Corporate Governance

Board and audit committee effectiveness, ethnic diversification and earnings management: a study of the Malaysian manufacturing sector

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Abstract

Purpose – *This purpose of this paper is to examine the implications of the Revised Malaysian Code on Corporate Governance (2007) toward the effectiveness of the board and audit committees in Malaysian manufacturing companies. Since the manufacturing firms are dominantly held by Chinese firms, this paper is extended to incorporate the implication of ethnicity on board and audit committees' effectiveness.*

Design/methodology/approach – *Using a sample of 201 firms from fiscal year 2004-2009, the data set consists of a total of 1,206 firm-year observations. Analysis is carried out using correlation analysis, multiple and logistic regression analyses.*

Findings – *The findings reveal that board and audit committees' effectiveness is positively associated with earnings management pre- and post-Revised Malaysian Code on Corporate Governance (2007). A higher number of ethnic members in the board are also positively associated with earnings management.*

Research limitations/implications – *This study is limited to some industries in the manufacturing sector due to the special characteristics of this sector and covers mostly large firms. The results may not therefore be applicable to small firms. Finally, the study does not consider possible interaction between the board and audit characteristics which may be significant in influencing earnings management.*

Practical implications – *The findings show that the corporate governance mechanism in Malaysian firms is currently inadequate in preventing earnings management and extra effort is needed to improve board governance.*

Originality/value – *This paper contributes to the current literature on the issues of corporate governance effectiveness and board ethnicity in the current economic and political structure in Malaysia.*

Keywords *Ethnicity, Audit committees, Earnings management, Board characteristics*

Paper type *Research paper*

Introduction

The Malaysian Code of Corporate Governance (MCCG), first proposed in year 2000, was greatly needed to rebuild investor confidence after the 1997 Asian Financial Crisis. Since then, it has been revised in year 2007 as the Revised Malaysian Code of Corporate Governance (RMCCG (2007)) with the aim to continuously improve the corporate governance laws and regulations in Malaysia. The revised code emphasizes on the roles of independent directors both on the board as well as in audit committees to ensure transparency and good practice of corporate governance.

However, despite the progressive growth in corporate governance regulations, the corporate environment in Malaysia, which is fundamentally different from that of other developed countries due to the heavy influence of politics, impedes the full impact of the corporate governance regulations. The National Economic Policy (NEP) which was aimed

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at improving the ethnic Malay community's position in the economy, led to government reformative actions to improve ethnic Malay participation in the economy to rectify economic imbalances between different ethnic communities in Malaysia. One of the effects of the reformative actions is the appointment of ethnic Malays as independent directors on the boards of companies. Ethnic Malays were included as affiliates in Chinese-dominated firms leading to the existence of "Ali Baba Companies" and possible rent-seeking behavior. The concept of "Ali Baba" is the alliance between less qualified ethnic Malays who enjoy access to contracts and tenders with financially strong non-ethnic Malay companies. The ethnic Malays will enjoy a certain amount of benefits without doing the actual work and some suggest that Chinese capitalists have to succumb to this rent-seeking practice to get access to some of the projects (Yoshihara, 1988; Wan Jan, 2011).

Diversification on the board with diverse ethnic minorities will improve firm value (Carter *et al.*, 2003). Technical skills and expertise that the ethnic minorities have helps improve firms' competitiveness in the market. However, in Malaysia, there are several challenges facing ethnic diversification on the board. For instance, in response to the government's affirmative action in support of ethnic Malays, Gomez (2007) states that most Chinese-owned businesses in Malaysia have either refused to go public or have resorted to different ways of expanding their business. However, the top 20 largest Chinese firms listed on the Bursa Malaysia prefer to link up with Malaysian politicians and have enjoyed government patronage (Gomez, 2007). Previous studies have found Malaysia to have one of the worst earnings management scores in the region, with the appointment of independent directors being based on affiliation rather than expertise (Fan and Wong, 2002; Wan-Hussin, 2009). KPMG's (2013) report also shows that based on the top 100 ranked companies in Malaysia, nearly half (45 per cent) of the independent directors are retired civil servants or former politicians, thus suggesting that it is not "what" one knows but "who" one knows that makes them attractive to be appointed as independent directors. Therefore, from the perspective of the managerial hegemony theory, to a certain extent, the appointment of these ethnic Malay independent directors is merely symbolic in nature, as they are passive observers and lack the credibility to monitor management behavior (Cohen *et al.*, 2008). The institutional environment in Malaysia, which is different from other developed countries due to differences in social and cultural factors, may influence the selection of the independent directors and the reliability as well as the effectiveness of corporate governance implementation in curtailing earnings management activities in Malaysia.

Therefore, the aim of this study is to investigate the effectiveness of RMCCG (2007) and the legitimacy of the roles, purpose and functions of the ethnic Malay director on the boards (Abdul Rahman and Mohamed Ali, 2006; Haniffa and Cooke, 2002). In examining the effect of board effectiveness and ethnic diversification on the board, the manufacturing sector is chosen, as this sector is highly dominated by the Chinese community. Previous studies suggest that the Chinese business community has diverse business supplier networks among their communities as part of their strategic initiative to gain control over the market (Jesudason, 1997). If the Chinese community is willing to accept other ethnic communities, particularly ethnic Malays, as part of their boards, then to what extent does the appointment improve board monitoring? That is, if ethnic Malays improve board monitoring and reduce earnings management, there is a genuine case that the appointment is legitimate and not for the purpose of "rent seeking". To date, prior literature on ethnic diversification in Malaysia suggest ethnic Malays influence firms' disclosure practices, audit fees, risks, government bailouts and so forth. This study hence looks into the effectiveness of RMCCG (2007) implementation and ethnic diversification in influencing earnings management activities.

This study contributes to the current literature in several ways. First, it allows us to understand the significance of board independence and qualification as suggested by RMCCG (2007) in reducing earnings management activities in manufacturing firms in

Malaysia, given the differences in social, political and cultural environment in Malaysia with those of other developed countries. Second, ethnicity issue on the board is still under-explored particularly after RMCCG (2007) implementation, and Malaysia has undergone rapid economic reforms where the gap between Chinese and ethnic Malays are reduced. Since Malaysia is a multi-racial country, the study will have implications toward corporate reforms aimed at improving board effectiveness.

The findings of this study reveal that the presence of ethnic Malays positively influences earnings management. Since the majority of firms are dominated by Chinese, this evidence suggests that Malay directors' presence on the board may be part of rent-seeking opportunities. Further analysis shows that board independence is higher but audit committee's qualification is lower in ethnic majority firms, implying the ineffectiveness of the ethnic Malay directors. These findings are consistent with the findings from Haniffa and Cooke (2002) implying that there is a lack of professionalism among ethnic Malays. Results of the panel data regression analysis suggest that the existence of Malay directors on the board has not succeeded in curbing earnings management.

The remainder of this paper will be as follows. The next section provides the review of literature for this study, which includes a brief discussion on the effectiveness of RMCCG (2007) and issues of ethnicity its implications for earnings management are also highlighted. The development of hypotheses is also carried out in this section. The section that follows discusses the research methodology and design and this is followed by a section on the sample selection and data. Next, a section on the results of analysis carried out to meet the objectives of the study is presented and this is followed by the final section which concludes this study.

Literature review and hypothesis development

After the implementation of the RMCCG (2007), there is greater emphasis on the independence, financial knowledge or qualification of board and audit committees. Studies during the period of the earlier implementation of MCCG find that qualification is an important deterrent of the existence of earnings management. However, in the later studies, it is found that qualification in the context of having a senior auditor in the audit committee is associated with higher earnings management (Md Yusof, 2010). In fact, incorporating board members with retired government officers and influential "cult figures" who act as qualified independent directors is seen as a strategy to boost market confidence. In addition to that, the issue of independence is equally perplexing as recent studies in Malaysia have shown that board independence has no association with earnings management (Abdul Rahman and Mohamed Ali, 2006; Rahmat *et al.*, 2009).

Interestingly, most companies in Malaysia fulfill the required regulations under Bursa Malaysia Listing requirements, yet the continued existence of the issues of independence and qualifications means that the regulations may not have been effective in preventing earnings manipulations. In the context of board independence, Abdullah *et al.* (2010), in their study of financial restatements in Malaysian firms, find that audit committees of firms that restate the financial statements are more independent than those that do not, thus highlighting the issue of the ineffectiveness of audit committees and the possibility of firms merely creating audit committees as the provider of views rather than as "watchdogs". Even though greater level of board and audit committee independence is observed post-MCCG (2007), the issue remains as to whether this greater independence is just part of a strategy to boost market confidence or it actually strengthens the "checks and balances" role that should be played by the audit committee.

An interesting issue in the Malaysian corporate sector is the multi-racial composition of its board that is composed of indigenous Malays, Chinese and Indians. As this study focuses on the manufacturing sector, the main discussion will be largely on ethnic Malays and Chinese, who together make up close to 99 per cent of the boards of these firms. From a legal perspective, Malaysia has greater compliance to its corporate governance laws as it follows the common law which is more restrictive than their neighboring countries civil law such as Thailand and Indonesia (Walter, 2009; La Porta *et al.*, 2000). Despite this, there is favorable treatment given to ethnic Malays under the New Economic Policy (NEP)[1] that led to unfavorable treatment toward other ethnic communities in the country. The main objective of this policy was to improve wealth inequalities between ethnic Malays and Chinese[2]. To ensure a balanced economy, ethnic Malays were included as affiliates in Chinese dominated firms. However, the main weakness of the NEP was the existence of "Ali Baba Companies" through which an alliance between less qualified ethnic Malays and financially strong Chinese communities are created. The ethnic Malays will enjoy a certain amount of benefit without doing the actual work and some suggest that the Chinese capitalists have to succumb to this rent-seeking practice to get access to some of the projects (Yoshihara, 1988; Wan Jan, 2011).

This paper thus aims to investigate further the implications of ethnic Malays board members on potential earnings management activities. As argued earlier, the existence of possible rent-seeking activities as well as the priority given to ethnic Malays members may have an influence over the implementation of corporate governance policies.

Independent directors and audit committee effectiveness and earnings management

Several measures have been taken to improve the role of the independent director under the RMCCG (2007). Independent directors must have relevant experience and knowledge in the industry. In support of this, studies in developed countries have shown that independent directors[3] and audit committees effectively deter earnings management (Marra *et al.*, 2011; Klein, 2002; Xie *et al.*, 2003) due to their advantages of having more information about the organization compared to outside directors (Beasley, 1996), of being experts in decision control (Fama, 1980), of their monitoring role in terms of helping to uphold the integrity and credibility of published financial statements (Peasenell *et al.*, 2005) and improved financial reporting quality or the maintenance of financial reports at an acceptable level to avoid being sued (Piot and Janin, 2007; Jaggi *et al.*, 2009). Most of these studies support the agency theory, where independent directors act as stewards to mitigate earnings management.

The agency theory argument is debatable in Malaysia, as prominent studies here have shown that the presence of independent non-executive directors fails to improve financial disclosure or reduced earnings management activities (Abdul Rahman and Mohamed Ali, 2006; Mohd-Saleh *et al.*, 2005; Wan-Hussin, 2009). In fact, to some extent, the act of appointing independent directors serves as an illusion to shareholders of active board monitoring (Wan-Hussin, 2009). Notwithstanding such results, this does not imply that the independent directors' role is irrelevant, but that companies' compliance with respect to the appointment of independent directors is only by the letter, but not by the spirit, of the code. Since Malaysia is unique in terms of ethnic diversity, ownership structures of government-linked companies, institutional and family ownership, the role of independent directors both on the board as well as in audit committees is different in the Malaysian context. Consistent with Cornforth (2004), it is expected that independent directors only act as board council and their involvement in strategic decision-making is scant, consistent with the managerial hegemony theory. Thus, it is hypothesized that an independent director's role in both the board and the audit committees fails to mitigate earnings management pre- and post-RMCCG (2007):

> *H1.* The proportion of independent non-executive director's independence is associated with higher level of earnings management pre- and post-RMCCG (2007).

An important emphasis of the RMCCG (2007) is on the qualifications of audit committee members. Hillman and Dalziel (2003) argue that representation from lawyers, financial institutions, top management from other firms, marketing specialists and former government officers may offer high-quality advice and counsel to the organization, as they bring with them indispensable expertise, skills and experience (Hillman and Dalziel, 2003). Several studies have made recommendations for the board to possess the relevant expertise to discharge their duties more effectively. They also suggest that a board composed of independent directors with financial expertise performs the monitoring duties more effectively because they have better knowledge of how earnings are being managed by managers (Barton *et al.*, 2004; Xie *et al.*, 2003), hence lower probability of earnings restatement (Agrawal and Chadha 2005)[4]:

H2. The proportion of audit committee members with financial expertise is associated with earnings management pre- and post-RMCCG (2007).

Even though studies have shown that a well-informed board will make better decisions and enforce greater monitoring, in the context of Malaysia, the issue of only qualification as a factor deterring earnings management is debatable. Due to the diverse objectives of the board, there is the issue of appointed audit committees composed of those who are always agreeable to the objectives set by the management. In contrast to the agency theory, where there is greater emphasis on audit committees as overseers of management, hegemony theorists believe that independent directors in the audit committee only act to ratify management actions and keep the stakeholders contented. But in reality, even in fully compliant audit committees, independent directors fail to question or act against the management. Cohen *et al.* (2008) argue that a toothless "paper tiger" audit committee will only act as an ally to management on issues raised by the auditors and will not be able to question managerial misbehavior. In these circumstances, a strong relationship between independent directors in the audit committee with the CEO may result in biased decision making. Not surprisingly, firms that employ former audit firm partners as part of the board are associated with larger abnormal accruals (Menon and Williams, 2004). Hence, it is hypothesized that:

H3. The proportion of independent directors in the audit committee is associated with higher level of earnings management pre- and post-RMCCG (2007).

Ethnicity and earnings management

Appointment of ethnic Malays on highly dominated Chinese firms can be due to their expertise and skills in the relevant areas or due to their influence in government institutions and political parties in Malaysia. Chinese entrepreneurs are found to be more secretive and have complex supplier networks within their business communities (Haniffa and Cooke, 2002; Jesudason, 1997). According to Gomez (2007), there is little evidence intra-ethnic business networks and a decline in inter-ethnic business links among Chinese businesses in Malaysia. Interestingly however, KPMG (2013) reports that nearly half of the independent directors of the Top 100 companies in Malaysia are composed of retired civil servants or former politicians and these independent directors are composed of ethnic Malays. Based on the study by Mitchell and Joseph (2010), politically connected firms are mostly dominated by ethnic Malays and government bailouts on these firms which suffered the most during the 1997 financial crisis suggests the need for directors to be linked to the ruling government to gain access to projects as well as protection under economic uncertainties (Johnson and Mitton, 2003; Gomez and Jomo, 1997)[5]. Faccio *et al.* (2006) also find Malaysia to be ranked as one of the highest countries with government bailouts and in this country politically connected firms have strong access to financing (Bliss and Gul, 2012; Faccio *et al.*, 2006). Since most politically connected firms are dominated by ethnic Malays, the appointment of ethnic Malays on the board of Chinese-owned firms may assist the firms in gaining access to projects, support and financing for their business operations. If the appointment of ethnic Malays directors is only for this purpose and is based on their affiliation and connection, it is posited that their appointment will not curtail earnings management activities.

Based on this perspective, it is hypothesized that:

H4. The percentage of ethnic Malay directors (ETHNICITY) is associated with higher level of earnings management pre- and post-RMCCG (2007).

Methodology

Measure of earnings management

This study uses discretionary accruals (DA) as the primary measure of earnings management (Jones, 1991). One common approach is to decompose total accruals into non-discretionary (expected) and discretionary (unexpected portions). Total accruals are calculated as:

$$TA_t/A_{it-1} = \alpha_1(1/A_{it-1}) + \beta_1(\Delta REV_{it}/A_{it-1}) + \beta_2(PPE_{it}/A_{it-1}) + \varepsilon \quad (1)$$

Where,

TA_t = change in non-cash current assets minus change in current liabilities;
A_{it-1} = total assets for firm i at the end of year t−1;
ΔREV_{it} = revenue for firm i in year t less revenues year t−1; and
PPE_{it} = gross property, plant and equipment for firm i at the end of year t;

The expected portion results from changes in firms' economic environment and is up to the management's discretion. The unexpected portion is the outcome of discretionary manipulation by the management. The Jones (1991) model assumes that a high level of *DA* suggests that a firm is engaging in earnings management (Jones 1991). The Jones (1991) model was later improved and known as the modified Jones (1991) model. The fitted values (denoting the estimated parameters by $\alpha 1$, $\beta 1$, $\beta 2$) obtained from the above regression measure nondiscretionary accruals:

$$NDA_{it} = \alpha_1(1/A_{it-1}) + \beta_1[(\Delta REV_{it} - \Delta REC_{it})/A_{it-1})] + \beta_2(PPE_{it}/A_{it-1}) \quad (2)$$

Where,

NDA_{it} = nondiscretionary accruals for firm i at time t; and
ΔREC_{it} = receivables for firm i in year t less receivables year t−1;

The residual measures DA ($ABSDA_{it}$) as:

$$ABSDA_{it} = TA_{it}/A_{it-1} - NDA_{it} \quad (3)$$

Model specification

The model for this study is as follows:

$$\begin{aligned} ABSDA_{it} = {} & \alpha_0 INTERCEPT_{it} + \alpha_1 ACINDEP + \alpha_2 ACQUALI + \alpha_3 INDEP \\ & + \alpha_4 ETHNICITY + \alpha_5 CHAIRINDEP + \alpha_6 BIG4 + \alpha_7 BOARDSIZE \\ & + \alpha_8 MEET + \alpha_9 CEOTENURE + \alpha_{10} OWNCON + \alpha_{11} CFFO \\ & + \alpha_{12} LEVERAGE + \alpha_{13} SIZE + \alpha_{14} MBRATIO + \varepsilon \end{aligned} \quad (4)$$

The definition and measurement of each variable is presented in Table I. CHAIRINDEP, BIG4, BOARDSIZE, MEET, CEOTENURE and OWNCON serve as the control variables related to corporate governance, while CFFO, LEVERAGE, SIZE and MBRATIO are the firm-specific control variables.

Chairman should be independent of company's affairs (CHAIRINDEP) while being on the board, and in doing so may reasonably check and provide restraint to any overly ambitious plans of the Chief Executive Officer (Rechner and Dalton, 1991).

The external auditor (BIG4) also has a major role in monitoring the client's disclosure policies and practices, hence plays a major role in mitigating earnings management. Prior research also argues that large audit firms are perceived to perform higher-quality audits compared to smaller audit firms (DeAngelo, 1981).

Table I Variable definition and operationalization

Variable	*Definition*	*Measurement*	*Expected sign*	*Reference from past literature*
ABSDA	Absolute discretionary accruals	Using modified Jones model		Klein (2002), Becker *et al.* (1998), Mohd-Saleh *et al.* (2005), Abdul Rahman and Mohamed Ali (2006)
ACINDEP	Independence of audit committees	Number of independent non-executive directors in the audit committees/total number of audit committee members	+/−	Abdul Rahman and Mohamed Ali (2006), Mohd-Saleh *et al.* (2007), Wan Ismail *et al.* (2010)
ACQUALI	Qualification of audit committees	Indicator variable with the value of "1" if the audit committee is composed of those with accounting, finance and economics knowledge "0" otherwise	+/−	Mohd-Saleh *et al.* (2007), Abbott *et al.* (2004), Yatim *et al.* (2006)
INDEP	Independence of board of directors	Number of independent non-executive directors in the board/total no of board members	+/−	Abdul Rahman and Mohamed Ali (2006), Klein (2002), Mohd-Saleh *et al.* (2005), Xie *et al.* (2003)
ETHNICITY	Ethnicity of the board	Ratio of Bumiputera directors to total number of directors on board	+/−	Marimuthu (2008), Abdul Rahman and Mohamed Ali (2006), Haniffa and Cooke (2005)
CHAIRINDEP	Independence of chairman	Indicator variable with the value of "1" if Chairman is independent non-executive directors and "0" indicate otherwise	−	Rechner and Dalton (1991), Dey *et al.* (2011)
BIG4	Big 4 Auditors	Indicator variable with the value of "1" if audited by BIG4 and "0" otherwise	−	Abbott *et al.* (2000, 2004), Davidson *et al.* (2005)
BOARDSIZE	Size of the board	The number of directors in the board	−	Abdul Rahman and Mohamed Ali (2006)
MEET	Frequency of board meetings	Log 10 of number of board meetings conducted	+/−	Brick and Chidambaran (2010), Vafeas (1999)
CEOTENURE	CEO tenure	Log 10 of total number of years of service of the chief executive officer (CEO)	−	Walters and Wright (2007), Brookman and Thistle (2009)
OWNCON	Concentrated ownership	Combined number of significant shareholders (more than 5% shares ownership)/total no of ordinary shares	−	Fan and Wong (2002), Hutchinson and Leung (2007), Donnelly and Lynch (2002)
CFFO	Cash flow from operations	Cash flow from operations over lag total assets	−	Marra *et al.* (2011), Abdul Rahman and Mohamed Ali (2006), Becker *et al.* (1998), Peasnell *et al.* (2005)
LEVERAGE	Leverage	Current liabilities over total assets	+/−	Klein (2002)
SIZE	Total assets	Log 10 of total assets	−	Klein (2002), Becker *et al* (1998), Mohd-Saleh *et al.* (2005), Abdul Rahman and Mohamed Ali (2006)
MBRATIO	Market to book ratio	Market value of equity/book value of equity	+	Park and Shin (2003), Abbott *et al.* (2004)

Xie *et al.* (2003) argue that larger boards (BOARDSIZE) prevent earnings management better compared to smaller boards because larger boards are normally composed of independent directors with necessary expertise and experience, although Abdul Rahman and Mohamed Ali (2006) find results contradicting this.

With respect to the number of board meetings (MEET) as a corporate governance mechanism, two views arise from previous literature. The first view is consistent with agency theory, i.e. board meetings are beneficial in terms of effective management monitoring, strategy discussion and implementation and ability for directors to consult together and share opinions (Vafeas, 1999). Xie *et al.* (2003) suggest that board activity influences members' ability to serve as effective monitors, hence reducing earnings management practices. The second view by Jensen (1993) states that boards should be relatively inactive, and the fact that boards regularly meet might indicate a presence of problems. In sum, more meetings can be interpreted as more issues associated with the firms.

CEO tenure (CEOTENURE) is included to measure the level of experience of the CEO and the extant of earnings management (Ali and Zhang, 2015). Ali and Zhang (2015) argue that earnings management is less prevalent in the earlier years of a CEO's tenure as compared to the later years of their service as the CEO, although after controlling for earnings overstatement in the early years, they also argue that earnings management is more pervasive in the later years of the CEO's tenure. However, this is beyond the scope of this study.

The influence of ownership concentration (OWNCON) on managers' opportunistic behavior has been extensively studied with some arguing that block ownership constrains managers from earnings management and earnings misstatements (Abdullah *et al.*, 2010; Abdul Rahman and Mohamed Ali, 2006; Abbott *et al.*, 2000).

Cash flow from operations (CFFO) is introduced (Marra *et al.*, 2011; Abdul Rahman and Mohamed Ali, 2006; Becker *et al.*, 1998; Peasenell *et al.*, 2005) as another control variable with regards to possible debt covenant restrictions. Higher cash flows are associated with lower earnings management.

LEVERAGE is measured to capture the incentives to practice earnings management when firms are close to debt covenant violations (Klein, 2002). Highly leveraged firms have greater incentives to manage earnings upward compared to low leverage firms to avoid disclosing their financial problems or exhibiting low performance in the financial report (Park and Shin, 2004). Firms may resort to income-increasing accounting practices to show favorable performance when negotiating with lenders (Piot and Janin, 2007). From another perspective, highly levered firms may not be able to practice earnings management as they will be placed under close observation by lenders (Park and Shin, 2004).

Firm size (SIZE) is also controlled, as previous studies suggest that smaller firms are less scrutinized or monitored by the stakeholders resulting in a negative relationship between size and earnings management (Abdul Rahman and Mohamed Ali, 2006; Marra *et al.*, 2011; Klein, 2002; Park and Shin, 2004).

Finally, to control for firms' growth, the market to book ratio (MBRATIO) is used. Firms with high growth potential have the tendency to engage in earnings management to meet market expectations.

Sample selection and data

The sample consists of 1,206 firm-year observations between fiscal years 2004 and 2009. Nine industries within the manufacturing sector are chosen based on the list available in the Emerging Market Information System (EMIS) database[6]. The manufacturing sector is chosen since this sector is highly dominated by the Chinese. In addition, most companies that exist within the manufacturing sector are predominantly family owned and there exists diverse ethnic groups within the management. This helps to normalize the distribution of ethnic members and assists the investigation on the effects of ethnic members on earnings management. Data relating to the board and audit committee attributes are collected from the annual reports disclosed in the Bursa Malaysia website while other financial data are collected from the EMIS database.

To ensure a balanced comparison of observations, companies that were either listed or delisted during the period of the study of six years (2004-2009) are excluded, therefore, allowing comparability pre- and post-RMCCG (2007). The final number of companies considered from fiscal year 2004 to 2009 is 201, resulting in a final sample of 1,206 observations – 603 each for the pre- and post-RMCCG (2007) periods.

Results

Descriptive analysis

Tables II and III present descriptive statistics for the variables over the period of 6 years (fiscal years 2004 to 2009). In general, it is noted that ABSDA has slightly increased in 2009. The mean is lower as compared to that found by Wan Ismail *et al.* (2010), but higher than the mean found by Abdul Rahman and Mohamed Ali (2006) and Md Yusof (2010). The mean for the Md Yusof's study is 0.1652, and, considering that the sample for this study is from manufacturing sectors with a much larger sample size, it is reasonable to assume that the mean should be higher.

Among the independent variables, it is worth noting that there is a significant increase in ACINDEP and ACQUALI, post-RMCCG (2007), as a result of greater emphasis on board and audit committees' independence. Consistent with Abdul Rahman and Mohamed Ali (2006), the mean of ACINDEP is approximately 0.6997 in the fiscal year 2004. However, in fiscal year 2009 the mean for ACINDEP is 0.8754, consistent with the observation of Wan Ismail *et al.* (2010). An increase in ACQUALI is observed from 0.8209 in year 2004 to 0.9552 in year 2009. This is significantly higher than Mohd-Saleh *et al.*'s (2007) study. However, the measurement for the variable differs, as their study uses a ratio of audit committees with accounting knowledge of total members. In addition to that, Mohd-Saleh *et al.* (2007) only focus on companies in year 2001, the first year of MCCG implementation when most of the companies were still adjusting to the requirements.

Despite the increase in the level of qualification and independence of audit committees, the mean for INDEP has been quite stagnant. Most of the companies, in general, fulfill the requirement that one third of the board should be independent. It ranges from 0.3991 (fiscal year 2004) to 0.4256 (fiscal year 2009), roughly similar to Abdul Rahman and Mohamed Ali's (2006) study, where their mean is 0.3850. However, merely meeting the minimum required amount is not sufficient to alleviate earnings management (Johari *et al.*, 2008).

The mean for ETHNICITY ranges from 0.3219 to 0.3470 during the pre-RMCCG (2007) period and 0.2880 to 0.3171 during the post-RMCCG (2007) period. This is lower, as compared to the mean value observed by Abdul Rahman and Mohamed Ali (2006), as their mean is 0.4800.

As for CHAIRINDEP, both periods, pre and post, show the median as 0; however, there is a slight increase in the mean from 0.2338 (fiscal year 2004) to 0.2985 (fiscal year 2009). In the Australian context, Kang *et al.* (2007) find that a majority of Australian boards have a chairman who is independent of the board (Kang *et al.*, 2007). In Malaysia, the idea of having a chairman as an independent director is still new.

Most of the companies chose Big 4 auditors (BIG4) but there is a slight decrease in the mean post-RMCCG (2007), indicating that some companies have switched to non-Big 4 auditors. The mean values have dropped from 0.6418 (fiscal year 2004) to 0.5672 (fiscal year 2009).

The mean for board size (BOARDSIZE) for this study pre- and post-RMCCG (2007) remains constant at seven to eight members of the board and this is similar to Kang *et al.*'s (2007) study, where the average is eight to nine members. In fact, in the Malaysian setting, the findings are almost similar to those of Abdul Rahman and Mohamed Ali (2006) and Wan Ismail *et al.* (2010), where mean board size is 8.89 and 7.578, respectively.

With regards to cash flow from operations (CFFO), there are no major differences in the mean of CFFO from the period before and after RMCCG (2007). The mean ranges from

Table II Descriptive statistics (Years 2004-2006)

Variable	*Year 2004 Mean*	*Year 2004 Median*	*Year 2004 SD*	*Year 2005 Mean*	*Year 2005 Median*	*Year 2005 SD*	*Year 2006 Mean*	*Year 2006 Median*	*Year 2006 SD*
ABSDA	0.2284	0.2055	0.1747	0.2887	0.2588	0.3327	0.2419	0.2145	0.2133
ACINDEP	0.6997	0.6667	0.0922	0.7006	0.6667	0.0921	0.7072	0.6667	0.0840
ACQUALI	0.8209	1	0.3844	0.8492	1	0.3587	0.8643	1	0.4225
INDEP	0.3991	0.3750	0.1258	0.4110	0.3846	0.2966	0.4058	0.4	0.1065
ETHNICITY	0.3470	0.2857	0.2453	0.3374	0.2857	0.2388	0.3219	0.2727	0.2333
CHAIRINDEP	0.2338	0	0.4243	0.2412	0	0.4289	0.2462	0	0.4319
BIG4	0.6418	1	0.4807	0.6533	1	0.4771	0.6382	1	0.4817
BOARDSIZE	7.7711	7	2.1418	7.7286	7	2.0093	7.6281	8	1.9803
MEET	4.9055	5	1.6721	5.0050	5	1.3799	5.1294	5	1.9550
CEOTENURE	7.9851	6	7.7237	8.5980	6	7.7726	9.3417	6	7.9737
OWNCON	48.01	49.66	18.54	47.10	49.17	17.77	82.65	49.83	496.45
CFFO	0.1863	0.0633	1.5193	0.0631	0.0581	0.1014	0.0590	0.0536	0.1071
LEVERAGE	0.2733	0.2535	0.1543	0.2937	0.2631	0.2212	0.3130	0.2736	0.2543
SIZE (RM'000)	582,201	166,586	1,238,946	1,055,489	175,138	6,486,023	1,145,008	200,750	7,407,594
MBRATIO	1.2612	0.7500	2.0421	1.6222	0.8100	4.9453	1.3200	0.9100	1.8463

Table III Descriptive statistics (Years 2007-2009)

Variable	Year 2007 Mean	Year 2007 Median	Year 2007 SD	Year 2008 Mean	Year 2008 Median	Year 2008 SD	Year 2009 Mean	Year 2009 Median	Year 2009 SD
ABSDA	0.2481	0.2296	0.1939	0.2273	0.1929	0.1945	0.2937	0.2666	0.2170
ACINDEP	0.7262	0.6667	0.1159	0.7757	0.7500	0.1485	0.8754	1	0.3061
ACQUALI	0.8408	1	0.3668	0.8883	1	0.3158	0.9552	1	0.2073
INDEP	0.4363	0.4000	0.3367	0.4315	0.4286	0.1078	0.4256	0.4286	0.1239
ETHNICITY	0.3171	0.2500	0.2332	0.3073	0.2500	0.2286	0.2880	0.2500	0.2207
CHAIRINDEP	0.2537	0	0.4362	0.2792	0	0.4497	0.2985	0	0.4587
BIG4	0.6219	1	0.4861	0.6142	1	0.4880	0.5672	1	0.4967
BOARDSIZE	7.6318	8	2.0208	7.5838	7	1.8679	7.4030	7	1.8362
MEET	4.9652	5	1.5079	5.1117	5	1.7076	5.2040	5	2.0864
CEOTENURE	9.8010	7	8.2517	10.5178	8	8.4156	10.9204	9	8.4979
OWNCON	46.57	47.44	17.96	47.43	48.74	18.01	47.45	49.48	18.97
CFFO	0.0711	0.0692	0.1115	0.0727	0.0600	0.1101	0.0604	0.0523	0.1234
LEVERAGE	0.3068	0.2686	0.1767	0.3037	0.2731	0.2049	0.2906	0.2432	0.2378
SIZE (RM'000)	700,238	210,641	1,558,970	754,306.5	222,002	1,735,804	843,017	218,858	2,262,193
MBRATIO	0.9240	0.9000	3.1110	1.0450	0.9000	1.9268	1.0592	0.8500	3.6137

0.06 to 0.07 but is, however, slightly higher in the year 2004. This is consistent with previous studies in Malaysia (Abdul Rahman and Mohamed Ali, 2006).

The mean for MEET remains the same over the period; approximately five meetings are conducted in each year for most of the firms. Experience of the Chief Executive Officer (CEOTENURE) is used to control for the level of board experience and it is found that the mean tenure is approximately 8 years. The mean for MBRATIO too remains the same across the period except for only a slight increase in the year 2005, with a mean of 1.6222. For most of the years, the mean ranges from 0.9240 to 1.3200. There is a consistent level of OWNCON from the period pre- to post-RMCCG, ranging from 46.57 to 48.01.

Mann-Whitney tests and correlation matrix

To gauge the significance of the differences between the variables across the two periods, Table IV presents the results of the Mann-Whitney test. The level of audit independence (ACINDEP), board independence (INDEP) and CEO tenure (CEOTENURE) are found to be significantly different (higher) at the 5 per cent level pre- and post-RMCCG (2007). The level of audit committee qualification is significantly higher at the 10 per cent level post-RMCCG (2007) due to the imposition of RMCCG (2007) under Bursa Malaysia Listing requirements. Another important finding is the level of ethnicity (ETHNICITY), which has dropped post-RMCCG (2007) possibly due to a more liberalized economy and less reliance on ethnic groups to improve firm performance (Jesudason, 1997).

The influence of ethnicity is also analyzed using the Mann-Whitney test and presented in Table V. The sample for majority ethnic firms is only 193, whilst the non-majority ethnics have a higher number of observations, 1,013. The results show that almost all the variables, except for ACINDEP, CHAIRINDEP and BIG4, are significantly different at the 5 per cent level. Minority ethnic firms are found to have significantly higher ACQUALI, CEOTENURE and BOARDSIZE but majority ethnic firms have significantly higher INDEP, MEET and OWNCON. Based on the findings, majority ethnic firms have a lower level of qualification compared to non-majority ethnic firms. However, the level of board independence is higher in the majority ethnic firms. This confirms the findings of Haniffa and Cooke (2002) that there is a lack of professionalism in majority ethnic firms (lower qualification) but their boards are more independent.

Table VI shows the correlation matrix between the regression variables. There is only one significant relationship for the independent variable, which is ACQUALI ($p < 0.10$). This indicates that qualification is positively associated with earnings management (ABSDA). The correlation matrix in Table VI confirms that there is no multicollinearity among the variables, as none of the relationships have coefficients greater than 0.75.

Table IV Mann-Whitney test for pre- and post-RMCCG (2007)

Variable	*Pre-2007 (n = 603)* *Mean*	*Median*	*SD*	*Post-2007 (n = 603)* *Mean*	*Median*	*SD*	*Diff. in Means*	*Mann-Whitney (p-value)*
ABSDA	0.2521	0.2235	0.2504	0.2563	0.2333	0.2036	1.221	0.2217
ACINDEP	0.7025	0.6667	0.0894	0.7931	0.75	0.217	0.091	0.000***
ACQUALI	0.8436	1	0.3892	0.8952	1	0.307	0.052	0.098*
INDEP	0.4058	0.4	0.1955	0.4307	0.4286	0.216	0.025	0.000***
ETHNICITY	0.3361	0.2857	0.2390	0.3037	0.25	0.228	−0.032	0.017**
CHAIRINDEP	0.2421	0	0.4277	0.2779	0	0.448	0.036	0.283
BIG4	0.6451	1	0.4791	0.6036	1	0.490	−0.042	0.213
BOARDSIZE	7.7032	7	2.0428	7.5373	7	1.910	−0.166	0.214
MEET	5.0145	5	1.6851	5.0995	5	1.784	0.085	0.602
CEOTENURE	8.6551	6	7.8304	10.4179	8	8.388	1.763	0.000***
OWNCON	58.9804	49.21	286.5278	47.1608	48.72	18.293	−11.820	0.858
CFFO	0.1025	0.0584	0.8847	0.0683	0.0617	0.115	−0.034	0.808
LEVERAGE	0.2939	0.2638	0.2141	0.3008	0.2588	0.208	0.007	0.554
SIZE	922,140	180,978	5,715,956	766,090	218,031	1,874,945	−156,050	0.053*
MBRATIO	1.4008	0.81	3.2628	1.0167	0.88	2.971	−0.384	0.424

Notes: *Significant at 10% level; **significant at 5% level; ***significant at 1% level

Table V Mann-Whitney test for majority ethnic and non-ethnic firms

	Majority ethnics (n = 193)			Minority ethnics (n = 1013)				Mann-Whitney
Variable	*Mean*	*Median*	*SD*	*Mean*	*Median*	*SD*	*Diff. in Means*	*(p-value)*
ACINDEP	0.7425	0.7500	0.1158	0.7489	0.6667	0.1803	−0.006	0.238
ACQUALI	0.7720	1	0.4180	0.8880	1	0.3355	−0.116	0.012**
INDEP	0.4499	0.4286	0.1105	0.4122	0.4000	0.2198	0.038	0.000***
CHAIRINDEP	0.2073	0	0.4072	0.2700	0	0.4432	−0.063	0.167
BIG4	0.6684	1	0.4726	0.6160	1	0.4858	0.052	0.248
MEET	5.9727	5	2.3507	4.8835	5	1.5315	1.089	0.000***
CEOTENURE	6.3109	4	6.1203	10.1510	8	8.3534	−3.840	0.000***
BOARDSIZE	7.3161	7	1.9051	7.6782	7	1.9804	−0.362	0.037**
OWNCON	86.5650	52.0700	505.2031	46.6892	48.6000	18.0954	39.876	0.017**
CFFO	0.0497	0.0507	0.1103	0.0921	0.0610	0.6869	−0.042	0.034**
LEVERAGE	0.3404	0.2985	0.2907	0.2891	0.2543	0.1904	0.051	0.001***
SIZE	2,343,635	312,013	10,118,221	558,422	192,388	1,251,816	1,785,213	0.001***
MBRATIO	0.9323	0.7500	1.5449	1.2615	0.8800	3.3005	−0.329	0.041**

Notes: *Significant at 10% level; **significant at 5% level; ***significant at 1% level

Regression analysis

Since the sample of this study is organized in the panel data form (pooling of time series and cross sectional observations), panel data regression seems to be the most appropriate technique in running the data[7]. By using this model, the results are more robust as Generalized Least Square (GLS) corrects for both autocorrelation and heteroscedasticity and this will improve the efficiency of the coefficients of each variable in this study. The analysis is carried out for the entire sample and then for the sub-samples, i.e. periods pre- and post-RMCCG (2007). Table VII presents the results of the analyses.

A significant positive relationship is found between earnings management (ABSDA) and the qualification of the independent directors in the audit committees (ACQUALI) for the full sample ($t = 4.26$). The results are also consistent for both pre ($t = 3.53$) and post ($t = 2.21$) RMCCG (2007). In addition to that, a marginally significant positive association between audit committee independence (ACINDEP) and ABSDA is found post-RMCCG (2007). Abdul Rahman and Mohamed Ali (2006) suggest that audit committees in Malaysia are ineffective in carrying out their monitoring tasks. In fact, current amendments to RMCCG (2007) which requires all members of the audit committees to be financially literate and comprise fully of non-executive directors have not effectively deterred earnings management (Md Yusof, 2010). Though contrary to these findings, Mohd-Saleh *et al.* (2007) find audit committee independence and accounting knowledge, with the interaction effect of audit committee meetings, deter earnings management. However, there is sample selection bias in the results of their study as the fiscal year of the study is the year of MCCG (2001) implementation. In that year most of the companies that had a high percentage of accounting members and all members being independent may have been adopting the corporate governance practice on a voluntary basis rather than having it imposed by the regulator. The study of Md Yusof (2010) finds no evidence to suggest that financial expertise has any association with earnings management. Since the code does not specifically define financial literacy, it is defined here at the very minimum level, that is, having knowledge in accounting, finance and/or economics.

This study observes an increase in ACQUALI from 0.8209 in the year 2004 to 0.9552 in the year 2009, which is part of the compliance to the mandatory rulings of the Bursa Malaysia Listing Requirements. However, the evidence suggests that it has not fulfilled the actual "checks and balances" roles that should be played by the audit committee members. The findings imply that qualification may, in certain circumstances, lead to more earnings manipulation rather than improve monitoring. Even though prior studies have documented a negative relationship between earnings management and qualification, there have been questions on its validity especially with accounting scandals in corporations (such as

Table VI Correlation matrix

Variable	ABSDA	ACINDEP	ACQUALI	INDEP	ETHNICITY	CHAIRINDEP	BIG4	BOARDSIZE	CFFO	LEVERAGE	SIZE	MEET	CEOTENURE	MBRATIO	OWNCON
ABSDA	1.0000														
ACINDEP	0.0326	1.0000													
ACQUALI	0.0722*	0.0314	1.0000												
INDEP	0.0628	0.1136***	0.0036	1.0000											
ETHNICITY	0.0566	0.1183***	−0.0784*	0.1288***	1.0000										
CHAIRINDEP	−0.0035	0.0783	−0.0132	0.0411	0.0229	1.0000									
BIG4	0.0356	−0.0238	0.0954**	−0.0558	0.0209	−0.0015	1.0000								
BOARDSIZE	0.0517	0.0312	0.0973**	−0.1835***	−0.0516	0.1489***	−0.0434	1.0000							
CFFO	0.0184	0.0150	0.0292	−0.0070	−0.0614	−0.0148	−0.0514	−0.0218	1.0000						
LEVERAGE	0.1071	0.0106	−0.0361	0.0212	0.1332***	−0.0638	0.0496	−0.1339***	−0.0766*	1.0000					
SIZE	0.0877	0.1697***	0.0882**	0.0139	0.2303***	0.1117***	0.1405***	0.2629***	−0.0364	0.0073	1.0000				
MEET	−0.0328	0.0098	0.0142	0.0627	0.1864***	0.0724	−0.0340	0.0448	−0.0323	0.1661***	0.1791***	1.0000			
CEOTENURE	0.0285	−0.0240	−0.0081	−0.0524	−0.1078***	−0.0727*	−0.0551	0.0056	−0.0894**	0.0061	0.1302***	0.0065	1.0000		
MBRATIO	−0.0151	0.0426	−0.0268	0.0190	−0.0784*	0.0948**	0.1057***	0.0683*	0.0268	−0.1053***	0.1496***	−0.0090	−0.0975**	1.0000	
OWNCON	0.0187	0.0203	0.0247	0.0065	0.0767*	0.0754*	0.0335	0.0343	0.0045	−0.0295	0.0622	0.0245	−0.0509	0.0019	1.0000

Notes: *Significant at 10% level; **significant at 5% level; ***significant at 1% level

Table VII Panel data regressions results between ABSDA and corporate governance mechanisms and ethnicity

Variable	*Exp sign*	*Full sample Coefficients (t-stat)*	*Pre-MCCG Coefficients (t-stat)*	*Post-MCCG Coefficients (t-stat)*
C	?	−18.1322 (−2.05*)	−17.3361 (−1.75*)	−36.9769 (−1.65*)
ACINDEP	+/−	0.0101 (0.60)	0.0184 (0.72)	0.029899 (1.75*)
ACQUALI	+/−	0.0481 (4.26***)	0.0340 (3.53***)	0.026568 (2.21**)
INDEP	+/−	0.0247 (1.29)	0.1057 (4.56***)	0.025525 (1.3)
ETHNICITY	+/−	0.0133 (1.05)	0.0447 (5.39***)	0.027217 (1.71*)
CHAIRINDEP	−	0.0177 (2.95***)	0.0100 (1.36)	0.017752 (3.80***)
BIG4	−	−0.0016 (−0.25)	0.0319 (2.82***)	−0.01927 (−3.38***)
BOARDSIZE	−	0.0046 (2.48**)	0.0082 (7.97***)	0.003279 (1.81*)
MEET	+/−	(−0.1398) (−4.50***)	−0.09586 (−3.20***)	−0.14576 (−4.67***)
CEOTENURE	−	0.0304 (4.49***)	0.027541 (5.89***)	0.036291 (3.21***)
OWNCON	−	1.19E−05 (0.76)	4.61E−06 (0.27)	0.000176 (0.79)
CFFO	−	0.0122 (1.09)	0.002776 (0.53)	0.455863 (9.96***)
LEVERAGE	+/−	−0.1205 (−4.18***)	−0.00096 (−0.02)	−0.11805 (−5.45***)
SIZE	−	−0.0259 (−2.88***)	−0.0044 (−0.48)	−0.083 (−5.31***)
MBRATIO	+	0.0046 (2.72***)	0.001758 (3.12***)	0.005292 (4.63***)
Period fixed (dummy variables)	+/−	Yes	Yes	Yes
Industry fixed (dummy variables)	+/−	Yes	Yes	Yes
Adjusted R^2		0.144	0.198	0.420
F-statistic		12.236	9.217	25.267

Notes: *Significant at 10% level; **significant at 5% level; ***significant at 1% level

Lehman Brothers, Enron, Xerox and AOL, to name a few) with qualified independents directors (Xie *et al.*, 2003; Park and Shin, 2003, 2004).

It is also found that a positive association exists between ACINDEP and ABSDA ($t = 1.75$) post-RMCCG (2007) but the association is only significant at the 10 per cent level. The relationship is not significant for the full sample and for the pre-RMCCG (2007) subsample. It is observed from the Mann-Whitney test earlier that there is a significant increase in the proportion of independent directors in the audit committee post-RMCCG (2007). The more independent the board, the higher the earnings management observed, supporting past studies in the Malaysian context which have shown that, in the context of financial restatements, firms which restate their financial statements are more independent than those that do not (Abdullah *et al.* 2010). Some argue that independent directors' ineffectiveness is due to information asymmetry between managers and independent directors (Md Yusof, 2010).

A significant and positive association between INDEP and ABSDA ($t = 4.56$) is found pre-RMCCG (2007) but not post-RMCCG (2007) or for the full sample. A plausible explanation for this, from the Malaysian perspective, is in contrast to the agency theory proposition. Under the agency theory, independent directors are seen as effective monitors, whereas, as the results suggest, none of the corporate governance mechanism is an effective deterrent of earnings management. Therefore, this evidence supports the managerial hegemony theory that top management has greater authority in terms of decision making and will elect independent directors who are close allies of theirs and, thus, the independent directors will not act as effective "whistle blowers" and active participants in the board's decision making (Kosnik 1987; Patton and Baker 1987). However, no significant finding is made post-RMCCG (2007) as most companies have complied with the requirement and the level of INDEP remains constant post-RMCCG (2007). Therefore, greater compliance to RMCCG (2007) is seen as an act of compliance symbolically, rather than the need to improve effective monitoring. As a few earlier studies undertaken in Malaysia find no association between INDEP and earnings management in Malaysia (Mohd-Saleh *et al.*, 2005; Abdul Rahman and Mohamed Ali, 2006; Md Yusof, 2010), the evidence suggests the insignificant role of independent directors on the board. Both studies mentioned above, however, use very small samples of observation as compared to the current study.

In the periods, pre- and post-RMCCG (2007) ETHNICITY is found to be positively associated with ABSDA, suggesting that a higher number of ethnic Malay members on the board increases earnings management. However, pre-RMCCG (2007) the coefficient is around 0.0447 (marginally significant at the 1 per cent level), whereas in the post-RMCCG (2007) period, the coefficient is smaller (0.0272) and significant only at the 10 per cent level. Even though the results are less significant post-RMCCG (2007), the evidence still suggests that a higher number of ethnic Malay directors results in higher earnings management due to their existence on boards being based on rent-seeking opportunities (Wan Jan, 2011; Jesudason, 1997) or due to the possible weaker governance structures that exist in these firms (Eichenseher, 1995; CheAhmad and Houghton, 2001).

Conclusion

This paper discusses the issue of board effectiveness from two perspectives: director's independence on board, audit committees and their qualifications. Findings reveal that board effectiveness is positively associated with earnings management. Additionally, the role of independent directors is studied as studies internationally have shown the effectiveness of the board in deterring earnings management. However, this may not be applicable in Malaysia as there are several differences in terms of ethnic structures, family structures and strong government ownership.

This study extends the research on board effectiveness in Malaysia by providing empirical research on the relevancy of independent directors and their qualification as a corporate governance mechanism. By looking at its implications pre- and post-RMCCG (2007), this study finds no evidence to suggest that board independence and qualification effectively deter earnings management. In fact, board independence and qualification result in higher earnings management. The possible explanation for this is that the appointment of independent directors is mainly due to their connection with the firm, thus weakening their role as an overseer of the firms' operations.

In particular, appointment of ethnic Malays on boards fails to curtail earnings management activities. This suggests that the appointment of ethnic Malays on the board may be due to their influence rather than their technical expertise in ensuring that the financial statements are prepared according to the accounting standards and high ethical practices. Even though some ethnic Malays may possess the level of qualification as required by the corporate governance standards, the results of this study suggest that the main objective for director's appointment seems to be their affiliation rather than their capability in reducing earnings management activities.

This paper contributes to the extant literature, particularly on issues of board independence, qualification and ethnicity in several ways. The findings suggest that ethnic Malay appointment is less effective in deterring earnings management hence suggesting that economic policy, based upon privileges given to ethnic Malays, has induced firms to simply elect independent directors based on ethnic background to improve the perception of the market regulators and gain access to financing and projects. As a conclusion, these findings are useful to regulators to look into the corporate governance mechanism in the context of the selection of independent directors. This study takes the view that corporate governance practice in most firms in Malaysia is currently inadequate in preventing earnings management and more effort is needed to improve board governance, rather than just improvement in the levels of board independence and qualification.

The study has its limitations and hence provides avenue for further research. This study is limited to the manufacturing sector since most firms in this sector are dominated by Chinese entrepreneurs. Also, the firms studied are mostly large firms, hence the study is biased toward these types of firms. Further, appointed Malay directors can be either politically linked or ex-government servants and this maybe another factor that indirectly influences ethnic Malay directors' effectiveness. Future studies can investigate further whether the appointment of politically linked and non-politically linked ethnic Malay directors improves board effectiveness. Finally, the study does not consider possible interaction between the board and audit characteristics which may be significant in influencing earnings management.

Notes

1. One of the reasons the manufacturing sector is chosen is due to its emphasis by the Malaysian government through New Economic Policies (NEP), subsequently succeeded by New Economic Model in 2010. The outlined policies gave priority to the promotion of the manufacturing sector, emphasizing export-oriented industrialization over import-substitution industrialization (Koon 1997). A direct consequence of this is the increased competitiveness of the manufacturing sectors over other sectors in Malaysia.

2. Several steps have been taken to improve ethnic firms' equity, for instance, under the Industrial Coordination Act first implemented in 1975, business firms with more than 25 workers and RM 100,000 of shareholders' funds were required to have 30 per cent of ethnic Malays members in their workforce and equity ownership (Whah, 2011). Since the 1990s, however, firms are no longer required to fulfill this act.

3. "Independence" is, generally, being taken as a meaning that there are no relationships or circumstances which could affect the directors' judgments. The 1992 Cadbury Committee Report and the OECD Principles of Corporate Governance recommend that non-executive directors should be independent of management and free from any business or other relationship which could materially interfere with the exercise of their independent judgment. In Malaysia, the Listing Requirement of Bursa Malaysia defines independent directors as a director who is independent from the management, free from any business or other relationship which could interfere with the exercise of independent judgment.

4. One of the main duties of the directors is to ensure that the managers prepare the financial statements according to the approved accounting standards. Section 166A (3) of Companies Act 1965 clearly states that "[T]he directors of the company shall ensure that the accounts of the company and, if the company is a holding company for which consolidated accounts are required, the consolidated accounts of the company, laid before the company at its annual general meeting, are made out in accordance with applicable accounting standards". Malaysian Accounting Standards Board (MASB) also requires that directors make a statement in an annual report that the accounts are prepared in accordance with the approved accounting standards. To carry out the task effectively, directors need to have the relevant expertise and knowledge. RMCCG (2007) recommends that the nominating committee should consider the candidates' skill, knowledge, expertise, experience, professionalism and integrity. Besides this, RMCCG (2007) also requires that all members of the audit committee should be financially literate and at least one should be a member of an accounting association or body. This requirement is to ensure that the directors would be able to understand and interpret financial statements accurately, as part of their duties to monitor the firm's internal control system.

5. The Malaysian government set out to address the socioeconomic imbalance between ethnic groups in the country, following riots in 1969 among the three dominant ethnic groups: Malays (known as Bumiputeras), Chinese and Indians. The policy instruments used were the New Economic Policy (NEP) from 1970 to 1990 and the National Development Policy (NDP) from 1991 to 2000. The objective of both the NEP and NDP was to promote and encourage Bumiputera participation in the corporate ownership of Malaysia. The social policy to support firms with Bumiputera ownership resulted in another group of firms "picked" by the government to receive NEP/NDP motivated patronage (Fraser *et al.*, 2006, p. 1293).

6. Apparel Manufacturing; Automotive and Transportation Equipment Manufacturing; Cement and Concrete Product Manufacturing; Beverage and Tobacco Product Manufacturing; Chemical Manufacturing; Computer and Electronic Product Manufacturing; Electrical Equipment, Appliance, and Component Manufacturing; Food Manufacturing; Furniture and Related Product Manufacturing.

7. The data revealed that there is autocorrelation using a Lagrange multiplier test (p-value is 0.000). Further analysis also revealed that there is heteroscedasticity problem using Breusch-

Pagan-Godfrey test (p-value is 0.000) (Gujarati and Porter, 2010; Baltagi, 2005). Other post-estimation tests also show the presence of heteroscedasticity (Modified Wald test, Prob > chi2 = 0.000). Since all tests have p-values which are less than 10 per cent, pooled regression is inappropriate for the test, as pooled regression techniques may distort the exact relationship of the variables under this study due to the correlation between errors component. Thus, a GLS estimator is used to correct for the problems of heteroscedasticity, autocorrelation and contemporaneous correlation (Magalhaes and Africano, 2007; Beck and Katz, 1995).

References

Abbott, L.J., Park, Y. and Parker, S. (2000), "The effects of audit committee activity and independence on corporate fraud", *Managerial Finance*, Vol. 26 No. 11, pp. 55-68.

Abbott, L.J., Parker, S. and Peters, G.F. (2004), "Audit committee charactersitics and restatements", *Auditing-A Journal of Practice & Theory*, Vol. 23 No. 1, pp. 69-87.

Abdul Rahman, R. and Mohamed Ali, F.H. (2006), "Board, audit committees, culture and earnings management: Malaysian evidence", *Managerial Auditing Journal*, Vol. 21 No. 7, pp. 783-804.

Abdullah, S.N., Yusof, N.Z.M. and Nor, M.N.M. (2010), "Financial restatements and corporate among Malaysian listed companies", *Managerial Auditing Journal*, Vol. 25 No. 6, pp. 526-552.

Agrawal, A. and Chadha, S. (2005), "Corporate governance and accounting scandals", *Journal of Law & Economics*, Vol. 48 No. 2, pp. 371-406.

Ali, A. and Zhang, W. (2015), "CEO tenure and earnings management", *Journal of Accounting and Economics*, Vol. 59 No. 1, pp. 60-79.

Baltagi, B.H. (2005), *Econometric Analysis of Panel Data*, John Wiley & Sons Ltd, West Sussex.

Barton, D., Coombes, P. and Wong, S.C.Y. (2004), "Asia's governance challenge", *The McKinsey Quarterly*, Vol. 2 No. 1, pp. 55-61.

Beasley, M. (1996), "An empirical analysis of the relation between the board of director composition and financial statement fraud", *The Accounting Review*, Vol. 71 No. 4, pp. 443-465.

Beck, N. and Katz, J.N. (1995), "What to do with time series cross section data", *American Political Journal Review*, Vol. 89 No. 3, pp. 634-647.

Becker, C., Defond, M., Jiambalvo, J. and Subramanyam, K. (1998), "The effect of audit quality on earnings management", *Contemporary Accounting Research*, Vol. 15 No. 1, pp. 1-24.

Bliss, M. and Gul, F. (2012), "Political connection and cost of debt: some Malaysian evidence", *Journal of Banking & Finance*, Vol. 36 No. 5, pp. 1520-1527.

Brick, I. and Chidambaran, N. (2010), "Board meetings, committee structure and firm value", *Journal of Corporate Finance*, Vol. 16 No. 4, pp. 533-553.

Brookman, J. and Thistle, P.D. (2009), "CEO tenure, the risk of termination and firm value", *Journal of Corporate Finance*, Vol. 15 No. 3, pp. 331-344.

Carter, D.A., Simkins, B.J. and Simpson, W.G. (2003), "Corporate governance, board diversity, and firm value", *The Financial Review*, Vol. 38 No. 1, pp. 33-53.

CheAhmad, A. and Houghton, K.A. (2001), "The effect of ethnicity on audit pricing", Working Paper, Universiti Utara Malaysia, Malaysia and University of Melbourne, Melbourne.

Cohen, D., Dey, A. and Lys, T. (2008), "Real and accrual-based earnings management in the pre- and post-Sarbanes-Oxley periods", *The Accounting Review*, Vol. 8 No. 3, pp. 757-787.

Cornforth, C. (2004), "The Governance of cooperatives and mutual associations: a paradox perspective", *Annals of Public and Cooperative Economics*, Vol. 75 No. 1, pp. 11-32.

Davidson, R. and Kent, P. (2005), "Internal governance structures and earnings management", *Accounting and Finance*, Vol. 45 No. 2, pp. 241-267.

DeAngelo, L.E. (1981), "Auditor independence, 'low-balling' and disclosure regulation", *Journal of Accounting and Economics*, Vol. 3 No. 1, pp. 113-127.

Dey, A., Engel, E. and Liu, X. (2011), "CEO and board chair roles: to split or not to split?", *Journal of Corporate Finance*, Vol. 17 No. 5, pp. 1595-1618.

Donnelly, R. and Lynch, C. (2002), "The ownership structure of UK firms amd the informativeness of accounting earnings", *Accounting and Business Research*, Vol. 32 No. 4, pp. 245-257.

Eichenseher, J.W. (1995), "Additional factors in audit pricing: new evidence from Malaysia", *Accounting & Business Review*, Vol. 2 No. 1, pp. 1-26.

Faccio, M., Masulis, R.W. and McConnell, J.J. (2006), "Political connections and corporate bailouts", *The Journal of Finance*, Vol. 61 No. 6, pp. 2597-2635.

Fama, E.F. (1980), "Agency problems and theory of the firm", *Journal of Political Economy*, Vol. 88 No. 2, pp. 288-307.

Fan, J.P.H. and Wong, T.J. (2002), "Corporate ownership structure and the informativeness of accounting earnings in East Asia", *Journal of Accounting and Economics*, Vol. 33 No. 3, pp. 401-425.

Fraser, D.R., Zhang, H. and Derashid, C. (2006), "Capital structure and political patronage: the case of Malaysia", *Journal of Banking & Finance*, Vol. 30 No. 4, pp. 1291-1308.

Gomez, E.T. (2007), "Family firms, transnationalism and generational change: Chinese enterprise in Britain and Malaysia", *East Asia*, Vol. 22 No. 2, pp. 153-172.

Gomez, E.T. and Jomo, K.S. (1997), *Malaysia's Political Economy: Politics, Patronage and Profits*, Cambridge University Press, New York, NY.

Gujarati, D.N. and Porter, D.C. (2010), *Basic Econometrics*, McGraw-Hill, New York, NY.

Haniffa, R.M. and Cooke, T.E. (2002), "Culture, corporate governance and disclosure in Malaysian corporations", *Abacus*, Vol. 38 No. 3, pp. 317-349.

Hillman, A. and Dalziel, T. (2003), "Boards of directors and firm performance: integrating agency and resource dependence perspectives", *Academy of Management Review*, Vol. 28 No. 3, pp. 383-396.

Hutchinson, M. and Leung, S. (2007), "An investigation of factors influencing the association between top management ownership and earnings management", *Journal of Contemporary Accounting & Economics*, Vol. 3 No. 2, pp. 130-153.

Jaggi, B., Leung, S. and Gul, F. (2009), "Family control, board independence and earnings management: evidence based on Hong Kong firms", *Journal of Accounting and Public Policy*, Vol. 28 No. 4, pp. 281-300.

Jensen, M.C. (1993), "The modern industrial revolution, exit, and the failure of internal control systems", *Journal of Finance*, Vol. 48 No. 3, pp. 831-880.

Jesudason, J.V. (1997), "Chinese business and ethnic equilibrium in Malaysia", *Development and Change*, Vol. 28 No. 1, pp. 119-141.

Johari, N.H., Mohd Saleh, N., Jaffar, R. and Hassan, M.S. (2008), "The influence of board independence, competency and ownership on earnings management in Malaysia", *International Journal of Economics and Management*, Vol. 2 No. 2, pp. 281-306.

Johnson, S. and Mitton, T. (2003), "Cronyism and capital controls: evidence from Malaysia", *Journal of Financial Economics*, Vol. 67 No. 2, pp. 351-382.

Jones, J. (1991), "Earnings management during import relief investigation", *Journal of Accounting Research*, Vol. 29 No. 2, pp. 193-228.

Kang, H., Cheng, M. and Gray, S.J. (2007), "Corporate governance and board composition: diversity and independence of Australian boards", *Corporate Governance*, Vol. 15 No. 2, pp. 194-207.

Klein, A. (2002), "Audit committee, board of director characteristics, and earnings management", *Journal of Accounting and Economics*, Vol. 33 No. 3, pp. 375-400.

Koon, H.P. (1997), "The new economic policy and the chinese community in peninsular Malaysia", *The Developing Economies*, Vol. 35 No. 3, pp. 262-292.

Kosnik, R.D. (1987), "Greenmail: a study of board performance in corporate governance", *Administrative Science Quarterly*, Vol. 32 No. 2, pp. 163-185.

KPMG (2013), "Study on non-executive directors 2013-profile and pay", available at: www.kpmg.com/MY/en/IssuesAndInsights/ArticlesPublications/Documents/2013/aci-ned-2013.pdf

La Porta, R., Lopez-de-Silanes, F., Shleifer, A. and Vishny, R. (2000), "Investor protection and corporate governance", *Journal of Financial Economics*, Vol. 58 Nos 1/2, pp. 3-27.

Magalhaes, M. and Africano, A.P. (2007), "A panel analysis of the FDI impact on international trade", FEP Working Paper No. NIPE WP6/2007, Faculdade de Economia do Porto, Universidade do Porto, January.

Marra, A., Mazzola, P. and Prencipe, A. (2011), "Board monitoring and earnings management pre- and post-IFRS", *The International Journal of Accounting*, Vol. 46 No. 2, pp. 205-230.

Md Yusof, M.A. (2010), "Does audit committees constraint discretionary accruals in MESDAQ listed companies", *International Journal of Business and Social Science*, Vol. 1 No. 3, pp. 124-136.

Menon, K. and Williams, D.D. (2004), "Former audit partners and abnormal accruals", *The Accounting Review*, Vol. 79 No. 4, pp. 1095-1118.

Mitchell, H. and Joseph, S. (2010), "Changes in Malaysia: capital controls, prime ministers and political connections", *Pacific-Basin Finance Journal*, Vol. 18 No. 5, pp. 460-476.

Mohd-Saleh, N., Iskandar, T.M. and Rahmat, M.M. (2005), "Earnings management and board characteristics: evidence from Malaysia", *Journal Pengurusan*, Vol. 24 No. 1, pp. 77-103.

Mohd-Saleh, N., Iskandar, T.M. and Rahmat, M.M. (2007), "Audit committee characteristics and earnings management: evidence from Malaysia", *Asian Review of Accounting*, Vol. 15 No. 2, pp. 147-163.

Park, W.Y. and Shin, H.H. (2003), "Board composition and earnings management in Canada", *Journal of Corporate Finance*, Vol. 185 No. 1, pp. 1-27.

Park, W.Y. and Shin, H.H. (2004), "Board composition and earnings management in Canada", *Journal of Corporate Finance*, Vol. 10 No. 3, pp. 431-457.

Patton, A. and Baker, J.C. (1987), "Why don't directors rock the boat?", *Harvard Business Review*, Vol. 65 No. 6, pp. 10-18.

Peasenell, K.V., Pope, P.F. and Young, S. (2005), "Board monitoring and earnings management: do outside directors influence abnormal accruals", *Journal of Business Finance & Accounting*, Vol. 32 No. 7, pp. 1311-1346.

Piot, C. and Janin, R. (2007), "External auditors, audit committees and earnings management in France", *European Accounting Review*, Vol. 16 No. 2, pp. 429-454.

Rahmat, M.M., Iskandar, T.M. and Saleh, N.M. (2009), "Audit committee characteristics in financially distressed and non-distressed companies", *Managerial Auditing Journal*, Vol. 24 No. 7, pp. 624-638.

Rechner, P.L. and Dalton, D.R. (1991), "CEO duality and organisational performance: a longitudinal analysis", *Strategic Management Journal*, Vol. 12 No. 1, pp. 155-160.

Vafeas, N. (1999), "Board meeting frequency and firm performance", *Journal of Financial Economics*, Vol. 53 No. 1, pp. 113-143.

Walter, A. (2009), *Governing Finance: East Asia's Adoption of International Standards*, Cornell University Press, Ithaca, New York, NY.

Walters, B.A. and Wright, P. (2007), "CEO tenure, boards of Directors, and acquisition performance", *Journal of Business Research*, Vol. 60 No. 4, pp. 331-338.

Wan Ismail, W.A., Dunstan, K. and Zijl, T.V. (2010), "Earnings quality and corporate governance following the implementation of Malaysian code of corporate governance", paper presented at the Journal of Contemporary Accounting and Economics Joint Symposium 2010, Seoul, 5-6 January, available at: www.researchgate.net/publication/228121833_Earnings_Quality_and_Corporate_Governance_Following_the_Implementation_of_Malaysian_Code_of_Corporate_Governance (accessed 1 December 2013).

Wan Jan, W.S. (2011), "Malaysia's new economic model: is the Malaysian Government serious about economic liberalization", Working Paper No. 14, Friedrich-Naumann-Stiftung für die Freiheit.

Wan-Hussin, W.N. (2009), "The impact of family-firm structure and board composition on corporate transparency: evidence based on segment disclosures in Malaysia", *The International Journal of Accounting*, Vol. 44 No. 4, pp. 313-333.

Whah, C.Y. (2011), "Towards inter-ethnic business development and national unity in Malaysia", *Kajian Malaysia*, Vol. 29 No. 1, pp. 141-176.

Xie, B., Davidson, W.N. III and DaDalt, P.J. (2003), "Earnings management and corporate governance: the role of the board and the audit committee", *Journal of Corporate Finance*, Vol. 9 No. 1, pp. 295-316.

Yoshihara, K. (1988), *The Rise of Ersatz Capitalism in South-East Asia*, Oxford University Press, Oxford.

Further reading

Abdullah, S.N. and Mohd-Nasir, N. (2004), “Accrual management and the independence of the Boards of directors and Audit committees”, *IIUM Journal of Economics and Management*, Vol. 12 No. 1, pp. 1-31.

Beasley, J.V.C., Hermanson, D.R. and Neal, T.L. (2010), *Fraudulent Financial Reporting 1998-2007, An Analysis of US Public Companies*, Committees of Sponsoring Organizations of the Treadway Commissions, Durham.

Haniffa, R.M. and Cooke, T.M. (2005), “The impact of culture and governance on corporate social reporting”, *Journal of Accounting and Public Policy*, Vol. 24 No. 5, pp. 391-430.

Marimuthu, M. (2008), “Ethnic diversity on Boards of Directors and its implication on firm financial performance”, *Journal of International Social Research*, Vol. 1 No. 4, pp. 431-445.

Yatim, P., Kent, P. and Clarkson, P. (2006), “Governance structures, ethnicity, and audit fees of Malaysian listed firms”, *Managerial Auditing Journal*, Vol. 21 No. 7, pp. 757-782.

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