



## Board independence, women directors and firm performance in Malaysian small-cap firms

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### ABSTRACT

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This study examined how board independence and female directors (i.e., women in leadership) affected the performance of Malaysian small-cap firms. Small-cap firms trading on the Bursa Malaysia ACE (Access, Certainty Efficiency) market were the subject of this study due to the less strict listing standards imposed on them than large-listed firms. The 2012-2014 annual reports of firms listed on the ACE market were downloaded through the Bursa Malaysia website and the required data was hand-collected. The hypotheses were tested using quantile regression (QR). The data reveal that board independence and firm performance are unrelated unless company performance is in the 0.10 quantile. Board independence has a negative impact on business performance at the 0.10 quantile. Similarly, the connection between women directors and business success was negative in the lower quintiles particularly in the 0.10 and 0.30 quantiles. Nevertheless, in other quantiles, board independence and the presence of female directors on firm performance were not associated. The significance of the study lies in the possibility that small firms might find it excessively expensive to comply with the Malaysian Code of Corporate Governance (MCCG). This study examines the hitherto ignored roles of board independence and women directors in small-cap enterprises on firm performance.

**Contribution/Originality:** This research examines the roles of board independence and women directors on firm performance in small-cap companies in Malaysia which have never been examined before. Thus, the findings will shed light on the influence of board independence and women directors on the performance of small-cap companies.

## 1. INTRODUCTION

Bursa Malaysia (the Malaysian stock exchange) currently has three trading boards: the main board, the ACE board and the Leading Entrepreneur Accelerator Platform (LEAP) board. Each of the boards has particular objectives. The LEAP board is exclusively accessible to experienced investors whereas the shares of the main and ACE board listed firms are traded by the general public (i.e., persons and organisations with total net assets surpassing RM10 million roughly USD2.2 million or persons with net personal assets over Ringgit Malaysia (RM)3 million approximately USD0.68 million). In contrast, the ACE board allows small and medium-sized high-technology companies to acquire funds by issuing securities to the general public. The main board is intended for

large, established companies. The firms listed on these boards are subjected to different levels of listing requirements depending on the degree of public interest in the firms. As a result, listing requirements for main board companies are more stringent than those for ACE board companies.

Research on the effect of the board, especially female directors on the success of the company has been done in Malaysia (e.g., (Haniffa & Cooke, 2002; Kweh, Ahmad, Ting, Zhang, & Hassan, 2019; Norliana, Marlia, & Norhayati, 2018)). The focus of this research was on large-listed Malaysian companies or main board firms. The results addressing the independence of the board, the separation of the responsibilities of the CEO and board chairman and the structure of the company's ownership of business performance are subjective. Their research indicates that there is no relationship between CEO duality, board independence and company success (Haniffa & Hudaib, 2006). On the other hand, ownership concentration is negatively correlated with the firm's Tobin's q (Duru, Iyengar, & Zampelli, 2016; Haniffa & Hudaib, 2006). No similar study has looked into the impact of female directors and board independence on small-cap businesses' business performance in Malaysia. The relationship between board independence and female directors and the corporate success of these small-cap enterprises may differ from that of large-cap firms due to differences in listing criteria and analyst coverage. Hence, the major purpose of this research is to investigate the extent to which board independence as well as the presence of female directors impact firm performance in small-cap enterprises. The emphasis is on board independence because it is covered extensively in all corporate governance rules around the world including Malaysia. Furthermore, the presence of women on the boards of Malaysian listed firms is being closely examined due to its significance in Malaysia. Since 2011, the Malaysian government has made women's appointment to boards of directors of publicly traded firms mandatory with a target of 30 per cent of a firm's board size.

This study adds to the corporate governance literature as follows: First, the study provides evidence on small-cap firms in Malaysia that have previously been overlooked by corporate governance academics. Second, the topic of board independence has received specific attention from Malaysia's Securities Commission where board composition has been the primary emphasis since the Asian Financial Crisis in 1997. The participation of women on boards has recently received significant interest from Malaysian authorities. According to the Malaysia Corporate Governance Code 2012 (Securities Commission, 2012) if the chairman is not independent, the majority of the board members of a listed firm should be independent. The requirement was clarified in the Malaysia Corporate Governance Code 2017 (Securities Commission, 2017) where it only applied to large-cap corporations while the need for small-cap firms is that at least 50 per cent of the firm's directors should be independent. Third, the Malaysian government has adopted several steps to boost the participation of women in policymaking since 2005. For instance, the Malaysian government mandated that all publicly traded companies have at least 30 per cent women on their boards by 2016 with compliance due in 2016. However, according to the 2017 and 2021 Malaysia Corporate Governance Codes (Securities Commission, 2017) compliance with the gender diversity rule was optional for small-cap companies and only applied to large-listed organizations. As a result, this study will contribute to the existing literature on the importance of female directors in small publicly traded firms.

The remainder of the paper is structured as follows: The next section reviews the research on gender diversity and board independence before making any hypotheses. The subsequent part describes the research methodology followed by a discussion of the findings. The final section provides the conclusions.

## 2. HYPOTHESIS DEVELOPMENT

### 2.1. Board Independence

One essential component of corporate governance is the composition of a company's board of directors. A focus on the function of the board of directors was placed in the Malaysian Finance Committee Report on Corporate Governance (Securities Commission, 2000). Corporate governance was defined in the report as "the process and structure used to direct and manage the company's business and affairs to promote business prosperity and

corporate accountability with the ultimate goal of realising long-term shareholder value while taking into account the interests of other stakeholders" (Securities Commission, 2000). The definition has been retained in all successive MCCGs (Securities Commission, 2000, 2007, 2012, 2017). This definition is basically the same as the one offered by the Cadbury Committee (1992). The significance of the board in corporate governance was highlighted by Jensen (1993) who said that the board is at the pinnacle of a company's internal control system.

The debate over board independence was sparked by the Cadbury Code (Cadbury Committee, 1992) which required firms to appoint a sufficient number of non-executive members to their boards, the majority of whom had to be independent. The UK Corporate Governance Code 2018 (Financial Reporting Council, 2018) specifies that at least 50% of the board be made up of independent directors with the exception of the chairman who is expected to be an independent director upon appointment (Financial Reporting Council, 2018). The Malaysian Code on Corporate Governance (Securities Commission, 2021) aims to ensure that the board is not influenced by the company's controlling owners by increasing the proportion of independent and non-independent members. The size of the company determines the current requirements for the proportion of independent and non-independent directors on the board. The majority of board members for other firms must be independent, but independent directors must make up at least 50% of the board for large publicly listed corporations. Large businesses are those that are listed on the Bursa Malaysia Top 100 index or have a board capitalization of at least RM2 billion or around USD 500 million. As a result, small-cap companies are classified similarly to other types of enterprises with the current requirement being that half of the board members of a corporation be independent. The board's independence has received significant attention in corporate governance reforms due to its position as the most senior component of a company's governance procedures. Corporate governance experts in Malaysia rated a firm's board structure second (Noor, Rasli, Abdul Rashid, Mubarak, & Abas, 2022). Furthermore, less information asymmetry results from the board's independence (Goh, Lee, Ng, & Ow Yong, 2016).

Board independence is crucial in corporate governance since it is widely held that non-executive directors do not effectively discharge their monitoring roles (Haniffa & Hudaib, 2006). The likelihood of more independent boards acting in investors' best interests is higher (Goh et al., 2016). Furthermore, smaller investors' interests are crucially protected by independent directors in cases where those interests are at risk (Annuar & Abdul Rashid, 2015). However, the evidence on the role of board independence and firm performance is mixed. For instance, studies found that the association is positive (Al-Msiedeem & Rashid, 2018; Boohene & Agyepong, 2023; Hu, Lin, & Tosun, 2023; Pucheta-Martínez & Gallego-Álvarez, 2020; Sasidharan, 2020). On the other hand, studies also found board independence and firm performance are not associated (Li & Roberts, 2018; Rashid, 2018; Zabri, Ahmad, & Wah, 2016) or even negatively associated and (Al-Saidi, 2021; Kweh et al., 2019; Shan, 2019) were also documented. Pham and Nguyen (2020) found that board independence reduced the negative impact of debt financing and accounting profitability. According to the "old-boy network" (Finkelstein & Hambrick, 1988; O'Neal & Thomas, 1995), firm top management (i.e., CEO), owners and controlling shareholders (Claessens, Djankov, & Lang, 2000; Lorsch & Young, 1990; Shivdasani & Yermack, 1999) strongly influence the appointment of independent directors. As a result, the skills and abilities required by a business may differ from those of its directors (Mallin, 2004). Furthermore, a cost associated with the selection of independent directors is that the business will have to pay more director fees the more independent members there are on the board and the more qualified they are. It was found that a large Malaysian listed company's board typically consisted of eight directors of whom 3.28 were independent (Alabdullah, Ahmed, & Muneerali, 2019). Their data was taken from the annual reports of Malaysian listed firms in 2018.

Small-cap Malaysian listed corporations are predicted to have fewer directors and independent directors on their boards than large firms. These limitations may make it more difficult for independent directors of small-cap listed firms to perform their duties, in addition to the fact that they are selected from networks of top management (such as the CEO), owners and controlling shareholders. Hence,

*H: Board independence is associated negatively with the firm's performance.*

## 2.2. Women Directors

Malaysia's government launched an endeavor in 2005 to include more women in leadership when it established a policy requiring women to hold 30 per cent of top posts in the government sector. The government expanded the programme to the private sector in 2011 as a result of its success, advising all listed companies to select women to account for thirty percent of board posts. The Malaysian Code in 2012 (Securities Commission, 2012) included a clause requiring a firm to disclose its boardroom gender diversity policies in its annual report including targets and steps taken to increase the participation of women to ensure that listed firms comply with this initiative. The recommendation of 30 per cent representations on a board is only for large-listed firms (i.e., a firm with RM2 billion in board capitalizations about US\$500 million or the firm is listed on the top 100 at the start of the year) to avoid unnecessary burden on medium and small-sized listed firms, according to the Securities Commission (2017). Compliance is required for other listed companies.

There are several theoretical arguments for appointing women to the board. However, board diversity can either be advantageous or disadvantageous to the firm. As a result, authors such as Milliken and Martins (1996) and Williams and O'Reilly (1998) described the appointment of women to boards as a "double-edged sword" or "mixed blessing". It is suggested that women's leadership styles are different from men which has implications for women in leadership roles. Men tend to lead in a 'transactional' or command-and-control style whereas women lead in a 'transformational, interactive or participative style (Rosener, 1990). Gender socialization strategies argue that men and women bring different ideals to their work which impact their decisions and practices (Betz, O'Connell, & Shepard, 1989). It is said that men are more likely than women to transgress the rules or be unethical. According to empirical studies, men commit unethical behaviours more than women (Albaum & Peterson, 2006; Betz et al., 1989). Mason and Mudrack (1996) contend that gender similarity is expected to be recognised in the workplace due to occupational socialization. Diversity in group membership is said to improve the group's total abilities, talents, knowledge, and information from the perspective of information and decision-making (Watson, Kumar, & Michaelsen, 1993). As a result, the decision-making process is improved since the various viewpoints and perspectives of distinct team members are extended leading to a variety of alternative solutions (Watson et al., 1993).

According to social identification and social categorization theories (Tajfel, 1981; Turner, 1987) diversity can be detrimental to group dynamics and performance. According to these theories, individuals will tend to associate with those in the same group who are similar to them (i.e., in-group members) and detach from others who are dissimilar to them (out-group members). As a result, team diversity has negative affective implications (Milliken & Martins, 1996) resulting in lower overall group performance. Nielsen and Huse (2010) argue that the detrimental impacts of gender and racial variety are more pronounced than those of functional and educational background differences suggesting that the former may be the result of enduring prejudices and preconceptions.

The impact of female directors on business success has been empirically investigated in Malaysia with inconsistent results while the involvement of female directors is favourably associated with the firm's return on assets (e.g., (Foster, Fernholm, & Brunnberg, 2023; Jeet, 2020; Laskar, Sahu, & Choudhury, 2023; Maji & Saha, 2021; Pucheta-Martínez & Gallego-Álvarez, 2020)). For instance, Liu, Wei, and Xie (2014) discovered a favourable and substantial association between female directors on boards and business performance in a study of female directors in China. The evidence from China is supported by evidence from France (Boukattaya & Omri, 2018) and Turkey (Arioglu, 2020; Kılıç & Kuzey, 2016). Similarly, Pearce and Zahra (1991) discovered that having more women on boards resulted in more conflicts and disagreements among directors as well as higher perceived and objective firm performance. On the other hand, several studies Ahmad, Raja Kamaruzaman, Hamdan, and Annuar (2020); Endraswati (2018); Martín-Ugedo, Mínguez-Vera, and Rossi (2019) and Yang, Riepe, Moser, Pull, and

Terjesen (2019) discovered that their existence has a negative relationship with the firm's Tobin's q. However, a few studies found the relationship between female directors and firm performance was not significant (Al-Matari & Alosaimi, 2022; Hamdani, Shareza Hafiz, Koto, & Marpaung, 2022; Osman, Ibrahim, & Zulkafli, 2022). Hamdani et al. (2022) further revealed that female CEOs reduced the firm's ROA and that female ownership was negatively associated with the firm's Tobin's q. Al-Jaifi (2020) found no relationship between gender diversity and social and environmental performance in the context of the Association of South East Asian Nations (ASEAN). On the other hand, Shahzad, Hussain Baig, Rehman, Latif, and Sergi (2020) revealed that the association between female directors and firm performance is indirect because board members are overwhelmingly male and if women directors are the only minority on the board and if social identification and categorization theories (Tajfel, 1981; Turner, 1982, 1987) hold in the Malaysian context, the presence of women directors on the board will result in lower firm performance contend that social identification and categorization theories which the board believes to be more prevalent than the perceived advantages of having women directors could explain the negative association between women directors on the boards of large Malaysian companies and Tobin's q. Moreover, female top executives would be more inclined to be judged more heavily on employee satisfaction than financial performance (Appelbaum & Shapiro, 1993). This is because female executives are more concerned with the work environment than with financial achievement. Furthermore, women are risk-averse compared to men (Beckmann & Menkhoff, 2008; Eckel & Grossman, 2008; Fehr-Duda, De Gennaro, & Schubert, 2006; Watson & McNaughton, 2007). As a result, women directors choose low-risk, low-return initiatives over high-risk, high-return ventures. Liu et al. (2014) found that the relationship between the performance of the firm and the presence of three or more women on the board was stronger. Hence, Konrad, Kramer, and Erkut (2008) critical mass theory applies to Chinese firms as well as to French firms (Redor, 2018).

The advantages of women directors in Malaysia can be challenging to see as small-cap companies there might not have implemented a board diversity culture yet because of resource constraints. Furthermore, if the firm selects women for the board, the women directors are more likely to be family members of the firm's top management who are related to the firm's major owners. As a result, female directors could not have the same influence. Therefore,

*H<sub>2</sub>: Women directors on the board of small-listed firms are negatively associated with firm performance.*

### 3. METHODS

This study looked at non-financial companies that were listed for the fiscal years 2012, 2013, and 2014 on the ACE Board of Bursa Malaysia. The year 2012 was chosen since it was the year the Malaysian government implemented a law requiring at least thirty per cent of the board members of companies with Malaysian listings to be women. The government unveiled the policy in 2011. The yearly reports of the firms were examined in order to collect data. They were available on the Bursa Malaysia website. The quantile regression or QR technique was used to test the hypotheses. The data do not need to meet the conditions of normality, homoscedasticity, lack of outliers and constant variance to be used using QR in contrast to ordinary least squares (OLS). OLS regression equations calculate the dependent variable's mean based on the independent variables. However, in QR, equations are built based on the quantiles of the dependent variable to approximate the relationship between the independent components and the dependent variable. In essence, this method investigates how much the dependent variable's score affects the relationship between the independent factors and the dependent variable. Additionally, OLS regression only calculates the conditional mean effects of a dependent variable whereas QR calculates the conditional quantiles of the distribution of a dependent variable. As a result, the QR technique gives the coefficients of the independent variables in each of the dependent variable's quantiles as opposed to assuming a linear relationship as in the case of the OLS regression approach. Hence, the hypotheses (H1 and H2) were tested using the following model:

$$ROA_{it} = \alpha_{oit} + \beta_1.BODIND_{it} + \beta_2.WOMEN_{it} + \sum \beta_n X_{it} + \varepsilon_{it}, \quad (1)$$

ROA which is derived by dividing EBIT by total assets represents the company's performance in year  $t$ . Several studies [Haniffa and Hudaib \(2006\)](#); [Johl, Kaur, and Cooper \(2015\)](#); [Karim, Manab, and Ismail \(2023\)](#); [Potharla and Amirishetty \(2021\)](#) and [Shan \(2019\)](#) have employed ROA to assess a firm's performance. The percentage of independent directors on the board of company  $i$  in year  $t$  is indicated by the symbol BODIND while WOMEN denotes the presence of at least one female director of firm  $i$  in year  $t$ .  $X$  is a vector of control variables. These variables are as follows: LNAST or log natural of the firm's total assets, BODCHR or board chairman independence (a binary variable with a value of "1" if the chairman is independent and a value of "0" otherwise), TOP5 or the total shares held by the top five shareholders (as a percentage) and GRG or leverage for firm  $i$  in year  $t$ , calculated by dividing total debts by total assets.  $ROA_{i,t-1}$  which is the performance of business  $i$  in year  $t-1$ , is determined by dividing profit before tax and interest by total assets. FAMBOD is the percentage of board members that are connected to the company's important shareholder(s). BODSZ is the board size. Finally,  $\epsilon$  is the error term.

Firm size was used as a proxy for political costs in earlier studies ([Abdul Rahman & Haneem Mohamed Ali, 2006](#); [Jaggi, Leung, & Gul, 2009](#); [Xie, Davidson III, & DaDalt, 2003](#)). [Coles, Daniel, and Naveen \(2008\)](#) state that managers at larger companies are typically more ingrained and difficult to evaluate. Second, the gearing ratio (GRG) or the ratio of total debt to total assets is used to assess the probability that the company would breach debt covenants ([Hashim & Devi, 2008](#); [Johl et al., 2015](#); [Saleh, Mohd Iskandar, & Mohid Rahmat, 2007](#); [Saleh, Iskandar, & Rahmat, 2005](#); [Sun, Liu, & Lan, 2011](#); [Young, 1998](#)). The profitability of the company is negatively correlated with the gearing ratio [Johl et al. \(2015\)](#). Third, [Hermalin and Weisbach \(2003\)](#) discovered a negative relationship between board size and corporate success as measured by profitability and Tobin's  $q$  which was later supported by subsequent studies ([Coles et al., 2008](#); [Tulung & Ramdani, 2018](#); [Yermack, 1996](#)). Additionally, research on small and medium-sized enterprises in Finland revealed a negative relationship between board size and profitability (i.e., ROA). However, board size is strongly and favourably related to business performance for large listed companies in Malaysia ([Alabdullah et al., 2019](#); [Johl et al., 2015](#); [Shukeri, Shin, & Shaari, 2012](#)). [Orazalin \(2020\)](#) found a significant and negative relationship between large board size and earnings management in top public firms in Kazakhstan highlighting the importance of board size in reining in the unethical behaviour of the company's managers.

The presence of a family member(s) on the board of the company is another control variable (FAMBOD). Family members are frequently appointed to the board by the company's controlling shareholders because they are risk averse ([Ibrahim & Samad, 2011](#); [Jaggi et al., 2009](#)) which could affect the board's capability to effectively carry out its monitoring responsibilities as an entire organization ([Jensen & Meckling, 1976](#)). The opportunistic actions of principals may cause family ownership to reduce the firm's value if it exceeds a specific level.-cum-managerial ([Mohd-Saleh, Rahman, & Hasan, 2009](#)). According to [Ibrahim and Samad \(2011\)](#) Malaysian family-owned businesses have a lower ROA and Tobin's  $q$  than non-family-owned businesses. As a result, the firm's performance may suffer. FAMBOD is a variable that calculates the percentage of family members on the board. A family's level of ownership in a firm is also reflected in the number of family members on the board; the more family members there are, the larger their ownership stake in the business. As a result, the number of family members on the board serves as a proxy for the family ownership of the company. Furthermore, board chairman independence (a measure of CEO duality) was included in the studies because the board chairman controls board meetings and hence decides the meeting agenda. Previous studies show that board duality or the CEO serving as both the chairman ([Carter, Simkins, & Simpson, 2003](#); [Coles et al., 2008](#); [Di Pietra, Grambovas, Raonic, & Riccaboni, 2008](#); [Duchin, Ozbas, & Sensoy, 2010](#); [Finkelstein & D'aveni, 1994](#); [Florackis & Ozkan, 2009](#); [Terjesen, Couto, & Francisco, 2016](#); [Yermack, 1996](#)) and has negative impacts on firm performance ([Bhagat & Bolton, 2008](#)). Prior research in the Malaysian context ([Hashim & Devi, 2008](#); [Shukeri et al., 2012](#)) does not find that CEO duality has a significant effect on firm performance or earnings management. However, these studies focused on large-listed firms whereas the current study focused on small-cap firms.

The study's evaluation took into account the effect of ownership concentration, a factor that has been studied in previous research (Abdul Rahman & Haneem Mohamed Ali, 2006; Hashim & Devi, 2008) because closely held ownership structures are common in Malaysian firms and can have an impact on their performance. Moreover, businesses with dispersed ownership might experience issues related to free riding (Admati, Pfleiderer, & Zechner, 1994). The percentage of shares held by the top five shareholders was taken into consideration in the study to determine ownership concentration (Haniffa & Hudaib, 2006; Li, Lu, Mittoo, & Zhang, 2015) which identified a positive and significant relationship between ownership concentration and business profitability. The majority of the enterprises in the ACE market today are technology-based since it developed from the Malaysian Exchange of Securities Dealing and Automated Quotation (MESDAQ). Consequently, the income statements of technology-based organizations might experience delays in reflecting their accounting earnings compared to other types of businesses. The solution to this problem was the introduction of the binary variable "technology" (TECH) which has the value "0" if the firm does not operate in the technology sector and "1" otherwise. Additionally, the lagged firm performance variable (ROA<sub>t-1</sub>) was incorporated in the analysis as previous studies (Haniffa & Hudaib, 2006) suggest that the performance of the preceding year may influence the current year's performance.

#### 4. RESULTS AND DISCUSSION

A total of 906 companies were listed on the Bursa Malaysia Boards as of December 31, 2014 with 107 of those companies listed on the ACE Board representing roughly 13 per cent of all the companies listed on those boards. 20 of these 906 businesses were classified by Bursa Malaysia as being in financial difficulties and classified under Guidance Note (GN) 3 or Practice Note (PN) 17. Notably, 15 per cent of these financially distressed firms belonged to the ACE Board comprising three out of the 20 troubled enterprises. This suggests that the risk of financial distress for firms listed on the ACE Board is low. The final sample comprised 90 firms. According to information collected from their annual filings on the Bursa Malaysia website, a total of 82 firms were covered by 246 firm-years of these 90 companies that had comprehensive data available for the financial years from 2012 to 2014. Table 1 presents descriptive statistics with Panel A displaying statistics for continuous variables and Panel B presenting the frequencies of dummy variables.

Table 1. Descriptive statistics (n=246).

Panel A. Continuous variables				
Variable	Range	Mean	Std. deviation	Skewness
ROA (In percentage)	-20.169-1.910	-0.183	1.412	-11.949
Board independence (BODIND)	0.250-1.00	0.516	0.226	0.132
Firm size (Log natural of total assets) (LNAST)	13.559-20.875	17.045	1.012	-0.151
Gearing (In ratio)	0-8.579	0.127	0.402	10.015
Top five shareholdings (In percentage)	6.800-88.100	47.29	19.167	-0.018
Board size (In percentage)	4-10	6.25	1.305	0.675
Panel B. Dichotomous variables (In percentage)				
Variable	0 (No)		1 (Yes)	
Women on the board (WOMBOD)	65		35	
Family on the board (FAMBOD)	75		25	
Chairman's independence (BODCHR)	48		52	
Technology (TECH)	94		155	

During the study period from 2012 to 2014, the firms generally reported losses with an average Return on Assets (ROA) of -18.3 per cent. Notably, the previous year's performance was even worse with an average ROA of -33.2 per cent. In contrast, according to studies by Johl et al. (2015) and Haniffa and Hudaib (2006) the average

return on assets (ROAs) for larger-listed companies in Malaysia were 0.025 and 0.058, respectively. Similarly, Khatib and Nour (2021) also reported a positive ROA of 0.9 per cent before the COVID-19 pandemic. This indicates that small-cap firms in Malaysia tend to be less profitable than their larger counterparts.

In the companies under study, independent directors comprised, on average, 50 per cent of the board size. According to Shukeri et al. (2012) and Johl et al. (2015), the percentage of independent directors in larger listed Malaysian firms ranges from 43 per cent to 46 per cent. Kweh et al. (2019) and Tahir, Rahman, and Masri (2020) revealed that only 45 per cent and 44 per cent of the board members of large listed firms in Malaysia are independent, respectively. As a result, small listed companies have a higher percentage of independent directors on the board. However, Haniffa and Hudaib (2006) discovered a higher percentage of independent directors in their study (i.e., 58 per cent) when they looked at the annual reports of Malaysian listed corporations for the financial years from 1996 to 2000. Therefore, the percentage of board independence in larger Malaysian listed corporations has decreased over time despite efforts by the securities commission to increase the number of independent directors on the boards of Malaysian listed companies, such as the implementation of the Malaysian Corporate Governance Code. Only 35 per cent of women are represented on the boards of small-cap companies which is surprisingly low. As a result, most small publicly traded companies do not have women appointed to their boards. A more detailed examination of women directors within small-cap firms revealed that only 7.25 per cent of the total board members in these firms were women. This indicates that women continue to be underrepresented on corporate boards, especially in Malaysian small-cap enterprises. In terms of board size, Malaysian small-cap firms have an average of 6.25 directors which is smaller than the average number of directors in larger Malaysian firms standing at 7.4 (Johl et al., 2015; Shukeri et al., 2012). The average boards of Malaysia's small-cap businesses are comparable to those of the country's largest publicly listed companies despite this difference. Moreover, the average board size in Malaysian small-cap enterprises is larger than the average board size in Finnish small and medium-sized firms which was reported to be 3.71 as found by Eisenberg, Sundgren, and Wells (1998). The average number of directors on the boards of Malaysian small-cap companies seems to be higher than that of Finnish small-cap companies. Malaysian small-cap enterprises had an average total assets or company size of RM45 million (approximately US\$11 million). This shows that small-cap and larger companies' operational scales are very different from one another.

In addition, Malaysian small-cap companies have a significantly lower average gearing ratio (i.e., the ratio of debt to equity) of 0.127 than larger listed corporations. For instance, Johl et al. (2015) observed a ratio of 0.208 for larger firms. This suggests that small-cap firms rely less on debt financing compared to their larger counterparts. In addition, the top five owners collectively make up 65 per cent of Malaysian small-cap enterprises. This indicates that ownership in small-cap firms is more concentrated among a smaller group of top shareholders compared to larger-listed firms.

Table 2 presents the findings of a cross-tabulation of business sectorial classification versus board size. It likely provides insights into the distribution of board sizes across different business sectors within small-cap firms.

**Table 2.** Cross-tabulations (n=246).

Panel A. Sectorial classification and board size						
Sector	1-4 directors		5-8 directors		9 and above directors	
	Count	%	Count	%	Count	%
Consumer products	2	13.3%	4	1%	0	0
Industrial products	2	13.3%	35	16%	1	10%
Technology	7	50%	141	63%	5	50%
Trading and services	2	13.3%	43	20%	4	40%
Total	14	100%	222	100%	10	100%
Overall	6%		90%		4%	
Contingency coefficient	0.409***					

Note: \*\*\* Statistical significance at the 0.01 level (1-tailed).

<b>Panel B. Cross-tabulation of sectorial classification and independent directors</b>						
Sector	1-2 independent directors		3-4 independent directors		5 and above independent directors	
	Count	%	Count	%	Count	%
Consumer products	2	5%	5	3%	0	0
Industrial products	8	18%	22	12%	5	41%
Technology	25	56%	121	63%	7	59%
Trading and services	9	21%	42	22%	0	0
Total	44	100%	190	100%	12	100%
Overall	18%		78%		4%	
Contingency coefficient	0.352***					

Note: \*\*\* Statistical significance at the 0.01 level (1-tailed).

<b>Panel C. Sectorial classification and women directors</b>						
Sector	0		1-2 women directors		3 and above women directors	
	Count	%	Count	%	Count	%
Consumer products	6	4%	0	0%	0	0%
Industrial products	24	15%	12	15%	0	0%
Technology	96	60%	53	67%	4	57%
Trading and services	34	21%	14	18%	3	43%
Total	160	100%	79	100%	7	100%
Overall	65%		32%		3%	
Contingency coefficient	0.308***					

Note: \*\*\* Statistical significance at the 0.01 level (1-tailed).

The findings in Panel A of Table 2 (i.e., cross-tabulation) show that almost all the firms included in the study have boards consisting of five to eight directors accounting for approximately 90 per cent of the total firms. According to Panel B of Table 2 which shows the number of independent directors on these boards, a considerable number of the businesses (about 78 percent) have selected three or four independent directors. This suggests that the majority of Malaysian small-cap firms have already complied with the most recent requirement of the Malaysian Corporate Governance Code which stipulates that at least half of the board members of small-cap firms should be independent and was issued by the Securities Commission (2017).

Lastly, Panel C presents the distribution of women directors across industries indicating that most firms (around 90 per cent) have only one or two women directors on their boards. This observation may suggest that tokenism is being practiced in small-cap enterprises where a few women are appointed to fulfil diversity requirements but meaningful gender representation is yet to be achieved. The study by Zaichkowsky (2014) reveals that companies that have even one female member on their board can have improved corporate governance rankings compared to companies that lack female representation on their boards. In addition, according to the author, the critical mass hypothesis does not require three or more female directors on a board of directors in order for these positive impacts to take place (Konrad et al., 2008). Furthermore, Zaichkowsky contends that advocating for legislation requiring three-woman quotas especially for small boards consisting of six to nine members might encounter resistance or rejection. This implies that pushing for mandatory gender diversity quotas on small boards could be met with challenges. The results of the correlation analysis are shown in Table 3.

Table 3 demonstrates that there is no proof that the number of independent or female directors on a company's board correlates with that company's performance. Interestingly, there is a strong and positive relationship found between board independence and the number of family members on the board. According to this data, the appointment of more independent directors is correlated with the presence of family members on the board. Nonetheless, there are positive and substantial relationships between business performance and firm size and performance from the previous year.

Table 3. Pearson's correlation analysis (n=246).

Variables	ROA	BODIND	WOMBOD	GRG	ROA <sub>t-1</sub>	LNAST	FAMBOD	BODCHR	TOP5	BODSZ
BODIND	0028									
WOMBOD	0.057	-0.148**								
GRG	-0.185**	0.057	0.054							
LNAST	0.310***	-0.072	0.151**	-0.203**	0.316***					
FAMBOD	-0.001	-0.314**	0.204***	0.047	0.052	-0.018				
BODCHR	-0.015	0.184***	-0.056	-0.027	-0.015	0.010	-0.222***			
TOP5	0.013	-0.082	-0.019	0.020	0.020	0.067	0.122**	-0.071		
ROA <sub>t-1</sub>	0.164***	-0.101	0.085	-0.231***	0.171***	0.208***	0.069	0.046	0.013	
BODSZ	0.055	-0.410***	0.161***	0.079	0.011	0.136**	0.045	-0.63**	-0.040	
TECH	-0.083	0.133**	0.009	0.126**	-0.033	0.016	-0.085	-0.013	-0.132**	-0.080

Note: \*\*\*Statistical significance at the 0.01 level (2-tailed).

\*\* Statistical significance at the 0.05 level (2-tailed).

Previous research by Haniffa and Hudaib (2006); Hannan and Freeman (1989) and Weir, Laing, and McKnight (2002) has established a negative relationship between business size and performance which means that smaller firms generally perform better. The positive relationship between firm size and performance is consistent with this finding. Haniffa and Hudaib (2006) findings in larger firms are consistent with the positive relationship between current and prior year's performance indicating that past performance can positively influence current performance. It is interesting to note that this study also finds a relationship between board size and the percentage of women on boards. Female directors are more likely to be found on bigger boards. Furthermore, there is a positive relationship between board size and business size as well as between female directors and firm size.

In a nutshell, the findings imply that board independence and the participation of female directors do not significantly affect business success but that firm size and performance from the prior year do. Additionally, larger boards are more likely to have female representation as previously noted studies noted that in larger corporations, there are favourable relationships between company size, female directors and board size. Table 4 displays the results of the panel (ordinary) least squares and QR approaches used for hypothesis testing.

Table 4. Panel least squares (PLS) and QR results (t-values in parentheses) (n=246).

Variable	Expected sign	PLS	Q0.1	Q0.30	Q0.50 (Median)	Q0.70	Q0.90
Constant		-6.303 (-2.103**)	-2.973 (-4.155***)	-0.688 (-4.387***)	-0.849 (-5.277***)	-0.817 (-2.522***)	-0.871 (-1.251)
BODIND	-	0.072 (0.275)	-0.084 (-0.259)	-0.067 (-0.568)	-0.067 (-0.529)	0.096 (0.538)	0.220 (0.944)
WOMBOD	-	-0.081 (-3.713***)	-0.047 (-1.073)	-0.013 (-1.075)	-0.005 (-0.442)	-0.007 (-0.533)	-0.033 (-0.976)
BODCHR	+	-0.050 (-0.415)	0.057 (0.754)	0.009 (0.467)	0.000 (0.040)	-0.017 (-0.661)	-0.033 (-0.470)
FAMBOD	+	0.027 (1.906**)	0.038 (1.539*)	0.001 (0.175)	0.002 (0.235)	-0.002 (-0.253)	-0.015 (-0.566)
GRG	-	-0.130 (-1.22)	-0.399 (-1.942**)	-0.106 (-3.746***)	-0.207 (-18.229***)	-0.100 (-0.531)	-0.004 (-0.021)
LNAST	+	0.348 (2.11**)	0.151 (2.936***)	0.036 (4.047***)	0.048 (4.994***)	0.044 (1.767*)	0.048 (1.395*)
TOP5	+	0.007 (1.698**)	0.003 (2.237**)	0.000 (1.871**)	0.001 (2.422**)	0.001 (1.381***)	0.003 (1.772**)
BODSZ	+	-0.004 (-0.525)	0.009 (0.023)	0.004 (0.716)	-0.000 (-0.040)	0.006 (0.566)	0.010 (0.259)
ROA <sub>t-1</sub>	+	0.127 (2.411***)	0.460 (4.2898***)	0.253 (8.820***)	0.056 (9.344***)	0.066 (5.353***)	0.010 (3.122***)
TECH	-	-0.186 (-1.136)	-0.073 (-0.790)	-0.025 (-1.612**)	-0.001 (-0.495)	-0.034 (-1.726**)	-0.041 (-0.858)
Pseudo R <sup>2</sup>		0.130***	0.269***	0.138***	0.067***	0.064***	0.061***

Note: \*\*\*Statistical significance at the 0.01 level (one-tailed).  
 \*\*Statistical significance at the 0.05 level (one-tailed).  
 \*Statistical significance at the 0.10 level (one-tailed).

$$The\ equation:\ ROA_{it} = \alpha_{oit} + \beta_2.BODIND_{it} + \beta_1.WOMEN_{it} + \sum \beta_n X_{it} + \varepsilon_{it}$$

The panel least squares method's findings show that the performance of a company is not statistically and significantly correlated with board independence. Results from the QR method are generally similar to results found from the panel least squares method where the relationship between board independence and firm performance is not significant. Hence, the result is consistent with previous studies and thus, supports the conclusions of earlier studies (Li & Roberts, 2018; Rashid, 2018; Zabri et al., 2016). Other authors Al-Saidi (2021); Endraswati (2018); Kweh et al. (2019); Lim, Lye, Yuen, and Teoh (2019); Martín-Ugedo et al. (2019) and Shan (2019) also discovered a negative relationship between board independence and firm performance. Nevertheless,

some studies Al-Msiedeen and Rashid (2018); Hu et al. (2023) and Jyothi and Mangalagiri (2019) discovered a positive relationship between board independence and firm performance.

Table 4 displays the results of panel least squares which demonstrate a negative and significant relationship between the success of a company and the number of women on the board suggesting that having female directors on the board is related to lower business performance. This evidence is supported by Ahmad et al. (2020) who examined the relationship between women directors and the firm performance of large Malaysian listed firms. Their research indicated a positive and substantial relationship between ROA and women directors in larger companies. Their findings are in line with earlier findings (Ahmad et al., 2020; Jeet, 2020; Martín-Ugedo et al., 2019; Yang et al., 2019). Similar findings were also noted by Habash and Abuzarour (2022) although the relationship is more pronounced in companies that have demonstrated consistent financial success. Similarly, Lawrence and Raithatha (2023) found a noticeably good market response when women directors were recruited to the board but only when they appointed only qualified female directors who were not associated with the promoters. In the context of UK private firms, Sattar, Biswas, and Roberts (2023) revealed that women directors significantly increase small firm profitability and the effect is more evident for high-risk firms. They contend that having a more diverse board of directors improves the success of small businesses because women directors' oversight functions are advantageous to the company even when there are also male directors present who are very busy. Overall, evidence relating to the relationship between board independence, the representation of women directors and corporate performance appears to vary between small-cap enterprises and large firms in Malaysia. Although board independence may not have a major impact on performance in small-cap companies, there appears to be a negative relationship between board independence and performance in larger enterprises. Similarly, women directors negatively affect performance in small-cap firms contrary to the positive relationship observed in larger companies. Considering this, hypotheses H1 and H2 which proposed a relationship between these factors and company performance are not supported. It is interesting to note that the relationship between board independence and company performance changes depending on performance level. The association between board independence and business performance is weakly negative for ordinary and underperforming enterprises. However, the relationship has become favourable for companies that perform better than average. This suggests that although board independence has a variable impact on company success, it is more noticeable for companies that perform at a higher level. The findings of Ramdani and Witteloostuijn (2010) who discovered a favourable correlation between board independence and a firm's Return on Assets (ROA) in the 0.5 and 0.75 quantiles are in direct opposition to our findings. Their study revealed that the advantages of having more independent directors only materialize in companies with average to superior performance based on large-listed businesses in four Asian countries. Their results showed a negative but insignificant link for businesses performing below average similar to the current study's (i.e., in the 0.5 quantiles and below). Nonetheless, this research supports Gerged and Agwili (2020) argument that better-governed enterprises are not always correlated with higher accounting value. This implies that even if board independence and governance practices do not always directly convert into better accounting metrics like ROA, they can nevertheless have a favourable impact on a firm's overall governance effectiveness.

Table 4's additional analysis of the QR data demonstrates a negative relationship between the number of women on the board and firm performance across all quantiles. However, this negative relationship is not statistically significant. This finding is consistent with that of Mazzotta, Bronzetti, and Baldini (2017) who investigated Italian enterprises and discovered no evidence of a substantial link between female directors and firm performance. Our results are consistent with the results documented by Adams and Ferreira (2009) which indicate that introducing gender quotas does not necessarily result in higher company performance and in fact, gender quotas may even reduce firm value particularly for low-performing enterprises. The results might be explained by the fact that large-cap firms are more likely to adhere to international best practices whereas small-cap businesses may not have completely integrated women directors into their corporate governance culture. The success of small-

cap firms may benefit less from gender diversity as a result of this lack of integration. The study highlights the need of considering the distinct dynamics and environment of small-cap companies when evaluating the impact of gender diversity on the success of the organization. It suggests that simply implementing gender quotas might not lead to the desired outcomes in terms of business performance and further efforts are needed to ensure the effective integration and participation of female directors in small-cap company boards.

According to the findings for the control variables, the only factors that consistently showed a positive relationship with company success were business size, ownership by the top five shareholders and the previous year's performance. The results show that there is a positive correlation between firm size and performance which supports the argument put forth by [Haniffa and Hudaib \(2006\)](#); [Weir et al. \(2002\)](#) and [Hannan and Freeman \(1989\)](#) that smaller businesses outperform their larger counterparts. This might be explained by the fact that smaller businesses frequently concentrate on supplying specialty markets which enables them to perform better. The results of this study indicate that there is a high positive correlation between the performance of the previous year and the current year for large-listed firms supporting the findings by [Haniffa and Hudaib \(2006\)](#). Interestingly, the QR method showed that this association is particularly strong in the 0.10 quantiles showing that for poorly performing firms (i.e., the bottom 0.10), their prior year's performance has a stronger influence on the current year's performance than for firms with either mediocre or high current performance. This strong association with low-performing firms might be an indication of earnings management being used to make them appear profitable. Overall, the study emphasizes the importance of firm size, ownership concentration and the previous year's performance as significant factors influencing firm performance in small-cap enterprises. The findings provide valuable insights into the dynamics of these companies and how their performance is affected by various variables.

The study's conclusions regarding board size and its impact on business performance are equivocal because neither the panel least squares nor the QR methods demonstrate any statistically significant correlation. [Haniffa and Cooke \(2002\)](#) discovered data in large organisations that showed a positive correlation between board size and company performance. However, [Rashid \(2018\)](#) found board size and firm performance were positively associated. These findings contradict the evidence from the present study. The difference could be explained by the small size of the study's participating companies which might not necessitate a larger board size to function efficiently. [Table 1](#) demonstrates that the average board size in this study was six. The evidence is conflicting when it comes to gearing (the ratio of debt to equity) and how it affects business success. The QR technique demonstrates a negative and substantial relationship between gearing and poorly and mediocly performing enterprises whereas the panel least squares method finds no meaningful relationship. The difference in reported earnings between above-average and high-performing enterprises and low- and mediocre-performing firms can be explained by the sensitivity of low- and mediocre-performing firms' earnings to interest expenditures. On the other hand, the top five shareholdings have a favourable impact on business performance which is consistent with [Haniffa and Hudaib \(2006\)](#) findings. This implies that a concentrated ownership structure with a higher percentage held by the top five shareholders has a favourable effect on firm performance. Finally, the performance of the company is not considerably impacted by family members on the board. As a result, the management entrenchment theory is refuted showing that there is no evidence of opportunistic behaviours linked to having family members on the board.

[Table 5](#) displays the outcomes of further tests carried out by altering the measurement of some factors. In particular, the measurement of women directors on the board was changed from a dummy variable to a continuous variable expressing the proportion of women directors on the board. This change enables an analysis of whether the efficacy of the board is improved by having a higher percentage of female directors. The benchmark for family directors on the board was altered from the proportion of family members on the board to the proportion of shares owned by the family directors. The relationship between the family's ownership and their representation on the board is better understood using this alternative operational definition of women in leadership. Additionally, the top

thirty shareholders' combined shareholdings were used as the new measurement for the concentration of ownership rather than the top five shareholders' combined shareholdings. This modification makes it feasible to more fully understand ownership concentration and its probable impact on business performance.

**Table 5.** Additional tests using panel least squares (PLS) and QR (T-values in parentheses) (n=246).

Variable	Expected sign	Panel least squares	Q0.1	Q0.30	Q0.50 (Median)	Q0.70	Q0.90
Constant		-6.875 (-4.036***)	-2.653 (-6.616***)	-0.747 (-4.311***)	-1.005 (-5.381***)	-0.925 (-2.932***)	-0.856 (-1.519*)
BODIND	-	0.260 (0.298)	-0.513 (-1.684**)	-0.100 (-0.864)	-0.069 (-0.565)	0.074 (0.534)	0.306 (1.370*)
WOMBOD	-	-0.416 (-0.492)	-0.463 (-2.249**)	-0.166 (-1.815**)	-0.079 (-0.979)	-0.049 (-0.539)	-0.127 (-0.460)
BODCHR	-	-0.076 (-0.441)	0.056 (0.931)	0.015 (0.739)	0.005 (0.290)	-0.018 (-0.661)	-0.049 (-0.820)
FAMSHR	+	0.000 (0.123)	0.002 (2.158**)	0.000 (1.289*)	0.000 (0.376)	-0.000 (-0.149)	-0.001 (-0.610)
GRG	-	-0.119 (-0.617)	-0.376 (-1.731**)	-0.102 (-3.632***)	-0.203 (-17.295***)	-0.112 (-0.668)	-0.061 (-0.459)
LNAST	+	0.360 (3.907***)	0.149 (4.934***)	0.040 (4.221***)	0.055 (5.438***)	0.050 (2.667***)	0.035 (0.036)
TOP30SHR	+	0.011 (2.117**)	0.003 (1.684**)	0.001 (1.996**)	0.001 (2.346***)	0.001 (1.779*)	0.003 (2.600***)
BODSZ	+	-0.019 (-0.269)	-0.013 (-0.694)	0.001 (0.212)	0.001 (0.093)	0.002 (0.365)	0.010 (0.565)
ROA <sub>t-1</sub>	+	0.125 (3.028***)	0.461 (51.483***)	0.252 (8.827***)	0.054 (8.709***)	0.064 (6.012***)	0.011 (3.723***)
TECH	-	-0.195 (-1.097)	-0.054 (-0.802)	-0.027 (-1.823**)	-0.007 (-0.463)	-0.034 (-1.746*)	-0.008 (-0.161)
Pseudo R <sup>2</sup>		0.138***	0.270***	0.139***	0.070***	0.03***	0.03***

Note: \*\*\* Statistical significance at the 0.01 level (one-tailed)  
 \*\* Statistical significance at the 0.05 level (one-tailed)  
 \* Statistical significance at the 0.10 level (one-tailed)

$$\text{The equation: } ROA_{it} = \alpha_{0it} + \beta_2.CHRIND_{it} + \beta_1.WOMEN_{it} + \sum \beta_n X_{it} + \varepsilon_{it}$$

The results of other studies show that board independence has no discernible relationship to business performance which invalidates H1. However, there is only a significant and negative relationship between the percentage of female directors on the board and the performance of the company in the lower quantiles (i.e., 0.3 and 0.1). This finding provides support for the hypothesis (H2) that struggling businesses may suffer from having more female board members. On the other hand, the impact of family ownership on the firm's shareholding is favourable especially at lower levels of performance (i.e., in the 0.1 and 0.3 quantiles) which is in line with the data in Table 4 when family members on the board were used as a proxy for the influence of family owners in their firms. Finally, the impact of ownership concentration on firm performance was consistently observed when the top thirty shareholders of the company rather than the top five shareholders were used in the measurement. The performance of a company is still correlated favourably with ownership concentration. These additional tests provide greater insights into the relationships between the components and small-cap enterprise business performance. They emphasize how crucial it is to take into account ownership concentration, the influence of family owners, and the percentage of female directors on the board when evaluating company success in this specific context. The findings demonstrate that alternative measurements of the same variable may provide different results highlighting the necessity for careful analyses and interpretations in research on small-cap firms.

## 5. SUMMARY AND CONCLUSION

Different types of boards are available in Malaysia's capital markets providing chances for companies of various sizes and specializations to list their shares openly each subject to certain listing criteria. One of the primary reasons for this differentiation is to enable small and medium-sized firms to raise capital from the public through share issuance rather than relying solely on bank loans. Numerous smaller businesses might face challenges securing bank loans due to their size and absence of established financial records. The less severe listing requirements for smaller businesses as opposed to the bigger businesses listed on the Main Board are the price to pay for this quicker access to finance. Therefore, the effectiveness of corporate governance mechanisms in these smaller firms might be compromised. These corporations may lack adequate governance measures and checks and balances due to lenient listing standards which might result in a poor level of responsibility and monitoring. Investors may be at risk in small and medium-sized businesses with poor corporate governance because there may be more opportunities for insider trading, conflicts of interest and decreased transparency. Such issues may impact the overall trust and confidence of investors in these firms affecting their ability to raise capital in the future and limiting their growth potential. Allowing various types of companies to offer shares to the public can be advantageous for raising capital. However, it is imperative for both market participants and regulators to ensure that appropriate corporate governance protocols are adhered to, irrespective of the size or classification of the companies listed. Striking a balance between ease of access to capital and maintaining strong governance standards is essential for the overall health and integrity of the Malaysian capital markets.

The results of the study of Malaysian small-cap listed companies indicate that depending on the financial success of the companies, board independence and the participation of women on the board may have different effects on firm performance. It appears that having independent directors and female directors is detrimental for companies whose financial performance is in the lower quantiles (i.e., 0.10 and 0.30). This could be due to the potential costs associated with appointing independent directors and increasing board size to accommodate female directors without significant positive impacts on their financial performance. Such changes in the board composition might not yield the desired improvements and may even lead to added financial burdens for these struggling firms. However, the number of female directors does not appear to have a substantial impact on the success of enterprises with low or high financial performance levels. This suggests that companies that are already operating well might not notice much of an influence from the inclusion of women directors.

It is interesting to note that the study also shows that having an independent board chairman in low-performing enterprises tends to be useful in raising the firm's financial performance. Replacing the current non-independent chairman with an independent one could be a viable action to enhance short-term financial performance. Importantly, this initiative is not expected to be too costly for the firm. Overall, the study highlights the importance of considering the specific financial performance context of small-cap firms when making decisions about board composition and corporate governance measures. It is essential to customize governance practices to the particular demands and circumstances of each firm to maximise the efficiency of corporate governance systems and enhance long-term company performance. The study's findings show a strong relationship between performance the year before and performance the following year particularly for companies with poor financial performance or those in the bottom 10% of performers. This suggests that these low-performing small-cap firms may be engaging in earnings management to make their financial results appear more favourable or to minimize losses. As a result, it is crucial to scrutinize the reported earnings of these firms more closely to ensure the authenticity and accuracy of their financial performance. Moreover, the study indicates that family ownership and the top five shareholders do not significantly impact the performance of most firms except for those at the extreme ends of financial performance. Family ownership and the top five shareholdings tend to boost business performance in the bottom 0.10 of performance. This might be due to family owners' close involvement and commitment to the firm's success in these challenging situations. On the other hand, the size of a company's top five shareholders in the

top 0.10 quantile may result in excessive monitoring. Over-monitoring occurs when there is excessive scrutiny or interference from shareholders which might not be beneficial for already well-performing firms. These types of owners should organise their interactions with the firm's management taking into account the past and future success of their companies. It is essential not to overly interfere or impose unnecessary constraints on the operations of well-performing firms.

Overall, the study offers insightful information about the intricacies of small-cap company performance and emphasises the significance of careful evaluation and governance procedures customized to the particular performance levels and ownership structures of these firms. Stakeholders can make more informed decisions to enhance their overall performance and financial well-being by understanding the unique dynamics and challenges faced by small-cap firms. The findings from the analysis of Malaysian small-cap listed companies point to numerous significant variations in corporate governance practices and their effects on business performance when compared to large-listed companies. These findings have important ramifications for comprehending the behaviour of small-cap companies and adjusting governance procedures to suit particular requirements. The most noteworthy conclusion is that small-cap organisations have a distinct corporate governance structure compared to large-listed enterprises. Small-cap firms have smaller board sizes and a lower representation of female directors compared to large firms. Additionally, ownership is more concentrated in small-cap firms and they tend to have lower gearing ratios but they also incur losses more frequently as indicated by the negative mean ROA during the study period.

The next findings of this study are that the effects of board independence and women directors on business performance are discovered to depend on the firms' performance levels. In other words, the effects change depending on how well each firm performs financially. The presence of female directors is inversely correlated with bad firm performance while the correlation is negligible for average and excellent enterprises. Similarly, board independence is negatively associated with company performance for low-performing firms but not for high-performing ones. This implies that the impact of female directors and board independence depends on the company's ROA. Thirdly, it has been discovered that having family members on the board of directors and owning shares in the company might help low-performing businesses improve their financial performance. Consequently, it appears that having family members serve on the board of directors is useful in resolving the problems that struggling businesses face. Fourth, the top five or top thirty shareholders' combined shareholdings which reflect ownership concentration have a beneficial impact on the success of the company. This implies that higher financial performance in small-cap enterprises is linked to a more concentrated ownership structure. Lastly, the study emphasises a significant relationship between performance in the current year and the prior year particularly for businesses in the bottom 0.10 percentile. This indicates that the current year's performance can be used as a predictor of the next year's performance particularly for poorly performing firms. In addition, the study sheds light on the distinctive qualities of Malaysia's small-cap listed companies and highlights the need for appropriate corporate governance measures to handle the unique possibilities and problems these businesses confront. Stakeholders can improve the performance and sustainability of these firms by making more informed decisions and having a better awareness of the different elements affecting company performance in the context of small-cap companies.

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