The Star Online,* December 11, 2007. Accessed April 20, 2013. http://biz.thestar.com.my/news/story.asp?file=/2010/7/3/business/6599104andsec=business.

Majella G. "Audit Committees Play a Key Role in Assuring Audit Quality." *Accountants Today* July/August (2012): 23-25.

Malaysian Institute of Accountants (MIA). "International Standard on Quality Control 1: Quality Control for Firms that Perform Audits and Reviews of Historical Financial Information, and Other Assurance and Related Service Engagements." Last modified January 1, 2010. http://www.mia.org.my/new/downloads/professional/audit/knowledge/comparison/isqc/isqc1.pdf

Malaysian Institute of Accountants (MIA). "Recommended Practice Guide 7 (Revised): A Guide to Charging for Professional Assurance Services." Accessed April 16, 2013. http://www.mia.org.my/handbook/guide/RPG/RPG7/.

Mat Yasin, F. "Audit Committee Effectiveness and Internal Audit: An Empirical Investigation with Audit Quality." Unpublished dissertation, International Islamic University Malaysia, 2012.

Mohd Saleh, N., T.M. Iskandar, and M.M. Rahmat. "Earnings Management and Board Characteristics: Evidence from Malaysia." *Jurnal Pengurusan* 24 (2005): 77-103.

Mohd Saleh, N., T.M. Iskandar, and M.M. Rahmat. "Audit Committee Characteristics and Earnings Management: Evidence from Malaysia." *Asian Review of Accounting* 15, no. 2 (2007): 147-63.

Monks, R., and N. Minow. *Corporate Governance.* Cambridge: Blackwell, 1995.

Nelson, S. P. "Audit Committee Expertise and Financial Reporting Quality." PhD dissertation, Universiti of Malaya, 2010.

Pallant, J. *SPSS Survival Manual: A Step by Step Guide to Data Analysis using SPSS (4th Ed.).* England: McGraw-Hill International, 2010.

Public Company Accounting Oversight Board [PCAOB]. "PCAOB Oversees the Auditors of Companies to Protect Investors." Accessed April 20, 2013. http://pcaobus.org/Pages/default.aspx

Roodposhti, F.R., and S.N. Chashmi. "The Impact of Corporate Governance Mechanisms on Earnings Management." *African Journal of Business Management* 5, no. 11 (2011): 4143-151.

Sahlan, L.A. "The Malaysian Listing Requirement Reforms and Earnings Management Practices of Public Listed Firms." *The IUP Journal of Corporate Governance* 10, no. 2 (2011): 7-36.

Schipper, K. "Commentary on Earnings Management." *Accounting Horizons* 3, no. 4 (1989): 91-102.

Securities Commission. *Malaysian Code on Corporate Governance (Revised 2007).* Kuala Lumpur: Securities Commission, 2007.

Securities Commission. *Audit Oversight Board Annual Report 2011.* Kuala Lumpur: Securities Commission, 2011a.

Securities Commission. "Former Transmile Directors Sentenced to Jail and Fined for Misleading Disclosures." *Securities Commission*, October 28, 2011b. Accessed April 20, 2013.http://www.sc.com.my/main.asp?pageid=379andlinkid=2963andyearno=2011andmod=paper

Securities Commission. *Audit Oversight Board Annual Report 2012.* Kuala Lumpur: Securities Commission, 2012a.

Securities Commission. *Malaysian Code on Corporate Governance 2012.* Kuala Lumpur: Securities Commission, 2012b.

Securities Commission. "Corporate Governance Regulatory Framework" Accessed April, 2013. http://www.sc.com.my/corporate-governance-regulatory-framework/

Securities Commission. "Audit Oversight Board: Enforcement-Sanctions." Accessed April 8, 2014. http://www.sc.com.my/general-section/audit-overboard/audit-oversight-board-enforcement/sanctions/

Sulaiman, N.A. "Audit Quality in Practice: A Study of Perceptions of Auditors, Audit Committee Members and Quality Inspectors." PhD dissertation, University of Manchester, 2011.

Sun, N., A. Selama, K. Hussainey, and M. Habbash. "Corporate Environmental Disclosure, Corporate Governance and Earnings Management" *Managerial Auditing Journal* 25, no. 7 (2010): 679-700.

Tabachnick, B.G., and L.S. Fidell. *Using Multivariate Statistics (5th Ed.).* USA: Pearson Education Inc., 2007.

Vanasco, R.R., C.R. Skousen, and L.R. Santagato. “Auditor Independence: An International Perspective.” *Managerial Auditing Journal* 12, no. 9 (1997): 498-505.

Vethanayagam, J., S. Yahya, and H. Haron. “Independent Non-Executive Directors, Managerial Ownership and Firm Performance in Malaysian Public Listed Companies.” In *Proceeding Symposium on Accountability, Governance and Performance*, 2006.

Watts, R.L., and J.L. Zimmerman. *Positive Accounting Theory.* Englewood Cliffs, N. J.: Prentice-Hall, 1986.

Xie, B., SW.N. Davidson, and P.J. DaDalt. “Earnings Management and Corporate Governance: The Role of the Board and the Audit Committee.” *Journal of Corporate Finance* 9, no. 3 (2003): 295-316.

Xu, Y., E. Carson, N. Fargher, and L. Jiang. “Responses by Australian Auditors to the Global Financial Crisis.” *Accounting and Finance* 53, no. 1 (2013): 301–338.

Ye, P., E. Carson, and R. Simnett. “Threats to Auditor Independence: The Impact of Relationship and Economic Bonds.” *Auditing: A Journal of Practice and Theory* 30, no. 1 (2011): 121-148.