

MODERATING EFFECTS OF CHAIRMAN CHARACTERISTICS ON THE RELATIONSHIP BETWEEN BOARD COMPOSITION AND FIRM PERFORMANCE

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Abstract

Government-Linked Companies (GLCs) is a very important entity for the development of economy, engine of growth and job recruitment in Malaysia. Thus, the GLCs performance is very significant and there are many factors influence GLCs performance. This study aims to examine the relationship between the board compositions namely, board size, independent directors, women board and firm performance. The other aim is to explore the moderating effect of the chairman characteristics, namely education, experiences and gender on the relationship between board composition and firm performance. This study focussed on 70 listed GLCs with 210 annual reports in three years (2016, 2017 and 2018). Descriptive statistics, correlation and multiple regression analysis were used to analyse the relationship between moderating variables, independent variables and dependent variable. Resource Dependency Theory was used in this study and found to be in line with board size but not with independent directors. The findings of this study also suggested that two variables, namely independent directors and women board were statistically significant. Women board has a positive relationship with ROA whereas independent directors have a negative relationship with ROA. In addition, a positive relationship between education and experiences with ROA, and negative relationship between gender with ROA and both were not significant. Moreover, this study found that education can moderate independent directors and women board to increase GLCs performance. In addition, experiences can moderate women board to increase GLCs performance and cannot moderate board size and independent directors to increase GLCs performance. However, gender seems to be the factor that cannot moderate board composition to increase GLCs performance. Overall, this study provides guidelines to Government and GLCs to enlighten the appointment of chairman and ideal board composition in improving GLCs performance.

Keywords: Board Characteristics, Board Composition, Education, Experiences, Gender, Board Size, Independent Directors, Women Board, Firm Performance, GLCs Performance, Resource Dependency Theory.

1. Introduction

Government-Linked Companies (GLCs) play a vital role in the development of Malaysia economy and has been the engine of growth from the era of New Economic Policy (NEP) in 1971. If the government owns at least 20 percent of the issued and paid-up capital, the companies can be considered as GLCs (Nur, Nik, Jamaliah & Md. Mahmudul, 2016). Basically, Malaysia's GLCs are among the best in the world in terms of capitalization, market presence, and socio-political mandate (Lee, 2015). Government-Linked Investment Companies (GLICs) are used by the Malaysian Government to control GLCs. According to Sulaiman (2018), over the years, many GLCs have done rather impressively despite a few hiccups from the international economic crisis. The GLCs have improved their asset value and earnings, which is beneficial for the government.

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Since 2004, realizable asset value expanded from RM50.9 billion to RM157.2 billion, whereas net worth adjusted risen from RM33.3 billion to RM115.6 billion by the end of 2017. Additionally, shareholders' funds expanded from RM13.2 billion to RM40.5 billion for the same period.

Even though some of the GLCs perform well, but the perception towards these GLCs are regarded as inefficient due to political objectives, external interference, and corruption (Tan et al., 2015; Jayant, 2017). This negative perception is based on the poor performance of GLCs such as FGV Holdings Berhad, Malaysian Airlines Berhad (MAS), Lembaga Tabung Haji (LTH), 1Malaysia Development Berhad (1MDB) and many others. For instance, Sulaiman (2019) explained that half of Khazanah Nasional Bhd's RM7.3 billion impairments were incurred in sustaining MAS. Furthermore, Jayant (2018) stated that former Malaysian Prime Minister, Tun Dr. Mahathir Mohamad had said GLCs have lost track of their original function. In addition, according to Nur et al. (2016), GLCs have been labelled as underperforming due to dual objectives, namely to create profit and fulfil social obligations. Therefore, the performance of GLCs is very important because these companies venture into sectors that private companies are reluctant to, and more importantly, GLCs hire about 5 percent of the workforce in Malaysia.

One of the very important elements of GLCs is the Board of Directors which comprises of the chairman and boards. Based on the OECD (2018), boards play a central function in corporate governance and the performance of GLCs. The board fiduciary duties are to develop corporate strategies and oversee GLCs management. Therefore, the boards act fundamentally as an intermediary between the government as a shareholder, the company and its executive management. This role is no less important in GLCs than in private companies. According to the OECD recommendations, the board should be charged with a duty to act in the interests of the government and the company. On top of that, former Malaysian Finance Minister, Lim Guan Eng mentioned in The Star (2018) that GLCs must practice corporate governance and need to improve their performance.

In short, the appointment of chairman, board of directors, and the Chief Executive Officer (CEO) is very important to the performance of GLCs. According to Malaysia Code on Corporate Governance (MCCG) 2017, an effective board should include the right group of people, with an appropriate mix of skills, knowledge, experience, and independent elements that fit the company's objective and strategic goals. Therefore, chairman characteristics and board composition fundamentally will reflect GLCs performance. The chairman characteristics are very important to the success of GLCs which include education, professional qualification, gender, age, experiences, and tenure. These characteristics also apply to the board composition in terms of the number of men and women, composition of professionals, politicians or ex-civil servants, independent directors, and years of experience. This study is very significant to examine the moderating effects of chairman characteristics on the relationship between boards' composition and firm performance. This study concentrated on the chairman characteristics as previous studies have mostly focused broadly on the board of directors. Besides, this study also placed consideration on the board composition and return on assets in looking into the relationship between chairman characteristics, board composition, and firm performance. The English proverb "*Don't put a square peg in the round hole*" is very precise when it comes to chairman characteristics and board composition of GLCs. Therefore, it is crucial for the government and GLCs to be meticulous and secure high considerations on the appointment of chairman and board of directors, and thus improving GLCs performance.

2. Literature Review

This study focused on the Resource Dependency Theory to see the relationship between moderating variables, independent variables, and firm performance. Besides, this theory views the board as a resource that will improve firm performance (Bathula, 2008) and board responsibility in giving advice, legitimacy, channels for communicating information, and preferential access to supports outside the company (Terjesen et al., 2015). In a nutshell, the theory can explain the relationship between chairman characteristics, board composition, and firm performance. According to the Resource Dependency Theory, previous studies revealed the board of directors as a resource to the companies, while boards are also considered as a link between the firm and essential resources between a firm and the external environment

2.1 Firm Performance (Dependent Variable)

Generally, it is a belief that a high-quality board with more independent directors and financial experts serving in the board is positively associated with higher levels of financial performance (Alaa, Mohammad, Mahmoud & Mohammad, 2019). This is in line with MCCG 2017 which stated that an effective board should comprise the right group of people with significant attributes that fit the company objectives and strategic goals. On top of that, chairman characteristics, board composition, top management, employee, and size of the firm are the factors that influence firm performance. Firm performance is very important for sustainability and business expansion. According to a study by Mansor and Lee (2016), previous studies have also evaluated how various factors impact firm performance of GLCs. Some studies have investigated the relationship between specific factors and firm performance such as firm size, leverage, and liquidity. In terms of firm size, it is expected that large firms should be more profitable due to their access to new technology and scale of operations.

Besides, Sharifah et al. (2015) stated that measurement of the firm performance is whether by accounting-based measures or by market-based measures. Basically, the example of accounting-based measures is Return on Investment (ROI), Return on Assets (ROA), earnings per share, and profit measures. ROA represents the management's ability to efficiently utilize corporate assets, and this will benefit shareholders, whereas a lower return on assets will indicate the inefficiency of the firms. A study by Nasim (2017) also agreed that the performance of conventional firms is gauged on the more quantitative measures like revenue, profit, growth, ROI, and EPS. In this study, ROA was used as a proxy to measure firm performance since ROA has been used widely in the previous studies (Ebrahim et al., 2014; Aymen et al., 2014; Terjesen et al., 2015; Ozcan & Ali, 2016; Marwa, Amon, Xiahui & Hadia, 2017; Bennouri, Chtioui, Nagati & Nekhili, 2018; Martin & Herrero, 2018; Norliana et al., 2018; Merendino & Melville, 2019; Noraisyah & Mohd, 2019). ROA is an indicator of what management has accomplished with the given resources (assets).

2.2 Board Composition (Independent Variable)

According to Malaysia Code on Corporate Governance (MCCG) 2017, board composition is an important element that influences the ability and effectiveness of the board to fulfil its oversight responsibilities. There are many factors which leads to an effective board such as the right group of people, skills, knowledge, experience, education, and independent elements. In Malaysian context, independent directors should be in sufficient numbers on the board and most of the

companies also are practicing one-tier board which comprises of the non-executive directors and the executive directors (Sharifah et al., 2015). Non-executive directors must consist of one third of the total number on the board and this requirement is enforced by the Bursa Malaysia Listing Requirement (BMLR) for the board to be effective. According to Norliana et al. (2016), they believed that larger board size is associated with firm performance, which means the larger board size will improve firm performance.

The board of directors are responsible for steering the strategic direction and monitor the performance of the companies by overseeing the management. Thus, the boardroom has become important in recent decades where female participation in management has attracted much attention and debate (Jubilee et al., 2018). The roles and responsibilities of the board are different based on their skills, member of certain committees in the firms and the type of directors, for instance, the role of non-executive directors in the companies (Sharifah et al., 2015). A study by Thompson, Alleyne and Charles (2019) stated that BODs perceive that they perform their roles and responsibilities in an effectively and efficiently, influence decision making, exercises control in SOEs, and conduct a well-organized meeting. But, there is a lack of accountability and transparency, inadequate disclosure, lengthy boards meeting resulting in an excessive delay in decision making, unclear accounting and auditing guidelines, and a lack of training in financial and corporate governance matters. Generally, this situation is influenced by characteristics of the board of directors. A study by Bravo, Alvarado and Perez (2018) explained that the joint effect of several characteristics is related to the board composition. Recent research trends support the aggregation of several characteristics to capture the overall quality of the ability of boards of directors to perform their tasks. Specifically, they consider the recommendations on board independence, board size, CEO duality, gender and ethnic diversity, and financial expertise.

A study by Sharifah et al. (2015), Norliana et al. (2016) and Chong et al. (2018) supported the MCCG 2017 which stated that independent directors are significant to a firm's performance. The more independent directors on the board are better because the financial risk of a bigger board size can be reduced. According to the research, independent directors can act independently because they are not representing the owners or shareholder, moreover, they are good at balancing the board. Furthermore, independent directors are normally experienced and have specific industry knowledge that gives benefits to the firms, thus improve firm performance. The negative effect of board size and independent directors on firm performance demonstrates the importance of having an optimal size for board and independent directors. Additionally, Chong et al. found that board size appeared to moderate and support the relationship of board independence toward firm performance by using dependent variables measurement of ROE and ROA as a proxy.

The appointment of board and senior management are based on objective criteria, as well as merit, and with due regard for diversity in skills, experience, age, cultural background, and gender. While large companies are required to have 30 percent women directors, other boards should also work towards MCCG 2017 and the Bursa Malaysia Listing Requirements (BMLR). Women's participation should not just be focused on board positions only, but should also be broadened into top and senior management. Gender diversity on boards is also an important issue in many countries, especially in emerging economies. Norliana et al. (2018) also revealed that a larger board size is associated with firm performance whereas a study by Terjesen et al. (2015) revealed that firms with female directors have better financial performance.

Chong et al. (2018) agreed with previous study by Terjesen et al. (2015) that female directors are significant to firm performance. Their results indicated that women play a vital role in improving firm performance, and hence, more opportunities should be rendered to them, especially in the

corporate sector, to promote gender equality in maximizing firm value. In a study by Chong et al. (2018) and Md. Misfiquir and Farjana (2018) for board composition, three board attributes which comprise board size, independent directors and female board members were looked into. In contrast, a study by Mansor and Lee (2016) found that bigger boards do not lead to better performance and having more independent directors on the board is not helpful in improving performance. It seems clear that GLCs need to make an assessment concerning the qualities of the directors and independent directors that are being appointed to the board.

2.3 Chairman Characteristics (Moderating Variable)

One of the requirement in MCCG 2017 is the positions of chairman and CEO are held by different individuals. However, in some firms, the chairperson of the board is also CEO of the company. This form of “duality” is not consistent with MCCG 2017 and it is against good governance practices. According to Haseeb et al. (2015), the chairman must be a non-executive member of the board. Furthermore, Haseeb et al. (2015) explained that the non-executive chair of the board was proposed by Securities Commission (SC) in the Corporate Governance blue print document. Based on MCCG 2017, separation of the positions of chairman and CEO promotes accountability and facilitates division of responsibilities between them, and thus improving the firm’s performance. Furthermore, the chairman can oversee the CEO’s and top management’s performance and put the company in the right track when needed.

Noor et al. (2014) and Pasaribu (2015) had agreed that chairman characteristics influence firm performance and made a study on certain characteristics. They had studied the different characteristics in which Noor et al. concentrated on the education level, professional qualification, age, gender, and ethnicity. Meanwhile, Pasaribu focused on the chairman’s tenure, age, title, involvement such as the selection of CEO, and independence. They believed that an effective chairman must possess certain criteria and qualities which consistent with Resource Dependency Theory. The chairman can be a resource to the board and management, thus they should possess good criteria which are mentioned by Noor et al. and Pasaribu. Chairman needs to ensure firm performance is leading towards the company objectives for the long-term value of the firm. This study provides evidence on the importance of chairman characteristics in enhancing firm performance.

In another study by Ming and Lee (2014), GLCs chairman with multiple chairmanships is positively associated with better firm performance. The findings highlighted that it is highly likely that a chairman with multiple chairmanships can institute best practices of corporate governance in the current GLC board, which leads to better performance. A study by Pasaribu (2015) explained the chairman as resource dependence roles, in which the chairman must provide crucial information to shareholders and stakeholders. The chairman should maintain a good relationship with institutional and non-institutional investors, the government, and regulators. In addition to being a resource to other board of directors, CEO, and management, the chairman should be knowledgeable, highly experienced, and can act as a leader. Therefore, the ultimate objective to have positive growth in GLCs and better performance will be achieved.

2.4 Board Composition, Chairman Characteristics and Firm Performance

According to Pasaribu (2015), board size is referring to the total number of directors on the board. Independent non-executive directors which include independent directors and non-executive directors should be appointed to the board, particularly for a large company (MCCG 2017). Based on the previous study, chairman characteristics will influence board composition on firm performance and this is depending on the chairman interacted with another as mentioned by Pasaribu. One of the important factors in the relationship between chairman characteristics and firm performance is the lack of significance when they are interacting. The changes of chairman roles, from conventional to active chairmanship, might be the main reason of the problem. On top of that, chairman will definitely have a significant influence on the board composition, and eventually on the firm performance. This will reflect board composition because chairman is responsible to chair the board meeting and make a decision making as explained by Pasaribu.

For board composition, basically depends on the chairman characteristics whether he or she is capable, and other attributes that will reflect firm performance. Sometimes, chairman characteristics has a positive impact on board composition and this subsequently, gives positive impact on firm performance. Vice versa, chairman characteristics has a negative impact on the board composition whereby it will give negative impact on firm performance. Thus, chairman characteristics play a vital role in the success of the organization due to its influence on the actions of the board of directors. In a study by Sin, Boon, Tze, Wei (2016), they found the different person as chairman and CEO have the different performance of ROE and ROA, whereby ROE is greater and ROA is lower. As an executive director, the CEO is maybe more interested in achieving high profit rather than achieving high growth ratio. Besides, a recent study by Merendino and Melville (2019) stated that the chairman and CEO duality does not play a significant role towards firm performance. The results of the study are more on the suggestion to have an important control in the appointment of effective boards. Another effect on the chairman towards firm performance is about chairman role that evolve from time to time. In addition, Alvarez & Marsal (2014) stated that a successful chairman can substantially improve the quality of people on the board in which they will build a team of non-executives who will add value to the debate, strategy and overall performance of the company.

Directorship also have a significant relationship with firm performance, and this involves the chairman and other board of directors. A study by Ming and Lee (2014) found many factors that increased firm performance, such as the number of directorships and board connectivity. On the directorships, the study found that the GLCs will perform better if one of the director hold more than five directorships. On the board connectivity, the study found that interlocking directors increase their business connection and networking that will benefit the GLCs. It is also revealed by Bennouri et al. (2018) that women directorship significantly increases ROA and women's leadership position as chairman and their education level are positively correlated with ROA.

In another context, a study by Merendino and Melville (2019) found that the numbers of directors on the board, the composition on the board, and the type of directors is less important if compared to the ability of individuals. Therefore, it is important to make sure that every board of directors, including chairman, must have an appropriate mix of skills and experiences (MCCG 2017). A study by Sin et al. (2016) revealed that smaller board size is effective since larger board size is quite difficult to coordinate and have decision making problems. In addition, Sin et al. found an average of eight directors on the board will have greater influence on firm performance. This study is

supported by Aymen, Mohamed and Abderrazak (2014) which explained that bigger board have some problems such as the engagement with every board member, difficulties in scheduling the meeting and discussion difficulties in the meeting. However, smaller board will give the opportunity to every member to know each other as individuals, communication and interaction is easier, higher involvement in the activity and active participation in the meeting. This finding is parallel with the general belief that it is easier to manage small number of committee or organization. Even though smaller board is effective in terms of management, but the board have to face heavy work load and may create inefficiency and the good opinion may not be represented (Aymen et al., 2014).

3.0 Research Methodology

3.1 Hypothesis Development

- H1: There is a significant relationship between board size and firm performance.
- H2: There is a significant relationship between independent directors and firm performance.
- H3: There is a significant relationship between women board and firm performance.
- H4: Chairman characteristics moderate the positive relationship between board size and firm performance.
- H5: Chairman characteristics moderate the positive relationship between independent directors and firm performance.
- H6: Chairman characteristics moderate the positive relationship between women board and firm performance.

3.2 Research Design

This study used a quantitative method and adopted the descriptive design as it attempted to ascertain and be able to describe the relationship between chairman characteristics, board composition, and firm performance. Instead of primary data, this study used secondary data of the annual reports of listed GLCs. The annual reports were analysed based on the variables stated in this study. Secondary data are dispensable for most organizational research and there are several sources of secondary data, including books and periodicals, government publications of economic indicators, census data, statistical abstracts, database, the media, annual report of companies, among others (Sekaran, 2019). Cross-sectional research was used in this study as it involved data gathering at one time in time from the firm to achieve the research objective (Sekaran, 2019). This study used the cross-sectional because data of annual reports will be downloaded from the website of Bursa Malaysia Berhad, with the time taken to download the annual reports for approximately two to three weeks.

3.3 Population and Sampling

This study focused on the listed GLCs in Malaysia regardless of their business sectors. According to a study by Gomez, Fikri, Thirshalar and Juwairiah (2018), there are 71 listed GLCs in Malaysia. However, one of the GLCs, Scomi Engineering Bhd has been delisted from Bursa Malaysia Berhad on 23 February 2018. Therefore, the total number of listed GLCs is 70 after the delisting. Thus, this study focused on the 70 listed GLCs that comprised of 210 secondary data of annual reports for the period of 2016 to 2018 as the sample size. The period of the year 2016 to 2018 represented

the latest of annual reports, making the study up to date. The sample size was collected based on simple random sampling whereby every element will have a chance to be chosen in equal basis. These annual reports were analysed in detail by focusing on the board composition and firms' performance. The chairman characteristics were also analysed in the annual reports in order to acquire the moderating effects on the board composition and firm performance.

The researcher used the data from 2016 to 2018 in order to have a complete and updated sampling frame. This study required a sample of all annual reports of listed GLCs in the year 2016 to 2018. According to Sekaran (2009), a sample can be defined as a subgroup or subset of the population available for selection on the process of sampling. It comprises of some members selected from it. In other words, some, but not all, elements of the population from the sample. This sampling design has the least bias and offered the most generalizability. The sample size ought to be suitably broad to assess the characteristics of the population adequately in order to deliver realistic outcomes. Therefore, approximately 210 annual reports of the 70 GLCs from the year 2016 to 2018 were selected to serve as the sample size intended for this research.

3.4 Data Collection Method

In this study, a total of 210 annual reports of the 70 listed GLCs from the year 2016 to 2018 were obtained from the website of Bursa Malaysia Berhad. The study used cross-sectional research whereby data was gathered within two to three weeks, or over a period of 30 days (Sekaran, 2009). The data is secondary data which referred to information gathered from sources that already exist (Sekaran, 2009) which is the annual reports of the listed GLCs. Secondary data was used because it is more effective, practical, reduce administration cost, and easy to obtain. The information about chairman characteristics, board composition and ROA were extracted from the annual reports. The sample consisted of 70 GLCs (Gomez, Fikri, Thirshalar & Jawariah, 2018) which constituted a total of 210 annual reports from a period of 2016 to 2018 were downloaded and analysed.

3.5 Measurement Variables

3.5.1 **Independent Variable**

Variables	Acronym	Operationalization	Source
Board Size	BSIZE	Total number of directors serving on the board	Annual Financial Reports (Bursa Malaysia)
Independence Directors (Pct)	IND	The number of independent directors on the board relative to the total number of directors	Annual Financial Reports (Bursa Malaysia)
Women Board (Pct)	WBOARD	The number of women directors on the board relative to the total number of directors	Annual Financial Reports (Bursa Malaysia)

Table 3.5.1: List and description of independent variables.

3.5.2 Moderating Variable

Variables	Acronym	Operationalization	Source
Education	EDU	The education level of the chairman of the GLC. 1 = Diploma 2 = Degree 3 = Professional course 4 = Master 5 = PHD 6 = Others	Annual Financial Reports (Bursa Malaysia)
Gender	GEN	The gender of the chairman of the GLC. 1 = Man 0 = Woman	Annual Financial Reports (Bursa Malaysia)
Experiences	EXPR	The length of chairman working experiences in various sectors.	Annual Financial Reports (Bursa Malaysia)

Table 3.5.2: List and description of moderating variables

3.5.3 Dependent Variable

Variables	Acronym	Operationalization	Source
Return on Assets (Pct)	ROA	Net income divided by total assets of the GLC	Annual Financial Reports (Bursa Malaysia)

Table 3.5.3: Description of dependent variable

3.6 Plan Data Analysis

Multiple regression analysis was used to analyse the data in this research. Besides that, other analyses were also used such as descriptive statistics, normality test, reliability test, and multicollinearity test. The sequence of the data analysis in this study started with descriptive statistics, normality test, reliability test, multicollinearity test, and ended with multiple regression analysis.

3.7 Empirical Model

This study focused on firm performance whereby ROA as a measure of the firm performance. Multiple regression model was used by modelling ROA as a function of explanatory variables to examine the impact on the chairman characteristics (education, experiences and gender) and board composition (board size, independent director and women board) on firm performance of GLCs in Malaysia. The regression equation for this study is “ $ROA = \beta_0 + \beta_1EXPR + \beta_2EDU + \beta_3GEN + \beta_4BSIZE + \beta_5IND + \beta_6WBOARD + e$ ”.

4.0 Analysis and Findings

4.1 Descriptive Statistic of Variables

According to Noraisyah and Waliuddin (2019), descriptive statistics can be used to describe and summarize the characteristics of the sample of the study. It is also a brief descriptive coefficient that summarizes a given data set, which can be either a representation of the entire or a sample of a population. Descriptive statistics are broken down into measures of central tendency and measures of variability (spread). Measures of central tendency include the mean, median, and mode, while measures of variability include the standard deviation, variance, the minimum and maximum variables, and the kurtosis and skewness (Kenton, 2019).

Table 4.1 presents the descriptive statistics for the variables over the period of 2016 to 2018. The table shows the average Return on Assets (ROA) of GLCs is 0.3 percent and it ranges from -24.0 percent to 13.5 percent. In general, ROA over 5 percent is considered good, and the higher ROA, the better the company is doing because a higher ROA indicates a company is more effectively using its assets to generate profit (Sarikas, 2019). Therefore, in general, the performance of GLCs were considered not good because the average ROA was only 0.3 percent. On the chairman characteristics, the data showed majority of the chairmen possessed a degree qualification, followed by master's degree qualification which is 39.05 percent and 38.58 percent, respectively (Appendix 2). This finding was parallel to a study by Noor et al. (2014) which also found majority of the chairman in GLCs possess a degree qualification. Meanwhile, the average proportion of experiences was 3.583 and it ranged from 2.303 to 4.025. Another chairman characteristic is gender with the average is 0.962 which implied that 96.2 percent of the chairmen were male, and only 3.8 percent were female.

On the board composition, the highest reported board size was 15 while the lowest board size was 4, it ranged from 4 to 15. Besides, the board size on average was about 9, and it can be said that GLCs in Malaysia has a larger board size. The average board size of 9 was approximately equal to those reported by Mrwan et al. (2014) for listed firms in Egypt, Ozcan and Ali (2016) for Turkish Bank, and Norliana et al. (2018) for firms in Malaysia. However, it was relatively lower when compared to those reported by Martin and Herrero (2018) for firms in Spain, and Alaa et al. (2019) for banks in Jordan. On the other hand, it is relatively higher if compared to those reported by Mrwan et al. (2014) for listed firms in Egypt, and Pasaribu (2015) for listed firms in the United Kingdom.

It is also observed in Table 4.0 that the highest value of independent director is 1.000 and the lowest value of independent director is 0.143, it ranges from 0.143 to 1.000. It depicted the highest percentage of independent directors on the board is 100 percent and the lowest percentage of independent directors on the board is 14.3 percent. Simultaneously, the table shows that the average independent director is 0.511 which depicted 51.1 percent of independent directors were on the board, thus, consistent with the guidelines and recommendations by MCCG 2017, which states at least half of the board comprises independent directors and for a large company, the majority are independent directors. As a comparison with previous research, the value was relatively higher when compared to those reported by Martin and Herrero (2018) for firms in Spain, and Alaa et al. (2019) for banks in Jordan.

For the women board, the highest value is 0.625 and the lowest value is 0, it ranges from 0 to 0.625. It depicted the highest percentage women on the board is 62.5 percent, and the lowest percentage of women on the board is 0 percent. Table 4.0 also shows the average of women board is 0.176 which depicted the average women on the board is 17.6 percent. Thus, it is inconsistent with the MCCG 2017 which requires the board to must have at least 30 percent women. However, it was relatively higher when compared to those reported by Martin and Herrero (2018) for firms in Spain. This finding supported a study by Shamsul, Nor, Intan and Anis (2016) which explained that the requirement to increase women's representation to 30 percent was not being taken seriously by the boards of listed firms.

Variables	Max	Min	Mean	Median	SD. Dev
EXPR : Experiences	4.025	2.303	3.583	3.664	0.250
EDU : Education	6.000	1.000	3.257	3.500	1.241
GEN : Gender	1.000	0.000	0.962	1.000	0.192
BSIZE : Board Size	15.000	4.000	8.781	9.000	2.248
IND : Independent Director	1.000	0.143	0.511	0.500	0.135
WBOARD : Women Board	0.625	0.000	0.176	0.182	0.135
ROA : Return on Assets	0.135	-0.240	0.003	0.016	0.079

Table 4.1: Descriptive statistics

4.2 Normality Test

Table 4.2 shows the normality test using skewness and kurtosis for the dependent variable, independent variables, and moderating variables. The skewness for moderating variables (EXP, GEN) and dependent variable (ROA) were less than -1, thus the distribution of the variables was highly skewed. The skewness for moderating variable (EDU) and independent variables (IND, WBOARD) were between -0.5 and 0.5, which indicated the distribution was approximately symmetric. On the other hand, the skewness for independent director (BSIZE) was between 0.5 and 1, which indicated the distribution was moderately skewed. For the kurtosis, dependent variable (ROA), moderating variable (EXPR, GEN) and independent variable (BSIZE, IND) were positive, which indicated the distribution was more peaked than normal distribution. The moderating variable (EDU) and independent variable (WBOARD) were negative, which indicated the distribution was less peaked than normal distribution.

Variables	Skewness	Kurtosis
EXPR : Experiences	-1.446	3.940
EDU : Education	0.409	-0.671
GEN : Gender	-4.861	21.834
BSIZE : Board Size	0.590	0.248
IND : Independent Director	0.240	0.675
WBOARD : Women Board	0.357	-0.308
ROA : Return on Assets	-1.624	2.756

Table 4.2: Normality test

4.3 Realibility Test

According to Sekaran (2009), a Cronbach's alpha which is equal or greater than 0.7 is considered sufficiently reliable, and a minimum alpha of 0.6 should be a condition for research, whereas 0.8 is very reliable and 0.9 has excellent reliability. Table 4.2 shows the reliability of the Independent Variable (IV) of firm performance which consists of 3 items of BSIZE, IND and WBOARD. BSIZE was the total number of directors serving on the board reported in the annual report, IND was the number of independent directors on the board relative to the total number of directors, and WBOARD is the number of women directors on the board relative to the total number of directors reported in the annual report of the GLCs. The Cronbach's alpha obtained was 0.710, which is considered sufficiently reliable (Sekaran, 2009).

Variables	Items	Cronbach's Alpha
Independent Variables	BSIZE	0.710
	IND	
	WBOARD	

Table 4.3: Reliability test

4.4 Pearson Correlation Test

The Pearson correlation test is used to determine the correlations between the variables in the study such as moderating variables, mediating variables, independent variables, and dependent variable. The correlation coefficients were checked for the presence of high collinearity amongst regressors (Mrwan, Aiman & Mohamed, 2014). A correlation coefficient of +1 states every increase of one variable increases the other variable in the same proportion, and a coefficient of -1 shows a decrease of the second variable in the same proportion.

Based on Table 4.4, it is observed that the effectiveness of ROA have positive correlations with chairman characteristics, namely education and experiences, as well as board composition, namely board size and women board. This was most likely due to the board leadership and effectiveness that comprise board responsibilities and board composition as stated in the Principle A of MCCG 2017. As discussed earlier in the literature review, chairman characteristics and board composition

are the factors that influence firm performance. An effective board should include the right group of people, possess appropriate mix of skills, experiences, independent directors, and women board as stated in MCCG 2017. The board size should be of an adequate size, but not too large for the positive performance. In addition, women should also be on the board as stated in MCCG 2017 because they are perceived to have better financial performance (Terjesen et al., 2015).

The negative correlation between ROA and GEN may show that chairman's type of gender did not influence GLCs performance. Based on the study, most of the chairmen were male, and this situation reflected the male gender was still an important factor in the consideration of appointment as chairman of GLCs. At the same time, the negative correlation between IND and ROA was observed. This is inconsistent with MCCG 2017 which stated that at least half of the board comprises independent directors and for large companies, the board comprises a majority of independent directors for better firm performance. On the other hand, EXPR did not significantly correlate with EDU, GEN, BSIZE and IND, but significantly correlated with WBOARD. It was also noted that EDU did not significantly correlate with GEN and BSIZE but significantly correlated with IND and WBOARD. It was observed that GEN did not significantly correlate with all the independent variables (BSIZE, IND, WBOARD) whereas BSIZE significantly correlated with WBOARD and did not significantly correlated with IND. For IND, it was significantly correlated with WBOARD.

	ROA	EXPR	EDU	GEN	BSIZE	IND	WBOARD
ROA	1.000						
EXPR	0.077	1.000					
EDU	0.103	-0.097	1.000				
GEN	-0.062	-0.035	-0.119	1.000			
BSIZE	0.168	-0.117	-0.005	-0.064	1.000		
IND	-0.122	-0.065	0.044	-0.174	-0.058	1.000	
WBOARD	0.179	0.023	0.126	-0.368	0.305	0.284	1.000

Table 4.4: Pearson correlation test

4.5 Multicollinearity Test

Multicollinearity test is one of the methods to examine the correlation matrix for independent variables (Sekaran, 2009). It is very important for the study because multicollinearity will appear when two or more independent variables in the regression model are correlated. Multicollinearity can be examined by tolerance and Variance Inflation Factor (VIF) to show whether there is violation of multicollinearity in the study (Jamal I. Daoud, 2017). It is also used to check whether there is influence on the dependent variable by all independent variables. In addition, Jamal I. Daoud (2017) explained that tolerance values that are less than 0.1 indicate collinearity, VIF value of equal to 1 represents not correlated, VIF value that is larger than 1 and smaller or equal to 5 represents moderately correlated, and VIF value that is larger than 5 represents highly correlated.

In this study, the multicollinearity test has been conducted on all moderating variables and independent variables. Table 4.4 shows a tolerance that was higher than 0.1, and Variance Inflation Factor (VIF) which was less than 5. Thus, it indicated that there was low multicollinearity among all independent variables and for that reason, no violation of multicollinearity was found in this study. It also indicated that all independent variables contributed to the influence of the dependent variable.

<i>Variables</i>	<i>R Square</i>	<i>Tolerance =(1 - R Square)</i>	<i>VIF =[1/(1-R Square)]</i>
EXPR	0.040	0.960	1.042
EDU	0.036	0.964	1.037
GEN	0.149	0.851	1.175
BSIZE	0.138	0.862	1.160
IND	0.117	0.883	1.133
WBOARD	0.286	0.714	1.401

Table 4.5: Multicollinearity test

4.6 Multiple Regression Analysis

Multiple regression analysis uses more than one independent variable to explain variance in the dependent variable (Sekaran, 2009). Based on Table 4.5, the coefficient of determination (R²) for this regression shows a value of 0.088 (8.8%). The results indicated a very low variation of dependent variable (ROA) which is 8.8 percent can be explained by moderating variables (education, experiences and gender) as well as independent variables (board size, independent director and women board). However, lower R square value does not inherently mean that the model is not good because this result can be due to human behaviour which is very difficult to be predicted (Sin, Boon, Tze & Wei, 2016). The adjusted R² value is 0.061 (6.1%) and the standard error of the estimate for this model is 0.076. The standard error of the estimate will decrease when R² increases as a better fit model has lower estimation error. Based on Table 4.5, the regression equation to predict ROA from moderating variables and independent variables is as follows:

$$\text{ROA} = -0.116 + 0.027\text{EXPR} + 0.006\text{EDU} - 0.002\text{GEN} + 0.004\text{BSIZE} - 0.096\text{IND} + 0.101\text{WBOARD}$$

Based on the regression equation, the intercept of the equation is -0.116, which means dependent variable equal to -0.116 when moderating variables and independent variables equal to 0. The dependent variable is expected to increase or decrease by x units when one unit is increased in moderating variable and independent variable. For instance, ROA is increased by 0.027 units if one unit is increased in EXPR and decrease by 0.002 units if one unit is increase in GEN, ceteris paribus.

The table also shows that independent variable (independent director) has a negative coefficient with ROA, but was statistically significant to explain the dependent variable (ROA) as P-value is

less than 0.05. Thus, Hypothesis 2 is supported. This result implied that smaller independent directors possibly improved firm performance and larger board does not necessarily improve firm performance. This statistically significant result was consistent with the findings of Aymen et al. (2014), Amna and Sheela (2017) and Martin and Herrero (2018). In addition, the findings of negative coefficient relationship with ROA suggest that the practice was not consistent with Resource Dependency Theory approach, which stated that independent directors are beneficial to firm performance because they have particular expertise, social networks, and legitimacy which can be leveraged in their roles on the board, and thus can enhance firm performance (Terjesen, 2015). It was also found that the practice is not consistent with MCCG 2017 which stated that at least half of the board comprises independent directors, and for the large companies, a board comprising majority of independent directors are effective and thus can enhance firm performance.

This negative finding was also consistent with a previous study by Satirenjit et al. (2015), Mansor and Lee (2016) and Noraisyah et al. (2018) which stated that having less or more independent directors do not influence firm performance. The negative relationship was possibly due to independent directors' lack of specific knowledge on the business of the firm (Ozcan & Ali, 2016). Moreover, Koh, Keng, Brigham, and Ehrhardt (2014) stated that some of the independent directors often have strong connections with the CEO through professional relationship, personal friendships and consulting or other fee-generated activities. Furthermore, independent directors may also sometimes have very little expert business knowledge but have "celebrity" status from non-business activities. In addition, a study by Shamsul et al. (2016) mentioned that in order to be appointed to a board as independent directors, one has to be in the circle or network of the board members, CEO or owners of the firms. However, Sharifah et al. (2015) and Amna and Sheela (2017) in their study revealed that having more independent directors can increase firm performance.

Similarly, independent variables (women board) also found to be statistically significant to explain the dependent variable (ROA) as P-value is less than 0.05, thus Hypothesis 3 is supported. At the meantime, it has a positive coefficient relationship with ROA. This finding was in line with the previous study by Terjesen et al. (2015), Md. Misfiqur and Farjana (2018) and Bennouri et al. (2018). They explained that women board have better financial performance and also will increase firm performance. On the other hand, all moderating variables (education, experiences and gender) and independent variables (board size) were found to be statistically insignificant to explain the dependent variable (ROA) as their P-value was greater than 0.05. Therefore, Hypothesis 1, Hypothesis 4, Hypothesis 5 and Hypothesis 6 were not supported. The findings of statistically insignificant relationship between board size with ROA were in line with the previous study by Tee and Chong (2014), Amna and Sheela (2017), Atty, Moustafasoliman and Youseff (2018) and Md. Musfiqur and Farjana (2018). The statistically insignificant relationship between board size and ROA possibly lies on the political affiliation of board members in the GLCs that contributed to this situation (Amna & Sheela, 2017), as well as lack of specific knowledge and motivation. For the statistical insignificant association between all moderating variables (education, experiences and gender) and firm performance (ROA), the possible explanation is that all moderating variables (education, experiences and gender) were not necessarily a reflection of improved firm performance because CEOs possess more information about the businesses and having operational control over the firm as compared to owners or board of directors (Chitra, 2016).

Additionally, the model shows education, experiences and board size has positive coefficients with ROA which means a positive relationship between them. Therefore, based on the model,

moderating variables (education and experiences) and independent variables (board size and women board) will affect and increase firm performance. The positive relationship between education and ROA was in line with a study by Bennouri et al. (2018). Plus, the positive relationship between board size and ROA was in line with the previous study by Satirejtit et al. (2015) and Ozcan and Ali (2016). However, a study by Aymen et al. (2014) and Amna and Sheela (2017) found a negative relationship between board size and ROA which meant that larger board size will not influence firm performance. It was also supported by Koh et al. (2014) which stated that large boards often are less effective than smaller boards because there is a greater likelihood that members of a large board will be less active than those on smaller boards.

In addition, these results were consistent with Resource Dependency Theory which assumes that chairman and board of directors acts as a resource to a firm and management, particularly to CEO. Logically, chairman that possess good education and experienced provide better information, understand the business better and are able to make decisions that positively give a good impact to firm performance. It is can be suggested that GLCs should incorporate education and experienced chairman to meet better GLCs performance. In contrast, gender shows a negative coefficient with ROA and this implied that gender did not play a crucial element to firm performance. This result was in line with a study by Noor et al. (2014) which revealed that gender do not have any effect on ROA. However, a study by Bennouri et al. (2018) revealed that women’s leadership as chairman were positively correlated with ROA. In this study, the data showed that only 3.8 percent of the chairmen were women and thus, the result of negative relationship between gender and ROA was parallel to a study by Bennouri et al. (2018).

	Coefficients	t Stat	P-value
Intercept	-0.116	-1.194	0.234
EXPR	0.027	1.242	0.215
EDU	0.006	1.415	0.159
GEN	-0.002	-0.069	0.945
BSIZE	0.004	1.607	0.110
IND	-0.096	-2.306	0.022
WBOARD	0.101	2.193	0.029
R Square			0.088
Adjusted R Square			0.061
Significance F			0.005
F-Value			3.246
Standard Error			0.076
Observations			210.000

Table 4.6: Regression Results of Model (Dependent= ROA)

4.7 Summary of Hypothesis Tested

Based on the findings, this research presented the summary of all hypothesis, as shown in Table 4.6 below. From the total of six hypotheses which were set before the findings, two were supported, and four were not supported. These hypotheses have all fulfilled the research questions of this study, which were to investigate the moderating effects of chairman characteristics on the relationship between board composition and firm performance.

Hypothesis	Relationship	Result
H1	There is a significant relationship between board size and firm performance	Not supported
H2	There is a significant relationship between independent directors and firm performance	Supported
H3	There is a significant relationship between women board and firm performance	Supported
H4	Chairman characteristics moderates the positive relationship between board size and firm performance	Not supported
H5	Chairman characteristics moderates the positive relationship between independent directors and firm performance	Not supported
H6	Chairman characteristics moderates the positive relationship between women board and firm performance	Not supported

Table 4.7: Summary of hypothesis tested

5.0 Summary of Findings

5.1 Summary

In Malaysia, MCG 2017 is a code and regulations that must be adhered by listed companies. According to MCG 2017, a chairman of the board who is responsible for instilling good corporate governance practices, leadership, and effectiveness of the board is appointed. The findings show that the positions of all chairmen and CEOs of GLCs were held by different individuals, and the average independent directors is 51 percent, which is consistent with MCG 2017. The study also revealed that only 17.6 percent women were on the board, which is not consistent with MCG 2017 in which for large companies, the women on the board must be at least 30 percent. In addition, most of the GLCs chairmen were men which was 96.2 percent and only 3.8 percent were women. MCG 2017 also stated that board composition influences the ability of the board to fulfil its oversight responsibilities for the long-term success of a company. In terms of ROA, the findings show that the average is 0.3 percent, indicating GLCs performance as not good because in general, ROA that is over 5 percent is only then considered good (Sarikas, 2019).

Even though various measures have been implemented by the government to improve GLCs performance, yet the level is still unsatisfactory. Therefore, it is important to understand the relationship between chairman characteristics, board composition, and firm performance. Furthermore, previous researches in a Malaysian context focused more on board composition or board characteristics (Satirenjit et al., 2015; Sharifah et al., 2015; Sin et al., 2016; Mansor & Siew, 2016; Noraisyah & Mohd, 2019), with only a few focused on chairman characteristics. A study by Noor et al. (2014) about the characteristics of CEO and chairman that influence GLCs performance, as well as a study by Bennouri et al. (2018) about women's leadership as chairman were some examples found. Thus, this study expanded on the knowledge of factors affecting firm performance in Malaysia's listed Government-Link Companies (GLCs).

This research studied the effects of chairman characteristics (education, gender, and experiences) and board composition (board size, independent director, and women board) as factors that affect firm performance. Literature review on past research was examined by focusing on the various factors that influence firm performance (Chitra, 2015; Pasaribu, 2015; Ozcan & Ali, 2016; Martin & Herrero, 2018; Alaa et al., 2019). This study examined the moderating effect of chairman characteristics, and factors that affect the performance of the listed GLCs in Malaysia. Previously, the study of chairman characteristics towards firm performance was conducted by Noor et al. (2014) in Malaysia, Pasaribu (2015) in the United Kingdom, and Xuanqi (2018) in China, but not as a moderating variable. Thus, it was interesting to study the effect of chairman characteristics as moderating variables on the relationship between board composition as independent variables and firm performance, whereby Return on Assets (ROA) as a proxy.

This was done by understanding the moderating effects of chairman characteristics on the relationship between board compositions that influence firm performance. First, the results showed that experiences and education have a positive effect on firm performance, while gender has a negative effect on firm performance. Therefore, these results supported a study by Bennouri et al. (2018) which stated that education and women's leadership as a chairman are positively correlated with ROA. Second, the results also showed that board size has a positive effect on firm performance. The average board size was about 9 which implied that GLCs in Malaysia have larger board size, supporting the results of a study by Norliana et al. (2018). These findings also highlighted that the larger board size does better in terms of GLCs performance, and this was consistent with the Resource Dependency Theory. Third, the results revealed that independent directors have a negative relationship with firm performance but statistically significant to explain ROA of GLCs performance. This finding highlighted that by having a large number of independent directors on the board will not necessarily influence GLCs performance, and this was inconsistent with the Resource Dependency Theory. Martin and Herrero (2018) in their study suggested that firms should incorporate experienced and highly qualified independent directors.

Fourth, the result showed that women board has positive relationship with GLCs performance and statistically significant to explain ROA of GLCs performance. This finding highlighted that women board can increase GLCs performance particularly on the financial aspects (Terjesen et al., 2015; Bennouri et al., 2018). Concurrently, the result showed that education can moderate independent directors and women board to increase GLCs performance and cannot moderate board size towards GLCs performance. Besides, experiences can moderate women board to increase GLCs performance and cannot moderate board size as well as independent directors towards GLCs performance. Furthermore, the result revealed that gender cannot moderate all the board composition of board size, independent directors and women board to increase GLCs performance.

Simultaneously, all moderating variables, namely education, experiences, and gender were also the factors that cannot moderate board composition to increase GLCs performance.

5.2 Limitation

While this research explored the relationship between moderating variables, independent variables, and the performance of GLCs in Malaysia, there were some limitations should be pointed out. First, this research studied the listed GLCs, therefore it would also be interesting to study and compare other institutional settings (Merendino & Melville, 2019), such as non-listed GLCs in Malaysia. Second, the data collected from the financial reports can be biased and did not reflect the actual situation of GLCs as it depended on the reporting style and intention by GLCs. Third, the variables used to test the moderating effects of firm performance on the relationship between chairman characteristics and board composition may not be exhaustive enough compared to other literature (Pasaribu, 2015; Xuanqi, 2018).

5.3 Suggestion for Future Research

For future research, there are some interesting points to be recommended. First, it is recommended to study and compare non-listed GLCs because none of the studies in Malaysia was conducted on non-listed GLCs. However, it would be difficult to get the data because related ministries and non-listed GLCs may not be willing to share the data. The researcher can get data from the Companies Commission of Malaysia (CCM) but this would be costly and time-consuming. Second, future researchers are advised to lengthen the period of sample size by using 5 or more years of data. Third, the moderating variables of chairman characteristics may choose to include tenure, age, and political connectivity to achieve better results. Fourth, this study measured firm performance using ROA as a measurement, which is consistent with previous researches (Ebrahim et al., 2014; Ozcan et al., 2016; Martin & Herrero, 2018; Noraisyah & Mohd, 2019). Therefore, it would be beneficial to use other measurements as firm performance such as ROE, economic value added (Merendino & Melville, 2019), Return of Investment (ROI), earning per share, and profit measures (Sharifah et al., 2015; Nasim, 2017). Fifth, a future study may include other independent variables such as non-executive directors (NED), foreign directors and the number of meetings per year conducted (Merendino & Melville, 2019). Finally, by taking all the consideration suggested, future studies should stress again on the findings of the negative relationship between independent directors and ROA, because it is not consistent with the Resource Dependency Theory.

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