

## CORPORATE GOVERNANCE AND FIRM VALUE: THE MODERATING EFFECT OF BOARD GENDER DIVERSITY

Yeoh Siong Chin <sup>1</sup>, Yuvaraj Ganesan <sup>1</sup>, Anwar Allah Pitchay <sup>2</sup>, Hasnah Haron <sup>3</sup>, Ratih Hendayani <sup>4</sup>

<sup>1</sup> Graduate School of Business, Universiti Sains Malaysia, Malaysia

<sup>2</sup> School of Management, Universiti Sains Malaysia, Malaysia

<sup>3</sup> Faculty of Industrial Management, Universiti Malaysia Pahang, Malaysia

<sup>4</sup> School of Economics and Business, Telkom University, Indonesia

E-mail: [yuvaraj@usm.my](mailto:yuvaraj@usm.my)

Received August 2019; accepted November 2019

### Abstract

The purpose of this research is to examine the relationship between corporate governance and firm value. The component of corporate governance is board size, board independence, number of board monitoring committees, risk management committee. Board gender diversity will be introduced in this study as a moderator variable between corporate governance and firm value. This study adopts a quantitative approach and cross-sectional design. A total of 120 top market capitalization was selected for companies listed in Bursa Malaysia and relevant data are extracted from respective companies' annual reports. Result shows that board size and board independence are positively significant to firm value. However, board monitoring committee and risk management committee do not show any significant relationship with Tobin's Q. Board gender diversity, however, do not function as a moderating role in the relationship of corporate governance and business performance. This study contributes by explaining the relationship between corporate governance and firm value in a developing country. Policymakers and academician will be able to have a better insight into the research and this study pioneer to test the moderating effect of board gender diversity, and the relationship between risk management committee and firm value. Further this paper, able to enhance knowledge and understanding of relevant authority and help them to strategies new policy or standards for listed company.

### Research paper

**Keywords:** Corporate Governance, Firm Values, Firm Size, Gender, Tobin Q, Board

**Reference** to this paper should be made as follows: Chin, Y. S., Ganesan, Y., Pitchay, A. A., Haron, H., & Hendayani, R. (2019). Corporate Governance and Firm Value: The Moderating Effect of Board Gender Diversity, *Journal of Entrepreneurship, Business and Economics*, 7(2s), 43–77.

## **Introduction**

The breakthrough of corporate governance in Malaysia was the implementation of the Malaysian Code of Corporate Governance (MCCG) in March 2000, and subsequently the introduction of Minority Shareholders Watchdog Group (MSWG) in the year 2001. Some of the high-profile collapse of companies in Malaysia such as Renong Berhad in 2000, United Engineers (Malaysia) Berhad in 2001, and Transmile Group Berhad in 2007 was partly attributed by a poor corporate governance practice (Shahansha Molla et al. 2016). Since then, MCCG was revised twice (before 2017), once in 2007 and thereafter in 2012. The revisions in 2007 and 2012 of MCCG were aimed at improving the accountabilities of the board of directors and audit committee. It was also highlighted that the board independence should be represented the majority by independent non-executive directors, who are financially literate (Johl et al., 2015). Growing concerns from the public to strengthen corporate governance for all public listed companies in Malaysia were further enforced by the PwC Global Economic Crime Survey 2016 which showed a high percentage of respondent believes there is asset misappropriation and also accounting fraud in their organization (PwC, 2016). On the 26th of April 2017, the Securities Commission of Malaysia (SC) announced the issuance of the new Malaysian Code on Corporate Governance (MCCG 2017), which will supersede the MCCG 2012. The MCCG 2017 is the fourth edition (before this 2000, 2007, and 2012) after taking into context inputs from various stakeholders, corporate governance failures, market structures changes, and current market needs. The new MCCG was made

applicable to all public listed companies, while non-listed companies are encouraged to adapt the code. Public listed companies will no longer be given the flexibility of merely explaining the reasons for non-compliance, but instead they will have to provide alternative steps should the requirements were not met under MCCG 2017 (ACCA, 2017). It is proven that corporate governance has grown its importance drastically over the past decades especially firms are often managed by controlling shareholders. The positive relationship between corporate governance and the creation of firm value has been widely proven by researchers (Shahansha Molla et al. 2016). Business performance and the company's strategic decision making plays an important role in influencing the firm's value. This has been a general concern among stakeholders.

Despite strong corporate governance guidelines in Malaysia, there are still corporate scandals that have caused investors losing their investments. The case of Felda Global Venture Berhad (FGV) has attracted much attention from the authorities. The company's top officials were alleged with corruption and abuse of power (Chow, 2017). FGV saw consistent improvement in its top line (revenue) since the Initial Public Offering (IPO). Despite a stronger revenue generation, FGV failed to translate the revenue into their net profit. This is an indicator of poor management, misappropriation of funds, poor decision making, or a combination of all. Over the past four years, FGV has seen its net profit fallen drastically from nearly RM1,000 million in 2013 to just RM29.6 million in 2016. As a result of this, dividend per share paid to the shareholders moved in tandem with the

plunge in net profit. The dividend dropped 93% when compared between 2012 and 2016. Most importantly to investors, FGV saw its Return on Equity (ROE) dropped to almost 0% in Financial Year 2016 (FY16). Such a situation will create suspiciousness among investors, and foreign direct investors tend to shy away from investing in Malaysia for this reason. As a result, not only poor governance affects the performance of the company, but also the economy of Malaysia indirectly.

Apart from FGV's corporate scandals, Malaysia had also in the past witnessed several other high-profile corporate failures in 1Malaysia Development Berhad (1MDB), Port Klang Free Zone (PKFZ), Malaysia Airlines (MAS), and Perwaja Steel among others. These collapses gave significant evidence that there's a lack of effectiveness in the corporate governance mechanism. The board of directors play an important role in determining the effectiveness of corporate governance within a company. As such, this study is aimed to examine the relationship between board diversity and firm's value. Despite the continuous effort from the regulatory bodies to enhance the corporate governance in Malaysia, the board of directors and manager's mismanagement, corruption, and fraud persists. The objective of this research is to address the issue by analysing key corporate governance characteristic's relationship with the value of the firms. The element of corporate governance that will be used in this research paper is namely board size, board independence, board committees, and risk management committees affecting the firm value. Besides, this study also studies the moderating ef-

fect of board gender diversity in influencing the relationship between corporate governance and firm value.

## **Literature Review**

Corporate governance is not new, and its history span back decades since the formation of companies. Companies need the adoption of corporate governance because of the issues of separation of management and ownership in the modern corporation. The interest of those who have control over the firm is not aligned with the interest of the owner/shareholder (Padachi et al. 2017). Corporate governance characteristics used in this study are namely board size, board independence, board monitoring committees, and risk management committee.

Board size can be defined as the total numbers of directors on a board (PanAsian et al. 2003). Academicians agreed that board size causes a coordination problem between its board members, and Jensen (1993) suggested that a board size should be no more than 8 directors. There are also arguments between the trade-off of coordination cost and prospective ideas. In Malaysia, to promote independence, the board must ideally comprise of half independent director, but for large companies, the majority of directors should consist of independent director. To maintain the independence of the board, the tenure of an independent director must not exceed cumulative of nine years (MCCG, 2017).

The board monitoring committee of audit, remuneration, and nomination committee has been constantly recommended by corporate govern-

ance code in many region and countries for the past decades (Pierce, 2004). Upadhyay et al. (2014) explained that the importance of board committees was because the board is broken into sub-board with a clearly defined mandate, the accountability for some directors increases, hence solving the free-rider issues. Risk management and internal control is a substantial tool for a company's governance, management, and operations to be effective. Risk management takes into consideration the threat and opportunities, while a sound internal control will be able to mitigate the threat, while capitalizing on the opportunity (Salamzadeh et al., 2019). Companies that can integrate effective governance structure and processes with risk management and internal control at every level of the organization across all operations tend to be more successful (MCCG, 2017).

### ***Agency Theory***

The fundamental underlying theory in agency theory is the premise of the principal-agent theory. The principal-agent theory is, in fact, a contractual relationship between the two parties, namely the principal and the agent. Principal engages the agent to perform a series of services on behalf of the principal, of which, strategic decision making is often given to the agent (Marie, 2014). A major challenge as highlighted by Monks and Minnow (1995) in agency theory concerning corporate governance is striking a balance in granting manager the discretionary power to conduct the business on behalf of the principal, while at the same time holding them accountable to the use of such power. This study will contribute to identifying key cor-

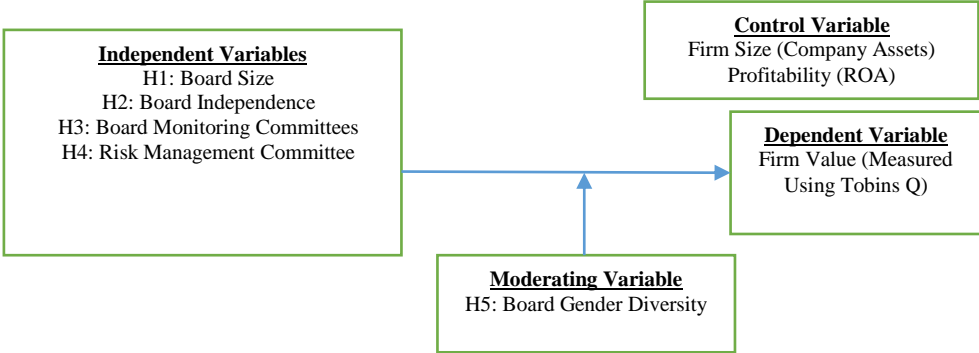
porate governance characteristic in preventing principal-agency theory that affects the firm value.

### ***Stakeholders Theory***

Stakeholders theory was first introduced by Freeman (1984), explaining how companies should deal with their stakeholders. Stakeholder theorist looks at a firm in a much broader perspective, where a firm is made up of more than just the shareholders. Another stakeholder theorist, Clarkson (1994) managed to substantiate a more vibrant understanding of stakeholder theory and explained the fact that stakeholder theory is important in complementing firm in achieving its goals. A firm is a system of stakeholders which operates within a larger system of the host society that provides market infrastructure and necessary legal for the firm's activities (Clarkson, 1994). He further added that the purpose of a firm is to create value and wealth for its stakeholder, by creating goods and services from stakes. This study was intended to increase awareness of corporate governance in affecting firm value, as stakeholder theorist suggests that the main purpose of having a sound corporate governance was to provide a platform in protecting the stakeholder's interest. Under the stakeholder theory, corporate governance is termed as "balancing act" because every stakeholder is given the rights to be heard (Marie, 2014).

**Theoretical Framework**

The proposed theoretical framework (Figure 1) for this study is developed by using Agency Theory and Stakeholder Theory as a base to explain the importance and relationship between corporate governance characteristic and firm value.



**Figure 1.** Theoretical Framework

**The Relationship between Board Size and Firm Value**

Many past studies have proven that there is an inverse relationship between the size of a board and several measures of corporate governance (Yermack, 1996). The reason why larger size board does not necessarily bring benefits to the firm was that a larger board will have difficulty when comes to coordination, and problems arise in the sense of communication between directors, and organization (Forbes et al., 1999). Other factors being constant, a larger board size tends to lower the level of corporate liquidity slack during any event, or crisis (Mcnulty et al. 2012). Larger board tend



to be less effective than the smaller board in maintaining sufficient cash, resources, or near cash to meet the firm's financial obligation. Larger board often faced with communication/coordination and agency problems. For a larger group of directors to reach consensus, it takes longer time and effort to make the final decision, and often the decision was made with more compromise and less extreme than any smaller board (Kogan et al. 1966). As Agency problems (director free-riding issue) become more severe with the increase of board size, it is easier for the CEO to influence and control the board. Jensen (1993) showed that the CEO has higher authority in decision making as the board size increases. Jensen (1993) further explained that as the board size reaches more than seven or eight directors, the board will function less effectively, and it is easier for the CEO to control them.

There has been an argument in the past studies between board size and firm's performance. However, the result of the study was a mix. Yermack (1996) and Eisenberg et al. (1998) concluded in their studies that firms with smaller boards produce a higher value of Tobin's Q. A study conducted in Malaysia by Johl et al. (2015) suggested that there is an existence of a relationship between the size of the board, and the firm's performance. When Meta-analysis technique was used by Dalton et al. (2000), the result obtained showed that a larger board was associated with better firm financial performance. Large firm size in developing countries showed that a bigger board size gives a positive impact to the firm's performance and in fact, a larger board size increases the performance of the firm (Malik et al. 2014). Balanced board size is important to mitigate the risk of identified in

agency theory and stakeholder theory; therefore, the suggested hypothesis is as follows:

**H1:** There is a positive relationship between board size and firm value.

### ***The Relationship between Board Independence and Firm Value***

Prior studies conducted by academicians showed mixed results between the association of independent non-executive directors and firm performance. Dahya et al. (2005) found in their study where investors in the United Kingdom tend to view the appointment of the independent director as good news and hence reflected in the stock returns. Dahya, et al. (2008) further strengthened the finding and proved that board independence showed a significant positive relationship to the firm performance, especially for companies that are listed in countries where there are lower levels of protection for the investors. However, Yammeesri et al. (2010) found that firms with more executive directors seen a better firm value as compared to a firm with a more independent non-executive director. As seen from the previous research, there are mixed results from their findings in regard to the relationship between board independence and firm value (Salamzadeh, 2015). Wang (2014) too failed to prove that there is a relationship between board independence and firm performance on his study conducted in China.

Further, Fuzi et al. (2016) stated in their research that there is a positive relationship between the representations of independent directors on board concerning firm performance. Liu et al. (2015) managed to prove in their study that there is a high degree of a positive and significant relation-

ship between board independence and firm value. In one of more recent research conducted by Reguera-Alvarado et al. (2017), they found evidence in their research that confirmed board independence leads a firm to a better performance, which was very much in line with prior research evidence found by Bhagat et al. (2013). Independence of the board contributes to a lower risk of the agency problem. It was widely understood that increasing proportion of independent non-executive directors will increase the value of the firm, hence the hypothesis for this variable is:

**H2:** There is a positive relationship between board independence and firm value.

### ***The Relationship between Board Monitoring Committee and Firm Value***

Past studies highlighted that the number of board committees as an important measurement for firm performance. The firm uses a monitoring committee to mitigate the costs associated with a larger board (Upadhyay et al. 2014; Goodarzi et al., 2018). Further, Upadhyay et al. (2014) conducted the study by using a sample of S&P 1500 firm from 2000 to 2003. In their research, they managed to substantiate that not only firms managed to mitigate the larger board costs, but firms with more than three board committees are also showing that the previous negative association between the board size and firm value as measured using Tobin's Q disappeared. The research showed that firm with large board size but with more than three monitoring committees showed a positive relationship with firm performance and value.

Coles et al. (2008) highlighted in their study that a complex firm needs a larger board and independent board. Upadhyay et al. (2014) supported the finding from Coles et al. (2008) and further elaborated that firm balance up the costly need of larger board by organizing them in committees. Brick et al. (2010) suggested in their studies that the Tobin's Q value is higher when studied on firms when board monitoring is higher. A study conducted in Hong Kong by Leung et al. (2014) showed an important indication where there is indeed a significantly positive relationship between board committees and firm performance but was moderated by the percentage of family ownership. With the introduction of more board monitoring committee, this study intends to prove that agency problem and issues identified in stakeholder's theory that affects the firm value will be reduced with improvement in finding a balanced number of board monitoring committees. This study will be conducted to test the result by Leung et al. (2014) and other prior research on the relation between board committees and firm value. The hypothesis for the study will be as follow:

**H3:** There is a positive relationship between several board committees and firm value.

### ***The Relationship between Risk Management Committee and Firm Value***

Over the past, proper risk management was the responsibilities of the audit committee (Korosec et al., 2005). Risk management has seen significant growth and a new committee specially set up to focus on risk (Subra-

maniam et al., 2009). The risk management committee is responsible for educating enterprise risk management to the member of the board, establishes risk strategy, and to review risk report (KPMG, 2001; Radovic Markovic and Salamzadeh, 2012). In line with this, the securities commission issued a guideline on the Statement of Internal Control (Guidance for Directors of Public Listed Companies), in December 2000, but was subsequently revised and the current guidelines on the Statement on Risk Management and Internal Control was introduced. The intention of the guideline was intending to guide the directors to disclose the firm risk management and internal control practice in the annual report (Nejati et al., 2011; Ahmad et al., 2015). Moreover, Subramaniam et al. (2009) stated in the study conducted by him that an effective risk management system assists the firm to achieve its objective. Yatim (2010) explained that the risk management committee is the sub-board and was introduced to reduce the burden of the audit committee in term of risk management. Apart from managing risk, the risk management committee is also expected to assist the management in providing disclosures to the shareholders.

Although much past research has been conducted to prove the importance of the risk management committee, there is limited literature in studying the relationship between the existence of the risk management committee and firm value. Considering risk management committee is acting as a substantial tool for a company's governance, management, and operations to be effective, while considering firm threat and opportunities, and advising on sound internal control to mitigate threat, while capitalizing on

the opportunity, it is worth considering that risk management committee will increase the value of a firm. Proper and working risk management and internal control will be able to identify the level of risk and assist the company in making an informed decision. Hence, the hypothesis for the study will be:

**H4:** There is a positive relationship between risk management committee and firm value.

***The Moderating Effect of Board Gender Diversity in the Relationship between Corporate Governance Characteristic (Board Size, Board Independence, Board Monitoring Committees and Risk Management Committee) and Firm Value***

The independent variables introduced in this study showed a mixed result from past studies. Board gender diversity has shown a strong relationship between board gender diversity and firm value. In one of the latest researches on literature review for board gender diversity conducted by Velte (2017), the result showed that presence of women in the board gives a positive effect on overall for financial performance. A research conducted by Julizaerma et al. (2012) has a strong finding that is a positive association between gender diversity and the ROA, which in other words, explains that the appointment of women director will give the impact of better financial condition to the company. Low et al. (2015) conducted research onboard diversity and firm performance in Asian countries: Hong Kong, South Ko-

rea, Malaysia, and Singapore. In their study, they explained that firms that increase the number of female directors on the board tend to have a positive effect on firm performance, especially during the first appointment. Due to the strong positive relation and its importance in the corporate governance, boardroom gender diversity was introduced as a moderating variable, to contribute to all prior research on the relation with firm value, considering the involvement of all the independent variables in the study. With the introduction of the moderating variable of board gender diversity, it is then hypothesized that:

**H5a:** Board gender diversity moderated the relationship between board size and firm value

**H5b:** Board gender diversity moderated the relationship between board independence and firm value

**H5c:** Board gender diversity moderated the relationship between the number of board committees and firm value

**H5d:** Board gender diversity moderated the relationship between risk management committee and firm value.

## **Research Methodology**

This study applied a quantitative approach, starting from identifying the problem and introduce the problem statement. Hypotheses were developed and examined to obtain the corresponding result based on data collection and data analysis. This approach, termed as positivism approach by

academicians and hypothetical-deductive method is the prevalent method which is used by many studies in Malaysia (Bhatt et al., 2017; Zabri et al., 2016; Johl et al., 2015). This study adopted a cross-sectional design where the data gathered are just for one year. Data and information used for this study were collected based on the annual report of the respective companies. Content analysis was the method selected because data collected provides a quantitative or numerical description. The unit analysis of this study is a company or generally known as a firm. The population for this study is the Public Listed Company listed in Bursa Malaysia. However, financial sectors will be excluded in this study because financial companies are subject to different requirement, rules and regulations required by the Bank Negara Malaysia (Devi et al., 2011). The data required was retrieved from the annual report of top 120 publicly listed companies by market capitalization companies in Bursa Malaysia.

## **Variables of The Study**

### ***Dependent Variable- Firm Value***

Tobin's Q is often used in the study as a proxy to measure the firm value in corporate governance literature (Yermack, 1996). Demsetz et al. (2001) stated in their study that a firm can increase the firm value by improving operating performance, or by increasing the present value of future investment opportunities. The calculation of Tobin's Q is based on the Total Market Value of Firm divided by Total Assets. Many corporate governance types of research were conducted using Return over Assets (ROA) or Return



on Equity (ROE) as a proxy to firm value. However, these are an accounting metric of firm performance (Brick et al., 2010), and not the market value. Tobin's Q, a market-based measure for the firm's market value to its book value, is used in this study as a proxy to measure firm value instead of accounting metric ratio.

***Independent and Moderating Variables***

This study was conducted based on the method adapted from sources in the prior study. All data collected and used for this study are empirical secondary data extracted from annual reports.

**Table 1.** Corporate Governance and the Related Literature Support.

<b>N o.</b>	<b>Independent Variables</b>	<b>Measurement</b>	<b>Sources</b>
1	Board Size	The total number of board directors appointed to the board	Eisenberg et al. (1998); Malik et al. (2014); Johl et al. (2015);
2	Board Independence	The proportion of independent director will be measured against the total number of directors in %.	Upadhyay et al. (2014); Liu et al. (2015); Fuzi et al. (2016); Reguera et al. (2017)
3	Board Monitoring Committees	Total numbers of board monitoring committees will be counted as a number.	Leung et al. (2014); Upadhyay et al. (2014)
4	Risk Management Committee	Binary variable where "1" indicates companies have risk management committee and "0" indicates company does not have risk management committee	Yatim (2010)
5	Board Gender Diversity	The proportion women director will be measured against the total number of directors in %.	Low et al. (2015); Velte (2017);

## **Control Variable**

### ***Firm Size***

Studies on firm size affecting the firm performance and value have shown a mixed result. Some studies have shown that firm size has a positive relationship with firm financial performance and value (Serrasqueiro et al., 2008). Logically, this is because as the firm size increases, internal fund generation and access to external capital market become easier. However, some studies show a negative relationship between firm size and financial performance. The firm size will be used as a control variable to prevent distortion of the result of the study.

### ***Profitability***

Fisher (1961) explained in his study that if the Keynesian theory of market psychology is accepted, when investors have no information about the firm's future, then they will assume the current state of the firm will last indefinitely. Dividends are a source of income to investors and it is an indicator of profitability (Fisher, 1961). Fisher (1961) further found that share prices are affected by the declared dividend, which is closely related to the profitability of the firm. An activity that can affect the dependent variable must be controlled (Sanchez, Filho, and Domingos, 2010). The profitability of a firm will affect the share price, which affects the firm's market capitalization, hence the profitability (ROA) is used as a control variable.

## **Finding and Discussion**

### ***Descriptive Analysis***

Descriptive Analysis was performed using SPSS software (IBM SPSS Statistic 20). A descriptive analysis is useful only for data that represent a continuous variable, which are the Board Size, Board Independence, Number of Board Monitoring Committees, and Women Representation in the Board. The smallest Board Size was 5 directors, while the highest directors were 16 directors and the sample have an average of 9 directors. Lowest Board of Independence was at 16.67% while a firm with the highest independence was 77.78%. As for women representation in the board, some firms are not represented by women on the board, while the highest percentage of women representation was 57%. The firm value was represented by Tobin's Q. Lowest Tobin's Q was 0.22 while the highest firm recorded Tobin's Q of 48.54. On average, the Tobin's Q is at 3.35.

**Table 2.** Descriptive Analysis

<b>Variables</b>	<b>Minimum</b>	<b>Maximum</b>	<b>Mean</b>	<b>Std. Deviation</b>
<b>Tobin's Q Company</b>	.22	48.54	3.35	5.68
<b>Board Size</b>	5.00	16.00	8.90	2.15
<b>Independence %</b>	16.67%	77.78%	45.96%	12.02%
<b>RM Comm*</b>	-	-	-	-
<b>Number of Board Monitoring Committees</b>	1	8	4.06	1.15
<b>Women %</b>	0.00%	57.14%	16.17%	11.65%

\*Binary measurement was used

### **Structural Model Path Coefficient and Coefficient Determination of R<sup>2</sup>**

The analysis of path coefficient explains the relationship between an exogenous and endogenous variable. The result can be in a negative relationship or a positive relationship. PLS was used to generate the structural path coefficient and R square. PLS assumes data collected are in a normal distribution nature, hence the application of the nonparametric bootstrap procedure is used to test and substantiate the significance of estimated path coefficient, with a process of creating a subsample repeated 1000 times for the proposed model.

**Table 3.** Lateral Collinearity Assessment

<b>Construct</b>	<b>Tobin's Q (VIF)</b>
<b>Board Independence</b>	1.310
<b>Board Size</b>	1.318
<b>Number of Board Monitoring Committees</b>	1.387
<b>Risk Management Committee</b>	1.353

Lateral Collinearity Assessment was conducted to ensure that there are no lateral collinearity issues in the structured assessed. Table 3 above presents the outcome of lateral collinearity test. All the Inner VIF values for independent variables are less than 5, indicating lateral multicollinearity did not happen (Hair et al. 2017).

**Table 4.** Coefficient of Determination

<b>Dependent Variable</b>	<b>Coefficient of Determination R<sup>2</sup></b>
<b>Business Performance</b>	0.779

R-squared ( $R^2$ ) is one of the most common methods in explaining the model quality in a proposed model. According to Hair et al. (2017), the indicator of 0.25 represents weak, 0.50 for moderate, while anything above 0.75 being substantial. Table 9 presents the calculated R2 value of Firm Value at 0.779, which is substantial according to Hair et al. (2017).

**Table 5.** Predictive Relevance

Dependent Variable	Predictive Relevance $Q^2$
Tobin's Q	0.604

Q-squared ( $Q^2$ ) is one of the most common indicative methods in assessing the predictive relevance on how well the values are reconstructed by the model and parameter estimates (Chin, 1998). In their research, Hair et al. (2017) explained that any value larger than 0 there is an existence of exogenous constructs with predictive relevance. For this study, as shown in Table 10,  $Q^2$  is at 0.604, which is above 0 explains that predictive relevance is supported.

**Table 6.** Hypothesis Testing

Hy- pothesis	Path	Path Coeffi- cient	Stand- ard Error	t- val- ue	Deci- sion	f Squar e
<b>H1</b>	Board Size → Firm Value	0.143	0.064	2.21 6*	Sup- ported	0.070
<b>H2</b>	Board Independence → Firm Value	0.122	0.067	1.82 9*	Sup- ported	0.052
<b>H3</b>	Board Monitoring Comm → Firm Value	-0.036	0.057	0.63 4	Not Sup- ported	0.004

<b>H4</b>	RM Comm → Firm Value	0.083	0.066	1.26 3	Not Sup- ported	0.023
-----------	----------------------	-------	-------	-----------	-----------------------	-------

Note: \*\*p<0.01, \*p<0.05

Hypothesis testing was conducted using bootstrapping, where the determinant of t-value greater than 1.645, tested at 0.05 level of significance. The result of the analysis shows that H1 is statistically significant at  $p < 0.05$  and positively related with a path coefficient of 0.143 and t-value of 2.216. Hence, H1 is supported by the analysis conducted. The result further supported a recent study conducted in Malaysia by Johl et al. (2015) that there is a relationship between board size and firm value. Malik et al. (2014) too proved in their study that a larger board size increases the overall performance of the firm. Although Lipton et al. (1992) stated in their study that bigger board size increases higher agency problem, this study was conducted with an introduction of firm size and firm performance (ROA) as a control variable, hence, the negative effect was eliminated.

Hypothesis 2 (H2) predicted that there is a positive correlation between Board Independence and Firm Value. The result of the study showed a positive relationship with a  $p < 0.05$  and positively related at the path coefficient of 0.122 and t-value of 1.829. Hence, H2 is supported in this study. This result further supports a recent study conducted by Reguera-Alvarado et al. (2017) stating that there is evidence of higher board independence lead to better firm value. This study shows that with higher independence director, investors are more comfortable to invest in the firm, which leads to higher Tobin's Q. The higher percentage of board independence managed to ad-

dress the agent-principal issues highlighted in the agency theory and stakeholder's theory.

Hypothesis 3 (H3) predicted a positive relationship between Number of Board Monitoring Committees and Firm Value. The result showed a path coefficient of 0.083, and t-value of just 1.263, hence the hypothesis was not supported. Brick et al. (2010) supported that the Tobin's Q value is higher when several board monitoring committees are higher. Leung et al. (2014) found a positive relationship between several board committees and firm value, but Cobetta et al. (2004) suggested that this may not be critical in emerging markets. Hence, this report fully supported the claim by Cobetta et al. (2014) that numbers of board monitoring committees have a positive relationship with firm value, but not significant in Malaysia's perspective. One reason the research result showed a positive relationship, but not significant was that out of the 120 companies tested, about 84% of the companies skewed and concentrated to have three (3) to five (5) monitoring committees. Hypothesis 4 (H4) predicted that there is a positive relationship between the Risk Management Committee and Firm Value. This study reveals that the existence of a risk management committee has a negative path coefficient at -0.036 and t-value of just 0.634, hence the hypothesis is not supported. The introduction of risk management committee has no significant influence on the firm value in Malaysia, although prior research proved that a strong risk management system helps the organization to achieve its objective. Yatim (2010) explained that the risk management committee is the sub-board and was introduced to reduce the burden of the audit committee

in term of risk management hence, the insignificant relationship could be mainly due to the belief that even though a firm might not have a risk management committee, it has in place a risk management, part of a role under audit committee. Meanwhile, the control variable firm size is negatively significant to firm value, while company profitability is positively significant to firm value.

**Table 7.** Hypothesis Testing for Moderating Effect

Hy- pothesis	Path	Path Coeffi- cient	Stand ard Error	t- val- ue	Deci- sion
<b>H5(a)</b>	Women Rep*Board Size → Firm Value	0.041	0.451	0.46	Not Sup- ported
<b>H5(b)</b>	Women Rep*Board Independence → Firm Value	0.053	0.623	0.61 3	Not Sup- ported
<b>H5(c)</b>	Women Rep*Board Monitoring Comm → Firm Value	-0.038	0.636	0.64	Not Sup- ported
<b>H5(d)</b>	Women Rep*RM Comm → Firm Value	0.045	0.480	0.50 4	Not Sup- ported

Note: \*\*p<0.01, \*p<0.05

Table 7 shows a summary of the result of moderating effect of board gender diversity. Surprisingly, the result showed an insignificant moderating effect for all the relationship. Hence, all hypothesis H5(a), H5(b), H5(c), and H5(d) are all rejected. The H5(a) was hypothesised to suggest that board gender diversity moderate relationship between board size and firm value. The result shown above shows that there is no significant moderating effect



between board size and firm value. Prior studies had shown a mixed result on board size affecting firm value, either negatively or positively. Agency theories suggest that the agent of a company tend to have self-interest, hence affecting the firm value. With a larger board, the monitoring will be able to minimise the risk of agency problems. Women representation in a board, however, do not influence the relationship between board size and firm value. H5(b) was hypothesised to suggest that board gender diversity moderate the relationship between board independence and firm value. However, the result of the study showed that there is no significant moderating effect of board gender diversity between board independence and firm value. Studies conducted on board independence and firm value showed mixed result previously, hence board gender diversity is introduced to moderate the effect. Board independence is important integral in a firm value because agency theory explained the agent-principal problems. With higher board independence, the agent will be closely monitored, and contribute to a higher investor and stakeholders' confidence.

H5(c) was hypothesised to suggest that board gender diversity moderate relationship between board monitoring committee and firm value. The result of this study showed that there is no significant moderating effect of board gender diversity between board monitoring committee and firm value. Prior studies have shown the mixed result on the relationship between board monitoring committees and firm value; hence board gender diversity is introduced to moderate the effect. Board monitoring committee, with the presence of women director, is crucial in ensuring a true and fair business

decision is made taking into account stakeholders and principal, as highlighted in agency theory and stakeholder theory. H5(d) was hypothesized to suggest that board gender diversity moderate the relationship between risk management committee and firm value. A result of this study showed no significant moderating effect of board gender diversity between the risk management committee and firm value. Research on the risk management committee and the firm value was limited as there is no prior study that conducted a direct study on the two variables. As mentioned by agency theory, agents are appointed to act on behalf of the principal, but the decision must be made at the best interest of the company. Hence with the risk management committee and the presence of women representative in the company would provide a stronger risk management system in the firm.

## **Conclusion**

Companies that have strong corporate governance contributes better to the nation's economy and society because these are the companies that add value to the shareholders' wealth, employees, public, and countries. Good corporate governance allows the company to use their capital more efficiently and will build the confidence of investors, hence improving the firm value and overall firm performance. Countries with poor governance of financial institution will deter foreign direct investments into the country and will eventually lead to the future financial crisis (Padachi et al. 2017). This study was conducted to substantiate the relationship between corporate governance characteristics, namely board size, board independence, board

monitoring committees and risk management committee with firm value. The moderating effect of board gender diversity was introduced to the study to further understand the moderating effect between corporate governance characteristic and firm value. The sample selected for the study is 120 top market capitalization companies as of 31 December 2016, and the reason top companies selected was due to its impact to the community and country in the event of corporate failure.

Four independent variables (board size, board independence, board monitoring committee, and risk management committee), one dependent variable (Tobin's Q) and one moderator (board gender diversity) were tested using PLS. The result showed that board size and board independence have a significant relationship with Firm Value. Agency theories suggest that the agent of a company tend to have self-interest, hence affecting the firm value. With a larger board, the monitoring will be able to minimize the risk of agency problems, while a higher board independence will also help to have the agent closely monitored, hence contributing to a higher investor and stakeholders' confidence which explains a stronger Tobin's Q. Board monitoring committees and risk management committees did not show a significant relationship in this study. This could be due to public perception in Malaysia that the existence of board members are will provide sufficient monitoring. It could also be due to lack of exposure towards the different numbers of board monitoring committees and its function. This study contributes to the literature of agency theory, stakeholder theory and corporate governance towards firm value as well as the findings of this study will be benefi-

cial to all policymakers. From the study, it is shown that most of the companies are still behind the required standards of having at least 30% women.

### **Theoretical Implication**

The study conducted in this research substantiated the relationship between part of corporate governance attributes, namely Board Size, Board Independence, Board Committees, and Risk Management Committees with Firm Value, with an introduction of Firm Size and ROA as a control variable. The result of this study assists in further strengthening the literature of corporate governance characteristic and firm value for Malaysia, represented by the top 120 market capitalisation sample. The result clearly showed strong significance where board size and board independence significantly correlated to firm value. Monks et al. (1995) explained the importance of corporate governance in agency theory in striking a balance in granting managers the authority to conduct business, while at the same time holding them responsible. The implementation of corporate governance is to gain investor's confidence. With agent-principal problems, investors and other stakeholders (stakeholder theory) are more sceptical when investing in the firm. This is why, with the implementation of corporate governance, the firm value should show a positive reaction due to the level of confidence.

### **Practical Implication**

The practicability of this research contributed to a better understanding of the effect of corporate governance characteristic on firm value. This study shows that board size and board independence significantly related to

firm value. With the introduction of MCCG (2017), there is a requirement of having at least 30% women representation in the board, but this study showed that as of the financial year 2016, only 13% of total 120 firms selected has more than 30% women director. The MCCG board needs to be aware that the requirement of 30% is still far from achievable. Securities Commission of Malaysia will benefit from this study as this study gives them an indicator that the listed companies in Malaysia are yet to be ready for this. On top of this, MCCG too set a guideline of having at least 50% independence director in the board. The samples of 120 companies selected for this study shows that about 42% of the companies have less than 50% independence, which shows that the companies failed to comply with the recommendation by MCCG. This study showed that Board Gender Diversity does not moderate the relationship between corporate governance and firm value in Malaysia but it does not imply that women representation in the board is not significant to firm value. A prior study conducted by Low et al. (2015) on board diversity and firm performance in Asian countries: Hong Kong, South Korea, Malaysia, and Singapore showed that firms that increase the number of female directors on the board tend to have a positive effect on firm performance. With the importance of corporate governance gaining its momentum even in developing countries like Malaysia, this study can be used as a reference for future research by Malaysia Institute of Accountants, Association of Chartered Certified Accountants and other professional bodies. This study may be used as a support for future research in identifying a crucial element of corporate governance characteristic in im-

proving firm value. The growing numbers of corporate governance failure in Malaysia have grown significantly, with the case of Felda Global Ventures, 1MDB, Tabung Haji, among others. These are high profile corporate failure and it affects the economy of Malaysia.

### **Limitation of The Study and Recommendation for Future Study**

The sample collected in this study was just 120 companies and is not controlled by industry. Hence it is hard to use the 120 top market capitalization companies to generalize all listed companies in Malaysia. This study was also conducted by collecting just 1 year of data from the selected companies. Hence the data representation might not represent a series of time. Future research can be done for unlisted companies as well. It is understood that unlisted companies are harder to obtain data, but the method of interviewing will work. This is because, for unlisted company, there is also minority interest that has no control over the company that they invested in. It is also recommended that future research can be conducted by using time series research, a mean of collecting data from a series of years.

### **References**

1. ACCA's What the New Malaysian Corporate Governance Code will Mean For (2017), from <http://www.accaglobal.com/my/en/member/discover/cpd-articles/governance-risk-control/mycorpgov-cpd.html>
2. Ahmad, R. A. R., Abdullah, N., Jamel, N. E. S. M., & Omar, N. (2015). Board characteristics and risk management and internal control disclosure level: Evidence from Malaysia. *Procedia Economics and Finance*, 31, 601-610.

3. Bhagat, S., & Bolton, B. (2013). Director ownership, governance, and performance. *Journal of Financial and Quantitative Analysis*, 48(1), 105-135.
4. Bhatt, P. R., Bhatt, P. R., Bhatt, R. R., & Bhatt, R. R. (2017). Corporate governance and firm performance in Malaysia. *Corporate Governance: The International Journal of Business in Society*, 17(5), 896-912
5. Brick, I. E., & Chidambaran, N. K. (2010). Board meetings, committee structure, and firm value. *Journal of corporate finance*, 16(4), 533-553.
6. Chin, W. W. (1998). The partial least squares approach to structural equation modelling. *Modern methods for business research*, 295(2), 295-336.
7. Chow, E. (2017). UPDATE 2-Chairman at Malaysia's FGV steps down after initiating a probe into management. [online] CNBC. Available at: <https://www.cnbc.com/2017/06/19/reuters-america-update-2-chairman-at-malysias-fgv-steps-down-after-initiating-probe-into-management.html> [Accessed 19 Nov. 2017].
8. Clarkson, M., Starik, M., Cochran, P., & Jones, T. M. (1994). The Toronto conference: Reflections on stakeholder theory. *Business and Society*, 33(1), 82.
9. Cohen, J. (1988). *Statistical power analysis for the behavioural sciences*. Hillsdale, NJ.
10. Coles, J. L., Daniel, N. D., & Naveen, L. (2008). Boards: Does one size fit all?. *Journal of financial economics*, 87(2), 329-356.
11. Dahya, J., & McConnell, J. J. (2005). Outside directors and corporate board decisions. *Journal of Corporate Finance*, 11(1), 37-60.
12. Dahya, J., Dimitrov, O., & McConnell, J. J. (2008). Dominant shareholders, corporate boards, and corporate value: A cross-country analysis. *Journal of Financial Economics*, 87(1), 73-100.
13. Demsetz, H., & Villalonga, B. (2001). Ownership structure and corporate performance. *Journal of corporate finance*, 7(3), 209-233.
14. Devi, S. S., Hooper, K., Uddin, S., & Tsamenyi, M. (2011). *Accounting in Asia*: Emerald Group Publishing.
15. Eisenberg, T., Sundgren, S., Wells, M., 1998. 'Larger Board size and decreasing firm value in small firms'. *J. Finance. Econ.* 48, 35–54.
16. Fisher, G. R. (1961). Some factors influencing share prices. *The Economic Journal*, 71(281), 121-141.

17. Forbes, D. P., & Milliken, F. J. (1999). Cognition and corporate governance: Understanding boards of directors as strategic decision-making groups. *Academy of management review*, 24(3), 489-505.
18. Freeman, E (1984), *Strategic Management: A Stakeholder Approach*, Pitman Press, Boston.
19. Fuzi, S. F. S., Halim, S. A. A., & Julizaerma, M. K. (2016). Board Independence and Firm Performance. *Procedia Economics and Finance*, 37, 460-465.
20. Ghazali, N. A. M., & Weetman, P. (2006). Perpetuating traditional influences: Voluntary disclosure in Malaysia following the economic crisis. *Journal of International Accounting, Auditing and Taxation*, 15(2), 226-248.
21. Goodarzi, S. M., Salamzadeh, Y., & Salamzadeh, A. (2018). The Impact of Business Ethics on Entrepreneurial Attitude of Manager. In *Competitiveness in Emerging Markets* (pp. 503-539). Springer, Cham.
22. Hair Jr, J. F., Hult, G. T. M., Ringle, C., & Sarstedt, M. (2017). *A primer on partial least squares structural equation modelling (PLS-SEM)* (2nd ed.): Sage Publications.
23. Haniffa, R. M., & Cooke, T. E. (2005). The impact of culture and governance on corporate social reporting. *Journal of Accounting and Public policy*, 24(5), 391-430.
24. Jensen, M. (1993). The modern industrial revolution, exit and the failure of internal control systems. *Journal of Finance*, 48, 831-880.
25. Johl, S. K., Kaur, S., & Cooper, B. J. (2015). Board characteristics and firm performance: Evidence from Malaysian public listed firms. *Journal of Economics, Business and Management*, 3(2), 239-243
26. Johl, S. K., Kaur, S., & Cooper, B. J. (2015). Board characteristics and firm performance: Evidence from Malaysian public listed firms. *Journal of Economics, Business and Management*, 3(2), 239-243.
27. Julizaerma, M. K., & Sori, Z. M. (2012). Gender diversity in the boardroom and firm performance of Malaysian public listed companies. *Procedia-Social and Behavioral Sciences*, 65, 1077-1085.
28. Kogan, N., & Wallach, M. A. (1966). Modification of a judgmental style through group interaction. *Journal of Personality and Social Psychology*, 4(2), 165.
29. Korosec, B., & Horvat, R. (2005). Risk reporting in corporate annual reports. *Economic and Business Review for Central and South-Eastern Europe*, 7(3), 217.



30. Leung, S., Richardson, G., & Jaggi, B. (2014). Corporate board and board committee independence, firm performance, and family ownership concentration: An analysis based on Hong Kong firms. *Journal of Contemporary Accounting & Economics*, 10(1), 16-31.
31. Lipton, M., & Lorsch, J., 1992, A Modest Proposal for Improved Corporate Governance. *The Business Lawyer*, 48(1), 59-77.
32. Liu, Y., Miletkov, M. K., Wei, Z., & Yang, T. (2015). Board independence and firm performance in China. *Journal of Corporate Finance*, 30, 223-244.
33. Low, D. C., Roberts, H., & Whiting, R. H. (2015). Board gender diversity and firm performance: Empirical evidence from Hong Kong, South Korea, Malaysia and Singapore. *Pacific-Basin Finance Journal*, 35, 381-401.
34. Malaysian Code on Corporate Governance 2017 (MCCG 2017). Retrieved October 2017, from <https://www.sc.com.my/wp-content/uploads/eng/html/cg/mccg2017.pdf>
35. Malik, M., Wan, D., Ahmad, M. I., Naseem, M. A., & Rehman, R. U. (2014). Role Of Board Size In Corporate Governance And Firm Performance Applying Pareto Approach, Is It Cultural Phenomena?. *Journal of Applied Business Research*, 30(5), 1395.
36. Marie L'Huillier, B. (2014). What does "corporate governance" actually mean?. *Corporate Governance*, 14(3), 300-319
37. McNulty, T., Florackis, C., & Ormrod, P. (2012). *Corporate Governance and Risk: A Study of Board Structure and Process*. ACCA Research Report, 129.
38. Monks, R., & Minow, N. (1995). *Corporate Governance* Blackwell. Cambridge, MA
39. Nejati, M., Salamzadeh, Y., & Salamzadeh, A. (2011). Ecological purchase behaviour: insights from a Middle Eastern country. *International Journal of Environment and Sustainable Development*, 10(4), 417-432.
40. Padachi, K., Ramsurrun, V., & Ramen, M. (2017). Corporate Governance and Firms' Performance of Mauritian Listed Companies. *International Journal of Financial Management and Reporting Analysis*, 1(1), 1-26
41. Panasian, C., Prevost, A. K., & Bhabra, H. S. (2003). Board independence and firm performance: The case of the Dey report and publicly listed Canadian firms. Montreal University: Working Paper.
42. Pierce, C. (2004). *The handbook of international corporate governance: A definitive guide*. Kogan Page Publishers.

43. Radovic Markovic, M., & Salamzadeh, A. (2012). The nature of entrepreneurship: Entrepreneurs and entrepreneurial activities. Lambert Academic Publishing: Germany.
44. Reguera-Alvarado, N., & Bravo, F. (2017). The effect of independent directors' characteristics on firm performance: tenure and multiple directorships. *Research in International Business and Finance*.
45. Roscoe, J. T. (1975). *Fundamental research statistics for the behavioural sciences* [by] John T. Roscoe.
46. Salamzadeh, A. (2015). New venture creation: Controversial perspectives and theories. *Economic Analysis*, 48(3-4), 101-109.
47. Salamzadeh, A., Radovic Markovic, M., & Masjed, S. M. (2019). The Effect of Media Convergence on Exploitation of Entrepreneurial Opportunities. *AD-minister*, (34), 59-76.
48. Sanchez, O. P., Filho, E. T., & Domingos, L. C. (2010). Econometric analysis of the effects of equity capitalization strategies on Brazilian companies performance. *Corporate Ownership & Control*, 8(1-6), 583-589. <http://dx.doi.org/10.22495/cocv8i1c6p1>
49. Serrasqueiro, Z. S., & Nunes, P. M. (2008). Performance and size: empirical evidence from Portuguese SMEs. *Small Business Economics*, 31(2), 195-217.
50. ShahanshaMolla, M., Miraz, M. H., & Habib, M. M. (2016). A Critical Review of Relationship Between Corporate Governance and Firm Performance: In Malaysian Perspective.
51. Subramaniam, N., McManus, L., & Zhang, J. (2009). Corporate governance, firm characteristics and risk management committee formation in Australian companies. *Managerial Auditing Journal*, 24(4), 316-339.
52. Upadhyay, A. D., Bhargava, R., & Faircloth, S. D. (2014). Board structure and the role of monitoring committees. *Journal of Business Research*, 67(7), 1486-1492.
53. Velte, P. (2017). Do women on board of directors have an impact on corporate governance quality and firm performance? A literature reviews. *International Journal of Sustainable Strategic Management*, 5(4), 302-346.
54. Wang, W. (2014). Independent directors and corporate performance in China: a meta-empirical study.
55. Yammeesri, J. and Herath, S.K. (2010), "Board characteristics and corporate value: evidence from Thailand", *Corporate Governance*, Vol. 10 No. 3, pp. 279-292
56. Yatim, P. (2010). Board structures and the establishment of a risk management committee by Malaysian listed firms. *Journal of Management & Governance*, 14(1), 17-36.

57. Yermack, D. (1996). The higher market valuation of companies with a small board of directors. *Journal of financial economics*, 40(2), 185-211.
58. Zabri, S. M., Ahmad, K., & Wah, K. K. (2016). Corporate governance practices and firm performance: Evidence from top 100 public listed companies in Malaysia. *Procedia Economics and Finance*, 35, 287-296.