The Impact of New Regulations on Earnings Management among Malaysian Listed Firms

Shamsul Nahar Abdullah\textsuperscript{a}, Nur Fajrina Che A Halim\textsuperscript{b}, Sherliza Puat Nelson\textsuperscript{c}

We 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. 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. 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. The data for the study is obtained from secondary data (annual reports). The final 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. The regression analyses also reveal the role of board independence in reducing earnings management after the new regime was enforced.

JEL Codes: G34 and M41

Track: Accounting

1. Introduction

The issue of earnings quality has been the focus of extensive academic research since Ball and Brown’s (1968) study on the information content 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. 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). In response to this development, the Malaysian Audit Oversight Board (AOB) was formed on 1 April 2010 by the

\textsuperscript{a} Department of Accounting, Kulliyyah of Economics and Management Sciences, International Islamic University Malaysia, P.O. Box 10, 50728 Kuala Lumpur, Malaysia (Email: shamsunahar@iium.edu.my)
\textsuperscript{b} Department of Accounting, Faculty of Business and Accounting, Universiti Sultan Zainal Abidin, 21030 Kuala Terengganu, Malaysia (Email: fajrina.halim@gmail.com)
\textsuperscript{c}Department of Accounting, Kulliyyah of Economics and Management Sciences, International Islamic University Malaysia, P.O. Box 10, 50728 Kuala Lumpur, Malaysia (Email: sherliza@iium.edu.my)

The AOB is empowered to investigate the audit process and documentation of auditors who audit the public interest entities (PIEs). Thus far, two partners were reprimanded in 2012, six in 2013 and two in 2014 (Securities Commission, 2014). In addition to the establishment of the AOB, 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. Hence, the objectives of this paper are as follows: First, it aims at determining whether audit effort 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 objectives of this paper are as follows: First, it aims at determining whether audit effort 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 the literature review. Subsequently, we explain the theoretical framework and hypotheses development. In the following section, we present the sample selection and research design. This chapter also explains in detail the measurement of each variable utilized in the study. This section is then followed a section which will present the results and the discussion of the results. Finally, we provide the conclusion of the study.

2. Literature Review

Audit Oversight Board. The AOB was set up under the Securities Act in April 2010. Prior to the establishment of the AOB, auditors or chartered accountants in Malaysia are monitored by the Malaysian Institute of Accountants (MIA). The establishment of the AOB is in line with the formation of the PCAOB in the US. 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).

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).

It is envisaged that bringing into force the AOB as an independent, external oversight body would strengthen the role of external auditors by ensuring that they 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 were expected to enhance the role of independent directors in monitoring public companies. Based on Cohen et al.’s (2004) framework, because auditors are part of the financial value chain, auditors act as the gatekeepers of financial information. While audit committee’s important responsibility is to evaluate the external audit processes and external auditors’ performance (Cohen et al., 2004). This evaluation 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 truly independent from management to enable them to discharge their role effectively.

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

**Section 317A and 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. 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 monitoring 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 sentencing of two audit committee members of Transmile in 2011 (Securities Commission, 2011c) 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, 2011c) The judge 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, 2011c)

The remarks by the Judge therefore clarify the role of the audit committee and its responsibility to raise at board meetings any issues that come to its knowledge.

**Auditing and earnings management.** Audit quality is fundamental to maintaining the credibility of corporate governance and to ensuring the reliability of the financial reporting process (Abdullah, Ismail and Jamaluddin, 2008). Becker et al. (1998) show that lower audit quality is associated with more ‘accounting flexibility’. It shows that to prevent earnings management, it is vital to ensure high-quality auditing take place because it will more likely discover evidence of any misappropriate act that would result in 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
The establishment of the AOB is expected to lead to more extensive audit work being conducted due to the introduction of stringent requirements for auditors. This view is supported by Hoitash, Markelevich and Barragato (2007), who suggest that higher auditor fees may increase the effort exerted by auditors, hence, increasing audit quality. Caramanis and Lennox (2008) state that if auditor independence affects the likelihood of detected problem being reported by auditors, audit efforts are therefore vital in order to increase the probability of a problem being detected by auditors. Their study indicates that low audit effort in terms of hours worked provides the opportunity for managers to aggressively manage earnings (Caramanis and Lennox, 2008). Therefore, to reduce income smoothing, more audit efforts are necessary to curb the intention of management to manage earnings (Caramanis and Lennox, 2008). Chen et al. (2011) reveal that the value of auditing increases when enforcement is stricter. 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. Carcello et al. (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.

The board of directors and audit committee. Prior studies have shown that the presence of a greater proportion of independent directors adds more value to the board monitoring process (e.g. 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) document 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) argue 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.

Independent audit committees also play an important role in ensuring the quality and credibility of financial reporting. 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 et al., 2006). Similarly, Cohen et al. (2004) highlight 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 note that although there are 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 are 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) provides 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. 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 et al. (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.

3. Hypotheses

**AOB and earnings management.** The AOB is empowered to inspect the working papers of auditors, hence auditors who fail to comply with the relevant auditing standards face 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. 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. As claimed by Blankley et al. (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, it is hypothesized that:

\[ H_1: \text{Audit effort is increased following the establishment of the AOB.} \]

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,

\[ H_2: \text{The establishment of the AOB interacts with audit effort to reduce earnings management.} \]

**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 et al., 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. 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 in the works of Abdul Rahman and Mohamed Ali (2006), Abdullah and Mohd Nasir (2004), Hashim and Devi (2008) and Mohd Saleh et al. (2005) does not support a link between board independence and earnings management. It may support Monks and Minow's (1995) argument, who suggest that when independent directors have no economic ties with the firm they are less effective. This implies that directors should hold shares in firms to be effective (Mohd Saleh, Iskandar and Rahmat, 2005).

However, 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, 2011b). Thus, the third hypothesis is:

**H3**: Board independence is associated with lower earnings management following the issuance of 317A and 320A of the CMSA.

**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 is associated with enhanced effectiveness (Bronson et al., 2009; Carcello and Neal, 2000; Klein, 2002).

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:

**H4**: Audit committee independence is associated with lower earnings management following the issuance of 317A and 320A.

4. Methods

All non-finance listed firms for 2009, 2010 and 2011 financial years were included in this study, resulting in a total of 2,388 firm years (2009: 809, 2010: 802, and 2011: 777). Finance firms were excluded because they were governed by different requirements, rules and regulations (Abdul Rahman and Mohamed Ali, 2006; Nelson, 2010). Financial data were obtained from the Datastream database and any missing information was hand-collected from annual reports of the relevant firms. Other non-financial data were hand-collected from annual reports. The measurement of all variables, both the tested and control variables in this study is explained below.

4.1 Test Variables
Discretionary accruals. The dependent variable in this study is discretionary accruals, which is a proxy for earnings management. 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 et al., 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 et al., 2005). In addition, Kothari et al. (2005) model mitigates the problem of heteroscedasticity and mis-specified issues that exist in other aggregate accruals models (Sun et al., 2010). Total accruals are first computed. Total accruals (TACC) are 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. \[ TACC_{i,t} = \text{EARN}_{i,t} - \text{CFO}_{i,t} \]

2. \[ TACC_{i,t}/\text{TA}_{i,t-1} = \alpha_1 \left(1/\text{TA}_{i,t-1}\right) + \alpha_2 (\Delta \text{REV}_{i,t} - \Delta \text{REC}_{i,t}/\text{TA}_{i,t-1}) + \alpha_3 (\Delta \text{PPE}_{i,t}/\text{TA}_{i,t-1}) + \alpha_4 \text{ROA}_{i,t-1} + \epsilon_{i,t} \]

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. TACC\(_{i,t}/\text{TA}_{i,t-1} \) is total accruals deflated by lagged total assets; \( \Delta \text{REV}_{i,t} - \Delta \text{REC}_{i,t} \) 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. \[ \text{NDACC}_{i,t} = \alpha_1 \left(1/\text{TA}_{i,t-1}\right) + \alpha_2 (\Delta \text{REV}_{i,t} - \Delta \text{REC}_{i,t}/\text{TA}_{i,t-1}) + \alpha_3 (\Delta \text{PPE}_{i,t}/\text{TA}_{i,t-1}) + \alpha_4 \text{ROA}_{i,t-1} \]

Finally, discretionary accruals (DACC) are the residuals (\( \epsilon \)):

4. \[ \text{DACC}_{i,t} = TACC_{i,t}/\text{TA}_{i,t-1} - \text{NDACC}_{i,t}/\text{TA}_{i,t-1} \]

Consistent with prior studies, this study uses the absolute value of discretionary accruals rather than signed discretionary accruals as a proxy for the mixed effect of upward or downward earnings (Carcello et al., 2011; Sun et al., 2010). In other words, we are only interested in the extent of earnings management rather than its direction. Furthermore, a movement from positive to negative discretionary accruals does not essentially demonstrate enhanced earnings quality (Carcello et al., 2011).

Audit effort. Audit effort is measured 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). Ghosh and Prelewicz (2009) found 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 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 ratio of independent non-executive members to total board members. For the purpose of this study, board independence is also measured by the proportion of independent directors on the board.

Audit committee independence. Consistent with other 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.

4.2 Control Variables

**Auditor Independence.** 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). 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.** Following the latest studies on audit committee expertise (Jamil and Nelson, 2011; Mat Yasin, 2012; Nelson, 2010), 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.

**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 et al. (2007).

**CEO Duality.** Similar to previous studies (e.g., Bradbury et al., 2006, 2007), 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 ratio 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 ratio 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 et al., 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.

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 were scrutinized further to ensure that discretionary accruals could be calculated for three years, i.e. 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. Table 1 describes the descriptive statistics for all the variables used in this study for the period 2009–2011.
Table 1: Descriptive statistics (N=2,124)

Panel A: Continuous variables

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

Panel B: Dummy variables

<table>
<thead>
<tr>
<th>Variable</th>
<th>AOB</th>
<th>BIG4</th>
<th>CEO</th>
<th>DLC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency</td>
<td>%</td>
<td>Frequency</td>
<td>%</td>
<td>Frequency</td>
</tr>
<tr>
<td>0</td>
<td>708</td>
<td>33.3</td>
<td>955</td>
<td>45.0</td>
</tr>
<tr>
<td>1</td>
<td>1,416</td>
<td>66.7</td>
<td>1,169</td>
<td>55.0</td>
</tr>
<tr>
<td>Total</td>
<td>2,124</td>
<td>100</td>
<td>2,124</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Panel C: Descriptive statistics for 2009, 2010 and 2011

<table>
<thead>
<tr>
<th>Variable</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>DACC</td>
<td>Mean</td>
<td>0.003</td>
<td>0.024</td>
</tr>
<tr>
<td>AFEE</td>
<td>Mean (in RM)</td>
<td>279,813</td>
<td>297,722</td>
</tr>
<tr>
<td>BIND</td>
<td>Mean</td>
<td>0.45</td>
<td>0.46</td>
</tr>
<tr>
<td>ACIND</td>
<td>Mean</td>
<td>0.87</td>
<td>0.87</td>
</tr>
</tbody>
</table>

On average, the result shows that about 46% of the boards of directors in PLCs are independent. This is a 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% 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.

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. Table 2 presents results from t-test for discretionary accruals.

Table 2: T-test Results

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>p-value (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>DACC2009</td>
<td>0.003</td>
<td>0.00</td>
</tr>
<tr>
<td>DACC2011</td>
<td>0.025</td>
<td></td>
</tr>
<tr>
<td>ABSDACC2009</td>
<td>0.064</td>
<td>0.29</td>
</tr>
<tr>
<td>ABSDACC2011</td>
<td>0.068</td>
<td></td>
</tr>
<tr>
<td>AFEE2009</td>
<td>279,813</td>
<td>0.00***</td>
</tr>
<tr>
<td>AFEE2011</td>
<td>324,548</td>
<td></td>
</tr>
</tbody>
</table>

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

H₁ proposed that audit effort would increase following establishment of the AOB. As shown in Table 2, the mean scores 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 result of the t-test also shows a significant p-value (0.00), which indicates 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, H₁ 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. Table 3 presents the results from regression analyses.

Table 3: Regression results
Panel regression analysis (N=2,124) for independent and control variables (Fixed effects)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>t-Statistic</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>-0.60</td>
<td>0.19</td>
<td>-3.14</td>
<td>0.00</td>
</tr>
<tr>
<td>AOB</td>
<td>-0.00</td>
<td>0.00</td>
<td>-0.34</td>
<td>0.37</td>
</tr>
<tr>
<td>AFEE</td>
<td>-0.00</td>
<td>0.00</td>
<td>-0.05</td>
<td>0.48</td>
</tr>
<tr>
<td>AOB.AFEE</td>
<td>-0.00</td>
<td>0.00</td>
<td>-0.10</td>
<td>0.46</td>
</tr>
<tr>
<td>BIND</td>
<td>-0.06</td>
<td>0.04</td>
<td>-1.56</td>
<td>0.06*</td>
</tr>
<tr>
<td>ACIND</td>
<td>-0.01</td>
<td>0.03</td>
<td>-0.49</td>
<td>0.31</td>
</tr>
<tr>
<td>BIG4</td>
<td>-0.03</td>
<td>0.01</td>
<td>-2.51</td>
<td>0.01***</td>
</tr>
<tr>
<td>ACFIN</td>
<td>0.01</td>
<td>0.03</td>
<td>0.33</td>
<td>0.37</td>
</tr>
<tr>
<td>ACMEEET</td>
<td>-0.00</td>
<td>0.00</td>
<td>-0.50</td>
<td>0.31</td>
</tr>
<tr>
<td>CEODL</td>
<td>0.11</td>
<td>0.02</td>
<td>5.46</td>
<td>0.00***</td>
</tr>
<tr>
<td>GRG</td>
<td>0.07</td>
<td>0.01</td>
<td>5.18</td>
<td>0.00***</td>
</tr>
<tr>
<td>ROA</td>
<td>-0.08</td>
<td>0.02</td>
<td>-3.71</td>
<td>0.00***</td>
</tr>
<tr>
<td>FSIDE</td>
<td>0.08</td>
<td>0.02</td>
<td>3.60</td>
<td>0.00***</td>
</tr>
</tbody>
</table>

R²              | 0.49 F-statistic 1.85 |
Adjusted R²     | 0.22 p-value 0.00*** |

* significant at 1% level (1-tailed); ** significant at 5% level (1-tailed); *** significant at 10% level (1-tailed).
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 AOBAAFE and ABSDACC. This indicates that the establishment of the AOB has not had an impact on earnings management. Therefore, $H_2$ is not supported. 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% 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 et al., 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. 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). 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. ACMETE 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 et al., 2006).

This study also predicted that the separation of roles of CEO and board chair would lead to lower earnings management. 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. 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; Roodposhti 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. 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 lower 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).

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 a 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.

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 are able to read, interpret and analyse financial reporting, which is important to discharge their roles diligently.

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

Bradbury, M, Mak, YT, and Tan, SM 2006, Board characteristics, audit committee characteristics and abnormal accruals, Pacific Accounting Review, Vol. 18, No. 2, pp. 47-68.


Majella G 2012, Audit committees play a key role in assuring audit quality, Accountants Today, July/August, pp. 23-25.
Malaysian Institute of Accountants (MIA) 2010, 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, MIA, Malaysia.
