Archives of Business Research – Vol. 10, No. 11
Publication Date: November 25, 2022
DOI:10.14738/abr.1011.13348.
Ismail, A. M., Fauzi, S. A. A., & Yatim, N. (2022). The Impact of Board Capabilities on Firm Financial Performance: A Resource-Based View Perspective. Archives of Business Research, 10(11). 8-27.

The Impact of Board Capabilities on Firm Financial Performance: A Resource-Based View Perspective

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ABSTRACT

The study aims to examine the effect of board capabilities (board composition, board gender diversity and board independence) on firm financial performance in Malaysian public listed companies based on the Resource-Based View Theory (RBVT). The board capabilities are crucial for the investors to create a better organisational performance. The study also used regression analysis to determine the relationships between the variables. The data were extracted from Thomson Eikon™ DataStream and annual reports of companies listed under Bursa Malaysia, comprising five years' worth of information. The results demonstrated a significant impact of board capabilities on firm financial performance. Specifically, board composition and board gender diversity significantly affected firm financial performance. Conversely, board independence and firm financial performance presented no significant impact. Ultimately, the study outlines the essential factors that impact firm financial performance to restore public confidence towards the companies. Hence, the corporate governance factors should be emphasised to protect investors' interests.

Keywords: Firm financial performance, board capabilities, board composition, board gender diversity, board independence, Resource-Based View Theory

INTRODUCTION

Corporate governance is a system of rules, practices, and processes in directing and controlling firms. Generally, corporate governance is vital to competitively develop established companies or firms within the local and global industries. Singh and Zammit[66] stated that the 1997 and 1998 Asian financial crises seriously affected corporate governance, explaining the emphasis in Asia. The financial collapse occurred due to an ineffective board of directors, weak internal control, unreliable financial reporting, inadequate disclosure, lax enforcement in ensuring compliance, and poor audits.[75] Hence, the United States (US) scandals and Asian financial crises became the wake-up call for better corporate governance and transparency, particularly among Malaysian firms.

Extensive studies performed on the topic commonly applied the agency theory perspective.[12] Nonetheless, few studies used the RBVT by Wernerfelt[74] (1984), which focused on the internal factors or firm resources affecting firm success the most instead of industry factors. The RBVT describes that firm internal resources are used to create a competitive advantage to survive in the industry with competitors. Thus, firms could achieve competitive advantages with resources and capabilities that are valuable, rare, imperfectly imitable, and not substitutable.[5] Therefore, the study emphasised firm intangible assets, the board of directors as the human capital resources of the firm. Pugliese *et al*.[62] mentioned that the corporate boards are essential in granting access to multiple resources and providing managers with strategic advice to facilitate in gaining maximum profit for the firm. Directors must possess the capabilities to ensure good decisions and management for the companies without issues from the lack of capabilities. Franks[24] defined capability as "knowledge, skills, and attitudes of individual directors, separately or as a board and their competence to undertake the legal, fiduciary, and ethical responsibilities assigned to them".

Problem Statement

The Malaysian Code of Corporate Governance (MCCG) was amended in 2017. Bhatt and Bhatt[12] stated that the high-level finance committee made efforts to reform corporate practices to promote corporate governance among companies, specifically in Malaysia. The listing requirements under the newly amended MCCG emphasised the company board of directors. The directors are the pillars of the companies who need to use the resources and capabilities to improve company performance.[52] International scandals such as the Enron case, Xerox, and Worldcom occurred due to the directors and poor corporate governance practices. The reasons for the corporate giants collapse include ineffective board of directors, weak internal control, unreliable financial reporting, and inadequate disclosure.[45]

Recent events in Malaysia have increased interest in the board capabilities following the Felda Global Ventures (FGV) Holdings scandal, whereby the directors were paid excessively high salaries and bonuses.[56] Barrock[6] reported that despite the tremendously high salaries, the directors failed to perform duties with reasonable care, skill, and diligence, resulting in huge losses of RM17 billion until presently. The scandal caused the Securities Commission Malaysia (SC) to implement new requirements for the MCCG 2017 whereby companies must disclose directors' remuneration to ensure transparency in organisations.

The RBVT explains that appointed directors should use capabilities, such as expertise, skills, and experiences, to enhance firm reputation by enabling connections with external organisations or resources to obtain competitive advantages over others.[61] Hence, the study enhances existing studies on the board capabilities and firm financial performance in Malaysian public listed companies using the RBVT. Accordingly, the main issue is whether board capabilities influence firm financial performance. Is the answer "yes" or "no", or does it depend on the firm situation?

LITERATURE REVIEW

Resource-Based View Theory

Kraaijenbrink *et al.*[43] described RBVT as one of the most influential and cited theories in management theorising. The theory outlines the internal sources of firms sustained competitive advantage (SCA), involving profitability and the value factor of firms in various

URL: http://dx.doi.org/10.14738/abr.1011.13348

industry sectors, as highlighted in Ismail, Ahmadi, Yatim and Ismail[34]. The RBVT highlighted the internal factors or firm resources that affect firm success the most instead of industry factors. Additionally, Wernerfelt proposed the significance of acquiring heterogeneous and idiosyncratic firm resources for superior performance and presented firms ability to gain competitive advantage in the capital market. Meanwhile, Barney[5] mentioned that competitive advantage is achievable through the resources and capabilities controlled by firms that are valuable, rare, imperfectly imitable, and not substitutable, as confirmed by Kraaijenbrink *et al*.[43].

Cardeal and Antonio[54] added that the valuable, rare, and inimitable traits are divided into two categories regarding organisation resources and capabilities. Firm routines and processes are examples of firm capabilities. Therefore, the capabilities denote the "O" in valuable, rare, inimitable, and organisation (VRIO) that demand organisations to use and transform resources to achieve a sustainable competitive advantage. Thus, resources and capabilities is a set of tangible and intangible assets, including management skills, the organisational processes and routines, and the information and knowledge firms control. Hence, valuable, rare, and imitable resources managed by unskilled people would not benefit companies.[41]

Kraaijenbrink *et al*.[43] divided resources into three resources: physical capital resources, human capital resources, and organisational capital resources. Nevertheless, the study emphasised the human capital resources: the board of directors. Notably, Wernerfelt[74] argued that firms could gain a competitive advantage through tangible and intangible resources. Specifically, tangible resources denote firm assets, while intangible assets are the capabilities of individuals in the organisation, such as the board of directors.

Development of the Malaysian Code of Corporate Governance

The first MCCG code was introduced in 2000 and used as a tool to enhance the corporate governance performance of Malaysian public listed companies.[45] The first MCCG mainly referred to the United Kingdom (UK) code with changes on the internal governance structures to suit the Malaysian context and accommodate the Cadbury report code of best practice. In 2001, the SC enforced all Bursa listed companies to comply with the MCCG listing requirements. The MCCG 2000 established company principles and best practices to create an optimal governance framework. The SC introduced a new amendment in 2007 and 2012 to achieve better firm performance, enhance the MCCG governance and improve any weaknesses of the previous MCCG.

A new code was established in 2007, which revised the MCCG 2000, highlighting the board of directors, audit committees, and the internal audit function. The new code ensures the effectiveness of the important roles in firms and that the roles and responsibilities are conducted effectively.[11] Subsequently, a code was introduced in 2012 comprising eight new principles and 26 new recommendations. The principles stipulate clear roles and responsibilities of the board, reinforcing the board composition, strengthening independent directors' effectiveness and commitments, and enhancing financial reporting integrity to identify and manage risks, ensure a high-quality disclosure and determine the relationship between companies and shareholders. The MCCG 2012 required Malaysian companies to comply with new principles and recommendations.

The implementation was a success, whereby companies complied beyond the minimal requirements of the MCCG.[76] Moreover, a new Malaysian code of corporate governance was established in 2017. The SC made three significant changes in MCCG 2017, employing the "CARE" approach from the term "Comprehend, Apply and Report" by changing the "comply or explain" method that was formerly introduced in 2012. The comprehensive changes in MCCG 2017 aim to enhance boardroom diversity and board independence.[71]

Financial Performance

Financial performance is a subjective measure of how well a firm uses the assets from its primary mode of business and generate revenue. Meanwhile, firm performance is the general financial health of firms over a given period and is used to compare between firms in similar or different industries. Taouab and Issor[70] added that presently, firm performance is a significant concept in strategic management research frequently applied as a dependent variable. In the 50s, firm performance was associated with the organisational efficiency that enables firms to achieve company targets without excessive efforts from the members and with limited resources. Tannenbaum and Georgopoulos[69] mentioned that the performance assessment criteria include productivity, flexibility, and interorganisational tensions. Cherrington[18] explained performance as a concept of success or firm effectiveness. The performance also serves as an indicator of how organisations perform effectively to achieve the goals successfully.

In the 20th century, firm performance mainly emphasised firm capability and ability to efficiently exploit available resources and meet the goals established in the company and their relevance to the users.[58] Lebas and Euske[46] presented multiple definitions of organisational performance, including performance as a set of financial and non-financial indicators that offer information on the accomplishment level of objectives and results.

Performance also involves a dynamic requiring judgment and interpretation illustrated by how futures are described when impacted by current actions. For instance, the person involved in the assessment of firm performance might understand differently about the performance. Knowledge of the fundamental characteristics in each responsibility area is vital in defining performance, and the results must be quantified when reporting firm performance levels. Nevertheless, Bartoli and Blatrix[7] proposed that performance should be achieved through items such as piloting, evaluation, efficiency, effectiveness, and quality.

Hypotheses Development

Board Composition

Studies highlighted several common board composition characteristics, such as the board size (the most common), ownership structure, and independent directors. The current study tested for the board composition characteristics. Past studies debated the adequate number of company board of directors and their impact on firm performance. Ashbaugh-Skaife, Collins, and Kinney[3] suggested six to fifteen members, stating that larger board sizes increase firm benefits, opportunities, knowledge, and skills that enhance firm performance. Correspondingly, Coles *et al*.[20] discovered that larger board sizes raised firm value, while proper management and control improved firm financial and non-financial performance.

URL: http://dx.doi.org/10.14738/abr.1011.13348

Pferrer and Salancik[59]; Guest[30]; Tricker[73]; Luckerath-Rovers[50] stated the resource dependence theory supported larger board sizes, which creates more connections between firms and the external environment. Contrarily, Jensen[36], Yermack[77], and Cheng *et al*.[17] favoured smaller board sizes than larger boards as the former is more efficient and easier to monitor. Similarly, Chong *et al*.[19] revealed that the larger the board sizes, the lower the profit of companies under Malaysian "Government Linked Company" and "Non-Government Linked Company".

Kumar and Singh[44] also discovered a negative impact between board size and firm performance. Nonetheless, studies presented varying results for the effect of board size and firm financial performance. For instance, Ferrer and Banderlipe[22], Garba and Abubakar[26], and Assenga *et al*.[4] found no impact between the two variables. Nevertheless, Torchia and Calabro[72] mentioned that directors are more knowledgeable in effective decision making due to smaller board sizes. The number motivates the directors to perform duties well and report any wrongdoings of other directors. Hence, the study proposed the following hypotheses:
H_1: Board composition significantly impacts firm financial performance.

Board Gender Diversity
Increasing studies highlighted board gender diversity or women on board, with mixed findings. Milliken and Martins[52] revealed that better quality decisions are made with diverse gender boards compared to a homogenous male-only board. Carter, Simkins, and Simpson[13] found a positive influence between women or minorities, company boards, and firm value. Moreover, findings depict that increased gender diversity levels in firms increased performance regarding return on assets (ROA) and return on equity (ROE).

Ismail and Manaf[33] confirmed that women on the board of directors positively impact firm performance. Liu, Wei, and Xie[48] also suggested that female directors create a stronger impact on firm performance. Meanwhile, Post and Byron[60] specified that female directors are more likely to possess marketing and sales experiences, be more cautious in risk-taking, and pay greater attention to corporate social responsibility and philanthropy. Although numerous studies support women on board and gender diversity, gender stereotypes could be why fewer women remain excluded from the board. Bergeron, Block, and Echtenkamp[8] stated that the stereotype against women remains entrenched, particularly in male-oriented jobs that are monopolised by men in managerial and executive positions. Supposedly, women are less competent than men. Women are also viewed as being less requisite for management characteristics and tend to be more social and service-oriented instead of achievement-oriented like men.[49]

Gender stereotypes are based on the perception of society on gender roles depending on the local culture. Hence, gender inequality is still discriminated against in the East. The perception and the role of women remain traditionally pre-determined, usually linked to passive and submissive behaviour of only caring for family responsibilities and supporting male family members. The dominant religion in Malaysia is Islam, where women's primary responsibility is to be obedient wives and dutiful mothers and daughters. Women must care for their families while the men are responsible for family welfare and protection. Consequently, Malaysian women face a biased universal legacy and discrimination emerging from the Islamic ideology, laws, and rulings that are usually gender-biased. Hence, the Malaysian government attempted

to resolve the issue by establishing new rules to be practised in firms corporate governance, requiring the inclusion of 30% of women on board. Thus, the following is proposed:
H_2: Board gender diversity significantly impacts firm financial performance.

Board Independence

Fuzi *et al.*[25] elaborated that the non-executive directors on board will fail to perform their jobs effectively and provide unbiased business judgment if they are not independent of the management. The board includes executive and non-executive directors to protect shareholder interests. Although the MCCG suggests a balanced board composition comprising independent directors, compliance is ineffective if the independent directors fail to exercise the jobs effectively. As independent individuals, the directors must ensure that their presence and performance are independent of insiders and management influence. The absence of independent non-executive directors prevents them from performing their roles effectively and providing unbiased judgments.[53]

Studies indicated mixed results on board independence and firm performance. Garg[27] mentioned that board independence does not guarantee the improvement of firm performance. Kakabadse, Yang, and Sanders[39] found a weak impact of board independence and firm performance in China due to excessive intervention among controlling shareholders and a low understanding of the functions of non-executive directors. Additionally, Berghe and Baelden[9] investigated the issue of independence through monitoring and strategic roles to determine board effectiveness.

Johari *et al.*[38] debated that the minimum composition of independent directors by the MCCG is insufficient to monitor the management. Correspondingly, Chee-Wooi and Chwee-Ming[15] discovered that the independent directors in Malaysian Government Linked Companies (GLCs) failed in their internal monitoring role. Conversely, Abdullah[1] found a positive influence between board independence and firm performance. Additionally, Ameer, Ramli, and Zakaria[2] identified a positive impact of board independence on firm performance in Malaysia, implying that companies with higher numbers of outside and foreign board of directors were significantly related to better firm performance.

McCabe and Nowak[51] proposed that company boards with a majority of non-executive directors provide a safeguard for a balanced power or management relationship. Studies revealed that Malaysian companies possess sufficient independent directors on board before and after the 1997 to 1998 Asian Financial Crisis. During the three-year research, Abdullah[1] noted that Malaysian companies were dominated by external directors independent of management. Observably, Malaysian companies are aware of the significance of independent directors even before the crisis. Foo and Zain[23] reported a significant influence between board independence and information disclosure that could be more transparent and enhance information dissemination that improves firm liquidity:
H_3: Board independence significantly impacts firm financial performance.

Theoretical Framework

Good corporate governance practice is crucial for every Malaysian company. Thus, the personnel related to the firm governance is the most critical person to achieve good corporate governance practice. The relationship between the corporate governance and the company

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includes the connection with company top management, board of directors, shareholders, and other stakeholders, such as employees and customers.[55] Hermalin and Weisbach[31] confirmed that the board of directors is the key player in corporate performance.

The study applied the corporate mechanism, which is board capabilities enhanced with several attributes, including board composition, gender diversity, and board independence. The study also applied Barney's[5] RBVT, where the firm uses the resources to gain sustained competitive advantages and enable firms to be valuable, rare, imperfectly imitable, and not substitutable, as verified by Kraaijenbrink *et al*.[43]. Figure 2.1 illustrates the research framework that develops the research hypotheses.

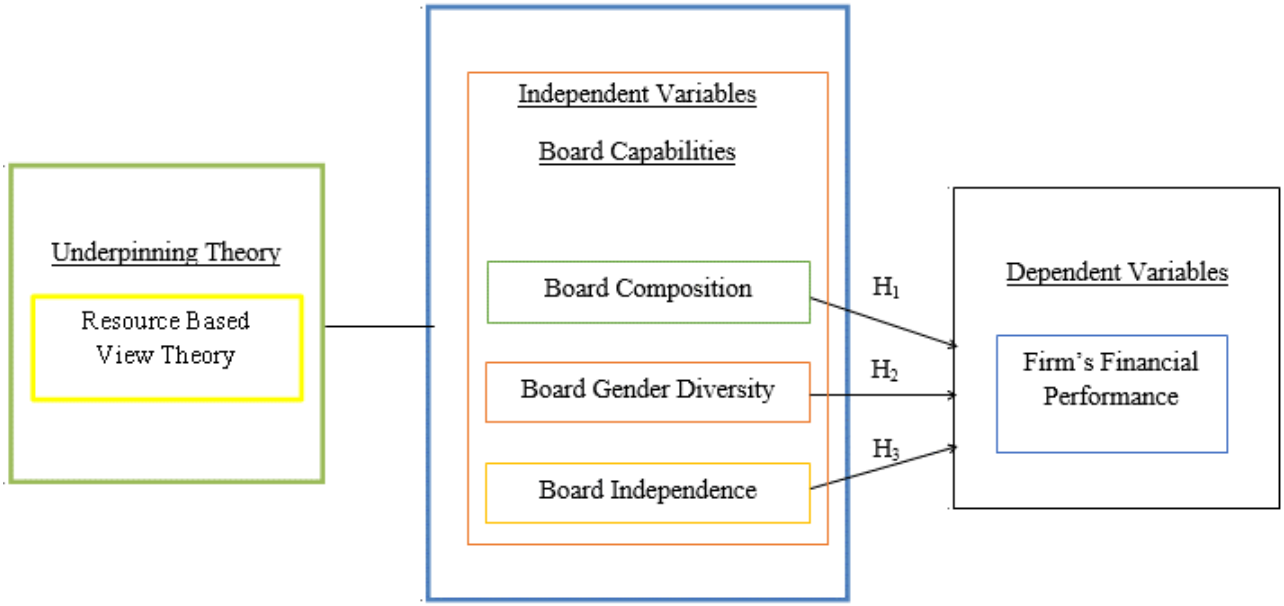


Figure 2.1. Theoretical Framework of the Relationship between Board Capabilities and Firm Financial Performance in Malaysia

The variables used in the study are board capability attributes comprising board composition, board gender diversity, and board independence. All three variables were examined to determine the effect on firm financial performance, specifically among the Top 100 Public Listed Company in Malaysia from 2014 to 2018.

RESEARCH METHODOLOGY

The study focused on the effect of board capabilities on firm financial performance. The hypothesis testing investigated the relationship between the variables and provided a better understanding of the effect of board capability attributes as the independent variable on firm financial performance as the dependent variable. The analysis unit was the public listed companies under Bursa Malaysia.

The primary data were 2014 to 2018 annual reports of the Top 100 companies listed under Bursa Malaysia recorded in the Thomson ReutersEikonTM Datastream. The study is a longitudinal study that analysed the data throughout a period. The study also explored the changes and impacts of board capabilities on firm financial performance for five consecutive years, from 2014 to 2018.

Data Collection Method

The study applied content analysis as the data collection method. The research population and sampling frame comprised all 940 Malaysian public listed companies under Bursa Malaysia, including financial and non-financial companies. The study also used the non-probability sampling technique, the purposive sampling technique. The approach is similar to the method used in past studies [21,29,40,67], emphasising the leading companies in each respective country. Finally, the study analysed the companies based on the information in top management and corporate governance reports using the purposive sampling method.

Variable Measurement

Dependent Variable

The dependent variable of the study was financial performance. The firm performance was measured by the company ROA.[14] The ROA was calculated using the net income divided by the company total assets, applied in Assenga *et al*.[4]. The measurement was used extensively in previous studies on the relationship between board capabilities and firm performance [35,63]. Meanwhile, the ROA is usually applied by financial analysts in the market when evaluating firm performance.[35] Studies prefer using ROA compared to ROE and return on sales (ROS) as a greater variation exists in annual sales and equity values using ROE and ROS than total firm assets.[28]

Independent Variables

The independent variable is board capabilities, comprising board composition, board gender diversity, and board independence. Board composition is measured by the board size of the firm. Furthermore, board gender diversity is measured by the percentage of women on board. Finally, board independence is calculated based on the percentage of independent directors in the company and the disclosure of board remuneration in the annual report.

Data Analysis

Descriptive Analysis

Descriptive analysis is a brief descriptive coefficient summarising the data set representing the 100 public listed companies in Malaysia using the Statistical Package for the Social Sciences (SPSS) software. The descriptive analysis determines the central tendency and the dispersion by measuring the mean, median, and standard deviation. Hence, the approach ensures no violation of the variable assumptions by the statistical method of tests. Additionally, the approach measures variability through skewness, kurtosis, and variance, depicting the number of analysed observations in the research.

Pearson Correlation Coefficient Analysis

The Pearson correlation coefficient analysis was used to examine the relationship between firm financial performance and board capabilities to assess the strength of the connection between the variables and is denoted by r. The relationship concerns the link between one variable to another and how the variable influences the dependent variables. A positive relationship between the variables indicates that if one variable value increases, the other value of the variable also increases.

The multicollinearity violates the assumption that no independent variables depict a linear relationship. Furthermore, analysing the test is crucial to identify any econometric problem in

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the model and examine the relationship and impact of board capabilities on firm financial performance. Lastly, the analysis must be conducted before the regression analysis.

Multiple Linear Regression Analysis

The multiple regression analysis was used to investigate the relationship between firm financial performance and board composition, board gender diversity, and board independence. The model identified the essential factors that influences firm performance.

$FFP = \beta_0 + \beta_1 BCOM_{it} + \beta_2 BGD_{it} + \beta_3 BI_{it} + \varepsilon_{it}$

Where,

β_0 = intercept
FFP = Firm Financial Performance - dependent variable
BCOM = Board Composition
BGD = Board Gender Diversity
BI = Board Independence

FINDINGS AND DISCUSSIONS

Assumptions of Multiple Linear Regression

Specific measurements are used to determine the validity and reliability of the variables in the Multiple Linear Regression, such as the Test of Normality using Shapiro-Wilk, Test of Linearity, Autocorrelation, and skewness and kurtosis. The results below present the skewness and kurtosis of the research data.

Normality Test

Table 4.1. Normality of Data

Variables	Skewness		Kurtosis	
	Statistic	Error	Statistic	Error
FFP	2.614	0.109	10.668	0.218
BCOM	-0.852	0.109	2.448	0.218
BGD	0.410	0.109	-0.396	0.218
BI	-0.526	0.109	1.316	0.218
BREM	-2.346	0.109	3.517	0.218
Valid N = 500				

Notes Variables FFP stands for Firm Financial Performance, BCOM stands for Board Composition, BGD denotes Board Gender Diversity, BI stands for Board Independence, and BREM stands for Board Remuneration Disclosure.**

Table 4.1 demonstrates the normality distribution values for the skewness and kurtosis. The results determine the normality of the data collected. Meanwhile, the value of normality distribution for the skewness should be within ±3 and the kurtosis value should be approximately ±10.[42] The normality test is vital as all the data collected are used for the regression model to ensure the model is more valuable and meaningful for the study. Hence, the highest value for the skewness and kurtosis was firm financial performance. The variable skewness value was 2.614, which was less than the value of the normality threshold. The kurtosis value was 10.668, which was slightly higher than the normality threshold. Hence, the multiple regressions were conducted as the entire data was in normal distribution and the hypotheses results were valid and not biased.

Descriptive Statistics

Table 4.2. Descriptive Statistics of Variables

Variables	Mean	Maximum	Minimum	Std. Dev.
FFP	8.25	73.07	-19.91	9.91
BCOM	8.58	15	0	2.57
BGD	15.42	50	0	11.68
BI	45.67	100	0	15.07
BREM **N = 500**	1.31	1	0	0.325

Notes Variables FFP stands for Firm Financial Performance, BCOM stands for Board Composition, BGD is the Board Gender Diversity, BI stands for Board Independence, and BREM stands for Board Remuneration Disclosure.**

The study investigated the relationship between board capabilities and firm financial performance of the top 100 public listed companies in Malaysia. The total data items in the study were 500, obtained from 100 public listed companies under Bursa Malaysia for five consecutive years from 2014 to 2018. The data were extractd from the Thomson Reuters EikonTM Datastream, which includes the company annual report. The descriptive statistics presented the final sample of the companies and all information for the mean, maximum, minimum, and standard deviation in the last five years.

Table 4.2 depicts the mean score of the firm financial performance measured by the company ROA at 8.25%, while the standard deviation was 9.91%. The value indicated the firm financial performance at an average of 8.25% and the maximum of 73.07%. Meanwhile, the minimum was -19.91%, implying that the highest ROA for the firms was more than 70% and the lowest ROA was less than 0 and negative 19%. The results implied that the management could not accomplish with the given resources, which is the company assets.[28]

The value for board composition comprised the number of board sizes in the firms with a mean of 8.58, and a standard deviation of 2.57. Subsequently, the maximum value of 15 and the minimum value of 0 suggests that the maximum number of members in the board was 15 directors and the minimum was 0, where the board size possessed no value due to the missing value from the annual report. The average number of board size was 8.58, in line with Lipton and Lorsch[47] that recommended eight or nine directors. Similarly, Jensen[36] suggested eight directors in each firm.

The board gender diversity demonstrated a mean value of 15.42% and a standard deviation of 11.68%. The result suggests that the average value of board gender diversity was 15.42%. Observably, the average number of women on board was approximately 15%, which is lower than the MCCG 2017 and MCCG 2012 requirements for public listed companies. The maximum value for board gender diversity was 50%, and a minimum of 0%. The values indicate the maximum percentage of women on board was 50%, and the lowest percentage of 0% with no women directors on board. Thus, many of the Top 100 public listed companies in Malaysia did not appoint women as directors, failing to follow the MCCG guidelines that supported board gender diversity.

URL: http://dx.doi.org/10.14738/abr.1011.13348

The independent directors were measured by the percentage of the independent directors and the board remuneration disclosure. The mean was 45.67% and the standard deviation was 15.07%, implying that the average number of independent directors was at 45.67%. The number is less than half of the majority recommended by the MCCG 2017. Moreover, the maximum value of 100% suggested that the company directors are all independent variables and the minimum value of 0 indicated no independent directors in the company. Additionally, the average for board remuneration disclosure was 1.31 and the standard deviation was 0.325. The maximum value was 1 and the minimum value was 0, which denoted disclosure of board of director remuneration details in the annual report.

Pearson Correlation Coefficient

The Pearson Correlation Coefficient test examines the relationship between the independent and dependent variable, determines the direction and strength of the variables, and identifies any multicollinearity problem of the variables. The multicollinearity issue occurs due to two or more highly correlated variables that could create bias relationships and violate the multiple regression assumption.

Table 4.3 demonstrates the Pearson Correlation Coefficient analysis for the dependent and independent variables. Pallant[57] added that the multicollinearity problem might occur if the independent variables are highly correlated and possess a bivariate correlation value of more than 0.9. The results demonstrated no variables of more than 0.9, suggesting no multicollinearity issue. The results depicted that the highest correlation for the variables was 0.357 between the board remuneration policy and the board composition. Hence, the Pearson Correlation Coefficient results signified insignificant multicollinearity problems, which did not affect the multiple regression results and the results of tolerance, variance inflation factor (VIF), and correlation as multicollinearity was not an issue.

Table 4.3. Pearson Correlation Coefficients Analysis for All Variables

	FFP	BCOM	BGD	BI	BREM
FFP	1.000				
BCOM	-0.116	1.000			
	0.005				
BGD	0.096	0.214	1.000		
	0.016	0.000			
BI	-0.028	0.179	0.069	1.000	
	0.265	0.000	0.061		
BREM	0.027	0.357	0.220	0.287	1.000
	0.271	0.000	0.000	0.000	

****Correlation is significant at the 0.01 level (2-tailed)**

***Correlation is significant at 0.05 level (2-tailed)**

Notes Variables FFP stands for Firm Financial Performance, BCOM stands for Board Composition, BGD is for the Board Gender Diversity, BI stands for Board Independence and BREM stands for Board Remuneration Disclosure.**

The study applied the Pearson Correlation Coefficient to identify the strength of the relationships of the variables. Table 4.3 illustrates the independent variables, which are the board capability attributes, comprising board composition, board gender diversity, and board

independence and the dependent variables were tested to determine firm financial performance. The board capabilities that denoted significance were board composition and board gender diversity at the significant level of 1% and 5% with a significant relationship impacting firm financial performance. Conversely, a slight negative connection was noted between board composition and firm financial performance (r = -0.116).

The r-value suggested that larger board sizes will lower firm financial performance among the public listed companies in Malaysia. Additionally, a slight positive relationship existed between board gender diversity and firm financial performance (r = 0.096). The results implied that the increase in the number of women on board of directors raised firm financial performance, as supported by Ismail and Manaf[33]. Nevertheless, the board independence indicated an insignificant relationship with firm financial performance as the significant level was more than 1% and 5% despite using two measurements to test the variables. The measurement results were not significant according to the new requirements of MCCG 2017 that emphasises board independence and board of director remuneration disclosure on the annual report.

Multiple Linear Regression

The multiple linear regression explains the causal relationship between two or more independent variables, y with the dependent variable, x.[57,68] The board capability characteristics comprised board composition, board gender diversity, and independent directors and firm financial performance for the dependent variable. Table 4.4 presents the multicollinearity test with tolerance level and VIF. Meanwhile, Table 4.5 illustrates the multiple linear regression results of the model and the overall fit statistics.

Table 4.4. Multicollinearity Test Tolerance and VIF

Variables	Tolerance	VIF
BCOM	0.847	1.180
BGD	0.931	1.075
BI	0.911	1.098
BREM	0.802	1.247

Notes Variables FFP stands for Firm Financial Performance, BCOM stands for Board Composition, BGD is the Board Gender Diversity, BI stands for Board Independence, and BREM stands for Board Remuneration Disclosure.**

Table 4.4 depicts the multicollinearity test with tolerance level and VIF. The VIF identifies the multicollinearity problem by calculating the VIF in the study, which starts from 1, bringing the mean to zero collinearity. AVIF of more than 5 suggests critical levels of collinearity where the coefficients are poorly estimated and the p-values are questionable. Shamsuddin *et al.*[64] stated that the tolerance level below 0.1 and VIF of more than 10 indicates a serious problem.

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Table 4.5. Multiple Linear Regression Results

Variables	β Coefficients	T	Sig.
(Constant)	11.033	5.700	0.000
BCOM	-0.616	-3.323	0.001
BGD	0.099	2.556	0.011
BI	-0.018	-0.576	0.565
BREM	2.015	1.340	0.181
R^2 (%)	0.032		
Adjusted R^2 (%)	0.024		
F-value	4.126		
Sig.	0.003		
N	499		

Notes Variables FFP stands for Firm Financial Performance, BCOM stands for Board Composition, BGD is for the Board Gender Diversity, BI stands for Board Independence and BREM stands for Board Remuneration Disclosure.**

Table 4.5 above presents all the results that show the impact of the independent and dependent variables. The regression model results indicated that the adjusted $R^2 = 0.024$, $F = 4.126$, $p < 0.05$. The F-ratio was statistically significant at 5% significance level, suggesting that the regression model contributed to 2.4% of the variance of the firm financial performance explained by the variation of the independent variables. The results also indicated that the value of the adjusted R^2 decreased compared to the R^2 value as the value actually gives the meaning for a predictor that improved the model by less than expected chance. Nonetheless, the F-ratio was very small in percentage due to the large number data. Pallant[57] specified the number of data ($n > 30$) was considered large and acceptable for the F-ratio as the value is in small numbers or percentage. Although the model was significant, the r squared implied that the variables in the model might not be strong to test firm financial performance.

The board composition p-value = 0.001 < 0.05, which was less than 0.05, implying a significant result with firm financial performance. For board gender diversity, the p-value = 0.011 < 0.05, which was also significant with the firm financial performance. Contrarily, board independence and board remuneration p-value = 0.565 and 0.181, which were more than 0.05, signifying no significance with firm financial performance.

The equation model was tested further to the variable sensitivity and presented as follows:
FFP = 11.033 - 0.616(BCOM) + 0.099(BGD) - 0.018(BI)

The significant variances based on the equation are as follows:

- β_0 = 11.033. When all the predictor variables remain constant, the Firm Financial Performance (FFP) are at 11.033%.
- When the board composition increases by 1 person, the firm financial performance decreases by 0.616%.
- When the board gender diversity increases by 1%, the firm financial position increases by 0.099%.
- When the board independence increases by 1%, the firm financial position decreases by 0.018%.

Discussion

Board Composition

Ashbaugh-Skaife, Collins, & Kinney[3] proposed that the number of board of directors in an organisation should be six to 15 members. A larger board size could benefit firms more and increase the opportunities, knowledge, and skills that improve firm performance. Conversely, Jensen[36] favoured smaller board sizes as the size is easier to handle and more efficient than larger board sizes. Hence, the results demonstrated that board composition significantly impacted firm financial performance; thus H_1 is supported. Contrarily, the findings revealed a negative effect between board composition and firm financial position. Hence, smaller board sizes increase firm financial performance according to Shukeri, Shin, and Shaari[65]. The results coincide with Chong *et al*.[19], Jensen[36], Yermack[77], and Cheng *et al*.[17]. Nonetheless, the results contradicted the RBVT, which supported that larger board sizes could enhance the connections with external resources.

A smaller number of board directors could improve the skills and knowledge of the board of directors to perform their roles in the organisation. Additionally, Cheng[16] verified that a small number of boards reduces the agency problem in firms while a larger number of boards increases the complexity of the decision-making process. Furthermore, larger board sizes increase the information transferring process, causing the directors to be less effective and diligent as all the directors acquire the information.

Kumar and Singh[44] stated that the optimum number of board sizes largely affect the company, adding that a smaller number of board size is more effective and increases firm performance. Conclusively, board composition impacts firm financial performance in Malaysian public listed companies. Specifically, small numbers of board members increase firm financial performance as the board is easier to control and the directors' knowledge, skills, and connections are sufficient to enhance firm financial performance.

Board Gender Diversity

The empirical evidence on board gender diversity is mixed. Several studies supported that board gender diversity improves firm financial performance.[13,33,48] Jizi and Nehme[37] mentioned that board gender diversity diversifies voice and life experiences, contributing to better governance and improves company overall performance. Thus, gender diversity at the board level may affect the process and quality of the decision making.[32] The results signified a significant relationship between board gender diversity and firm financial performance; thus, H_2 is accepted.

The result is consistent with the resource dependence theory which supported that woman on board increase the company legitimacy and improve the external connections between the firm and outside resources. Correspondingly, Assenga *et al*.[4] confirmed that using the resource dependence theory demonstrated a positive influence between board gender diversity and firm financial performance. The significant results could enhance the appointment of women on board and lessen the bias towards women while increasing the percentage of women on board and achieving 30% in Malaysian organisations based on the MCCG 2012 and 2017. Additionally, more women on board could enhance firms non-financial performance, such as the social responsibilities due to the natural characteristics of women with more empathy, creativity, and innovativeness that benefit firm growth.

URL: http://dx.doi.org/10.14738/abr.1011.13348

Board Independence

The board independence depicted mixed results. Several studies supported that board independence affects firm financial performance.[53,78] Conversely, Garg[27], Chee-Wooi, and Chwee-Ming[15] denied any impact between board independence and firm financial performance, stating that the independent directors of Malaysian GLCs failed in their internal monitoring role. Although the study used two measurements to assess board independence, the results indicated no significant impact between board independence and firm financial performance. Therefore, H_3 is rejected. The results contradict RBVT where the board independence do not influence and manipulate the decision-making process by the biased directors.

The results revealed that board independence did not affect firm financial performance, as confirmed by Chee-Wooi and Chwee-Ming[15]. Furthermore, Garg[27], stated that board independence does not guarantee improvement in firm performance. Summarily, board independence and the transparency of the board remuneration does not influence firm financial performance, which is insufficient to monitor the management and make the directors independent in making decisions for the organisations.

Correspondingly, Bhagat and Black[10] mentioned that the independent directors might not possess full knowledge of the business or the ability to monitor the management actions and they might be involved in excessive monitoring that damages the independent directors' functions. Additionally, most external directors in Malaysian companies are from overseas, not well known and capable of coping with the Malaysian local business environment and culture.[65]

Summary

The three hypotheses were tested to determine the relationships between the independent and the dependent variables. Table 4.6 summarises the tested hypotheses, identifying whether the hypotheses are supported or rejected.

Table 4.6. Summary of Hypotheses and Results of the Study

No.	Hypotheses	Result
H_1	A significant relationship exists between board composition and firm financial performance.	Supported, negative
H_2	A significant relationship exists between board gender diversity and firm financial performance.	Supported, positive
H_3	A significant relationship exists between board independence and firm financial performance	Not supported

CONCLUSION AND RECOMMENDATIONS

The study highlighted the impact of board capabilities on firm financial performance in Malaysian public listed companies from 2014 to 2018. The board capability attributes comprised board composition, board gender diversity, and board independence and the connection with the firm financial performance. Limited studies investigated the board capabilities based on RBVT. The study provides outcomes on the impact of board composition, board gender diversity, and board independence on firm financial performance. The hypotheses were based on previous literature on board capabilities and firm performance by using RBVT or the Resource Dependence Theory. Thus, the research framework was developed by using the board capability attributes comprising board composition (H_1), board gender diversity (H_2), and board independence (H_3) on firm financial performance. All the data from the top 100 public listed companies in Malaysia was collected from the Thomson Reuters EikonTM Datastream and the company annual reports.

The results from the multiple regression analysis suggested that firm financial performance significantly impacted board composition (H_1) and board gender diversity (H_2). Contrarily, board independence (H_3) demonstrated no significant impact. Therefore, H_1 and H_2 were supported, whereas H_3 was not significant for the study.

Contributions

The firm value is a crucial element for every business. Hence, the study facilitates practitioners to identify the problems in creating firm value. The company could use corporate governance as a way to develop firm performance and aid the government to achieve national economic goals. Therefore, to increase firm value, the company should focus on the management personnel, which are the board of directors. The board could bring benefits to the company based on their decision and management. Furthermore, board capabilities enable organisations to focus on the board of directors to be useful for the company. Moreover, according to RBVT, sustained competitive advantages could be gained by using intangible resources, which is the board capabilities of the firms. Full utilisation of board capabilities increases firm financial performance and achieve a competitive advantage for the firm.

Limitations

The study noted several limitations. Firstly, the study only emphasised the top 100 public listed companies in Malaysia based on market capitalisation. Thus, other organisations below than 100 and excluded from Bursa Malaysia were not assessed. Moreover, the study focused on the three board capability attributes: board composition, board gender diversity, and board independence. Other attributes could be used to test board capabilities and firm financial performance, such as the chief executive officer (CEO) duality, board skills and knowledge, and others.

Suggestions for Future Research

Academicians or researchers should perform similar studies but focus on the companies excluded from Bursa Malaysia, comparing between listed companies and non-listed companies in Malaysia. The approach could enhance literature on the changes in MCCG 2017 and examine the differences between listed companies and non-listed companies in Malaysia. Furthermore, future studies should lengthen the study period to more than five years to observe the changes

URL: http://dx.doi.org/10.14738/abr.1011.13348

of the present and past board capabilities, adding board capability attributes to further justify the board capabilities.

ACKNOWLEDGEMENT

We wish to thank the Faculty of Accountancy, Universiti Teknologi MARA for their support and funding.

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