

Accounting expertise in the audit committee and earnings management

Mujeeb Saif Mohsen Al-Absy, Ku Nor Izah Ku Ismail, Sitraselvi Chandren

Tunku Puteri Intan Safinaz School of Accounting, University Utara Malaysia, Malaysia

corresponding e-mail: [mogeab\[at\]yahoo\(dot\)com](mailto:mogeab[at]yahoo(dot)com)

address: Tunku Puteri Intan Safinaz School of Accountancy, Universiti Utara Malaysia 06010 UUM Sintok, Kedah, Malaysia

Abstract: This study attempts to investigate the influence of accounting expertise in the AC on the level of accrual earnings management (AEM) in Malaysian firms by using two proxies, the Modified Jones Models by Dechow et al. (1995) and Kasznik (1999). A sample of 143 firms with slight positive earnings were selected from the Bursa Malaysia Main Market for 2013, 2014 and 2015. Using panel data regression, this study shows that accounting expertise in the AC does not mitigate AEM. The accounting expertise of the AC directors and chairman and the AC's balanced accounting expertise have a positive relationship with attitude for AEM. In line with prior studies, this paper concludes that AC directors are either not truly independent or do not have time or energy to mitigate earnings management practices. Thus, more policies are needed to strengthen the independence of the AC and ensure the members carry out their duties more responsibly.

JEL Classifications: G34, G38, M42, M48, M41

Keywords: Audit committee, audit committee chairman, accounting expertise, accrual earnings management, Malaysia

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1. Introduction

Regulators, investors and the financial community have been paying more attention to the issue of financial scandals as well as financial statement fraud following the many corporate scandals of big companies (e.g., Enron Corporation and WorldCom) (Erickson, Hanlon, & Maydew, 2006; Rezaee, 2005). Accordingly, Abdullah & Ku Ismail (2016) and Vladu (2015) mentioned that several previous accounting scandals have brought to light the issue of earnings management (EM). In this regard, some scholars and researchers have argued that one of the main reasons for accounting scandals is related to EM (Magrath & Weld, 2002; Rezaee, 2005).

The alleged fraudulent listed firms in Malaysia have aggressively used EM prior to the alleged fraud year (Hasnan, Abdul-Rahman, & Mahenthiran, 2013; Sulaiman, Danbatta, & Rahman, 2014) and continue to smoothen their earnings in the years subsequent to the alleged fraud year (Sulaiman et al., 2014). It has been found that EM is significantly and positively related to the occurrences of fraudulent financial reporting (Hasnan et al., 2013). This is in line with the argument of Perols & Lougee (2011), who documented a positive relationship between prior year EM and fraud in US firms. Thus, firms that have previously used EM are more likely to commit fraud, and using EM motivates managers to continue to commit fraud practices in future rather than manage the earnings (Perols & Lougee, 2011; Sulaiman et al., 2014).

Globally, EM incentives are increasing rapidly (Leuz, Nanda, & Wysocki, 2003; Yu, 2008). For that reason, many countries in the world have this problem and Malaysia is not the exception (Leuz et al., 2003; Mohd Saleh, Mohd Iskandar, & Rahmat, 2005). Moreover, Yu (2008) added that there is a high likelihood of increase in EM in Malaysian firms. This evinces that more attention must be paid to EM in a firm. However, in Malaysia, the studies on EM are still evolving (Buniamin, Johari, Rahman, & Rauf, 2012; Hamid, Hashim, & Salleh, 2012). Abdul-Rahman & Ali (2006) and Healy & Wahlen (1999) stated that EM can mislead potential investors in realizing the actual performance of a company due to its distorted figures.

Consequently, after the failure of some of the world's top companies, the focus has significantly shifted to corporate governance (CG) (Cheung & Chan, 2004; Claessens & Fan, 2002; Jackling & Johl, 2009; Nam & Nam, 2004; Pergola, 2005; Shahwan, 2015). Nam & Nam (2004) asserted that the major reason for the 1997 Asian Financial Crisis was the weak CG. However, the effect of the Financial Crisis was mitigated after the implementation of good CG in Malaysia (The World Bank Report, 2012). Importantly, according to Mohammad, Wasiuzzaman, & Salleh (2016), the CG mechanisms used in Malaysian firms are currently inadequate to prevent EM and there is a need for additional efforts to improve the CG mechanism.

In Asian corporations, the most important issue of governance is family ownership/control. Specifically, this refers to the alignment of conflicts of interest between the majority shareholders, family owners and the minority shareholders (Cheung & Chan, 2004; Claessens & Fan, 2002). This is because the majority shareholders may be involved in management or dominate the management's decisions. Consequently, the nature of the agency problem shifts from conflicts of interest between manager and shareholder (type I agency problem) to controlling ownership (the owner who is often also the manager) and the minority shareholders (type II agency problem) (Cheung & Chan, 2004; Claessens & Fan, 2002).

Essentially, the audit committee (AC) is given greater responsibility to monitor and resolve the problem of conflict of interest and EM in a company. Xie, Davidson, & DaDalt (2003) argued that an efficient, effective and structured AC would directly have a bigger role in monitoring EM. They added that one of the main functions of the AC in a firm is to control financial reporting as well as to monitor the firm's financial performance. However, it is also argued that three or four AC members in a committee cannot be sufficient for overseeing the functions of internal as well as external audit (Burns, 2004).

From the Malaysian perspective, Abdul-Rahman & Ali (2006) argued that the AC has yet to attain a more effective monitoring role. Similarly, Chandrasegaram, Rahimansa, Rahman, Abdullah, & Mat (2013) contended that the AC is not effective in controlling the level of EM even in firms that have properly implemented the Malaysian Code of Corporate Governance (MCCG). Although the extent of the AC's independence has increased post-MCCG (2007), but its role is still questionable (Mohammad et al., 2016). It seems that the independent directors are not effective in the implementation of their supervisory functions (Abdul-Rahman & Ali, 2006) and they do seem to be helping in constraining EM due to the lack of financial sophistication and expertise (Abdul-Rahman & Ali, 2006; Hashim & Devi, 2008), or due to their connection to the firms (Mohammad et al., 2016). In this regard, prior studies have not established a decisive relationship between EM and AC mechanisms. Chandrasegaram et al. (2013) suggested this issue be investigated further in future. In addition, there is a need for investigating other potentially

influential variables that can gauge the effectiveness of the AC (Al-Rassas & Kamardin, 2016).

Furthermore, few studies have focused on the relationship between AC members' personal characteristics (e.g., working experience) and the firm's EM (Qi & Tian, 2012), and the empirical results on the relationship between AC members with financial expertise and EM are mixed (Inaam & Khamoussi, 2016). Besides the AC members, the individual power exercised by the AC chairman has a critical effect on organizational outcomes, with the power increasing according to the level of activity of the AC chairman (Turley & Zaman, 2007). The AC chairman must control the agenda, meetings and discussions as well as effectively interact with the AC members (Bédard & Gendron, 2010). They argued that no study has examined the AC chair. In addition, Carcello, Hermanson, & Ye (2011) called for future studies on the AC chairman's behavior, personality traits and characteristics, in ensuring the effectiveness of the AC. Thus, this study uses the AC chairman to determine the nature of the relationship with EM.

The motives for selecting Malaysia are due to the fact that the boards of the firms in Malaysia are dominated by a high percentage of non-independent directors during decision-making. Consequently, in some instances, non-independent directors may comprise family directors who later play an influential role in the board as well as in the AC. Thus, this study emphasizes on AC characteristics by investigating the nature of the relationship between audit committee directors' accounting expertise (ACDAE), audit committee chairman's accounting expertise (ACCAE) and audit committee's balanced accounting expertise (ACBAE) with EM for the years 2013, 2014 and 2015. Therefore, this paper extends the findings of prior studies related to accounting expertise in the AC, and especially, of the AC chairman, where currently, only a few studies have been conducted. In addition, this study provides empirical evidence for the new recommendations in the MCCG Draft (2016) that the chairman of the AC must have accounting expertise or relevant work experience, which has not yet been approved by MCCG (2017). However, this requirement has existed in other countries, such as in Spain, Germany, and Bosnia and Herzegovina. Non-approval of this recommendation by MCCG (2017) may indicate that ACCAE contradicts the proposition of the agency theory in Malaysia. Furthermore, this study introduces a new proxy, ACBAE, which can enhance the communication and skills among the AC members. This study proposes that the AC, consisting at least of two directors who possess accounting expertise, i.e., the chairman and at least one member, could improve the capability of the AC to mitigate EM (see Singapore Code of Corporate Governance (SCCG), 2012).

This study differs from other studies conducted in Malaysia, such as Al-Rassas & Kamardin (2015), which focuses only on the AC chairman who is a senior or former audit partner, as well as Azni Suhaily (2010) who focused on the AC chairman's financial expertise and AC chairman who is a former senior auditor. Besides, this study has a limited number of firms (100 public listed companies) based on only one year (2008). Generally, the results of the current study show that ACDAE, ACCAE and ACBAE have a positively significant association with the level of EM. In addition, only firm size (FSIZE) and leverage (LEV) have a significant influence on EM. The rest of this paper is organized as follows: review of the literature on EM and CG, theoretical background and development of hypotheses, research design, the results, discussion and conclusion.

2. Literature review

2.1. Earnings management

The most important types of EM are: (i) accrual earnings management (AEM); and (ii) real earnings management (REM). AEM is the earnings manipulation by managers via accounting estimates and methods, without any direct impact on cash flow, while REM is the manipulation of earnings by managers through operational activities, which has direct effects on cash flow (Enomoto, Kimura, & Yamaguchi, 2015; Lo, 2007; Roychowdhury, 2006; Sun, Lan, & Liu, 2014). Indeed, accrual accounting enhances the ability of earnings to reveal firm performance and hence, establish high quality and sound financial reporting. However, Dechow (1994) observed that in some aspects, the use of accruals would bring about new issues, such as EM, by which the managers can mostly exercise some of their preferences with regards to the recognition of accruals.

Actually, there are many ways by which managers can use judgment in financial reporting. For instance, judgment is necessary to estimate the number of economic events in the future, to manage working capital and to decide how to organize the transactions for companies (Fields, Lys, & Vincent, 2001; Healy & Wahlen, 1999). Managers must also choose among acceptable methods for depreciation, such as the accelerated or straight-line depreciation as well as inventory valuation methods, such as the Last In, First Out; First In, Last Out or weighted-average inventory valuation methods (Healy & Wahlen, 1999).

Generally, EM occurs when people exploit the flexibility in accounting principles (Fields et al., 2001; Jiraporn, Miller, Yoon, & Kim, 2008; Levitt, 1998) to manage earnings, which is very difficult for outsiders to detect (Magrath & Weld, 2002). In line with this, Healy & Wahlen (1999, p. 368) stated that:

"Earnings management occurs when managers use judgment in financial reporting and in structuring transactions to alter financial reports to either mislead some stakeholders about the underlying economic performance of the company or to influence contractual outcomes that depend on reported accounting numbers".

However, some scholars have argued that EM may have an efficient effect on firm value that will be beneficial for majority and minority shareholders. Chandren (2016) argued that through firm performance, it can be easy to classify whether the EM is efficient or opportunistic. Similarly, Jiraporn et al. (2008) found that EM is not detrimental to firm value; in fact, it is positively related to firm value. Also, Gunny (2010) supported the notion that manipulating earnings is not opportunistic; he found that using REM to just meet earnings benchmarks is significantly and positively related to the firm's future performance. In line with this, Chandren, Ahmad, and Ali (2015b) found that accretive share buyback (the proxy for REM) has a positive effect on share price return. Likewise, Chandren, Ahmad, and Ali (2017) found that accretive share buyback is significantly and positively related to the long-term performance of the firm.

Indeed, there is a thin line of difference between EM and fraud (Rosner, 2003), as it is argued that there is "a grey area between legitimacy and outright fraud" (Levitt, 1998). Importantly, the literature defines both "EM" and "fraud", as subsets of "earnings manipulation" (Dechow, Sloan, & Sweeney, 1996). Both of them refer to different techniques used by managers to achieve the desired earnings (Rosner, 2003). Therefore, because earnings manipulation through violations of Generally Accepted Accounting

Principles (GAAP) incurs potential legal costs, it can be prevented through earnings manipulation within the provisions of the GAAP (Dechow et al., 1996).

In essence, EM will mislead the users of financial reporting. In addition, it is difficult to determine the reasons managers engage in EM, i.e., whether it is to increase the shareholders' interest or their own, since firm performance is a common method used for evaluating and remunerating the managers. Even though EM will be beneficial to shareholders, it may also affect the shareholders themselves in case they want to invest in other firms as they may suspect the other firms are also doing the same thing. Thus, EM among firms will reduce the confidence of shareholders as they may become potential investors in other firms to diversify their investment portfolio.

2.2. Corporate governance in Malaysia

Several circumstances in Malaysia, such as the publicized local financial failures, for example, the Perwaja Steel Company in the middle of 1990s, led to the need for good CG (Ow-Yong & Kooi-Guan, 2000). The swift economic meltdown of Malaysia in mid-1997 clearly showed the effect of poor CG in the country (Abdul-Rahman & Ali, 2006; Ow-Yong & Kooi-Guan, 2000), Companies experienced a lack of accountability, transparency, disclosure and weak financial structure (Abdul-Rahman & Ali, 2006). This situation led to the immediate establishment of a strong Finance Committee on Corporate Governance which was given the task to extensively revise and reform Malaysian's CG (Ow-Yong & Kooi-Guan, 2000).

The MCCG (2000) first issued in March 2000 made an important move to reform CG practices. This Code played a significant role in guiding board members by clearly describing their responsibilities and the need for the board to control the company (MCCG, 2000). To further reiterate, the MCCG (2000) required that the AC should comprise at least three directors of which, the majority are independent. In addition, the committee must have written terms of reference which explain clearly the duties and authority of the members. Furthermore, the AC chairman must be an independent non-executive director. However, it did not prevent the executive directors from becoming a member of the AC.

The Securities Commission (SC) of Malaysia in 2007 reviewed the MCCG version of 2000 and subsequently issued the new MCCG in 2007 to develop the board and annual report quality of public listed companies. This was to be achieved by setting the required qualification of directors to strengthen the AC and the internal audit function of all listed companies (MCCG, 2007). The major amendment to the AC is its strengthening to ensure that the AC can perform its duties and responsibilities efficiently and effectively. The revised version clearly describes the criteria for selecting and appointing AC members, AC composition, AC meetings and the frequency of AC meetings. For instance, there is a need for the AC to include fully non-executive directors in its composition. Moreover, it is also mandated that the selected members must be able to read, analyze and even interpret the firm's financial statement so as to make them capable of executing their duties more effectively. The modified Code also increased the number of meetings with external auditors.

In 2011, the SC reviewed the MCCG version of 2007, after which it introduced a new version in 2012, known as MCCG 2012. The new version is focused on reinforcing board composition and structure and further identifying the role of directors and their fiduciary

responsibilities. The directors were charged with the task to be effective guardians of the company beyond overseeing and setting the company's strategic directions in performing business. They are also to ensure the company complies with the ethical norms and values, and maintains an effective structure and governance that would validate the rights of internal control and risk management appropriately (MCCG, 2012). Although the MCCG has been reviewed a number of times, there is still a lot to be done to inculcate the CG culture in Malaysia (MCCG Draft, 2016).

Therefore, the SC in 2016 introduced the Proposed Draft of the MCCG. The key amendments to this new draft of MCCG 2016 are aimed at strengthening the role of the AC chairman. Principle B, Practice 7.2 requires firms to appoint an AC chairman who has accounting experience. In addition, practice 7.3 requires firms to appoint an independent director to be the chairman of the AC and he or she must not be the same person as the board chairman. The new MCCG 2017 was issued in April 2017. Principle B, Practice 8.1 of MCCG 2017 confirms what was introduced in the draft MCCG 2016 regarding the board chairman not being appointed as chairman of the AC (MCCG, 2017, p. 35). However, MCCG 2017 does not require that the chairman must possess accounting experience or relevant experience. Until today, although the AC members and especially the chairman have responsibility for monitoring the financial reporting process, the MCCG does not specify what the exact level of financial literacy is needed.

From the above discussion, it shows the commitment of the Malaysian government to establish an effective CG framework by ensuring a favorable business environment in the country. These would directly influence firms' financial reporting quality and performance. At the same time, this indicates that either the Code is still imperfect or it is difficult to apply due to the difference in culture among Malaysian firms.

3. Theoretical background and development of hypotheses

3.1. Audit committee directors' accounting expertise

Under the agency theory, it is claimed that an AC with expert directors, is an effective device for decision control. From the resource dependence perspective, a direct reference is made to the directors' ability to attract resources to the company. Thus, integration of both the agency and resource dependence perspectives is crucial (Hillman & Dalziel, 2003). Indeed, the process of preparing financial reporting needs a high knowledge of the technical methods and accounting standards. Thus, the AC must comprise members who have accounting expertise and/or relevant financial expertise to fulfil their oversight functions of the corporate accounting process and financial reporting and control (Blue Ribbon, 1999). The members of AC, especially those with accounting expertise, can communicate more effectively with managers, monitor the external auditors (Chang & Sun, 2010) and improve financial reporting quality (McDaniel, Martin, & Maines, 2002).

Given the AC functions, the suitable definition of a financial expert is a person who has an accounting education background or accounting experience (Chang & Sun, 2010). Carcello, Hollingsworth, Klein, & Neal (2006) found a significantly negative relationship between AC with financial expertise on accounting and EM, while AC with financial expertise on non-accounting has an insignificant relationship with EM.

Regulators in many countries require that the AC should comprise at least one member who has accounting and auditing expertise, such as in Russia, Austria and China; while others require all the members of the AC to have a relevant background and knowledge or experience in the areas of accounting, auditing and finance, such as in India, Slovakia, Mauritius and the Philippines. In the context of Malaysia, "all members of the audit committee should be financially literate and at least one should be a member of an accounting association or body" (MCCG, 2007, p. 14).

Davidson, Xie, & Xu (2004) suggested that an increase in the number of members of the AC with financial expertise will increase shareholder value, while new directors who have financial expertise will have a significantly positive relationship with the price of company stock. Abernathy, Herrmann, Kang, & Krishnan (2013) found that there is a significant association between AC members with financial accounting expertise and analyst earnings forecasts.

Regarding EM, it has been found that AC members with either financial or corporate background reduce EM practices (Xie et al., 2003). The financial literacy and the independence of the AC members serve as mitigation of opportunistic behavior (Choi, Han, & Lee, 2014). Previous studies have investigated the influence of financial expertise in the AC on the attitude of managers to engage in EM. In developed countries, most studies have found a significantly negative relationship between AC financial expertise and EM (Bédard, Chtourou, & Courteau, 2004; Carcello et al., 2006; Chang & Sun, 2010). However, Sun et al. (2014) did not find a significant relationship. Compared to developing countries, the results are very different. Soliman & Ragab (2014) found that experience of AC members has a significantly negative association with EM; while Choi, Jeon, & Park (2004) found an insignificant relationship. Surprisingly, in the context of Malaysia, most studies have not found any significant relationship (Abdul-Rahman & Ali, 2006; Ishak, Haron, Salleh, & Rashid, 2011; Mansor, Che-Ahmad, Ahmad-Zaluki, & Osman, 2013; Saleh, Iskandar, & Rahmat, 2007).

Indeed, ACDAE has a major effect on the attitude of managers toward manipulation of earnings because of several reasons. First, ACDAE will force managers to follow ethics in preparing the financial report. Moreover, ACDAE is likely to be more effective in situations involving questionable financial reporting. Second, ACDAE may likely has longer meetings with the chief internal auditor (Raghunandan, Rama, & Read, 2001), due to ease of communication and ability to ask the correct questions. Third, ACDAE may help internal auditors to contribute more effectively to the external audit (Zain, Subramaniam, & Stewart, 2006). Fourth, ACDAE effectively review the internal audit proposals and internal auditing results (Raghunandan et al., 2001). Thus, in line with the agency and resource dependence theories, the following hypothesis is presented:

H₁: There is a negative relationship between audit committee directors' accounting expertise (ACDAE) and EM.

3.2. Audit committee chairman's accounting expertise

The effectiveness of the AC critically depends on the role of its chairman (MCCG Draft, 2016). The AC chairman has the greatest responsibility in monitoring the firm's financial reporting and any fraud that occurs (Schmidt & Wilkins, 2013). The AC chairman plays a central role in providing leadership, setting and managing the agenda of the committee (MCCG Draft, 2016). Thus, the AC chairman has the responsibility to ensure the proper

flow of information to the committee as well as open relationships between the AC and others parties, such as management and internal and external auditors (Bédard & Gendron, 2010; Tanyi & Smith, 2014).

Most of regulators in countries, such as in Spain, Germany, and Bosnia and Herzegovina, require that the AC chairman must have accounting expertise or relevant work experience. However, it is surprising that this recommendation has not been approved by MCCG 2017, although it is provided for in the MCCG Draft (2016, p. 18). Furthermore, previous studies have highlighted the issue of AC financial expertise. For instance, in developed countries (Bédard et al., 2004; Carcello et al., 2006; Chang & Sun, 2010; Sun et al., 2014); developing countries (Choi et al., 2004; Soliman & Ragab, 2014); and in the context of Malaysia (Abdul-Rahman & Ali, 2006; Ishak et al., 2011; Mansor et al., 2013; Saleh et al., 2007). However, the issue of ACCAE has not been fully highlighted in the previous literature.

Schmidt & Wilkins (2013) found that firms that have an ACCAE provide the timeliest disclosures. ACCAE is negatively and significantly associated with shorter restatement dark periods. Abernathy, Beyer, Masli, & Stefaniak (2014) provided only weak evidence that ACCAE is associated with financial reporting timeliness. However, they categorized the ACCAE into: (i) public accounting expertise, which is significantly and negatively associated with financial reporting timeliness; and (ii) CFO expertise, which is not associated with financial reporting timeliness.

Regarding EM, Azni Suhaily (2010) found an insignificant relationship between the chairman of the AC with either financial expertise or who is a former senior auditor and AEM. Importantly, the finding of Azni Suhaily (2010) is not considered as conclusive evidence due to the limited number of companies included in his study and the selection of only one year. However, Al-Rassas & Kamardin (2015) found a significantly positive relationship between AC chairman who is a senior or former audit partner and AEM using the Modified Jones Model (MJM) by Dechow et al. (1995) but not significant with the MJM by Yoon et al. (2006). Thus, based on the agency and resource dependence theories, the following hypothesis is presented:

H₂: There is a negative relationship between audit committee chairman's accounting expertise (ACCAE) and EM.

3.3. Audit committee's balanced accounting expertise

As explained earlier, AC with expert directors, is an effective device to monitor and supervise management behavior. Previous studies have examined the influence of accounting expertise in the AC on EM by using different proxies. For instance, proportion of directors with accounting expertise (e.g., Sun et al., 2014); number of directors with accounting expertise (e.g., Abdullah & Ku Ismail, 2016; Ishak et al., 2011); and dummy variable, "1 if the AC has accounting experts, 0 otherwise" (e.g., Abdul-Rahman & Ali, 2006) or "1 if the AC has an accounting financial expert, 0 otherwise" (e.g., Mansor et al., 2013). However, ACBAE has not been examined by previous studies.

This study expects that the AC chairman with accounting expertise plays a critical role in monitoring management's opportunistic behavior. However, there is a need for at least one member in the AC to have accounting expertise to interact with the AC chairman's accounting expertise to enhance the effectiveness of the AC. In other words, an AC

chairman with accounting expertise will make the right decision if he or she gets the support from at least one member in the AC who has accounting expertise. Accordingly, it is recommended by the SCCG (2012) that the AC should have at least two members who have a current and relevant accounting or related financial management experience, including the AC Chairman. An AC that consists of at least two members who possess accounting expertise, i.e., the chairman and at least one member, will enhance monitoring and ensure high financial reporting quality.

In addition, the interaction of the chairman and at least one member in the AC who has accounting expertise may reduce the domination of one member over the others. The AC chairman with accounting expertise, in some cases, may dominate the AC if there is no member with accounting expertise in the AC or vice versa. This is especially so in countries with high ownership concentration, where they attempt to dominate either the AC chairman or AC members. Thus, based on the agency and resource dependence theories and the above discussion, the following hypothesis is presented:

H₃: There is a negative relationship between audit committee' balanced accounting expertise (ACBAE) and EM.

4. Research design

4.1. Sample selection

From the Bursa Malaysia Main Market, 150 listed companies with slight positive earnings were selected for three years, from 2013 to 2015. The selection of this sample depended on the firms' performance [return on assets (ROA)] which was taken from the DataStream. Firms with slight positive earnings were selected (ROA near to zero). All firms with a negative ROA for one or more than one year were excluded. Then the firms' average ROA (the total ROA for 2013, 2014 and 2015 divided by the number of years) was calculated in order to select the firms with slight positive earnings.

TABLE 1. SUMMARY OF STUDY SAMPLE BY INDUSTRIES

| INDUSTRIES | FIRMS | OBSERVATIONS | (%) |
|----------------------|-------|--------------|-----|
| Construction | 14 | 42 | 10 |
| Consumer | 22 | 66 | 15 |
| Industrial products | 39 | 117 | 27 |
| Plantation | 13 | 39 | 9 |
| Properties | 24 | 72 | 17 |
| Trading and Services | 31 | 93 | 22 |
| Total | 143 | 429 | 100 |

Source: Own calculations based on data

The reason for choosing this sample is that annual losses (before being managed) are among the important items which are likely to be viewed by stakeholders of firms. Consequently, managers are likely to be more motivated to avoid reporting annual losses (Campa, 2015; Mohd Saleh et al., 2005; Roychowdhury, 2006). However, seven companies were excluded in the data collected because of the lack of complete data and having no records of up to eight observations. The sample of the firms selected is 143 for the period of three years (2013, 2014 and 2015) with 429 firm-observations as shown in Table 1. The

year 2013 was selected as the base year due to the fact that it is the first financial year following the introduction of the revised MCCG in 2012.

4.2. Variables measurement

The AEM has been predominantly used in previous studies as a major proxy of EM (Enomoto et al., 2015; Phillips, Pincus, & Rego, 2003; Saleh, Iskandar, & Rahmat, 2005), particularly in Malaysia (Chandren, Ahmad, & Ali, 2015a). In addition, Guay, Kothari, & Watts (1996) explained that managers use discretionary accruals (DA) to hide a firm's poor performance or due to temptation to jeopardize smoothness of yearly earnings. They found that the Jones Model (1991) and the MJM by Dechow et al. (1995) estimate DA that have the attributes of accruals resulting from management opportunism. Furthermore, their result is consistent with Dechow, Sloan, & Sweeney (1995), who found that the MJM by Dechow et al. (1995) is the most powerful mechanism for detecting EM. Equally, other scholars have also found that the most common model is the MJM by Dechow et al. (1995) (García-Meca & Sánchez-Ballesta, 2009; Peasnell, Pope, & Young, 2005; Wu, Chen, & Lee, 2016), which has been used in most studies (Kumari & Pattanayak, 2014; Maigoshi, Latif, & Kamardin, 2016; Moradi, Salehi, Bigli, & Najari, 2012).

Therefore, this study used the MJM by Dechow et al. (1995) as the first measurement for EM. In addition, it also used the MJM by Kasznik (1999) as the second measurement, which is the extension of MJM by Dechow et al. (1995). Kasznik (1999) included a change in operating cash flows as a variable that can explain more about the relationship with the total accruals. To determine the DA using MJM by Dechow et al. (1995), the total accruals should be calculated using the following equation:

$$TAC_{it} = EBXI_{it} - CFO_{it} \quad (1)$$

Where $EBXI_{it}$ is the actual earnings before charging extraordinary items, while CFO_{it} is the cash flow from operations. Moreover, the ordinary-least squares (OLS) cross-sectional analysis was run on all the industries and firm years (18 OLS multiple regressions for specific year and industry) to estimate the fitted values (coefficients of α_0 , α_1 , and α_2) using the following model:

$$\frac{TAC_{it}}{TA_{it-1}} = \alpha_0 \left(\frac{1}{TA_{it-1}} \right) + \alpha_1 \left[\frac{(\Delta REV_{it} - \Delta REC_{it})}{TA_{it-1}} \right] + \alpha_2 \left(\frac{PPE_{it}}{TA_{it-1}} \right) + \varepsilon_{it} \quad (2)$$

Where, TA_{it-1} is total assets in the past year, ΔREV_{it} is the revenue in year t less year $t - 1$, ΔREC_{it} is the receivables in year t less year $t - 1$, PPE_{it} is the gross property, plant and equipment in year t and ε_{it} is the error term. Furthermore, the coefficients of

α_0 , α_1 , and α_2 computed in equation (2) can be used in the following equation to calculate the non-discretionary accruals (NDA_{it}) as:

$$NDA_{it} = \alpha_0 \left(\frac{1}{TA_{it-1}} \right) + \alpha_1 \left[\frac{(\Delta REV_{it} - \Delta REC_{it})}{TA_{it-1}} \right] + \alpha_2 \left(\frac{PPE_{it}}{TA_{it-1}} \right) \quad (3)$$

Finally, DA_{it} can be determined by subtracting NDA_{it} from the total accruals. Hence, the following equation can be used to achieve that:

$$DA_{it} = \frac{TAC_{it}}{TA_{it-1}} - NDA_{it} \quad (4)$$

Regarding the second measurement, to determine the DA using the MJM by Kasznik (1999), Kasznik (1999) estimated the following cross-sectional model:

$$\frac{TAC_{it}}{TA_{it-1}} = \alpha_0 + \alpha_1 \left(\frac{1}{TA_{it-1}} \right) + \alpha_2 \left[\frac{(\Delta REV_{it} - \Delta REC_{it})}{TA_{it-1}} \right] + \alpha_3 \left(\frac{PPE_{it}}{TA_{it-1}} \right) + \alpha_4 \left(\frac{\Delta CFO_{it}}{TA_{it-1}} \right) + \varepsilon_{it} \quad (5)$$

Where, ΔCFO_{it} is the variation in cash flows from operations in the year t less year $t - 1$ and the remaining variables are as previously defined. Thus, calculations of NDA_{it} and DA_{it} in this model are the same as used in the MJM by Dechow et al. (1995). Importantly, it shows that DA can either be income-decrease or income-increase. Thus, this study focused on the numbers that have been managed and absolute value of DA, to reflect the EM for each model, regardless of its direction, as used by previous studies (Abdul-Rahman & Ali, 2006; Abdullah & Ku Ismail, 2016; Al-Rassas & Kamardin, 2016; Mohammad et al., 2016).

4.3. Regression models

Panel data regression analysis was run to investigate the influence of ACDAE, ACCAE and ACBAE, on the absolute value of DA by using two proxies, i.e., MJM by Dechow et al. (1995) (hereafter referred to as ABSDA1) and Kasznik (1999) (thereafter referred to as ABSDA2). Following prior research, this study included control variables that may affect the likelihood of EM. First, control variables related to board mechanisms, i.e., independent directors (BIND), size (BSIZE) and meeting (BMEET). Second, control variables related to AC mechanisms, i.e., independent directors (ACIND), size (ACSIZE) and meeting (ACMEET). Third, control variables related to others CG mechanisms, i.e., ownership concentration (OWNC) and audit quality (BIG4). Fourth, control variables

related to firm-specific characteristics, i.e., FSIZE, LEV and ROA. More details of these variables are provided in Table 2.

TABLE 2. SUMMARY OF THE OPERATIONALIZATION OF THE VARIABLES

| ACRONYM | MEASUREMENT AND RESOURCE |
|---------|---|
| ABSDA1 | Absolute value of DA_{it} using the MJM by Dechow et al. (1995) (Arun, Almahrog, & Aribi, 2015; Bukit & Iskandar, 2009; Hashim & Devi, 2008; Iqbal & Strong, 2010; Mansor et al., 2013; Mohammad et al., 2016; Salleh & Haat, 2013) |
| ABSDA2 | Absolute value of DA_{it} using the MJM by Kasznik (1999) (Al-Rassas, 2015; Siregar & Utama, 2008; Wan Ismail et al., 2013). |
| ACDAE | Proportion of AC member with accounting expertise (Abernathy et al., 2013; Saleh et al., 2007; Sun et al., 2014) |
| ACCAE | "1 if AC chairman qualifies as an accounting expertise, and 0 otherwise" (Abernathy et al., 2014; Azni Suhaily, 2010) |
| ACBAE | "1 if AC chairman and at least one member of AC qualifies as an accounting expertise, and 0 otherwise" |
| BIND | Proportion of independent directors (Abdul-Rahman & Ali, 2006; Abdullah & Nasir, 2004; Iqbal & Strong, 2010; Mohammad et al., 2016; Prencipe & Bar-Yosef, 2011; Xie et al., 2003) |
| BSIZE | Total number of board members (Abdullah & Ku Ismail, 2012, 2016; Badolato, Donelson, & Ege, 2014; Chandren et al., 2015a; Mohammad et al., 2016). |
| BMEET | Total number of board meeting per year (Adiguzel, 2013; Chandren et al., 2015a; Mohammad et al., 2016; Xie et al., 2003). |
| ACIND | Proportion of independent directors in AC (independent AC directors to total number of AC) (Abdul-Rahman & Ali, 2006; Bukit & Iskandar, 2009; Haji-Abdullah & Wan-Hussin, 2015; Klein, 2002; Xie et al., 2003). |
| ACSIZE | Number of AC members (Abdullah & Ku Ismail, 2016; Adiguzel, 2013; Badolato et al., 2014). |
| ACMEET | Number of AC meeting per year (Abdul-Rahman & Ali, 2006; Ishak et al., 2011; Mansor et al., 2013; Salleh et al., 2012; Soliman & Ragab, 2014; Xie et al., 2003) |
| OWNC | Proportion of shares held by the 5 largest shareholders (Al-Rassas & Kamardin, 2016) |
| BIG4 | "1 if firm audited by Big4, 0 otherwise" (Mohammad, Wasiuzzaman, & Salleh, 2016; (Abdullah & Ku Ismail, 2016; Al-Rassas & Kamardin, 2016; Ishak et al., 2011). |
| FSIZE | Total assets (Abdul-Rahman & Ali, 2006; Abdullah & Ku Ismail, 2012, 2016; Mohammad et al., 2016) Abdullah & Ku Ismail (2016) |
| LEV | Total debt to total assets (Abdul-Rahman & Ali, 2006; Abdullah & Ku Ismail, 2016; Badolato et al., 2014) |
| ROA | Net income/total assets (Abdul-Rahman & Ali, 2006; Abdullah & Ku Ismail, 2016) |

Thus, to investigate the influence of ACDAE, ACCAE and ACBAE on ABSDA, the following regressions were used respectively.

$$\begin{aligned}
 ABSDA = & \beta_0 + \beta_1 ACDAE + \beta_2 BIND + \beta_3 BSIZE \\
 & + \beta_4 BMEET + \beta_5 ACIND + \beta_6 ACSIZE \\
 & + \beta_7 ACMEET + \beta_8 OWNC + \beta_9 BIG4 \\
 & + \beta_{10} FSIZE + \beta_{11} LEV + \beta_{12} ROA + \varepsilon
 \end{aligned} \tag{6}$$

$$\begin{aligned}
 ABSDA = & \beta_0 + \beta_1 ACCAE + \beta_2 BIND + \beta_3 BSIZE \\
 & + \beta_4 BMEET + \beta_5 ACIND + \beta_6 ACSIZE \\
 & + \beta_7 ACMEET + \beta_8 OWNC + \beta_9 BIG4 \\
 & + \beta_{10} FSIZE + \beta_{11} LEV + \beta_{12} ROA + \varepsilon
 \end{aligned} \tag{7}$$

$$\begin{aligned}
 ABSDA = & \beta_0 + \beta_1 ACBAE + \beta_3 BIND + \beta_4 BSIZE \\
 & + \beta_5 BMEET + \beta_6 ACIND + \beta_7 ACSIZE \\
 & + \beta_8 ACMEET + \beta_9 OWNC + \beta_{10} BIG4 \\
 & + \beta_{11} FSIZE + \beta_{12} LEV + \beta_{13} ROA + \varepsilon
 \end{aligned} \tag{8}$$

5. Results and discussion

Table 3 shows that the mean values of the ABSDA1 and ABSDA2 are slightly similar at 0.045 and 0.034, respectively. By comparing the ABSDA1 with other findings, it is lower than Hashim & Devi (2008), where it is 0.152. However, it is slightly similar to Al-Rassas & Kamardin (2016), where it is 0.056. Regarding the other models used in previous studies, the mean value of ABSDA1 in this study is lower than ABSDA by using the Jones Model by Buniamin et al. (2012), where it is 0.099, ABSDA by using Kothari et al. (2005) by Salleh, Hashim, & Mohamad (2012), where it is 0.060 and ABSDA by using Kothari et al. (2005) by Abdullah & Ku Ismail (2016), where it is 0.065. However, the mean value of ABSDA1 in this study is similar to other models used by other studies, such as Abdul-Rahman & Ali (2006), where it is 0.047. For the descriptive result of the ABSDA2 in this study, it is lower than the result of Al-Rassas (2015) where it is 0.056 and Wan Ismail, Kamarudin, Zijl, & Dunstan (2013) where it is 0.618.

TABLE 3. DESCRIPTIVE STATISTICS OF THE CONTINUOUS VARIABLES (N=429)

| VARIABLE | MEAN | SD | MIN | MAX | SKEWNESS | KURTOSIS |
|-------------|--------|--------|-------|--------|----------|----------|
| ABSDA1 | 0.045 | 0.042 | 0.000 | 0.197 | 1.429 | 4.945 |
| ABSDA2 | 0.034 | 0.032 | 0.001 | 0.158 | 1.690 | 6.198 |
| ACDAE | 0.430 | 0.195 | 0.000 | 1.000 | 1.164 | 4.174 |
| BIND | 0.480 | 0.127 | 0.286 | 0.833 | 0.671 | 2.987 |
| BFSIZE | 7.233 | 1.792 | 4.000 | 13.000 | 0.701 | 3.495 |
| BMEET | 5.699 | 2.314 | 3.000 | 16.000 | 2.607 | 10.487 |
| ACIND | 0.909 | 0.140 | 0.667 | 1.000 | -0.953 | 2.012 |
| ACSIZE | 3.256 | 0.533 | 3.000 | 6.000 | 2.451 | 10.323 |
| ACMEET | 5.103 | 1.135 | 4.000 | 10.000 | 2.034 | 8.445 |
| OWNC | 0.551 | 0.164 | 0.204 | 0.869 | -0.082 | 2.163 |
| FSIZE (log) | 13.475 | 1.611 | 8.321 | 18.305 | 0.537 | 3.615 |
| ROA (%) | 2.913 | 1.586 | 0.100 | 6.790 | 0.330 | 2.409 |
| LEV (%) | 22.930 | 15.783 | 0.000 | 57.740 | 0.176 | 2.051 |

Source: Own calculations based on data.

Table 3 shows that the mean of ACDAE is 0.430. With regards to the continuous control variables in this table, board mechanisms, i.e., BIND, BFSIZE, BMEET, are 0.480, 7.233 and 5.699, respectively; the AC mechanisms, i.e., ACIND, ACSIZE, ACMEET are 0.909, 3.256 and 5.103, respectively, and other CG mechanism, i.e., OWNC is 0.551. In addition, the mean of the control variables related to firm-specific characteristics, FSIZE (log), LEV and ROA are 13.475, 22.930% and 2.913%, respectively.

Table 4 shows that 263 (61.31%) firm-observations appointed the chairman who has an accounting background and expertise. In addition, 126 (29.37%) firm-observations have balanced accounting expertise, where the AC chairman and at least one member have an accounting background and expertise. The remaining dummy control variable presented in

this Table is BIG4 where it is found that 222 (51.75%) firm-observations were audited by one of the four biggest accounting firms in Malaysia (Ernst & Young, Pricewaterhouse Coopers, Deloitte and KPMG).

TABLE 4. DESCRIPTIVE STATISTICS OF THE DUMMY VARIABLES (N=429)

| VARIABLES | Yes (1) | | No | |
|-----------|---------|---------|-------|---------|
| | FREQ. | PERCENT | FREQ. | PERCENT |
| ACCAE | 263 | 61.31 | 166 | 38.69 |
| ACBAE | 126 | 29.37 | 303 | 70.63 |
| BIG4 | 222 | 51.75 | 207 | 48.25 |

Source: Own calculations based on data.

In line with previous studies, such as Al-Rassas & Kamardin (2016) and Baatwah, Salleh, & Ahmad (2015), this study carried out Winsorized extreme observations to reduce the extreme values of data by setting the values in the bottom and top 1%. Furthermore, Skewness and Kurtosis, as descriptive numerical methods, were used to test the normality of the individual variables. Table 3 shows that the dataset of individual variables has not seriously violated the normality assumption, where in general, the Skewness is not higher than the threshold of ± 3 and Kurtosis is not much higher than the threshold of ± 10 (Kline, 2015). Moreover, Pearson correlation and Variance Inflation Factor (VIF) were used to check the degree of collinearity or multicollinearity among the variables. Table 5 shows that there is no correlation among variables, except for ACBAE and ACDAE. Thus, the researchers separately examined the influence of each ACDAE, ACCAE and ACBAE on ABSDA1 as well as on ABSDA2. Regarding the multicollinearity issue, Table 6 shows that there is no multicollinearity issue.

Before running the Linear Random effects regression, the study used the "Hausman test" to decide between random or fixed effects regression, where it shows that random effects regression is preferred for all Models. Thus, the researchers ran random effect regressions with the robust function for all Models of ABSDA1 to solve the problem of heteroscedasticity and with cluster function for all Models of ABSDA2 to solve the problems of heteroscedasticity and autocorrelation.

Table 7 shows the result of ABSDA1. There is evidence of a positive relationship between ACDAE, ACCAE and ACBAE and ABSDA1 ($t=2.040$, $p<0.041$), ($t=2.510$, $p<0.012$) and ($t=2.290$, $p<0.022$), respectively, all at 5%. Similarly, results of ABSDA2 in Table 8 show that ACDAE, ACCAE and ACBAE are positively associated with ABSDA2 at 10% ($t=1.850$, $p<0.064$), 1% ($t=2.640$, $p<0.008$) and 5% ($t=2.450$, $p<0.014$), respectively. The significantly positive effect of ACDAE on ABSDA1 and ABSDA2, is consistent with Mohammad et al. (2016). However, it is inconsistent with other studies that have found an insignificant relationship (Abdul-Rahman & Ali, 2006; Ishak et al., 2011; Mansor et al., 2013; Saleh et al., 2007). Similarly, the significantly positive influence of ACCAE on ABSDA1 and ABSDA2 is consistent with Al-Rassas & Kamardin (2015), who found a significantly positive relationship between AC chairman who is a senior or former audit partner and ABSDA by using the MJM by Dechow et al. (1995). However, it is inconsistent with Al-Rassas & Kamardin (2015) where they did not find a relationship by using the extended MJM by Yoon et al. (2006). It also is inconsistent with Azni Suhaily

(2010) who did not find a significant relationship between the AC chairman with either financial expertise or who is a former senior auditor and ABSDA using the MJM by Dechow et al. (1995).

TABLE 5. PEARSON CORRELATION ANALYSIS

PART 1 OF THE TABLE

| | ABSDA1 | ABSDA2 | ACDAE | ACCAE | ACBAE | BIND | BSIZE | BMEET |
|--------|----------|----------|----------|-----------|---------|-----------|----------|-----------|
| ABSDA1 | 1 | | | | | | | |
| ABSDA2 | 0.652*** | 1 | | | | | | |
| ACDAE | 0.128*** | 0.124** | 1 | | | | | |
| ACCAE | 0.140*** | 0.171 | 0.432*** | 1 | | | | |
| ACBAE | 0.139*** | 0.126*** | 0.843*** | 0.512*** | 1 | | | |
| BIND | 0.025 | -0.019 | 0.001 | 0.059 | 0.081* | 1 | | |
| BSIZE | -0.009 | 0.009 | 0.044 | -0.135*** | 0.062 | -0.432*** | 1 | |
| BMEET | 0.045 | 0.068 | 0.107** | 0.042 | 0.044 | -0.011 | 0.149*** | 1 |
| ACIND | 0.095** | 0.072 | 0.067 | 0.041 | 0.052 | 0.385*** | 0.104** | -0.203*** |
| ACSIZE | -0.003 | -0.036 | -0.036 | -0.085* | 0.103** | 0.148*** | 0.324*** | 0.337*** |
| ACMEET | -0.004 | -0.042 | 0.124** | -0.025 | 0.050 | -0.023 | 0.132*** | 0.612*** |
| OWNC | 0.007 | 0.021 | 0.031 | -0.007 | 0.027 | -0.147*** | 0.071 | 0.128*** |
| BIG4 | -0.053 | -0.050 | 0.116** | 0.181*** | 0.080* | 0.032 | 0.061 | 0.169*** |
| FSISE | -0.116** | -0.080* | 0.059 | -0.002 | 0.036 | -0.123** | 0.363*** | 0.286*** |
| ROA | 0.014 | 0.026 | 0.029 | 0.013 | 0.016 | -0.091* | 0.104** | 0.016 |
| LEV | 0.091* | 0.137*** | 0.079 | 0.009 | -0.032 | -0.215*** | 0.205*** | 0.019 |

PART 2 OF THE TABLE

| | ACIND | ACSIZE | ACMEET | OWNC | BIG4 | FSISE | ROA | LEV |
|--------|-----------|----------|----------|---------|----------|----------|-------|-----|
| ABSDA1 | | | | | | | | |
| ABSDA2 | | | | | | | | |
| ACDAE | | | | | | | | |
| ACCAE | | | | | | | | |
| ACBAE | | | | | | | | |
| BIND | | | | | | | | |
| BSIZE | | | | | | | | |
| BMEET | | | | | | | | |
| ACIND | 1 | | | | | | | |
| ACSIZE | -0.125** | 1 | | | | | | |
| ACMEET | -0.107* | 0.192*** | 1 | | | | | |
| OWNC | -0.060 | 0.091* | 0.129*** | 1 | | | | |
| BIG4 | -0.079 | 0.150*** | 0.071 | 0.057 | 1 | | | |
| FSISE | -0.160*** | 0.240*** | 0.230*** | 0.021** | 0.422*** | 1 | | |
| ROA | -0.065 | 0.035 | -0.008 | 0.054 | 0.011 | 0.111** | 1 | |
| LEV | 0.046 | -0.019 | 0.012 | -0.028 | 0.065 | 0.351*** | 0.023 | 1 |

Notes: 1. ABSDA1 is absolute value of DA using MJM by Dechow et al. (1995). 2. ABSDA2 is absolute value of DA using MJM by Kasznik (1999). 3. ACDAE is % of AC member with accounting expertise. 4. ACCAE is AC chair with accounting expertise. 5. ACBAE is "1 if AC chairman and at least one member of AC qualifies as an accounting expertise, and 0 otherwise." 6. BIND is % of board independent. 7. BSIZE is No. of board size. 8. BMEET is No. of board meeting. 9. ACIND is % of AC independence. 10. ACSIZE is Nc of AC size. 11. ACMEET is No. of AC meeting. 12. OWNC is % of shares held by the 5 largest shareholders. 13. BIG4 is "1 if firm audited by Big4, 0 otherwise." 14. FSISE is total assets. 15. ROA is return on assets. 16. LEV is total debt to total assets.

TABLE 6. VARIANCE INFLATION FACTOR (VIF)

| VARIABLE | VIF | 1/VIF |
|----------|------|-------|
| ACDAE | 4.49 | 0.223 |
| ACCAE | 1.53 | 0.655 |
| ACBAE | 4.59 | 0.218 |
| BIND | 2.32 | 0.430 |
| BSIZE | 2.30 | 0.434 |
| BMEET | 1.89 | 0.529 |
| ACIND | 1.77 | 0.564 |
| ACSIZE | 1.75 | 0.572 |
| ACMEET | 1.67 | 0.598 |
| OWNC | 1.07 | 0.935 |
| BIG4 | 1.34 | 0.748 |
| FSIZE | 1.78 | 0.560 |
| ROA | 1.03 | 0.969 |
| LEV | 1.30 | 0.772 |
| Mean VIF | 2.06 | |

TABLE 7. RANDOM EFFECT REGRESSION USING MJM BY DECHOW (ABSDA1)

| | Model 1 | | | Model 2 | | | Model 3 | | |
|-----------|---------|--------|----------|---------|--------|----------|---------|--------|----------|
| | Coef. | Coef. | Coef. | Coef. | z | P>z | Coef. | z | P>z |
| ACDAE | 0.025 | 2.040 | 0.041** | | | | | | |
| ACCAE | | | | 0.012 | 2.510 | 0.012** | | | |
| ACBAE | | | | | | | 0.013 | 2.290 | 0.022** |
| BIND | -0.002 | -0.090 | 0.929 | 0.000 | 0.000 | 0.999 | -0.006 | -0.220 | 0.827 |
| BSIZE | -0.000 | -0.210 | 0.830 | 0.000 | 0.110 | 0.912 | -0.001 | -0.300 | 0.761 |
| BMEET | 0.002 | 1.040 | 0.297 | 0.002 | 0.990 | 0.320 | 0.002 | 1.180 | 0.238 |
| ACIND | 0.021 | 1.040 | 0.299 | 0.020 | 1.000 | 0.318 | 0.023 | 1.140 | 0.253 |
| ACSIZE | 0.003 | 0.700 | 0.483 | 0.003 | 0.660 | 0.511 | 0.002 | 0.380 | 0.706 |
| ACMEET | -0.001 | -0.260 | 0.797 | -0.000 | -0.080 | 0.940 | -0.000 | -0.190 | 0.847 |
| OWNC | -0.000 | -0.000 | 0.998 | 0.001 | 0.050 | 0.964 | -0.000 | -0.020 | 0.987 |
| BIG4 | -0.001 | -0.140 | 0.888 | -0.002 | -0.350 | 0.727 | -0.000 | -0.070 | 0.941 |
| FSIZE | -0.005 | -2.610 | 0.009*** | -0.005 | -2.620 | 0.009*** | -0.005 | -2.690 | 0.007*** |
| ROA | 0.000 | 0.280 | 0.781 | 0.000 | 0.280 | 0.778 | 0.000 | 0.320 | 0.750 |
| LEV | 0.000 | 2.150 | 0.032** | 0.000 | 2.170 | 0.030** | 0.000 | 2.300 | 0.021** |
| cons | 0.060 | 2.000 | 0.046 | 0.058 | 1.850 | 0.064 | 0.071 | 2.370 | 0.018 |
| N | | | 429 | | | 429 | | | 429 |
| F-value | | | 18.41 | | | 19.93 | | | 18.75 |
| Sig | | | 0.104 | | | 0.068 | | | 0.095 |
| R-squared | | | 0.063 | | | 0.068 | | | 0.070 |

TABLE 8. RANDOM EFFECT REGRESSION USING MJM BY KASZNIK (ABSDA2)

| | Model 1 | | | Model 2 | | | Model 3 | | |
|-----------|---------|--------|----------|---------|--------|----------|---------|--------|----------|
| | Coef. | z | P>z | Coef. | z | P>z | Coef. | z | P>z |
| ACDAE | 0.018 | 1.850 | 0.064* | | | | | | |
| ACCAE | | | | 0.010 | 2.640 | 0.008*** | | | |
| ACBAE | | | | | | | 0.010 | 2.450 | 0.014** |
| BIND | -0.009 | -0.450 | 0.655 | -0.007 | -0.350 | 0.723 | -0.012 | -0.560 | 0.575 |
| BSIZE | -0.000 | -0.320 | 0.752 | 0.000 | 0.040 | 0.968 | -0.001 | -0.390 | 0.694 |
| BMEET | 0.002 | 1.790 | 0.073* | 0.002 | 1.800 | 0.072* | 0.002 | 1.960 | 0.050** |
| ACIND | 0.014 | 0.850 | 0.396 | 0.013 | 0.800 | 0.422 | 0.015 | 0.930 | 0.350 |
| ACSIZE | -0.001 | -0.220 | 0.827 | -0.001 | -0.240 | 0.814 | -0.002 | -0.460 | 0.645 |
| ACMEET | -0.002 | -1.270 | 0.203 | -0.002 | -1.140 | 0.254 | -0.002 | -1.210 | 0.225 |
| OWNC | 0.000 | 0.040 | 0.965 | 0.001 | 0.090 | 0.926 | 0.000 | 0.040 | 0.972 |
| BIG4 | -0.001 | -0.260 | 0.796 | -0.002 | -0.540 | 0.587 | -0.001 | -0.220 | 0.828 |
| FSIZE | -0.003 | -1.900 | 0.057* | -0.003 | -1.910 | 0.056* | -0.003 | -1.940 | 0.053* |
| ROA | 0.001 | 0.630 | 0.531 | 0.001 | 0.610 | 0.539 | 0.001 | 0.660 | 0.512 |
| LEV | 0.000 | 2.820 | 0.005*** | 0.000 | 2.900 | 0.004*** | 0.000 | 3.010 | 0.003*** |
| _cons | 0.056 | 2.230 | 0.026 | 0.052 | 2.100 | 0.036 | 0.063 | 2.550 | 0.011 |
| N | | | 429 | | | 429 | | | 429 |
| F-value | | | 20.70 | | | 24.74 | | | 23.50 |
| Sig | | | 0.055 | | | 0.016 | | | 0.024 |
| R-squared | | | 0.073 | | | 0.088 | | | 0.080 |

This study provides evidence that the three proxies of accounting expertise in the AC are inconsistent with the agency and resource dependence theories. It is in line with the argument of Mohammad et al. (2016) that the Malaysian perspective contradicts the proposition of the agency theory. From the perspective of the agency theory, directors with accounting experience effectively monitor management. However, the results reveal that ACDAE, ACCAE and ACBAE are significantly related to high EM. Therefore, the result supports the theory of managerial hegemony, where it describes the directors as an ineffective mechanism due to the lack of independence of outside directors from the management (Kosnik, 1987). Moreover, they may focus more on securing their board seat and benefits instead of monitoring management behavior (Kosnik, 1987), especially, in firms with slightly positive earnings, such as the sample selected in the current study. This is because the directors may have two choices, either losing their job by correcting managers' behavior or going along with them to secure their board seat (Eisenberg, 1975). This is true especially in developing countries where the insider directors in some cases are family members influencing the selection and role of the AC and its chairman. According to Kosnik (1987), outside directors who are selected due to their relationship to insider directors are more likely to support the insider directors' decisions. Indeed, there is a need for regulators to revise the criteria for selecting the independent directors (Mohammad et al., 2016), as the AC's effectiveness is significantly reduced due to the loyalty of the committee members to the family members who appoint them on corporate boards (Jaggi & Leung, 2007). Thus, it seems that qualification, in some cases, increases the opportunity to engage in EM (Mohammad et al., 2016).

Furthermore, the positively significant relationship between ACDAE, ACCAE and ACBAE with ABSDA1 or ABSDA2 found in this study may be due to the low number of AC members who possess accounting expertise in Malaysia (Ishak et al., 2011), where most of them are appointed in more than one company. Consequently, AC members with

financial expertise in Malaysia are busier than the non-financial experts, while the chairman of the AC is expectedly busier than other AC members (Jaafar, Wan-Hussin, & Bamahros, 2016). This is true especially in countries with high family ownership, and the CEO is involved in the selection process of directors. Thus, directors who are busier are more likely to be appointed by the CEOs (Shivdasani & Yermack, 1999). Thus, busy directors with financial expertise may have insufficient time and energy to effectively monitor the management (Elyasiani & Zhang, 2015).

Regarding control variables presented in Tables 7 and 8, the insignificant effect of BIND on ABSDA1 and ABSDA2 is in line with prior studies (Abdul-Rahman & Ali, 2006; Abdullah & Nasir, 2004; Buniamin et al., 2012; Hashim & Devi, 2008; Ishak et al., 2011; Mohammad et al., 2016; Saleh et al., 2005). Similarly, the insignificant influence of BSIZE on ABSDA1 and ABSDA2 also concurs with the findings of Abdullah & Ku Ismail (2016), Buniamin et al. (2012), Hashim & Devi (2008), Mansor et al. (2013), Saleh et al. (2005) and Salleh & Haat (2013). For the BMEET, the variable has a positively insignificant relationship with ABSDA1, which is in tandem with Hashim & Devi (2008). However, BMEET has a positively significant relationship with ABSDA2 at the 10% level, which is in line with Mansor et al. (2013).

Concerning the AC control variables, the ACIND's insignificant result found in this study is supported by the various studies carried out in Malaysia (Abdul-Rahman & Ali, 2006; Abdullah & Nasir, 2004; Chandrasegaram et al., 2013; Mohammad et al., 2016). ACSIZE has an insignificant relationship with ABSDA1 and ABSDA2, which is in line with the majority of studies in Malaysia (Abdullah & Ku Ismail, 2016; Chandrasegaram et al., 2013; Saleh et al., 2007; Salleh & Haat, 2013; Salleh et al., 2012). Similarly, there is no significant relationship between ACMEET and ABSDA1 or ABSDA2, which is in line with the majority of studies in Malaysia (Abdul-Rahman & Ali, 2006; Chandrasegaram et al., 2013; Mansor et al., 2013; Saleh et al., 2007). Regarding the other CG control mechanisms, this study did not find a significant relationship between either OWNC or BIG4 with ABSDA1 or ABSDA2, which is in line with the previous studies in Malaysia (Abdul-Rahman & Ali, 2006; Mohammad et al., 2016).

Regarding the firm-specific characteristics, FSIZE has a significantly negative relationship with ABSDA1 and ABSDA2. This result is in line with Abdul-Rahman & Ali (2006), Mansor et al. (2013), Saleh et al. (2005), Saleh et al. (2007) and Salleh et al. (2012). It may be because large firms are seriously reviewed by the external capital markets and analysts compared to small firms (Park & Shin, 2004). It is also found that LEV is positively and significantly related to ABSDA1 and ABSDA2. This positively significant result is consistent with previous studies (Al-Rassas & Kamardin, 2016; Saleh et al., 2005, 2007; Salleh & Haat, 2013; Salleh et al., 2012). This is because companies that face financial difficulties attempt to report higher returns in order to hide their financial constraints (Campa, 2015; Park & Shin, 2004). However, this study did not find a significant relationship between ROA and ABSDA1 or ABSDA2, which is in line with Abdul-Rahman & Ali (2006).

6. Robustness test

To test the robustness of the results, further analysis was conducted by using the OLS for the same regression Models. Table 9 shows the results of ABSDA1 and Table 10 shows the results of ABSDA2. The results seem to be similar to earlier findings (Tables 7 and 8).

TABLE 9. MULTIPLE REGRESSION RESULTS (OLS) USING MJM BY DECHOW (ABSDA1)

| | Model 1 | | | Model 2 | | | Model 3 | | |
|-----------|---------|--------|----------|---------|--------|----------|---------|--------|----------|
| | Coef. | Coef. | Coef. | Coef. | z | P>z | Coef. | z | P>z |
| ACDAE | 0.025 | 2.390 | 0.017** | | | | | | |
| ACCAE | | | | 0.012 | 3.020 | 0.003*** | | | |
| ACBAE | | | | | | | 0.013 | 2.710 | 0.007*** |
| BIND | 0.000 | 0.010 | 0.995 | 0.003 | 0.110 | 0.916 | -0.004 | -0.150 | 0.881 |
| BSIZE | 0.000 | -0.100 | 0.921 | 0.000 | 0.250 | 0.799 | 0.000 | -0.210 | 0.832 |
| BMEET | 0.002 | 1.750 | 0.081* | 0.002 | 1.610 | 0.108 | 0.002 | 1.920 | 0.056* |
| ACIND | 0.022 | 1.230 | 0.220 | 0.021 | 1.170 | 0.243 | 0.024 | 1.330 | 0.185 |
| ACSIZE | 0.002 | 0.570 | 0.568 | 0.002 | 0.540 | 0.593 | 0.001 | 0.220 | 0.826 |
| ACMEET | -0.002 | -0.780 | 0.436 | -0.001 | -0.440 | 0.657 | -0.001 | -0.680 | 0.494 |
| OWNC | 0.001 | 0.080 | 0.938 | 0.002 | 0.150 | 0.883 | 0.001 | 0.050 | 0.963 |
| BIG4 | -0.001 | -0.230 | 0.819 | -0.002 | -0.480 | 0.635 | -0.001 | -0.150 | 0.879 |
| FSIZE | -0.005 | -3.190 | 0.002*** | -0.005 | -3.180 | 0.002*** | -0.005 | -3.260 | 0.001*** |
| ROA | 0.001 | 0.570 | 0.566 | 0.001 | 0.570 | 0.567 | 0.001 | 0.610 | 0.541 |
| LEV | 0.000 | 2.720 | 0.007*** | 0.000 | 2.770 | 0.006*** | 0.000 | 2.920 | 0.004*** |
| _cons | 0.058 | 2.230 | 0.027 | 0.055 | 2.030 | 0.043 | 0.070 | 2.660 | 0.008 |
| N | | | 429 | | | 429 | | | 429 |
| F-value | | | 2.19 | | | 2.34 | | | 2.21 |
| Sig | | | 0.011 | | | 0.007 | | | 0.011 |
| R-squared | | | 0.064 | | | 0.069 | | | 0.071 |

TABLE 10. MULTIPLE REGRESSION RESULTS (OLS) USING MJM BY KASZNIK (ABSDA2)

| | Model 1 | | | Model 2 | | | Model 3 | | |
|-----------|---------|--------|----------|---------|--------|----------|---------|--------|----------|
| | Coef. | Coef. | Coef. | Coef. | z | P>z | Coef. | z | P>z |
| ACDAE | 0.018 | 2.290 | 0.022** | | | | | | |
| ACCAE | | | | 0.011 | 3.440 | 0.001*** | | | |
| ACBAE | | | | | | | 0.010 | 2.910 | 0.004*** |
| BIND | -0.003 | -0.150 | 0.878 | -0.001 | -0.030 | 0.973 | -0.006 | -0.320 | 0.750 |
| BSIZE | 0.000 | 0.090 | 0.928 | 0.001 | 0.520 | 0.602 | 0.000 | -0.020 | 0.982 |
| BMEET | 0.003 | 3.150 | 0.002*** | 0.003 | 2.990 | 0.003*** | 0.003 | 3.330 | 0.001*** |
| ACIND | 0.014 | 0.960 | 0.339 | 0.012 | 0.850 | 0.398 | 0.015 | 1.050 | 0.293 |
| ACSIZE | -0.002 | -0.420 | 0.675 | -0.001 | -0.410 | 0.680 | -0.003 | -0.720 | 0.474 |
| ACMEET | -0.004 | -2.240 | 0.025** | -0.003 | -1.910 | 0.056* | -0.004 | -2.170 | 0.031** |
| OWNC | 0.004 | 0.440 | 0.663 | 0.005 | 0.510 | 0.610 | 0.004 | 0.410 | 0.684 |
| BIG4 | -0.002 | -0.480 | 0.631 | -0.003 | -0.870 | 0.386 | -0.001 | -0.410 | 0.679 |
| FSIZE | -0.003 | -2.490 | 0.013** | -0.003 | -2.480 | 0.013** | -0.003 | -2.530 | 0.012** |
| ROA | 0.001 | 0.710 | 0.480 | 0.001 | 0.680 | 0.497 | 0.001 | 0.750 | 0.456 |
| LEV | 0.000 | 3.330 | 0.001*** | 0.000 | 3.450 | 0.001*** | 0.000 | 3.580 | 0.000*** |
| _cons | 0.053 | 2.490 | 0.013 | 0.048 | 2.270 | 0.024 | 0.061 | 2.890 | 0.004 |
| N | | | 429 | | | 429 | | | 429 |
| F-value | | | 2.93 | | | 3.51 | | | 3.21 |
| Sig | | | 0.001 | | | 0.000 | | | 0.000 |
| R-squared | | | 0.078 | | | 0.092 | | | 0.085 |

There is evidence of a positive relationship between ACDAE, ACCAE and ACBAE with ABSDA1 and ABSDA2 for all Models. Regarding control variables presented in Table 9, the results are found to be similar with results in Table 7, except the BMEET for the second and third Models, where it is found to be significantly related to ABSDA1. Regarding control variables presented in Table 10, the variables have the same results as presented in Table 8, except ACMEET, where it is found to be negatively related to ABSDA2.

7. Conclusions

The purpose of this study is to investigate the influence of accounting expertise in the AC by using three proxies: ACDAE, ACCAE and ACBAE, on the level of AEM by two proxies, the MJMs by Dechow et al. (1995) and Kasznik (1999). The results of this study reveal that ACDAE, ACCAE and ACBAE have a significantly positive relationship with the level of AEM. It seems to be that CG mechanisms in Malaysia need to be more effective to reduce the extent of AEM. According to Abdullah, Ku Ismail, & Nachum (2016); Mohammad et al. (2016), Malaysian firms' compliance to the CG code is not meant for effective monitoring; rather, it is for the purpose of fulfilling the compliance requirement.

Therefore, the findings of this study would be useful to potential investors, shareholders, policy-makers as well as other stockholders, in improving the role of CG mechanisms, particularly in countries with a high concentration of ownership. Lastly, the low number of firm-observations in this study is one of the limitations. It is suggested that future studies look into the other mechanisms of AC which really influence the effectiveness of the AC. In addition, it would be worthwhile for future studies to focus on REM proxies, because it has been shown that Malaysian companies are engaging in both - AEM and REM, especially after the adoption of the International financial reporting standards. In this regard, Wan Ismail et al. (2013) found that the absolute abnormal accruals value is significantly lower following IFRSs adoption.

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