

Al-Absy, Mujeeb Saif Mohsen

## Article

# The board chairman's characteristics and financial stability of Malaysian-listed firms

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*Suggested Citation:* Al-Absy, Mujeeb Saif Mohsen (2020) : The board chairman's characteristics and financial stability of Malaysian-listed firms, Cogent Business & Management, ISSN 2331-1975, Taylor & Francis, Abingdon, Vol. 7, Iss. 1, pp. 1-26,  
<https://doi.org/10.1080/23311975.2020.1823586>

This Version is available at:

<https://hdl.handle.net/10419/244958>

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Mujeeb Saif Mohsen Al-Absy |

To cite this article: Mujeeb Saif Mohsen Al-Absy | (2020) The board chairman's characteristics and financial stability of Malaysian-listed firms, Cogent Business & Management, 7:1, 1823586, DOI: [10.1080/23311975.2020.1823586](https://doi.org/10.1080/23311975.2020.1823586)

To link to this article: <https://doi.org/10.1080/23311975.2020.1823586>



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Received: 08 July 2020  
Accepted: 07 September 2020

\*Corresponding author: Mujeeb Saif Mohsen Al-Absy, Department of Accounting and Finance, College of Administrative and Financial Sciences, Gulf University, Street No. 4324, Sanad, 734, Kingdom of Bahrain  
E-mail: [mogeab@yahoo.com](mailto:mogeab@yahoo.com); [dr.mujeeb.saif@gulfuniversity.edu.bh](mailto:dr.mujeeb.saif@gulfuniversity.edu.bh)

Reviewing editor:  
Collins G. Ntim, Accounting,  
University of Southampton,  
Southampton, United Kingdom

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## ACCOUNTING, CORPORATE GOVERNANCE & BUSINESS ETHICS | RESEARCH ARTICLE

# The board chairman's characteristics and financial stability of Malaysian-listed firms

Mujeeb Saif Mohsen Al-Absy<sup>1\*</sup>

**Abstract:** This study examines the association between the board chairman's (BC's) characteristics (independence, age, ethnicity, tenure, family membership, dual chair with nomination committee (NC), dual chair with remuneration committee (RC)) and the firm's financial stability. The Altman (1993) Z-Score indicator was used to determine the financial stability of Malaysian suspect-listed firms, i.e., firms with lowest positive earnings for the years 2013–2015. Ordinary Least Square regression indicates that only the age and tenure of the BC are associated with high financial stability. This means that the chairman's age and tenure could protect the company against financial distress. However, the results showed a negative effect of the BC's ethnicity, family membership and dual chair with the NC on the firm's financial stability. These results, in general, are similar to the Feasible Generalized Least Squares regression and other robustness tests. This study is the first to investigate the influence of the board chairman's characteristics on the firm's financial stability. Thus, it alerts policymakers, firms and their stakeholders, as well as researchers, to the importance of strengthening the board chairman's characteristics to protect the company against financial distress, especially in emerging countries such as

### ABOUT THE AUTHOR

Mujeeb AL-Absy is an assistant professor, Department of Business Management, Abs Community College, Hajjah, Yemen, currently working as a visiting faculty member in the Department of Accounting and Finance, College of Administrative and Financial Sciences, Gulf University, Bahrain. He obtained his Master and PhD degrees from the School of Accountancy, College of Business, Universiti Utara Malaysia, Malaysia and a BSc degree from the College of Commerce and Economics, majoring in accounting, from Hodeidah University, Yemen. Dr. Mujeed has several articles published in Scopus journals; some of them also indexed by ISI. He has presented his working ideas at several international conferences in Malaysia. He has reviewed several international papers published in high-indexed journals. Professionally, Dr. Mujeeb has 6 years of working experience as an accountant at Salah Al-Awadi industrial complex, Hodeidah, Yemen. Email: [mogeab@yahoo.com](mailto:mogeab@yahoo.com)

### PUBLIC INTEREST STATEMENT

The paper examines the influence of the board chairman's (BC's) characteristics, e.g., chairman independence, age, ethnicity, tenure, family relationship, dual chair with nomination or remuneration committee, on the firm's financial stability. To enhance his independence, most regulators require that the BC should not be: an executive director, the same person as CEO, the chairman or a member of certain board committees. Lack of empirical studies on the influence of these characteristics on financial stability, and neglect of other characteristics by regulators and researchers, e.g., BC's age, ethnicity, tenure, the family relationship, have motivated conducting this research. The study finds that greater age and tenure of the board chairman significantly protect the company against financial distress. However, a BC who is of local ethnicity, a family member and chair of the nomination committee significantly causes the company financial distress. This study helps policymakers, firms and their stakeholders to strengthen the role of the BC.

Malaysia, where it has been observed that the board chairman attempts to dominate the entire firm's decisions.

**Subjects:** Business & Company Law; Banking & Finance Law; Economics; Finance;; Business, Management and Accounting

**Keywords:** board chairman; family membership; nomination committee; remuneration committee; financial stability; Malaysia

## 1. Introduction

The series of financial scandals and fraud witnessed globally have significantly affected economies worldwide. For example, the scandals of Enron Corporation and WorldCom in the US, as well as many more cases of fraud, have made regulators, investors and financial communities more aware of the need to pay more attention to the financial statements of companies. In the Malaysian context, investors' confidence was shaken by the acts of two former independent directors of Transmile Group Bhd. who gave Bursa Malaysia a misleading statement (Hashim, 2009; Wan-Abdullah et al., 2012).

The primary reason for these scandals is usually the failure of management to fulfil their obligations in increasing the firm's value, as well as to protect the shareholders' interest. Therefore, management often attempts to hide the actual performance to mislead stakeholders by claiming that the business performance is stable and predictable, while in actual fact it is not. This encourages management to report inaccurate accounting information or commit fraud (Abdul-Rahman & Ali, 2006; Kazemian & Sanusi, 2015) to show that the firm is financially stable. Hence, financial scandals are a clear example of how failures in corporate governance (CG) destroy companies (Rezaee, 2005). This is in line with the argument of Nam and Nam (2004), that the failure of CG was the main cause of the Asian financial crisis of 1997.

Indeed, in the Malaysian context, the rapid onset of the economic crisis of mid-1997 showed the consequences of weak CG (Abdul-Rahman & Ali, 2006). Consequently, attention has moved dramatically towards CG (Cheung & Chan, 2004; Shahwan, 2015). A significant effort has been made by the Malaysian government to boost the efficiency of CG, beginning in 1999 with the formation of a powerful Finance Committee on Corporate Governance (FCCG) to review and reform the Malaysian Code of Corporate Governance (MCCG), and the amendment of the Code in 2000, 2007, 2012 and most recently 2017.

Previous studies have extensively investigated the influence of CG mechanisms on financial reporting quality, such as earnings management (EM), financial reporting timeliness and performance. Only a few have examined the influence on a firm's financial distress of CG attributes: chief executive officer (CEO) duality, board independence, and ownership structure (Abdullah, 2006); CEO duality, board composition, existence of an audit committee (AC) and director and external ownership (Miglani et al., 2015); board composition, e.g., size, independence and CEO duality, and AC composition (Elloumi & Gueyie, 2001); and controlling shareholder directors and the deviation in control away from the cash flow rights (Lee & Yeh, 2004).

Whether CG characteristics significantly influence a firm's financial instability is still unclear (Lee & Yeh, 2004). It is therefore essential to expand the body of knowledge regarding the impact on financial distress of the composition and structure of the board (Elloumi & Gueyie, 2001), as the directors significantly influence company outcomes. In particular, no study has been conducted on the influence of the board chairman (BC) on financial stability, to the best knowledge of this researcher. The chairman is given greater responsibility for establishing good practices in governance, leadership and board effectiveness. Hence, the role of the chairman in the CG process needs further study (Carcello et al., 2011). Most regulators require firms to separate the position of chairman and CEO and/or appoint a non-executive chair. However, the chairman's characteristics have not been determined.

Although the primary concern of regulators and researchers has been given to board independence, there is no strict policy requiring firms to appoint an independent chairman. Likewise, there is no empirical evidence for the influence of the BC's independence on the firm's financial stability. A further characteristic of the BC is age; whether it protects the firm against financial distress has not been determined by regulators or researchers. In terms of board ethnicity, very few studies have been conducted (Marimuthu, 2008), especially the influence of the BC's ethnicity on the firm's financial stability. Regarding tenure, most regulators have determined the period of the independent directors' tenure, but not the BC's tenure; its influence on financial stability has not been investigated. Concerning the issue of family chairman, Al-Absy et al. (2019a) found that CG mechanisms can be affected, losing the monitoring role of overcoming unethical management behaviour when family members chair the board. However, the influence of family chairman on financial stability has not been covered in previous studies.

Concerning the impact of the BC chairing the nomination committee (NC), very little is known about the social dynamics among the CEO, BC and NC and how they affect the appointment of directors (Walther et al., 2017). Similarly, for the impact of a BC who chairs the remuneration committee (RC), the effect of social dynamics among the CEO, BC and RC on remuneration policy is unknown. Only one study, by Al-Absy et al. (2018b), has examined the influence of the BC chairing the NC or RC on financial reporting quality, measured by EM. Its effect on the firm's financial stability has not been investigated.

This study contributes in different ways to the literature. First, it seeks to bridge the gap in the literature by providing an empirical study on the influence of the BC's characteristics on financial stability. It extends the literature by applying agency theory as the underlying theory and resource dependence theory as a supporting theory to explain the relationship between the BC's characteristics and financial stability. Specifically, the study examines the association between the BC's characteristics (independence, age, ethnicity, tenure, family membership, dual chair with NC, dual chair with RC) and the firm's financial stability. The results may help policymakers and the regulatory bodies to understand the supervisory role of each of the BC's characteristics in enhancing the firm's financial stability. This may help the policymakers and regulatory bodies to re-evaluate the role of the BC's characteristics. This study can also help policymakers to take action in an attempt to improve the effectiveness of the BC's characteristics in increasing the firm's financial stability. It also draws the attention of researchers in CG to further investigation of the BC's characteristics to provide a definite conclusion that may help policymakers, investors, creditors as well as all shareholders.

Secondly, the study examines an emerging economy, Malaysia, where the business environment has specific characteristics that can affect the implementation of CG. Two features distinguish the ownership of Malaysian firms: concentrated shareholdings either by individuals or families, and the high percentage of government equity (Abdullah, 2006). The Malaysian context is also of interest for this study because of the diversity of its culture, i.e., religion, ethnicity and language (Muniandy & Ali, 2012). Furthermore, several revisions have been made to the MCCG by regulators (in 2007, 2012 and 2017), in an attempt to strengthen the governance practices. This shows that the Code is either still incomplete or is challenging to apply because of cultural differences between Malaysian companies (Al-Absy et al., 2018a), supporting the need to improve CG (Mohammad et al., 2016).

All of these features could significantly influence the appointment of the BC and his/her role in monitoring and supervising the firm's activities. Importantly, it has been observed that company directors in Malaysia face challenges in expressing views that may contradict those of the majority shareholders, especially when their views are different from the CEOs or the chairmans (Satkunasingam et al., 2012). Overall, the findings of the current study indicate that only age and tenure of the BC are associated with high financial stability, while the BC's ethnicity, family membership and dual chair with NC are associated with low financial stability.

## 2. Literature review

### 2.1. Corporate governance and financial stability

Companies with weak CG structures are considered to be exposed to downturns and the possibility of financial instability (Lee & Yeh, 2004). The argument that the implementation of specific CG structures is advantageous for firms, as expressed in the reduced risk of economic stress, was endorsed by Miglani et al. (2015). Likewise, the study of Abdullah (2006) provides evidence of the degree to which financial distress is linked to CG. Firms that face financial distress are expected to have several issues related to governance, mainly the effectiveness of directors in carrying out their monitoring functions (Abdullah, 2006).

Miglani et al. (2015) concluded that the probability of lower financial distress is associated with an increased number of directors, blockholder ownership and the presence of an AC. In contrast, financial distress is not significantly associated with CEO duality or the independence of the board. Abdullah (2006) found that financial distress is negatively associated with the interests of management, non-executive directors and outside blockholders. Hence, the study supports the claim that ownership held by non-executive directors as well as outside blockholders significantly enhances their opportunities to regulate management and ensure that their capital is maintained. In contrast, the study found that CEO duality and board independence are not significantly associated with the likelihood of financial distress.

Elloumi and Gueyie (2001) concluded that the composition of the board helps explain financial distress beyond the financial indicators. Nonetheless, in the context of financial distress, the distinction between financially distressed companies based on CEO changes as a proxy for turnaround strategies gives useful insights into the characteristics of CG. The study found that independent directors and ownership are negatively associated with the risk of financial distress. Nonetheless, there is no significant relationship between the existence of CEO duality and the risk of financial distress (Elloumi & Gueyie, 2001). Lee and Yeh (2004) found that the ratio of directors affiliated with the controlling shareholder and the divergence in control away from cash flow rights were strongly associated with the probability of financial distress, even after monitoring the potential impact of financial performance. CG was also found to have deteriorated in the year preceding financial distress.

### 2.2. Agency and resource development theories

Shareholders expect managers to adopt strategies that maximize the value of the firm. However, due to the conflict of interest between managers and shareholders expressed in agency theory (Jensen & Meckling, 1976), managers may become opportunistic in their behaviour at the expense of the shareholders (Tabasum et al., 2018; Wu et al., 2016). Therefore, shareholders attempt to limit the differences of interest through implementing several mechanisms of CG, e.g., board of directors, AC, and external auditors (Hajawiyah et al., 2020), that could effectively monitor and supervise the managers' activities and decisions. Hence, these mechanisms can play an important role in enhancing the quality of earnings reported by firms (Asogwa et al., 2019). Views on the role of CG mechanisms in monitoring managers' decisions have led to a shift towards a specific orientation of CG by regulators, which generally requires higher external directors' representation, experience, diversity in terms of gender and other mechanisms. Regarding the BC, most regulators required that he/she should not be: an executive director, the same person as the CEO, the chairman or a member of certain board committees. In the case of Malaysia, several revised CG codes were introduced (e.g., MCG. 2000, 2007, 2012 and 2017) aimed to reduce the agency problem. Agency theory is relevant theory in explaining the relationship between CG mechanisms, namely the BC's characteristics and the firm's financial stability.

Resource dependence theory also plays a vital role in strengthening the capacity of the board to effectively enhance the firm's governance and monitor the managers' directions. It indicates that firms have to obtain essential resources from their environment. The board is an integral component of an efficient firm, i.e., it is used to access resources and information (Boyd, 1990); it links firms with their stakeholders (Lückerath-Rovers, 2009); and it provides experience and knowledge (Hillman et al., 2000).



Consequently, the current study integrates the agency and resource dependence theories in explaining the relationship between the BC's characteristics and the firm's financial stability.

### 3. Empirical literature review and hypotheses development

#### 3.1. Board chairman's independence

Board independence is the primary concern of worldwide CG codes, including the MCCG. In MCCG 2000 and 2007, the independence of at least one-third of board members was required; the 2012 revision demanded a majority of independent directors unless the BC was independent; and MCCG 2017 currently requires the independence of at least one-half of the board, or a majority in large companies. Nevertheless, there is no strict policy requiring firms to appoint an independent chairman. Scholars have argued that the independence of a BC, who is neither a founder nor a CEO, could improve the board's monitoring role by effectively and independently examining the managers' decisions, especially those of the CEO. Further, it has been found that, among companies with BC independence, the earnings statement quality is higher than in those companies without an independent chairman (Al-dhamari & Ku Ismail, 2012). Likewise, Al-Zyoud (2012) and Al-Absy et al. (2019c) found that the chairman's independence is significantly associated with a low level of discretionary accruals, which indicates that it results in a higher reporting quality.

In contrast, Filatotchev et al. (2005) found that an independent chairman in a firm does not appear to affect its performance. Likewise, Al-Absy et al. (2019d) and Habbash (2011) found that the BC's independence is not significantly related to discretionary accruals or real earnings management. However, Mohammad et al. (2016) found that the chairman's independence is significantly associated with a higher level of EM. Nevertheless, based on the agency and resource dependence theories, the study expects that:

*H<sub>1</sub>: The board chairman's independence positively influences the financial stability of a firm.*

#### 3.2. Board chairman's age

Studies have documented that a person's age is negatively associated with job performance and that an older BC may mean poorer firm performance (Waelchli & Zeller, 2013). The Malaysian Companies Act 1965, section 169(1), states that no person of 70 years of age or above shall be elected or continue to serve as a director of a public company. Waelchli and Zeller (2013) argue that the BC's cognitive skills are declining and that his or her perception is greatly limited. The same authors reported the following results: (i) an older BC has little chance of concentrating on optimizing shareholder value; (ii) an older BC seems to be bureaucratically rather than strategically inclined; and (iii) an older BC pays less attention to performance-sensitive incentives. Al-Absy et al. (2019a) reported no significant influence on the financial reporting quality (measured by EM) of the chairman's age, in this case the AC chairman.

Conversely, Amran et al. (2014) found a significant positive association between the BC's age and firm performance, as an older BC has more experience and is, therefore, more risk averse. Accordingly, he/she may reasonably be expected to apply more checks and balances on managers. An older chairman may improve the quality of financial reporting, as the study of Xiong (2016) revealed that the BC's age is significantly associated with a low level of EM. Hence, the study expects that an older chairman could add value to the firm from longer experience that a younger chairman. Thus:

*H<sub>2</sub>: The board chairman's age positively influences the financial stability of the firm.*

#### 3.3. Board chairman's ethnicity

Culture influences personal behaviour, organizational policies and ethics as well as organizational governance (Haniffa & Cooke, 2002; Ow-Yong & Kooi-Guan, 2000). It plays an essential role in national CG codes (Cornelius, 2005). Malaysia is a multi-ethnic community, consisting of the main

group of Malays (known as Bumiputra), followed by Chinese, Indians and others. Consequently, a BC who belongs to a specific group may significantly influence the firm's activities and its value. Previous studies have focused on the influence of the board's ethnicity on the firm's performance and EM. However, there is no study of its effect on the financial distress of firms.

Marimuthu (2008) concluded that increasing the board's ethnic diversity would boost the financial performance of the firm. Likewise, positive relationships between the ethnicity of the BC or CEO and firm performance have been reported by Amran et al. (2014). Haniffa and Cooke (2002) found that a board with a high percentage of Malay directors is more likely to voluntarily disclosure information. Al-Absy et al. (2019a) also provide evidence of a significant association between the AC chairman's ethnicity and a low level of EM. On the other hand, a study of Salleh et al. (2006) revealed that ethnicity has no relationship with audit quality, neither for the BC nor for the proportion of Malay directors. Several other studies also reported that board ethnicity has no significant association with the quality of financial reporting, measured by EM (Abdul-Rahman & Ali, 2006; Mohammad et al., 2016).

Nevertheless, according to Salleh et al. (2006), Malays appear to have less individuality, and higher levels of uniformity, conservatism and disclosure than others. Hence, recruitment of a - Malay BC who follows Islamic business ethics may effectively monitor the managers' decisions and activities as he/she has the greatest responsibility for future financial breakdown. Hence, the study expects that a Malay chairman could add value to the firm and protect it against financial distress, in line with the agency and resource dependence theories. Thus, the study expects that:

*H<sub>3</sub>: The board chairman's ethnicity positively influences the financial stability of the firm.*

### **3.4. Board chairman's tenure**

Most regulators determine the period of independent directors' tenure, worldwide and in Malaysia. For instance, MCGG 2012 introduced a new requirement limiting their tenure to a cumulative term of 9 years; otherwise, the board should explain the position and obtain the shareholders' approval. Further, MCGG 2017 requests shareholders' approval through a two-tier voting process, in the case of retaining an independent director after 12 years. However, the issue of BC's tenure has been given less attention by regulators where BCs are not independent. The BC's tenure plays an essential role in board governance and independence, particularly in Malaysia, where the MCGG has raised concern over the role of powerful BCs.

Long tenure for directors increases their experience and knowledge in monitoring management decisions (Vafeas, 2005). For instance, a longer tenure of outside board directors significantly protects the firm against the likelihood of fraudulent financial reporting (Beasley, 1996). Likewise, a longer tenure of independent board directors is significantly associated with a low level of EM (Chtourou et al., 2001). Longer tenure of AC members significantly improves financial reporting quality (Dhaliwal et al., 2010). Likewise, Yang and Krishnan (2005) found that the longer tenure of AC directors is significantly associated with a low level of EM. Al-Absy et al. (2019a) also found that the tenure of the AC chairman is significantly associated with low EM. In terms of the BC, Xiong (2016) found that tenure is significant in reducing discretionary accruals and real earnings management. Equally, Al-Absy et al. (2019c) reported a significant relationship between the BC's tenure and the low level of discretionary accruals. Even linking discretionary accruals to income increase and decrease, Al-Absy et al. (2019b) found that the BC's tenure is significantly associated with a low level of income-increasing and income-decreasing earnings management.

On the other hand, Vafeas (2003) argued that more seasoned directors may become personal friends, and therefore less likely to control and monitor managers, particularly in firms controlled by CEOs. Further, Xie et al. (2003) found that the length of external directors' tenure is positively associated with current discretionary accruals. Tanyi and Smith (2014), however, found no significant relationship between the tenure of the AC chairman and the quality of financial reporting. In terms of



the BC, previous studies have found that tenure is not associated with firm performance (Waelchli & Zeller, 2013) or with the level of EM (Shu et al., 2015). A few studies have been conducted to investigate the influence of the BC's tenure on firm performance (Waelchli & Zeller, 2013) or EM (Shu et al., 2015; Xiong, 2016). However, there is no study linking it to the financial stability of firms. Thus,

*H<sub>4</sub>: The board chairman's tenure positively influences the financial stability of the firm.*

### **3.5. Board chairman as family membership**

The position of the BC in a company is crucial. Previously the CEO, who in most cases was a founder or a family member, took over the role of BC to be in the best position to protect the family's resources as well as to dominate the entire firm's decisions. It has been argued that the dominant position of a chairman who is a family member might reduce the type I agency problem. In other words, the conflict of interest between the shareholders and manager would be minimized if the chairman is a family member with ready access to the firm's information. In contrast, other scholars have argued that family owners may control the overall management decisions and attempt to increase their interest against the minority shareholders, especially in developing countries (Cheung & Chan, 2004; Claessens & Fan, 2002). Consequently, most regulators require companies to separate the roles of BC and CEO. However, Al-Absy et al. (2018b) argued that family-controlled firms might consider choosing a member of the family for the position of BC as the CEO would still have a significant influence on the his/her views.

Sacristán-Navarro et al. (2011) found that a family chairman, measured by a dummy variable equal to 1 if the family firm was chaired by a member of the ultimate family owner, and 0 otherwise, did not significantly affect firm profitability. Similarly, Chen et al. (2013) found that a family chairman, dummy variable equal to one if a family member held the chairman's position, is not associated with firm performance. Likewise, Kowalewski et al. (2010) found no significant relationship between the family BC and firm's performance (ROE, ROA, and operating income to total assets). According to Al-Absy et al. (2019a), the CG structures do not significantly reduce EM practices in a firm where the family member is a chairman. Family BCs may seek goals other than maximizing profit (Kowalewski et al., 2010). Therefore, Al-Absy et al. (2019a) claimed that it is crucial to have a BC who has a relationship with neither directors nor the major shareholders, as this relationship may hinder the effectiveness of CG in curbing practices related to EM, thereby reducing the reporting quality of firms, especially in a country where it is difficult to reduce the number of family directors on the board. Thus, the fifth hypothesis is stated as follows:

*H<sub>5</sub>: The board chairman's family membership negatively influences the financial stability of the firm.*

### **3.6. Board chairman's dual chair with the nomination and remuneration committees**

The BC is an essential member of a company, although he/she may be dominated by executive directors who are family members. A powerful BC may try to control and monitor the board's committees using his/her status or political ties, or because he/she is the major shareholder or founder of the firm (Satkunasingam et al., 2012). Therefore, the BC's participation on the board's committees is not appropriate in a society where there is deference to dominant or well-connected identities, leading to the committees' compliance with the chairman's directives, even if it transgresses CG (Satkunasingam et al., 2012).

One of these committees is the nomination committee (NC). National CG codes may require firms to set up the NC entirely comprising independent directors (such as in Thailand) or with a majority of independent directors (as in Russia, the United Kingdom, Singapore and Malaysia). Regarding the chairman, some CG codes request an independent director (e.g., in Australia, Singapore, Malaysia and Bahrain), while others require the chairman of the NC to be a non-executive director (e.g., Cyprus). Concerning the involvement of the BC in the NC, some CG codes (Australia, the United Kingdom, Cyprus and Denmark) allow that he/she may also be chairman of

the NC, while others (e.g., Singapore) allow the BC to become a member if he/she is an independent director (Al-Absy et al., 2018b).

However, the NC should not be chaired by the BC when the committee deals with the appointment of a successor to the chair, as regulated by the codes of the United Kingdom and Australia. Equally, Russia's code requires that if the NC chairman is the same person as the BC, he or she must decline to chair any committee meeting that discusses issues related to him/her, such as determining his/her successor or recommending his/her election. Importantly, some CG codes stress the importance of having a BC who is not the same person as the NC's chairman (such as in Slovenia and Thailand) or a member of the NC (such as in the United Arab Emirates and Thailand) (Al-Absy et al., 2018b).

This study suggests that the BC should not chair the NC. Otherwise, the efficiency of the NC will be low, for the following reasons. First, the insider directors, particularly in family-owned firms, may appoint a person controlled by them to serve as the BC and at the same time appoint them to chair the NC. Second, the terms of reference of the NC which is chaired by the BC should be reviewed by the whole board. Thus, it is difficult for the board to evaluate the terms of reference of the NC since the BC chairs the NC. Finally, the recommendations reported to the board by the NC, such as those related to the nomination of a new director to the board, will be less efficiently evaluated and discussed by the board members since the BC is the chairman of the NC. According to Al-Absy et al. (2018b), the BC's involvement in the NC, e.g., as a chairman or an ordinary member, is associated with a high level of EM practice in a firm. Thus,

*H<sub>6</sub>: The board chairman's duality as chair of the nomination committee negatively influences the financial stability of the firm.*

Another committee that may be dominated by BC is the remuneration committee (RC). Most CG codes require that the RC should be composed entirely of non-executive directors. However, other codes (as in Australia, Mauritius, Thailand, Singapore and Bahrain) require only a majority of directors to be independent, while others (e.g., Ireland and Russia) require all the directors to be independent. Regarding the RC chairman, several CG codes (e.g., Russia, the United Kingdom, Australia, Singapore, Thailand and Bahrain) require the appointment of an independent director. Concerning the BC's involvement in the RC, several CG codes recommend that the BC should not chair the RC (e.g., the United Kingdom, Russia, Ireland Slovenia, the Netherlands and Thailand) or be a member of the RC (e.g., Thailand and the United Arab Emirates) (Al-Absy et al., 2018b).

The primary role of the RC is to advise and support the board on issues related to remuneration. Their remuneration may affect the attitude of directors, encouraging them to either increase or reduce the firm value as well as the reporting quality. Hence, the remuneration package must be adequate to attract, motivate and retain directors with the necessary skills and qualifications (Al-Absy et al., 2018b). Further, the RC's directors should continuously make recommendations to the board for any particular action or decision regarding the directors' remuneration (Kanapathippillai et al., 2016). Thus, the recommendations made by a RC chaired by the BC may be adopted and implemented by the board without any discussion, if the BC dominates the board's decisions, especially in those firms with a higher percentage of insider directors or family members (Al-Absy et al., 2018b). The results of previous studies are few and inconsistent. Al-Absy et al. (2018b) found that a BC who chairs the RC is not significantly associated with real earnings management. However, the association between a BC who chairs the RC and discretionary accrual is found to be significant and negative. Nevertheless, based on the agency and resource dependence theories, combining the two positions in a single person may not effectively improve financial reporting. Thus,

*H<sub>7</sub>: The board chairman's duality as chair of the remuneration committee negatively influences the financial stability of the firm.*

#### 4. Research design

##### 4.1. Sample selection

This study covers three consecutive years, from 2013 to 2015. The selection of the sample is based on firm performance, i.e., return on asset (ROA) (Roychowdhury, 2006; Ugrin et al., 2017; Yuliana et al., 2015), taken from DataStream, as the ROA figure gives investors an idea of how efficiently a company's management is generating earnings from its assets. In line with previous studies that excluded suspect firms, i.e., ROA from zero to 0.005 (Roychowdhury, 2006; Yuliana et al., 2015) or from zero to 0.01 (Ugrin et al., 2017), firms with a negative ROA for one or more years were excluded here. Then, the firms' average ROA (the sum of the ROA for 2013, 2014 and 2015, divided by three) was calculated and arranged in ascending order to identify the 300 firms with the lowest average ROA. However, 18 firms were removed from the sample due to lack of complete data. This resulted in a final sample of 282 firms for the 3 years, that is 846 firm years.

##### 4.2. Regression models

The following regression model was utilized to determine the degree of the effect of the BC's characteristics (independence, age, ethnicity, tenure, family membership, dual chair with NC, dual chair with RC) on the firm's financial stability. Several control variables were included in the model, such as board size and meetings, audit committee size and meetings, ownership concentration, Big4 audit firms, sales growth, return on assets, leverage, cash flow from operations and manufacturing industry, to control the relationship between the BC's characteristics and the firm's financial stability. Details regarding the measurement of the variables are provided in Table 1.

$$\begin{aligned} \text{Financial Stability (Z-Score)} = & \beta_0 + \beta_1 \text{BCIND} + \beta_2 \text{BCAGE} + \beta_3 \text{BCETH} + \beta_4 \text{BCTEN} + \beta_5 \text{BCFM} + \beta_6 \text{BCD-} \\ & \text{N} + \beta_7 \text{BCD-R} + \beta_8 \text{BSIZE} + \beta_9 \text{BMEET} + \beta_{10} \text{ACSIZE} + \beta_{11} \text{ACMEET} \\ & + \beta_{12} \text{Big4} + \beta_{13} \text{Conc5} + \beta_{14} \text{SG} + \beta_{15} \text{LEV} + \beta_{16} \text{ROA} + \beta_{17} \text{NCFO} \\ & + \beta_{18} \text{INDUS} + \epsilon. \end{aligned}$$

To provide robust results, the study re-estimated the main model, first by including a dummy variable for year (Cai et al., 2012; Sakawa & Watanabel, 2017, 2018) to control the differences across the year (business cycle). It is argued that differences across the year can have a particular effect on the regression result (see Baatwah et al., 2015; Datta et al., 2013). Secondly, a dummy variable is included for the company sector (construction, consumer, industrial products, plantation, properties, technology, trade and services), instead of the INDUS used in the main model, in addition to the year dummy variable. Specifying the sector and including it in the regression may help in controlling differences across sectors.

##### 4.3. Descriptive statistics

Table 2 shows that the mean value of the firm's financial stability is 2.761, which is in line with the result of Wan-Hussin and Bamahros (2013). The result indicates that the selected firms in general fall within the grey zone (Z-Score mean is above 1.81 and below 2.99). This means that the firms selected are not in deep financial distress. However, the selected firms are not likely to be financially sound overall, as the mean of financial stability is below 2.99 (Altman, 1968). Table 2 also shows that the average age of the BC (BCAGE) is 64.280, which is consistent with Amran et al. (2014) who found that the age of the majority of Malaysian BCs is 50–71 years. It also shows that the average tenure of the BC (BCTEN) is 12.32 years, which is lower than the finding of Waelchli and Zeller (2013) and Shu et al. (2015): respectively, 14 years in Switzerland and 14.71 years in Taiwan. In terms of the BC's characteristics measured by a dummy variable, Table 2 reveals that 311 (36.76%), 432 (51.06%) and 332 (39.24%) firm-year observations indicated an independent chairman, Malay and family member, respectively. These results suggest that firms are more likely to appoint an independent chairman than in 2009 (mean value 30%) (Mohammad et al., 2016) and less likely to appoint a Malay chairman than in the period 2005–2009 (mean value was 74%)

**Table 1. Summary of variables' measurements**

| Variables                   | Acronym | Measurement  |
|-----------------------------|---------|--|
| Financial stability         | Z-Score | "1.2 * (working capital to total assets) + 1.4 * (retained earnings to total assets) + 3.3 * (earnings before taxes and interest to total assets) + 0.6 * (market value of equity to total liabilities) + 1.0 * (net sales to total assets)" (Gul, 2006; Wan-Hussin & Bamahros, 2013). |
| Chairman independent        | BCIND   | "1" if BC is independent, and "0", otherwise.  |
| Chairman age                | BCAGE   | BC's age.  |
| Chairman ethnicity          | BCETH   | "1" if BC is Bumiputra director, and "0", otherwise.   |
| Chairman tenure             | BCTEN   | Number of years the BC has served as a director on the firm.   |
| Chairman family member      | BCFM    | "1" if BC has a family relationship with other directors or with a major shareholder, and "0", otherwise.  |
| Chairman dual chair with NC | BCD-N   | "1" if BC chair the nomination committee, and "0", otherwise.  |
| Chairman dual chair with RC | BCD-R   | "1" if BC chair the remuneration committee, and "0", otherwise.  |
| Board size                  | BSIZE   | Number of board directors.   |
| Board meeting               | BMEET   | Number of board meetings per year.   |
| AC size                     | ACSIZE  | Number of AC directors.  |
| AC meeting                  | ACMEET  | Number of AC meetings per year.  |
| Ownership concentration     | Conc5   | Percentage of outstanding shares held by largest five shareholders.  |
| Big4 audit firms            | Big4    | "1" if firms were audited by Big4 firms, and "0", otherwise.   |
| Sales growth                | SG      | (current year's sales—prior year's sales)/prior year's sales   |
| Return on assets            | ROA     | Net income/total assets.   |
| Leverage                    | LEV     | Total debt to total assets.  |
| Cash flow from operations   | NCFO    | "1" if cash flow from operations is negative, and "0", otherwise   |
| Industry                    | INDUS   | "1" for observation in the manufacturing industry, and "0", otherwise.   |

Note: the study uses the Altman Z-Score by following the equation of Gul (2006) and Wan-Hussin and Bamahros (2013), to predict financial stability among Malaysian firms.

(Amran et al., 2014). It also shows a high percentage of firms who appointed a family member as chairman, similar to many other countries, e.g., Spain where the percentage is 42% (Sacristán-Navarro et al., 2011). Table 2 further shows that 152 (17.97%) firm-year observations show appointment of a single person as chairman of the board and the NC (BCD-N), and 179 (21.16%) a single person as chairman of the board and the RC (BCD-R).

Regarding the control variables, the results show that the mean value of board size (BSIZE) and meeting frequency (BMEET) is 7.413 members and 5.611 meetings per year, respectively. The mean value of AC size (ACSIZE) and meeting frequency (ACMEET) is 3.236 members and 5.054 meetings per year, respectively. Furthermore, the result in respect of ownership concentration (Conc5) suggests that the ownership percentage of the largest five shareholders is 54.60%. Further, 444 (52.48%) firm-year observations showed auditing by Big-4 firms (Big4). Concerning the firm-specific characteristics, the results indicate that the average value of leverage (LEV), return on assets (ROA) and sales growth (SG) is 20.87%, 4.41% and 7.80%, respectively. Regarding firm type (INDUS), 360 (42.55%) firm-year observations are for manufacturing firms. Lastly, the results show that 196 (23.17%) firm-year observations reported a negative value for the cash flow from operations.

**Table 2. Descriptive statistics of the continuous variables**

| <b>Continuous Variables</b> |                |                |               |                 |                 |
|-----------------------------|----------------|----------------|---------------|-----------------|-----------------|
| <b>Variable</b>             | <b>Mean</b>    | <b>Min</b>     | <b>Max</b>    | <b>Skewness</b> | <b>Kurtosis</b> |
| Z-Score                     | 2.761          | 0.405          | 10.060        | 1.886           | 7.091           |
| BCAGE                       | 64.280         | 30.000         | 88.000        | -0.408          | 3.314           |
| BCTEN                       | 12.323         | 0.330          | 45.330        | 1.186           | 4.306           |
| BSIZE                       | 7.413          | 4.000          | 17.000        | 0.991           | 4.811           |
| BMEET                       | 5.611          | 4.000          | 14.000        | 2.335           | 9.010           |
| ACSIZE                      | 3.236          | 3.000          | 6.000         | 2.233           | 8.597           |
| ACMEET                      | 5.054          | 3.000          | 10.000        | 1.823           | 7.706           |
| Conc5                       | 0.546          | 0.141          | 0.948         | -0.092          | 2.315           |
| SG                          | 0.078          | -0.509         | 1.263         | 1.652           | 7.675           |
| LEV                         | 20.873         | 0.000          | 68.560        | 0.414           | 2.452           |
| ROA                         | 4.411          | 0.010          | 15.160        | 0.654           | 3.562           |
| <b>Dummy Variables</b>      |                |                |               |                 |                 |
| <b>Variable</b>             | <b>Yes (1)</b> |                | <b>No (0)</b> |                 |                 |
|                             | <b>Freq.</b>   | <b>Percent</b> | <b>Freq.</b>  | <b>Percent</b>  |                 |
| BCIND                       | 311            | 36.76          | 535           | 63.24           |                 |
| BCETH                       | 432            | 51.06          | 414           | 48.94           |                 |
| BCFM                        | 332            | 39.24          | 514           | 60.76           |                 |
| BCD-N                       | 152            | 17.97          | 694           | 82.03           |                 |
| BCD-R                       | 179            | 21.16          | 667           | 78.84           |                 |
| Big4                        | 444            | 52.48          | 402           | 47.52           |                 |
| NCFO                        | 196            | 23.17          | 650           | 76.83           |                 |
| INDUS                       | 360            | 42.55          | 486           | 57.45           |                 |

Note: Z-Score = financial stability, BCAGE = BC's age, BCTEN = BC's tenure, BSIZE = board size, BMEET = board meeting, ACSIZE = AC size, ACMEET = AC meeting, Conc5 = ownership concentration, SG = sales growth, LEV = leverage, ROA = return on assets, BCIND = BC's independence, BCETH = BC's ethnicity, BCFM = BC's family membership, BCD-N = BC's dual chair with NC, BCD-R = BC's dual chair with RC, Big4 = big four audit firms, NCFO = cash flow from operations, INDUS = Industry.

#### 4.4. Diagnostic tests

The study winsorized the extreme observations of ACMEET by using 1% and Z-score, BMEET and SG by using 2% for the top and bottom observations to resolve the outlier problem. Table 2 shows that individual variables are normally distributed, i.e., in general, the skewness for all variables is within the threshold of  $\pm 3$  and the kurtosis is within the threshold of  $\pm 10$ . The correlation matrix (Table 3) shows that there are no collinearity or multicollinearity problems in the dataset, confirmed by the variance inflation factor test (data provided on request). However, the Breusch-Pagan/Cook-Weisberg test provides evidence for the existence of heteroscedasticity. Wooldridge's test shows that the data in this study does not suffer from the autocorrelation problem.

#### 5. Empirical results and discussion

Ordinary Least Square (OLS) regression with the robust functionality to solve the problem of heteroscedasticity was applied to investigate the influence of the BC's characteristics on firms' financial stability. OLS regression was used because the period of the data in the study is only 3 years. All models presented in Table 4 are fit (at the level of 1%). All models have a high  $R^2$  which indicates that the variables are strongly related to and significantly affect the firm's financial stability. Furthermore,  $R^2$  suggests that the variables comprehensively explain the issue of the firm's financial stability.

Table 4 reveals that the BC's independence is not significantly associated with the firm's financial stability. This result indicates that an independent chairman still faces difficulties in protecting all the stakeholders, as he/she may still be dominated by insider directors who own a higher percentage of shares and can also influence the board's decisions and composition. The result of the current study is consistent with previous studies which found that the BC's independence does not significantly influence the firm's performance (Filatotchev et al., 2005) nor significantly constrain the practice of discretionary accruals (Habbash, 2011) or real earnings management (Al-Absy et al., 2019d). However, it is inconsistent with other studies that found the BC's independence to be significantly associated with reducing discretionary accruals (Al-Absy et al., 2019c; Al-Zyoud, 2012).

In terms of BCAGE, age was found to be significantly associated with greater financial stability. This finding is consistent with Amran et al. (2014), who found that the BC's age is significantly related to firm performance; and Xiong (2016), who found that it is significantly related to a high level of financial reporting quality (measured by EM). The result suggests that the long life of the chairman makes him more efficient in supervising managers, less willing to engage in risky activities, and more likely to make wise decisions that maintain the firm's financial stability.

Similarly, the study found that the BC's tenure is significantly associated with greater financial stability. The result is consistent with prior studies which found that: the tenure of the independent directors significantly protects the firm against the likelihood of fraudulent financial reporting (Beasley, 1996) and significantly mitigates EM (Chtourou et al., 2001); the longer tenure of AC members significantly improves financial reporting quality (Dhaliwal et al., 2010) and mitigates EM (Yang & Krishnan, 2005); the tenure of the AC chairman is significantly associated with low EM (Al-Absy et al., 2019a); and the tenure of the BC significantly reduces EM (Al-Absy et al., 2019c; Xiong, 2016). The findings indicate that a BC with a long history of working in a firm is more likely to protect the firm from getting into difficulty. The long service of the chairman makes him/her aware of all the details and information about the firm, making him more professional in dealing with the firm's activities and decision-making.

Concerning BCETH, Table 4 shows that a BC's Malay ethnicity is significantly associated with low financial stability. It seems that Malay chairmen have difficulty in exercising their authority, or may not participate sufficiently in making decisions. The result is consistent with studies which found no significant relationship between the ethnicity of the BC or the percentage of Malay directors and the audit quality (Salleh et al., 2006); or the ethnic diversity of the board and mitigating EM (Abdul-Rahman & Ali, 2006; Mohammad et al., 2016). Regarding BCFM, the result reveals that the BC's family membership is significantly associated with low financial stability. The result suggests that family members may appoint a chairman who has family ties with other directors or shareholders, rather than for their experience and knowledge. Thus, the family chairman may pursue goals other than maximizing the firm's profit (Kowalewski et al., 2010) or may pay insufficient attention to the firm's activities, as previous studies found no significant relationship between a family chairman and firm performance (Chen et al., 2013; Kowalewski et al., 2010; Sacristán-Navarro et al., 2011).

In terms of BCD-N, it was found that a BC who chairs the NC is significantly associated with low financial stability. This suggests that under a single chairman, the board faces difficulties in evaluating the terms of reference of the NC. Further, the NC's recommendations reported to the board through the BC may mean that the selection of new directors will be less efficiently evaluated and discussed by the board members. The result is consistent with Al-Absy et al. (2018b), who reported that the involvement of the BC in the NC is significantly associated with a high level of EM practice. Further, it is consistent with Al-Arussi and Shamkhi (2016), who found that the BC is significantly related to the low level of financial disclosures when he/she chairs audit and nomination committees together. It is also consistent with previous studies which found that the BC's duality with CEO is significantly associated with a high level of EM practice (Gull et al., 2018; Wu et al., 2016).



Table 3. Pearson correlation

| Variable | Z-Score   | BCIND     | BCAGE    | BCETH     | BCTEN     | BCFM      | BCD-N    | BCD-R    | BSIZE     |
|----------|-----------|-----------|----------|-----------|-----------|-----------|----------|----------|-----------|
| Z-Score  | 1         |           |          |           |           |           |          |          |           |
| BCIND    | -0.038    | 1         |          |           |           |           |          |          |           |
| BCAGE    | 0.059*    | 0.179***  | 1        |           |           |           |          |          |           |
| BCETH    | -0.190*** | 0.428***  | 0.111*** | 1         |           |           |          |          |           |
| BCTEN    | 0.206***  | -0.205*** | 0.306*** | -0.315*** | 1         |           |          |          |           |
| BCFM     | 0.058*    | -0.588*** | -0.046   | -0.647*** | 0.393***  | 1         |          |          |           |
| BCD-N    | -0.093*** | 0.435***  | 0.037    | 0.163***  | -0.161*** | -0.282*** | 1        |          |           |
| BCD-R    | 0.006     | 0.223***  | 0.091*** | 0.125***  | -0.093*** | -0.156*** | 0.429*** | 1        |           |
| BSIZE    | 0.015     | -0.054    | 0.088**  | 0.103***  | 0.059*    | 0.010     | 0.029    | 0.027    | 1         |
| BMEET    | -0.111*** | -0.067*   | -0.010   | 0.291***  | -0.229*** | -0.261*** | -0.036   | -0.085** | 0.212***  |
| ACSIZE   | 0.002     | 0.022     | 0.064*   | 0.219***  | -0.055    | -0.159*** | 0.019    | 0.027    | 0.299***  |
| ACMEET   | -0.154*** | -0.121*** | -0.035   | 0.145***  | -0.106*** | -0.150*** | -0.073** | -0.077** | 0.148***  |
| SG       | -0.022    | 0.035     | -0.068** | -0.009    | -0.054    | -0.004    | 0.005    | -0.009   | 0.021     |
| LEV      | -0.581*** | -0.024    | 0.120*** | 0.115***  | -0.070**  | -0.004    | 0.067*   | -0.014   | 0.140***  |
| ROA      | 0.239***  | -0.028    | -0.016   | -0.029    | 0.009     | -0.001    | -0.009   | 0.085**  | 0.081**   |
| Big4     | -0.055    | -0.065*   | -0.024   | 0.087**   | 0.048     | -0.025    | 0.008    | 0.024    | 0.121***  |
| Conc5    | 0.164***  | -0.115*** | -0.048   | 0.003     | -0.129*** | -0.050    | -0.050   | -0.066*  | 0.042     |
| NCF0     | -0.161*** | 0.081**   | -0.062*  | 0.095***  | -0.170*** | -0.074**  | 0.086**  | -0.038   | -0.052    |
| INDUS    | 0.146***  | -0.012    | 0.048    | -0.195*** | 0.141***  | 0.141***  | 0.014    | -0.048   | -0.0928** |

| Variable | BMEET     | ACSIZE    | ACMEET    | SG       | LEV       | ROA      | Big4      | Conc5    | NCFO   | INDUS |
|----------|-----------|-----------|-----------|----------|-----------|----------|-----------|----------|--------|-------|
| Z-Score  |           |           |           |          |           |          |           |          |        |       |
| BCIND    |           |           |           |          |           |          |           |          |        |       |
| BCAGE    |           |           |           |          |           |          |           |          |        |       |
| BCETH    |           |           |           |          |           |          |           |          |        |       |
| BCTEN    |           |           |           |          |           |          |           |          |        |       |
| BCFM     |           |           |           |          |           |          |           |          |        |       |
| BCD-N    |           |           |           |          |           |          |           |          |        |       |
| BCD-R    |           |           |           |          |           |          |           |          |        |       |
| BSIZE    |           |           |           |          |           |          |           |          |        |       |
| BMEET    | 1         |           |           |          |           |          |           |          |        |       |
| ACSIZE   | 0.301***  | 1         |           |          |           |          |           |          |        |       |
| ACMEET   | 0.587***  | 0.152***  | 1         |          |           |          |           |          |        |       |
| SG       | -0.027    | -0.049    | 0.001     | 1        |           |          |           |          |        |       |
| LEV      | 0.084**   | -0.010    | 0.127***  | 0.033    | 1         |          |           |          |        |       |
| ROA      | -0.003    | -0.014    | -0.051    | 0.176*** | -0.097*** | 1        |           |          |        |       |
| Big4     | 0.171***  | 0.192***  | 0.117***  | -0.055   | 0.131***  | 0.015    | 1         |          |        |       |
| Conc5    | 0.139***  | 0.071**   | 0.074**   | 0.043    | -0.086**  | -0.002   | 0.088**   | 1        |        |       |
| NCFO     | 0.018     | -0.030    | -0.016    | 0.065*   | 0.122***  | -0.083** | -0.123*** | -0.084** | 1      |       |
| INDUS    | -0.248*** | -0.160*** | -0.145*** | -0.009   | -0.024    | 0.026    | -0.129*** | -0.003   | -0.048 | 1     |

Note: \*\*\* p < 0.01, \*\* p < 0.05, \* p < 0.1. Z-Score = financial stability, BCIND = BC's independence, BCAGE = BC's age, BCETH = BC's ethnicity, BCTEN = BC's tenure, BCFM = BC's family membership, BCD-N = BC's dual chair with NC, BCD-R = BC's dual chair with RC, BSIZE = board size, BMEET = board meeting, ACSIZE = AC size, ACMEET = AC meeting, SG = sales growth, LEV = leverage, ROA = return on assets, Big4 = big four audit firms, Conc5 = ownership concentration, NCFO = cash flow from operations, INDUS = Industry.

**Table 4. Regression using ordinary least squares (OLS)**

| Variable     | Model 1    |         | Model 2    |          | Model 3    |          |
|--------------|------------|---------|------------|----------|------------|----------|
|              | Coef.      | t-value | Coef.      | t-value  | Coef.      | t-value  |
| BCIND        | −0.0489    | −0.29   | −0.0485    | −0.29    | −0.0241    | −0.15    |
| BCAGE        | 0.0184***  | 3.03    | 0.0185***  | 3.03     | 0.0187***  | 3.15     |
| BCETH        | −0.529***  | −3.26   | −0.530***  | −3.26    | −0.395***  | −2.73    |
| BCTEN        | 0.0243***  | 3.18    | 0.0244***  | 3.19     | 0.0213***  | 2.93     |
| BCFM         | −0.451**   | −2.48   | −0.453**   | −2.50    | −0.420**   | −2.43    |
| BCD-N        | −0.259*    | −1.93   | −0.261*    | −1.94    | −0.242*    | −1.82    |
| BCD-R        | 0.0644     | 0.56    | 0.0664     | 0.57     | −0.00508   | −0.04    |
| BSIZE        | 0.0898***  | 3.14    | 0.0897***  | 3.13     | 0.107***   | 4.10     |
| BMEET        | −0.00326   | −0.10   | −0.00337   | −0.11    | −0.00501   | −0.16    |
| ACSIZE       | −0.00690   | −0.05   | −0.00584   | −0.04    | −0.182     | −1.54    |
| ACMEET       | −0.119**   | −2.45   | −0.118**   | −2.43    | −0.124***  | −2.69    |
| Big4         | 0.0510     | 0.49    | 0.0507     | 0.49     | −0.0381    | −0.40    |
| Conc5        | 1.551***   | 5.23    | 1.553***   | 5.23     | 1.495***   | 5.13     |
| SG           | −0.171     | −0.85   | −0.179     | −0.90    | −0.207     | −1.04    |
| LEV          | −0.0673*** | −17.07  | −0.0673*** | −17.05   | −0.0624*** | −16.66   |
| ROA          | 0.129***   | 6.17    | 0.129***   | 6.17     | 0.149***   | 7.47     |
| NCFO         | −0.108     | −0.99   | −0.105     | −0.96    | 0.0535     | 0.48     |
| INDUS        | 0.372***   | 3.65    | 0.372***   | 3.65     | −          | −        |
| Year dummy   | −          | −       | Included   | Included | Included   | Included |
| Sector dummy | −          | −       | −          | −        | Included   | Included |
| Constant     | 1.590***   | 2.76    | 1.585***   | 2.77     | 1.901***   | 3.46     |
| F-value      |            | 30.54   |            | 28.00    |            | 25.36    |
| Sig.         |            | 0.0000  |            | 0.0000   |            | 0.0000   |
| R-squared    |            | 0.457   |            | 0.458    |            | 0.508    |
| Observations |            | 846     |            | 846      |            | 846      |

Note: \*\*\* p < 0.01, \*\* p < 0.05, \* p < 0.1. Model 2 = re-estimate the Model 1 by including the year dummy variable. Model 3 = re-estimate the Model 1 by including a dummy variable for a year and firm sector (construction, consumer, industrial products, plantation, properties, technology, trade and services), instead of the only using INDUS. Z-Score = financial stability, BCIND = BC's independence, BCAGE = BC's age, BCETH = BC's ethnicity, BCTEN = BC's tenure, BCFM = BC's family membership, BCD-N = BC's dual chair with NC, BCD-R = BC's dual chair with RC, BSIZE = board size, BMEET = board meeting, ACSIZE = AC size, ACMEET = AC meeting, Big4 = big four audit firms, Conc5 = ownership concentration, SG = sales growth, LEV = leverage, ROA = return on assets, NCFO = cash flow from operations, INDUS = Industry.

Concerning BCD-R, it was found that a BC who chairs the RC is not significantly associated with low financial stability. It seems that domination of the RC by the BC affects the firm's activities less strongly than for the NC. The reason is that in Malaysia, MCGG 2000 requires firms to disclose in the annual report the remuneration paid to directors. Companies must also put in place a formal and transparent procedure to develop an executive remuneration policy and define remuneration packages for each director (other new revised policies are available in the revised MCGG 2017). The result of the current study is inconsistent with Gupta and Mahakud (2020), who found that the BC's duality with the CEO is significantly associated with high performance; and Al-Absy et al. (2018b), who found that the BC who chairs the RC is significantly associated with mitigating discretionary accrual. However, it is consistent with the same study by Al-Absy et al. (2018b), in which the authors used the other proxy for EM, namely real earnings management.

**Table 5. Regression using feasible generalized least squares (FGLS)**

| Variable     | Model 1    |         | Model 2    |          | Model 3    |          |
|--------------|------------|---------|------------|----------|------------|----------|
|              | Coef.      | Z-value | Coef.      | Z-value  | Coef.      | Z-value  |
| BCIND        | −0.133***  | −2.66   | −0.131***  | −2.66    | −0.0813    | −1.30    |
| BCAGE        | 0.0152***  | 7.06    | 0.0151***  | 6.92     | 0.0141***  | 6.72     |
| BCETH        | −0.461***  | −11.13  | −0.461***  | −11.16   | −0.384***  | −10.26   |
| BCTEN        | 0.0189***  | 7.14    | 0.0190***  | 7.09     | 0.0192***  | 7.13     |
| BCFM         | −0.435***  | −8.24   | −0.438***  | −8.52    | −0.412***  | −6.95    |
| BCD-N        | −0.201***  | −4.38   | −0.210***  | −4.58    | −0.175***  | −3.53    |
| BCD-R        | 0.139***   | 3.01    | 0.144***   | 3.16     | 0.0698     | 1.48     |
| BSIZE        | 0.0983***  | 13.72   | 0.0993***  | 13.79    | 0.109***   | 12.12    |
| BMEET        | −0.0225**  | −2.21   | −0.0232**  | −2.22    | −0.00708   | −0.66    |
| ACSIZE       | −0.0103    | −0.29   | −0.0133    | −0.36    | −0.175***  | −4.50    |
| ACMEET       | −0.0861*** | −5.57   | −0.0840*** | −5.12    | −0.102***  | −7.12    |
| Big4         | 0.0123     | 0.35    | 0.00865    | 0.25     | −0.0655*   | −1.84    |
| Conc5        | 1.047***   | 9.53    | 1.030***   | 9.58     | 1.235***   | 12.85    |
| SG           | −0.0892    | −1.40   | −0.119*    | −1.87    | −0.0993    | −1.40    |
| LEV          | −0.0590*** | −44.62  | −0.0591*** | −45.32   | −0.0541*** | −39.34   |
| ROA          | 0.128***   | 18.20   | 0.128***   | 18.23    | 0.139***   | 20.02    |
| NCFO         | −0.0252    | −0.70   | −0.0215    | −0.59    | 0.0838**   | 2.15     |
| INDUS        | 0.333***   | 9.71    | 0.337***   | 9.81     | −          | −        |
| Year dummy   | −          | −       | Included   | Included | Included   | Included |
| Sector dummy | −          | −       | −          | −        | Included   | Included |
| Constant     | 1.705***   | 9.13    | 1.729***   | 8.99     | 2.016***   | 9.51     |
| Wald chi2    |            | 3611.23 |            | 3732.19  |            | 4583.33  |
| Sig.         |            | 0.0000  |            | 0.0000   |            | 0.0000   |
| Observations |            | 846     |            | 846      |            | 846      |
| Number of ID |            | 282     |            | 282      |            | 282      |

Note: \*\*\* p < 0.01, \*\* p < 0.05, \* p < 0.1. Model 2 = re-estimate the Model 1 by including the year dummy variable. Model 3 = re-estimate the Model 1 by including a dummy variable for the year and firm sector (construction, consumer, industrial products, plantation, properties, technology, trade and services), instead of the only using INDUS. Z-Score = financial stability, BCIND = BC's independence, BCAGE = BC's age, BCETH = BC's ethnicity, BCTEN = BC's tenure, BCFM = BC's family membership, BCD-N = BC's dual chair with NC, BCD-R = BC's dual chair with RC, BSIZE = board size, BMEET = board meeting, ACSIZE = AC size, ACMEET = AC meeting, Big4 = big four audit firms, Conc5 = ownership concentration, SG = sales growth, LEV = leverage, ROA = return on assets, NCFO = cash flow from operations, INDUS = Industry.

In terms of control variables related to CG, the result shows that a larger board size results in greater financial stability, which is in line with Al-Absy et al. (2019a), Geraldes-Alves (2011), and Xie et al. (2003), who found a larger board is significantly related to a better quality of financial reporting, using the EM proxy. The results also indicate that financial stability is higher within firms with more concentrated ownership; Alves (2012) and Geraldes-Alves (2011) found the same result with financial reporting quality measured by EM. In contrast, the results found that financial stability is lower in a firm with more frequent AC meetings. This result is consistent with Al-Rassas and Kamardin (2015) and Salleh et al. (2012), who found that a greater number of AC meetings are significantly associated with low financial reporting quality, proxied by EM.

However, this study found that financial stability is not related to the frequency of board meetings, consistent with Habbash (2011) in terms of financial reporting quality (measured by EM); AC size, consistent with several authors (Abdullah & Ku Ismail, 2016; Salleh & Haat, 2013;

Table 6. Regression using the lag of the independent variables

| VARIABLES             | OLS        |         |            |          |            |          | FGLS       |         |            |         |            |          |
|-----------------------|------------|---------|------------|----------|------------|----------|------------|---------|------------|---------|------------|----------|
|                       | Model 1    |         | Model 2    |          | Model 3    |          | Model 1    |         | Model 2    |         | Model 3    |          |
|                       | Coef.      | t-value | Coef.      | t-value  | Coef.      | t-value  | Coef.      | Z-value | Coef.      | Z-value | Coef.      | Z-value  |
| BCIND <sub>t-1</sub>  | -0.164     | -0.74   | -0.165     | -0.74    | -0.133     | -0.64    | -0.177***  | -3.49   | -0.186***  | -3.46   | -0.165***  | -2.70    |
| BCAGE <sub>t-1</sub>  | 0.0145*    | 1.95    | 0.0147**   | 1.97     | 0.0162**   | 2.22     | 0.0143***  | 6.79    | 0.0147***  | 6.96    | 0.0158***  | 6.59     |
| BCETH <sub>t-1</sub>  | -0.504**   | -2.41   | -0.507**   | -2.43    | -0.385**   | -2.05    | -0.500***  | -10.07  | -0.506***  | -9.97   | -0.353***  | -7.80    |
| BCTEN <sub>t-1</sub>  | 0.0218**   | 2.28    | 0.0218**   | 2.28     | 0.0201**   | 2.19     | 0.0223***  | 8.90    | 0.0209***  | 7.58    | 0.0195***  | 7.71     |
| BCFM <sub>t-1</sub>   | -0.466*    | -1.96   | -0.469**   | -1.97    | -0.454**   | -2.06    | -0.451***  | -7.56   | -0.453***  | -7.58   | -0.426***  | -7.40    |
| BCD-n <sub>t-1</sub>  | -0.263     | -1.58   | -0.259     | -1.56    | -0.217     | -1.29    | -0.178***  | -3.23   | -0.174***  | -2.86   | -0.186***  | -3.71    |
| BCD-R <sub>t-1</sub>  | 0.135      | 0.96    | 0.135      | 0.96     | 0.0734     | 0.51     | 0.164***   | 3.76    | 0.175***   | 3.45    | 0.0512     | 0.98     |
| BSIZE <sub>t-1</sub>  | 0.0717**   | 1.97    | 0.0717**   | 1.97     | 0.0860**   | 2.57     | 0.0769***  | 7.40    | 0.0746***  | 7.06    | 0.0871***  | 8.86     |
| BMEET <sub>t-1</sub>  | -0.000487  | -0.01   | 0.000186   | 0.00     | 0.00360    | 0.08     | 0.00644    | 0.47    | 0.00554    | 0.41    | 7.92e-06   | 0.00     |
| ACSIZE <sub>t-1</sub> | 0.106      | 0.67    | 0.108      | 0.68     | -0.0961    | -0.67    | 0.0625     | 1.25    | 0.0731     | 1.44    | -0.144***  | -3.38    |
| ACMEET <sub>t-1</sub> | -0.176***  | -2.69   | -0.176***  | -2.69    | -0.205***  | -3.21    | -0.142***  | -6.89   | -0.136***  | -6.64   | -0.159***  | -8.36    |
| Big4 <sub>t-1</sub>   | -0.0543    | -0.42   | -0.0548    | -0.42    | -0.112     | -0.91    | -0.141***  | -3.23   | -0.142***  | -3.20   | -0.108***  | -2.82    |
| Conc5 <sub>t-1</sub>  | 1.368***   | 3.66    | 1.364***   | 3.64     | 1.368***   | 3.64     | 1.126***   | 8.68    | 1.101***   | 8.23    | 1.176***   | 10.88    |
| SG <sub>t-1</sub>     | -0.150     | -0.64   | -0.139     | -0.59    | -0.174     | -0.73    | -0.145**   | -2.22   | -0.147**   | -2.29   | -0.0903*   | -1.94    |
| LEV <sub>t-1</sub>    | -0.0643*** | -13.22  | -0.0643*** | -13.22   | -0.0595*** | -12.77   | -0.0608*** | -47.39  | -0.0606*** | -45.12  | -0.0540*** | -38.20   |
| ROA <sub>t-1</sub>    | 0.0749***  | 2.76    | 0.0734***  | 2.71     | 0.0879***  | 3.21     | 0.0716***  | 9.97    | 0.0735***  | 10.26   | 0.0791***  | 11.23    |
| NCFO <sub>t-1</sub>   | -0.0725    | -0.49   | -0.0740    | -0.51    | 0.0866     | 0.58     | -0.0507    | -1.25   | -0.0529    | -1.30   | 0.0872**   | 2.39     |
| INDUS <sub>t-1</sub>  | 0.424***   | 3.25    | 0.425***   | 3.25     | Included   | Included | 0.301***   | 6.91    | 0.315***   | 6.92    | Included   | Included |
| Year dummy            | -          | -       | Included   | Included | Included   | Included | -          | -       | -          | -       | Included   | Included |
| Sector dummy          | -          | -       | -          | -        | Included   | Included | -          | -       | -          | -       | Included   | Included |
| Constant              | 2.210***   | 3.11    | 2.247***   | 3.18     | 2.715***   | 3.86     | 2.205***   | 11.36   | 2.177***   | 10.91   | 2.637***   | 12.02    |
| F-value/<br>Wald      |            | 18.46   |            | 17.49    |            | 17.30    |            | 4829.56 |            | 5344.11 |            | 6477.30  |

(Continued)

Table 6. (Continued)

| VARIABLES    | OLS     |         |         |         |         |         | FGLS    |         |         |         |         |         |
|--------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
|              | Model 1 |         | Model 2 |         | Model 3 |         | Model 1 |         | Model 2 |         | Model 3 |         |
|              | Coef.   | t-value | Coef.   | t-value | Coef.   | t-value | Coef.   | Z-value | Coef.   | Z-value | Coef.   | Z-value |
| Sig.         |         | 0.0000  |         | 0.0000  |         | 0.0000  |         | 0.0000  |         | 0.0000  |         | 0.0000  |
| R-squared    |         | 0.418   |         | 0.418   |         | 0.465   |         |         |         |         |         |         |
| Observations |         | 564     |         | 564     |         | 564     |         | 564     |         | 564     |         | 564     |
| Number of ID |         |         |         |         |         |         |         | 282     |         | 282     |         | 282     |

Note: \*\*\* p < 0.01, \*\* p < 0.05, \* p < 0.1. Model 2 = re-estimate the Model 1 by including the year dummy variable. Model 3 = re-estimate the Model 1 by including a dummy variable for the year and firm sector (construction, consumer, industrial products, plantation, properties, technology, trade and services), instead of the only using INDUS. Z-Score = financial stability. Independent and control variables have been lagged (used one-year lagged value of variables) where BCIND = BC's independence, BCAGE = BC's age, BCETH = BC's ethnicity, BCTEN = BC's tenure, BCFM = BC's family membership, BCD-N = BC's dual chair with NC, BCD-R = BC's dual chair with RC, BSIZE = board size, BMEET = board meeting, ACSIZE = AC size, ACMEET = AC meeting, Big4 = big four audit firms, Conc5 = ownership concentration, SG = sales growth, LEV = leverage, ROA = return on assets, NCFO = cash flow from operations, INDUS = Industry.



Table 7. Regression using different measurement of the firm's financial stability

| VARIABLES        | OLS      |         |           |          |           |          | FGLS      |         |           |          |           |          |
|------------------|----------|---------|-----------|----------|-----------|----------|-----------|---------|-----------|----------|-----------|----------|
|                  | Model 1  |         | Model 2   |          | Model 3   |          | Model 1   |         | Model 2   |          | Model 3   |          |
|                  | Coef.    | t-value | Coef.     | t-value  | Coef.     | t-value  | Coef.     | Z-value | Coef.     | Z-value  | Coef.     | Z-value  |
| BCIND            | -0.165   | -0.48   | -0.163    | -0.48    | -0.111    | -0.33    | -0.233*   | -1.91   | -0.239**  | -2.00    | -0.255**  | -2.16    |
| BCAGE            | 0.048*** | 3.28    | 0.0478*** | 3.27     | 0.0456*** | 3.06     | 0.0355*** | 7.66    | 0.0358*** | 7.61     | 0.0333*** | 7.62     |
| BCETH            | -0.0450  | -0.16   | -0.0495   | -0.18    | -0.197    | -0.71    | 0.0683    | 0.64    | 0.0775    | 0.73     | -0.152    | -1.31    |
| BCTEN            | 0.0421** | 2.50    | 0.0425**  | 2.54     | 0.0466*** | 2.81     | 0.0454*** | 7.41    | 0.0468*** | 7.54     | 0.0512*** | 9.11     |
| BCFM             | -0.707** | -2.04   | -0.714**  | -2.06    | -0.797**  | -2.29    | -0.668*** | -4.91   | -0.689*** | -5.06    | -0.812*** | -5.91    |
| BCD-n            | -0.0215  | -0.06   | -0.0270   | -0.07    | -0.187    | -0.49    | 0.0275    | 0.22    | 0.0227    | 0.17     | -0.201    | -1.31    |
| BCD-R            | 0.533    | 1.52    | 0.539     | 1.53     | 0.635*    | 1.80     | 0.426***  | 3.23    | 0.457***  | 3.38     | 0.652***  | 4.67     |
| BSIZE            | 0.141**  | 2.06    | 0.141**   | 2.06     | 0.106     | 1.56     | 0.0824*** | 3.38    | 0.0718*** | 2.87     | 0.0434*   | 1.66     |
| BMEET            | 0.00183  | 0.02    | 0.00149   | 0.02     | -0.0105   | -0.14    | -0.0436   | -1.49   | -0.0397   | -1.29    | -0.00636  | -0.23    |
| ACSIZE           | -0.419*  | -1.81   | -0.416*   | -1.80    | -0.229    | -1.04    | -0.237*** | -2.61   | -0.206**  | -2.24    | -0.110    | -1.20    |
| ACMEET           | 0.0793   | 0.58    | 0.0828    | 0.61     | 0.103     | 0.78     | -0.0313   | -0.59   | -0.0404   | -0.75    | -0.0257   | -0.52    |
| Big4             | 0.235    | 0.95    | 0.235     | 0.95     | 0.276     | 1.08     | 0.136     | 1.57    | 0.140     | 1.63     | 0.160**   | 2.02     |
| Conc5            | 0.135    | 0.18    | 0.139     | 0.19     | 0.162     | 0.22     | 0.515*    | 1.94    | 0.542**   | 2.01     | 0.359     | 1.30     |
| SG               | -0.76*** | -2.59   | -0.782*** | -2.67    | -0.821*** | -2.71    | -0.523*** | -4.13   | -0.562*** | -4.36    | -0.620*** | -4.67    |
| LEV              | 0.0188** | 2.27    | 0.0189**  | 2.27     | 0.0125    | 1.45     | 0.0123*** | 4.53    | 0.0129*** | 4.75     | 0.0071*** | 3.03     |
| ROA              | 0.513*** | 10.29   | 0.511***  | 10.33    | 0.488***  | 9.99     | 0.494***  | 27.10   | 0.494***  | 27.27    | 0.456***  | 25.29    |
| NCF0             | -0.74*** | -3.08   | -0.732*** | -3.05    | -0.922*** | -3.72    | -0.544*** | -5.87   | -0.538*** | -5.75    | -0.630*** | -6.87    |
| INDUS            | -0.0777  | -0.32   | -0.0768   | -0.32    |           |          | -0.117    | -1.34   | -0.116    | -1.32    |           |          |
| Year dummy       | -        | -       | Included  | Included | Included  | Included | -         | -       | Included  | Included | Included  | Included |
| Sector dummy     | -        | -       | -         | -        | Included  | Included | -         | -       | -         | -        | Included  | Included |
| Constant         | -2.342*  | -1.89   | -2.357*   | -1.91    | -2.302*   | -1.95    | -1.347*** | -2.84   | -1.434*** | -2.97    | -1.025**  | -2.39    |
| F-value/<br>Wald |          | 9.69    |           | 8.85     |           | 9.68     |           | 1331.75 |           |          |           | 2146.45  |

(Continued)

Table 7. (Continued)

| VARIABLES    | OLS     |         |  |         |         |  | FGLS    |         |  |         |         |  |
|--------------|---------|---------|--|---------|---------|--|---------|---------|--|---------|---------|--|
|              | Model 1 |         |  | Model 2 |         |  | Model 3 |         |  | Model 1 |         |  |
|              | Coef.   | t-value |  | Coef.   | t-value |  | Coef.   | t-value |  | Coef.   | Z-value |  |
| Sig.         |         | 0.0000  |  |         | 0.0000  |  |         | 0.0000  |  |         | 0.0000  |  |
| R-squared    |         | 0.193   |  |         | 0.194   |  |         | 0.222   |  |         |         |  |
| Observations |         | 846     |  |         | 846     |  |         | 846     |  |         | 846     |  |
| Number of ID |         |         |  |         |         |  |         |         |  |         | 282     |  |

Note: \*\*\* p < 0.01, \*\* p < 0.05, \* p < 0.1. Model 2 = re-estimate the Model 1 by including the year dummy variable. Model 3 = re-estimate the Model 1 by including a dummy variable for the year and firm sector (construction, consumer, industrial products, plantation, properties, technology, trade and services), instead of the only using INDUS. Z-Score = financial stability, BCIND = BC's independence, BCAGE = BC's age, BCETH = BC's ethnicity, BCTEN = BC's tenure, BCFM = BC's family membership, BCD-N = BC's dual chair with NC, BCD-R = BC's dual chair with RC, BSIZE = board size, BMEET = board meeting, ACSIZE = AC size, ACMEET = AC meeting, Big4 = big four audit firms, Conc5 = ownership concentration, SG = sales growth, LEV = leverage, ROA = return on assets, NCFO = cash flow from operations, INDUS = Industry.

Salleh et al., 2012) in terms of financial reporting quality (measured by EM); and Big-4 audit firms (Abdullah & Ku Ismail, 2016; Mohammad et al., 2016). Regarding the firm's specific characteristics, the results revealed that a higher ratio of leverage results in lower financial stability, that is firms facing financial difficulties will be less stable. In contrast, the results show that a firm with a higher ratio of return on assets could be more financially stable. Firms which belong to the manufacturing sector are more likely to be financially stable. Finally, regarding sales growth and negative cash from operations, the results show no significant influence on financial stability.

## 6. Robustness tests

### 6.1. Regression using feasible generalized least squares (FGLS)

In this section, panel data regression is used to test the robustness of the results. FGLS regression, with the option panels (heteroscedastic), was used to solve the problem of heteroscedasticity (Podestà, 2002; StataCorp, 2015), following previous studies (Cai et al., 2012; Sakawa & Watanabel, 2017, 2018). The results in Table 5 are the same as in Table 4 (using OLS regression), except for the BC's independence and the BC's dual chair with NC only in models 1 and 2. This similarity suggests that the results of the study are robust.

### 6.2. Regression using the lag of the independent variables

One of the methods used in the study to minimize the possibility of misspecification and endogeneity was to employ a wide range of variables (Prencipe & Bar-Yosef, 2011), either related to governance or firm-specific characteristics. Other scholars have also suggested the need for an endogeneity test, especially in accounting studies (Larcker & Rusticus, 2010), such as for the AC and board composition (Hermalin & Weisbach, 2001) which could have an impact on the level of financial quality or stability. Further, the potential reverse causality of the level of financial quality or stability could also affect the next selection process of the AC and board members. Hence, this study re-estimated the main regression model using lagged independent variables (Al-Jaifi et al., 2017) to control for any potential reverse causality problem.

Table 6 shows that all the results of OLS regression, either for BC characteristics or control variables, are consistent with the results in Table 4, except that a BC chairing the nomination committee is insignificantly related to the firm's financial stability, as opposed to the significant result in Table 4. Regarding FGLS, Table 6 shows that all the results for the BC's characteristics are consistent with those in Table 5, although a few inconsistent results were found among the control variables. Overall, the results indicate that reverse causality may not be relevant for the investigated variables. Thus, there is no endogeneity issue in the findings.

### 6.3. Regression using different measurements of the firm's financial stability

Previous studies have used several measurements of financial stability. To provide reliable results and minimize bias towards a single measurement, this study uses different measures of financial stability. Following a previous study (Fazio et al., 2018), the current study applied the following equation:

$$Z - \text{Score} = \left( \frac{ROA_{it} + \text{Capital Ratio}_{it}}{\sigma(ROA)_{i:t,t-3}} \right)$$

where ROA is the return on assets, Capital Ratio is the capital-asset ratio and  $\sigma(ROA)_{i:t,t-3}$  is the standard deviation of ROA for each firm calculated by using information from the last 4 years (current + previous 3 years).

The results of the re-estimated models are presented in Table 7. The results from OLS and FGLS regression show the majority of the BC's characteristics are similar to the results reported in Tables 5 and 6, excepted for the BC's ethnicity and the BC chairing the nomination committee, which become insignificant instead of significant. This suggests that there is no significant difference in the results using a different measurement for the firm's financial stability.

## 7. Summary and conclusion

Successful directors must adequately control managers, and ensure that the firm is not subjected to undue financial risk which could lead to financial distress. The regulatory bodies and practitioners should be interested in evidence of the degree to which financial instability is linked with governance in developed countries. One of the critical positions in governance is that of the BC. The chairman links the stakeholders to the firm by leading the board of directors in promoting good CG practice. To date, the focus has largely been on the separation of the chairman and CEO positions, and other characteristics of the BC have been neglected by regulators. This gap may seriously affect the effectiveness of the board in protecting the firm against financial distress, especially in Malaysia, where the FCCG commented in the prelude to the MCCG on the role of powerful BCs who attempt to dominate board composition.

Hence, this study examines the association between the BC's characteristics (independence, age, ethnicity, tenure, family membership, dual chair with NC, dual chair with RC) and the firm's financial stability. The results indicate that only the age and tenure of the BC are associated with high financial stability. However, the BC's ethnicity, family membership and dual chair with the nomination committee are associated with low financial stability. The findings, in general, are robust and consistent with different assumptions, such as using the FGLS regression, the lag of the independent variables or using a different measurement for the firm's financial stability.

These findings have important implications for CG policy as set by the Malaysian regulator, by identifying the attributes of the BC that are associated with a reduced or increased level of the likelihood of financial distress. Therefore, this study draws the attention of CG researchers in Malaysia to further investigation of the issues explored in this study, to provide a definite conclusion that may help policymakers, investors, creditors as well as all shareholders. Research on the extent to which financial stability is associated with CG should be of interest to regulators and practitioners.

### Funding

The author received no direct funding for this research.

### Author details

Mujeeb Saif Mohsen Al-Absy<sup>1</sup>  
 E-mail: [mogeeb@yahoo.com](mailto:mogeeb@yahoo.com)

<sup>1</sup> Department of Accounting and Finance, College of Administrative and Financial Sciences, Gulf University, Street No. 4324, Sanad 734, Kingdom of Bahrain.

### Citation information

Cite this article as: The board chairman's characteristics and financial stability of Malaysian-listed firms, Mujeeb Saif Mohsen Al-Absy, *Cogent Business & Management* (2020), 7: 1823586.

### References

- Abdullah, S. N. (2006). Board structure and ownership in Malaysia: The case of distressed listed companies. *Corporate Governance: The International Journal of Business in Society*, 6(5), 582–594. <https://doi.org/10.1108/14720700610706072>
- Abdullah, S. N., & Ku Ismail, K. N. I. (2016). Women directors, family ownership and earnings management in Malaysia. *Asian Review of Accounting*, 24(4), 525–550. <https://doi.org/10.1108/ARA-07-2015-0067>
- Abdul-Rahman, R., & Ali, F. H. M. (2006). Board, audit committee, culture and earnings management: Malaysian evidence. *Managerial Auditing Journal*, 21(7), 783–804. <https://doi.org/10.1108/02686900610680549>
- Al-Absy, M. S. M., Ku Ismail, K. N. I., & Chandren, S. (2018a). Accounting expertise in the audit committee and earnings management. *Business and Economic Horizons*, 14(3), 451–476. <http://dx.doi.org/410.15208/beh.12018.15233>
- Al-Absy, M. S. M., Ku Ismail, K. N. I., & Chandren, S. (2018b). Board chairmen's involvement in the nomination and remuneration committees and earnings management. *Australasian Accounting, Business and Finance Journal*, 12(4), 60–76. <https://doi.org/http://dx.doi.org/10.14453/aabfj.v14412i14454.14455>
- Al-Absy, M. S. M., Ku Ismail, K. N. I., & Chandren, S. (2019a). Audit committee chairman characteristics and earnings management: The influence of family chairman. *Asia-Pacific Journal of Business Administration*, 11(4), 339–370. <https://doi.org/10.1108/APJBA-10-2018-0188>
- Al-Absy, M. S. M., Ku Ismail, K. N. I., & Chandren, S. (2019b). Corporate governance mechanisms and family directives: Aggressive or conservative in earnings' management? *Academy of Accounting and Financial Studies Journal*, 23(1), 1–9. <https://www.abacademies.org/journals/month-february-year-2019-vol-2023-issue-2011-journal-aafsj-past-issue.html>
- Al-Absy, M. S. M., Ku Ismail, K. N. I., & Chandren, S. (2019c). Corporate governance mechanisms, whistle-blowing policy and earnings management practices of firms in Malaysia. *International Journal of Business, Human and Social Sciences*, 13(6), 917–922. <https://doi.org/doi.org/910.5281/zenodo.3299765>
- Al-Absy, M. S. M., Ku Ismail, K. N. I., & Chandren, S. (2019d). Corporate governance mechanisms, whistle-blowing policy and real earnings management. *International Journal of Financial Research*, 10(6), 265–282. <https://doi.org/10.5430/ijfr.v10n6p265>

- Al-Arussi, A. S., & Shamkhi, D. (2016). Company characteristics, dominant personalities in board committees and internet financial disclosures by Malaysian listed companies. *Malaysian Management Journal*, 20 (December), 59–75. <http://mmj.uum.edu.my/images/pdf53/vol20/54terkinimmj20.pdf>
- Al-dhamari, R., & Ku Ismail, K. N. I. (2012). The association between board characteristics and earnings quality: Malaysian evidence. *Jurnal Pengurusan*, 41 (1), 43–55. <http://ejournal.ukm.my/pengurusan/article/view/7765/3113>
- Al-Jaifi, H. A., Al-Rassas, A. H., & Al-Qadasi, A. A. (2017). Corporate governance strength and stock market liquidity in Malaysia. *International Journal of Managerial Finance*, 13(5), 592–610. <https://doi.org/10.1108/IJMF-10-2016-0195>
- Al-Rassas, A. H., & Kamardin, H. (2015). Internal and external audit attributes, audit committee characteristics, ownership concentration and earnings quality: Evidence from Malaysia. *Mediterranean Journal of Social Sciences*, 6(3), 458–470. <https://doi.org/10.5901/mjss.2015.v5906n5903p5458>
- Altman, E. I. (1968). Financial ratios, discriminant analysis and the prediction of corporate bankruptcy. *The Journal of Finance*, 23(4), 589–609. <https://doi.org/10.1111/j.1540-6261.1968.tb00843.x>
- Alves, S. (2012). Ownership structure and earnings management: Evidence from Portugal. *Australasian Accounting, Business and Finance Journal*, 6(1), 57–74. <https://ro.uow.edu.au/aabfj/vol56/iss51/12>
- Al-Zyoud, A. A.-N. (2012). The effects of chairman independence and ownership structure on earnings management. *World Applied Sciences Journal*, 17(8), 934–940. [http://www.idosi.org/wasj/wasj917\(938\)912/932.pdf](http://www.idosi.org/wasj/wasj917(938)912/932.pdf)
- Amran, N. A., Yusof, M. A. M., Ishak, R., & Aripin, N. (2014). Do characteristics of CEO and Chairman influence Government-Linked Companies performance? *Procedia-Social and Behavioral Sciences*, 109(2), 799–803. <https://doi.org/10.1016/j.sbspro.2013.1012.1546>
- Asogwa, C. I., Ofoegbu, G. N., Nnam, J. I., & Chukwunwike, O. D. (2019). Effect of corporate governance board leadership models and attributes on earnings quality of quoted nigerian companies. *Cogent Business & Management*, 6(1), 1683124. <https://doi.org/10.1080/23311975.2019.1683124>
- Baatwah, S. R., Salleh, Z., & Ahmad, N. (2015). CEO characteristics and audit report timeliness: Do CEO tenure and financial expertise matter? *Managerial Auditing Journal*, 30(8/9), 998–1022. <https://doi.org/10.1108/MAJ-09-2014-1097>
- Beasley, M. S. (1996). An empirical analysis of the relation between the board of director composition and financial statement fraud. *The Accounting Review*, 71(4), 443–465. <http://www.jstor.org/stable/248566>
- Boyd, B. (1990). Corporate linkages and organizational environment: A test of the resource dependence model. *Strategic Management Journal*, 11(6), 419–430. <https://doi.org/10.1002/smj.4250110602>
- Cai, D., Luo, J.-H., & Wan, D.-F. (2012). Family CEOs: Do they benefit firm performance in China? *Asia Pacific Journal of Management*, 29(4), 923–947. <https://doi.org/10.1007/S10490-10012-19318-10494>
- Carcello, J. V., Hermanson, D. R., & Ye, Z. (2011). Corporate governance research in accounting and auditing: Insights, practice implications, and future research directions. *Auditing: A Journal of Practice & Theory*, 30 (3), 1–31. <https://doi.org/10.2308/ajpt-10112>
- Chen, E. T., Gray, S., & Nowland, J. (2013). Family representatives in family firms. *Corporate Governance: An International Review*, 21(3), 242–263. <https://doi.org/10.1111/corg.12009>
- Cheung, S. Y., & Chan, B. Y. (2004). Corporate governance in Asia. *Asia Pacific Development Journal*, 11(2), 1–32. <https://doi.org/10.18356/c18389f18354feb-en>
- Chtourou, S. M., Bedard, J., & Courteau, L. (2001). Corporate governance and earnings management. (Working Paper). Quebec, Canada: University Laval, Canda.
- Claessens, S., & Fan, J. P. (2002). Corporate governance in Asia: A survey. *International Review of Finance*, 3(2), 71–103. <https://doi.org/10.1111/1468-2443.00034>
- Cornelius, P. (2005). Good corporate practices in poor corporate governance systems: Some evidence from the Global Competitiveness Report. *Corporate Governance: The International Journal of Business in Society*, 5(3), 12–23. <https://doi.org/10.1108/14720700510604661>
- Datta, S., Iskandar-Datta, M., & Singh, V. (2013). Product market power, industry structure, and corporate earnings management. *Journal of Banking & Finance*, 37(8), 3273–3285. <https://doi.org/10.1016/j.jbankfin.2013.03.012>
- Dhaliwal, D., Naiker, V., & Navissi, F. (2010). The association between accruals quality and the characteristics of accounting experts and mix of expertise on audit committees. *Contemporary Accounting Research*, 27 (3), 787–827. <https://doi.org/10.1111/j.1911-3846.2010.01027.x>
- Elloumi, F., & Gueyie, J.-P. (2001). Financial distress and corporate governance: An empirical analysis. *Corporate Governance: The International Journal of Business in Society*, 1(1), 15–23. <https://doi.org/10.1108/14720700110389548>
- Fazio, D. M., Silva, T. C., Tabak, B. M., & Cajueiro, D. O. (2018). Inflation targeting and financial stability: Does the quality of institutions matter? *Economic Modelling*, 71(April), 1–15. <https://doi.org/10.1016/j.econmod.2017.09.011>
- Filatovchev, I., Lien, Y.-C., & Piesse, J. (2005). Corporate governance and performance in publicly listed, family-controlled firms: Evidence from Taiwan. *Asia Pacific Journal of Management*, 22(3), 257–283. <https://doi.org/10.1007/s10490-10005-13569-10492>
- Geraldes-Alves, S. M. (2011). The effect of the board structure on earnings management: Evidence from Portugal. *Journal of Financial Reporting and Accounting*, 9(2), 141–160. <https://doi.org/10.1108/1985251111173103>
- Gul, F. A. (2006). Auditors' response to political connections and cronyism in Malaysia. *Journal of Accounting Research*, 44(5), 931–963. <https://doi.org/10.1111/j.1475-1679X.2006.00220.x>
- Gull, A. A., Nekhili, M., Nagati, H., & Chtioui, T. (2018). Beyond gender diversity: How specific attributes of female directors affect earnings management. *The British Accounting Review*, 50(3), 255–274. <https://doi.org/10.1016/j.bar.2017.09.001>
- Gupta, N., & Mahakud, J. (2020). CEO characteristics and bank performance: Evidence from India. *Managerial Auditing Journal*, 35. (Forthcoming). <https://doi.org/10.1108/MAJ-1103-2019-2224>
- Habbash, M. (2011). The role of corporate governance regulations in constraining earnings management practice in Saudi Arabia. Paper presented at the Conference on Corporate Governance Held at Birmingham University Business School, United Kingdom.

- Hajawiyah, A., Wahyudin, A., & Pahala, I. (2020). The effect of good corporate governance mechanisms on accounting conservatism with leverage as a moderating variable. *Cogent Business & Management*, 7(1), 1779479. <https://doi.org/10.1080/23311975.2020.1779479>
- Haniffa, R. M., & Cooke, T. E. (2002). Culture, corporate governance and disclosure in Malaysian corporations. *Abacus*, 38(3), 317–349. <https://doi.org/10.1111/1467-6281.00112>
- Hashim, H. A. (2009). *Board of directors, ownership structure, ethnicity and earnings quality: Malaysian evidence* [Doctoral dissertation, University of Malaya].
- Hermalin, B. E., & Weisbach, M. S. (2001). *Boards of directors as an endogenously determined institution: A survey of the economic literature*. Working Paper, Berkeley and University of Illinois. <https://escholarship.org/uc/item/7tm3j0hp>
- Hillman, A. J., Cannella, A. A., & Paetzold, R. L. (2000). The resource dependence role of corporate directors: Strategic adaptation of board composition in response to environmental change. *Journal of Management Studies*, 37(2), 235–256. <https://doi.org/10.1111/1467-6486.00179>
- Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of Financial Economics*, 3(4), 305–360. [https://doi.org/10.1016/0304-405X\(76\)90026-X](https://doi.org/10.1016/0304-405X(76)90026-X)
- Kanapathipillai, S., Johl, S. K., & Wines, G. (2016). Remuneration committee effectiveness and narrative remuneration disclosure. *Pacific-Basin Finance Journal*, 40(B), 384–402. <https://doi.org/10.1016/j.pacfin.2016.02.006>
- Kazemian, S., & Sanusi, Z. M. (2015). Earnings management and ownership Structure. *Procedia Economics and Finance*, 31, 618–624. [https://doi.org/10.1016/S2212-5671\(15\)01149-1](https://doi.org/10.1016/S2212-5671(15)01149-1)
- Kowalewski, O., Talavera, O., & Stetsyuk, I. (2010). Influence of family involvement in management and ownership on firm performance: Evidence from Poland. *Family Business Review*, 23(1), 45–59. <https://doi.org/10.1177/0894486509355803>
- Larcker, D. F., & Rusticus, T. O. (2010). On the use of instrumental variables in accounting research. *Journal of Accounting and Economics*, 49(3), 186–205. <https://doi.org/10.1016/j.jacceco.2009.11.004>
- Lee, T. S., & Yeh, Y. H. (2004). Corporate governance and financial distress: Evidence from Taiwan. *Corporate Governance: An International Review*, 12(3), 378–388. <https://doi.org/10.1111/j.1467-8683.2004.00379.x>
- Lückerath-Rovers, M. (2009). Female directors on corporate boards provide legitimacy to a company: A resource dependency perspective. *Management Online Review*, (June), 1–13. <https://ssrn.com/abstract=1411693>
- Marimuthu, M. (2008). Ethnic diversity on boards of directors and its implications on firm financial performance. *Journal of International Social Research*, 1(4), 431–445. <https://doi.org/10.4314/431.452.6902&>
- Miglan, S., Ahmed, K., & Henry, D. (2015). Voluntary corporate governance structure and financial distress: Evidence from Australia. *Journal of Contemporary Accounting & Economics*, 11(1), 18–30. <https://doi.org/10.1016/j.jcae.2014.12.005>
- Mohammad, W. M. W., Wasuzzaman, S., & Salleh, N. M. Z. N. (2016). Board and audit committee effectiveness, ethnic diversification and earnings management: A study of the Malaysian manufacturing sector. *Corporate Governance: The International Journal of Business in Society*, 16(4), 726–746. <https://doi.org/10.1108/CG-06-2015-0085>
- Muniandy, B., & Ali, M. J. (2012). Development of financial reporting environment in Malaysia. *Research in Accounting Regulation*, 24(2), 115–125. <https://doi.org/10.1016/j.racreg.2012.05.004>
- Nam, S.-W., & Nam, I. C. (2004). *Corporate governance in Asia: Recent evidence from Indonesia, Republic of Korea, Malaysia, and Thailand*. Working Paper, Asian Development Bank Institute, Tokyo. <https://www.adb.org/sites/default/files/publication/159384/adbi-corp-gov-asia.pdf>
- Ow-Yong, K., & Kooi-Guan, C. (2000). Corporate governance codes: A comparison between Malaysia and the UK. *Corporate Governance: An International Review*, 8(2), 125–132. <https://doi.org/10.1111/1467-8683.00190>
- Podestà, F. (2002). *Recent developments in quantitative comparative methodology: The case of pooled time series cross-section analysis*. DSS Papers SOC 3–02. McDonough School of Business, Georgetown University. <http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.464.841&rep=rep1&type=pdf>
- Prencipe, A., & Bar-Yosef, S. (2011). Corporate governance and earnings management in family-controlled companies. *Journal of Accounting, Auditing & Finance*, 26(2), 199–227. <https://doi.org/10.1177/0148558X11401212>
- Rezaee, Z. (2005). Causes, consequences, and deterrence of financial statement fraud. *Critical Perspectives on Accounting*, 16(3), 277–298. [https://doi.org/10.1016/S1045-2354\(03\)00072-8](https://doi.org/10.1016/S1045-2354(03)00072-8)
- Roychowdhury, S. (2006). Earnings management through real activities manipulation. *Journal of Accounting and Economics*, 42(3), 335–370. <https://doi.org/10.1016/j.jacceco.2006.01.002>
- Sacristán-Navarro, M., Gómez-Ansón, S., & Cabeza-García, L. (2011). Family ownership and control, the presence of other large shareholders, and firm performance: Further evidence. *Family Business Review*, 24(1), 71–93. <https://doi.org/10.1177/0894486510396705>
- Sakawa, H., & Watanabel, N. (2017). Parent control and ownership monitoring in publicly listed subsidiaries in Japan. *Research in International Business and Finance*, 45, 7–14. <https://doi.org/10.1016/j.ribaf.2017.1007.1127>
- Sakawa, H., & Watanabel, N. (2018). Family control and ownership monitoring in Stakeholder-oriented corporate governance. *Management Decision*, 57(7), 1712–1728. <https://doi.org/10.1108/MD-1704-2018-0480>
- Salleh, N. M. Z. N., & Haat, M. H. C. (2013). Audit committee diversity-Malaysian evidence after the revision of MCGG. *Malaysian Accounting Review*, 12(2), 91–113. <https://doi.org/http://dx.doi.org/10.24191/mar.v24112i24192.24192>
- Salleh, Z., Hashim, H. A., & Mohamad, N. R. (2012). Accrual quality: The presence of women directors on audit committee boards. *Corporate Ownership & Control*, 10(1), 675–680. <https://doi.org/10.22495/cocv10i1c7art3>
- Salleh, Z., Stewart, J. D., & Manson, S. (2006). The impact of board composition and ethnicity on audit quality: Evidence from Malaysian companies. *Malaysian Accounting Review*, 5(2), 61–83. <https://www.researchgate.net/publication/29463250>
- Satkunasingam, E., Yong, A., & Cherk, S. (2012). The influence of cultural values on the board of directors:



- Lessons from five corporations. *Corporate Ownership & Control*, 9(4, Continued-2), 221–229. <https://doi.org/210.22495/cocv22499i22494c22492art22493>
- Shahwan, T. M. (2015). The effects of corporate governance on financial performance and financial distress: Evidence from Egypt. *Corporate Governance*, 15(5), 641–662. <https://doi.org/610.1108/CG-1111-2014-0140>
- Shu, P.-G., Yeh, Y.-H., Chiu, S.-B., & Yang, Y.-W. (2015). Board external connectedness and earnings management. *Asia Pacific Management Review*, 20(4), 265–274. <https://doi.org/210.1016/j.apmr.2015.1003.1003>
- StataCorp. (2015). *Stata longitudinal-data/panel-data reference manual: Release 14*. <https://www.stata.com/manuals/xt.pdf>
- Tabasum, S., Khakwani, M. S., & Irshad, S. (2018). Probability of financial distress and proposed adoption of corporate governance structures: Evidence from Pakistan. *Cogent Business & Management*, 5(1), 1492869. <https://doi.org/1492810.1491080/23311975.23312018.21492869>
- Tanyi, P. N., & Smith, D. B. (2014). Busyness, expertise, and financial reporting quality of audit committee chairs and financial experts. *Auditing: A Journal of Practice & Theory*, 34(2), 59–89. <https://doi.org/10.2308/ajpt-50929>
- Ugrin, J. C., Mason, T. W., & Emley, A. (2017). Culture's consequence: The relationship between income-increasing earnings management and IAS/IFRS adoption across cultures. *Advances in Accounting*, 37, 140–151. <https://doi.org/110.1016/j.adiac.2017.1004.1004>
- Vafeas, N. (2003). Length of board tenure and outside director independence. *Journal of Business Finance & Accounting*, 30(7–8), 1043–1064. <https://doi.org/10.1111/1468-5957.05525>
- Vafeas, N. (2005). Audit committees, boards, and the quality of reported earnings. *Contemporary Accounting Research*, 22(4), 1093–1122. <https://doi.org/10.1506/1QYN-2RFQ-FKYY-XP84>
- Waelchli, U., & Zeller, J. (2013). Old captains at the helm: Chairman age and firm performance. *Journal of Banking & Finance*, 37(5), 1612–1628. <https://doi.org/10.1016/j.jbankfin.2012.12.012>
- Walther, A., Morner, M., & Calabrò, A. (2017). The role of behaviorally integrated nominating committees in non-executive director selection processes. *European Management Journal*, 35(3), 351–361. <https://doi.org/10.1016/j.emj.2016.10.004>
- Wan-Abdullah, N. R., Nor, M. Z., & Omar, A. B. (2012). Case Study: Transmile Group Berhad. *Nida Case Research Journal*, 4(1), 71–86. <https://so04.tci-thaijo.org/index.php/NCRJ/issue/view/2536>
- Wan-Hussin, W. N., & Bamahros, H. M. (2013). Do investment in and the sourcing arrangement of the internal audit function affect audit delay? *Journal of Contemporary Accounting & Economics*, 9(1), 19–32. <https://doi.org/10.1016/j.jcae.2012.08.001>
- Wu, S., Chen, C.-M., & Lee, P.-C. (2016). Independent directors and earnings management: The moderating effects of controlling shareholders and the divergence of cash-flow and control rights. *The North American Journal of Economics and Finance*, 35, 153–165. <https://doi.org/10.1016/j.najef.2015.10.007>
- Xie, B., Davidson, W. N., & DaDalt, P. J. (2003). Earnings management and corporate governance: The role of the board and the audit committee. *Journal of Corporate Finance*, 9(3), 295–316. [https://doi.org/10.1016/S0929-1199\(02\)00006-8](https://doi.org/10.1016/S0929-1199(02)00006-8)
- Xiong, J. (2016). Chairman Characteristics and Earnings Management: Evidence from Chinese Listed Firms. *Open Journal of Accounting*, 5(4), 82–94. <https://doi.org/10.4236/ojacct.2016.54008>
- Yang, J. S., & Krishnan, J. (2005). Audit committees and quarterly earnings management. *International Journal of Auditing*, 9(3), 201–219. <https://doi.org/10.1111/j.1099-1123.2005.00278.x>
- Yuliana, R., Anshori, M., & Alim, M. N. (2015). Real earnings management in the Indonesian sharia capital market. *Procedia-Social and Behavioral Sciences*, 211, 866–873. <https://doi.org/10.1016/j.sbspro.2015.11.114>



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