THE INFLUENCE OF BOARD CHARACTERISTICS ON THE FINANCIAL PERFORMANCE OF LISTED COMPANIES IN MALAYSIA

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DECLARATION

I hereby declare that:

(1) This Research Project is the end result of my own work and that due acknowledgement has been given in the references to all sources of information be they printed, electronic, or personal.

(2) No portion of this research project has been submitted in support of any application for any other degree or qualification of this or any other university, or other institutes of learning.

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ABSTRACT

The research study is aimed to examine how the board characteristics influence on the financial performance of public listed companies in Malaysia from the year 2011 to the year 2020. Therefore, 85 listed companies in Malaysia have been selected to be examined in this research study. For measuring the financial performance, ROA and ROE are being used to measure the firm performance. The board characteristics variables included in this research study are board size, female directors, independent directors, international experience directors, and CEO duality. Besides, the company size will be the control variable in the research study. Panel analysis will be used in this research study, it consists of the pooled panel regression analysis, Random Effect Model, Fixed Effect Model, Hausman test, and Wald test. The analysis has been discussed based on the result of each of the variables. Then, the pooled panel regression analysis indicates that the variables of female directors, international experienced directors, independent directors, and CEO duality have a positive and significantly relationship with the firm performance. The board size variable has no significant relationship with the firm performance, based on the pooled panel regression analysis. Moreover, the company size is found that there is a negative and significant relationship with company performance. Therefore, based on the study, it can be concluded that not all board characteristics have relationship to firm performance, but there are some board characteristics are able to influence the financial performance of the listed companies positively and negatively. Moreover, this research study also suggests that the future study of this research study can be explored by providing more variables to examine that how the board characteristics influence on the financial performance of public listed companies.

CHAPTER 1

INTRODUCTION

Chapter 1 will be consisting of five sections. Firstly, the discussion on the research background of the corporate governance in FTSE Bursa Malaysia KLCI Companies in Malaysia. For the next section, there is problem statement which will be deliberated. Subsequently, the objectives of the research and research questions is being elaborated in third and fourth section, respectively. Lastly, significance of the study will be discussed in the fifth section.

1.1 Research Background

With the arising of the failure of large corporates such as Enron, WorldCom, Tyco, Parmalat, and others, it creates the awareness and importance of the topic of the corporate governance. Since then, the corporate governance is becoming one of the commonly discuss subjects on the field of corporate. Therefore, in order to increase the level of confidence of the shareholders and stakeholders in the market, the firm provides the corporate governance report every year in the annual report. The proliferation of scandals and financial crises (i.e., 1997 and 2008) are some of the main reasons of the increasing the attention of the topic of corporate governance (Claessens, 2006).

Generally, corporate governance is defined as the procedure and structure that the business and affairs of the company will be used to direct and manage towards promoting business prosperity and corporate accountability with the final objective of comprehending the value of stakeholder long-term, in which taken into account of the interest of other stakeholders, (Hamid, 2011).

For the purpose to enhance the confidence level of the stakeholder and shareholders in the market, the Malaysian Code on Corporate Governance 2000 (MCCG 2000) is being introduced in Malaysia by maintaining the global standard. It provided the best practices and principles for a company to comply. MCCG 2000 also enforced the listed companies or the companies to be listed to comply through listing requirement in Bursa Malaysia. According to MCCG 2007, In the year of 2007, Malaysian Code 2007 has been introduced and it was the revision of MCCG 2000. It is to focus the importance of internal audit ability and to strengthen the audit committee of companies.

In the year of 2012, Securities Commissions Malaysia (SC) introduced MCCG 2012 (MCCG 2012) which is the updated version of MCCG 2007. The changes are including to aimed to enhance the responsibilities of the board of, separating the position of CEO and chairman in the company, enhance the number of independent directors in the board, inspect the independences of the director, enhance framework and internal controls system of the company, improves financial reporting standard of the company, and to ensure the company has a good relationship to its shareholders. Subsequently, MCCG 2017 was announced in the year 2017 which is the updated version of MCCG 2012. The MCCG 2017 focuses on the CARE approach, in which the representing the comprehend, apply, and report approach (CARE approach). It allows the company to explain the reason why some practice is not being implemented in the Company which provide better flexibility.

MCCG is a vital system for corporate governance transformation as it contributes positive inspired corporate governance practices in Malaysia companies (Mahzan & Yan, 2014). In Malaysia, enhancement of Corporate Governance requirements is a focus for Bursa Malaysia in public listing company. Furthermore, MCCG also indicated that the companies listed in FTSE Bursa Malaysia Top 100 Index are considered as large companies which certain practices are only applicable to these companies. For example, the large companies shall disclose the measure used or intend to use to adopt MCCG practices and the required timeframe.

On the other hand, in order for a company to be listed in Bursa Malaysia, one of the requirements is that the company must comply to the corporate governance requirements. Therefore, it is considered as mandatory for companies to comply if the companies are required to be listed in Bursa Malaysia. Therefore, Bursa Malaysia plays an important role in relation to this matter. The key objectives for Bursa Malaysia regulatory activities are to maintain a trade fair and systematic market, with the emphasis on investor protection and maintaining market integrity. Corporate governance provides the appropriate approach such as CARE approach, to accomplishing these obligations.

According to the study of Dao and Ngo (2020), it shows that having a good corporate governance in the companies will assist the firms to have a good firm performance such as profitability. A good practice of corporate governance indicates that the companies have a good and effective corporate framework which will assist the companies to operate effectively. For example, in order to reduce possible fraud and misconduct of the employees, rules are being established and with the purpose to avoiding or reduce the possible conflicts of interest in which through representation of the independent directors to protect and secure the minority shareholders interest.

By becoming a good corporate governance company, it indicates that the company increases its transparency to the public (Hermalin & Weisbach, 2007). It includes the companies are required to disclose its information such as financial and operational, and including the management system such as control management system and monitoring system in the company. Firm will be getting benefits by increasing transparency of the company as more transparency company is able to improve and enhance the monitoring process to CEO by provided that it with an improved signal about the quality. This will subsequently reduce the conflict of interest among the directors and shareholders of the companies as well, as the information is clearly disclosed, and the companies will have clear goals and objectives to be focused on. As in the view of the investors, the voluntary disclosures made by the companies are also important to the investors. This is because the investors will have an unambiguous opinion in relation to the operational process and other related information. Therefore, the investors will have increased the confidence level towards the companies (Tsamenyi & Onumah, 2007). Thus, this will increase the share price of the companies in the long run.

1.2 Problem Statement

Corporate governance practices are essential to the companies that are listed in Malaysia as it is required by the Bursa Malaysia listing requirement. Board characteristics are one of the main elements for corporate governance mechanism. This is because board characteristics are referring to the formation, feature, attribute, and quality of the board of directors in a company. However, the subject in which the relationship of board characteristics of corporate governance mechanism to the firm performance are always having different results from the previous studies.

First and foremost, board size is one of the elements or the independent variable that will affect the firm performance. This is because according to the study of Kalsie and Shrivastav (2016), it indicates that the board size and the firm performance's relationship between them has a positive and significant relationship, in which it would be interpreted that the increment the board size will increase the firm performance. However, Bebeji et al. (2015) study found that the increase in board size will lead a decrease in company performance in Nigeria. Moreover, according to the study of Poudel et al. (2012), it indicated that there is no significant relationship between the board size and firm performance. Thus, it shows that there is an inconsistency of the outcome of the variable of the board size that the board size has a relationship with the firm performance. Therefore, this research will focus on the influence of the relationship between the variables of board size to the firm performance in Malaysia.

Besides, Brahma et al. (2020) study indicates the gender diversity has a significant relationship on the firm performance in United Kingdom. However, Mazzotta et al. (2017) study shows there is no relationship between the gender diversity between the board of directors and firm performance in Milan. These two studies generated different results as to whether the gender diversity has any effect to the firm performance. Therefore, this study will inspect the influence on the relationship of the gender diversity or the female director in the board of directors of the listed companies toward the company performance in the setting of geographically in Malaysia.

At such, according to the studies discussed above, it shows that some of elements of board characteristics are having different results in relation to the firm performance. Thus, this study is to examine the relationship of elements of the board characteristics of corporate governance to the firm performance in the context of listed companies in Malaysia.

1.3 Research Objective and Research Questions

The research objectives are to examine the relationship on the influence of board characteristics on financial performance of public listed companies in Malaysia.

The research question is that how does the board characteristics affect the firm performance of the public listed companies in Malaysia as follows:

1. To examine whether the board size has influence on company performance in Malaysia;

2. To examine whether the female director has influence on company performance in Malaysia;

3. To examine whether the independent director has influence on company performance in Malaysia;

4. To examine whether the international experience director has influence on company performance in Malaysia;

5. To examine whether the CEO duality has influence on company performance in Malaysia; and

6. To examine whether the company size has influence on company performance in Malaysia.

Therefore, the study will provide the answer to this question based on the findings in this study.

1.4 Significance of the Study

This study provides the effectiveness of the relationship of corporate governance variables to firm performance in the context of listed companies in Malaysia. Due to the different results are provided by the other study for the same variables, this study is focus on context of the listed companies in Malaysia. Thus, the listed companies in Malaysia are able to use the variables more clearly in Malaysia. For example, if the relationship between the variable and the form performance is positive, then the public listed companies should maintain the variable or increase it based on their capability. However, if the results show a negative relationship between the independent variable and firm performance, then the public listed companies should reduce or minimize the variable to an acceptable range by each company.

Besides that, a better policy for the board characteristics variables, as known as corporate governance variables) is able to be generated from the result of the findings in this study. As the results from this study will affect the firm performance, the policymakers are able to focus the significant area and provide the appropriate recommendation in the code of the corporate governance in the future to generate a continuous growth and effective policy. Furthermore, it will a better understanding of in relation to corporate governance variables which are able to clarify the firm performance of listed companies in Malaysia. Moreover, due to there is limited research that is updated to the year 2020.

For Policy Maker such as SC, the result will be potential indication on their future policy and governance reference. Due to there are limited similar studies and research are completed that are updated to the year 2020 and in Malaysia, this will help and provide to the policymakers a reference when enhancing the policy in the future. Besides, because the public listed companies that are selected for study are the Top 100 companies in Malaysia excluding the financial institutions and REITs, which indirectly reflect the country economy performance. A good governance mechanism in relation to bard characteristics and policy will help to attract foreign direct investment to invest in Malaysia public listed company.

This study will provide a reference to the policy maker to produce the new rules and regulations on the board composition. Such as, the procedure of appoint independent director, the appointment of director to company and the percentage of female directors should represent in the boardroom and others. It is also able to provide a direction for the policy maker to focus on the boardroom characteristic that will bring a positive impact to Malaysia company performance and economy.

Finally, yet importantly, as mentioned above, due to this study provide the information that are updated and covered the companies from 2011 to 2020 of public listed companies in Malaysia. In addition, based on my best knowledge, there are no research has been done for the combination of the independent variables which including board size, international experience of the directors in board of directors, percentage or number of independent directors in the companies, number of female directors, and CEO duality. Thus, this will able to contribute the results to the academy.

CHAPTER 2

LITERATURE REVIEW

The term of “corporate governance” started in the late 18th century and corporate governance has been defined as managers of resources of the company, the directors should pay significant attention on the own resources and processes (Abdullah & Valentine, 2009). In order to mitigate the challenges, a suitable governing body is required for improving the performance of the business. It results in the demand of corporate governance. It can also be explained as the system which is used by the companies for directing and controlling the business using a responsible and independent body like Governance Code.

According to Pillai and Al-Malkawi (2018), they explained that corporate governance consists of the framework of systems, relationships, processes, and rules that controls and exercises authority within the business. It consists of the mechanism which has been used by the company in controlling and holding them to account. The Organization for Economic and Development explained that corporate is one of the keyways of developing a joint relations and interest of various stakeholders.

As per the organization, corporate governance contains of a set of relationships between the management of the business, shareholders, other stakeholders, and the board. Moreover, corporate governance develops a structure that facilitates in setting the objectives of the business. It also facilitates in monitoring the company’s performance and developing effective objectives.

2.1 Theoretical Model

Since the corporate governance has been widely used, the corporate governance framework has been produced from many studies over time. In this section, the agency theory will be discussed. Then, following by stakeholder theory and stewardship theory and others. The following is the discussion of the relevant theories.

According to the study from Kiel and Nicholson (2003), it indicates that the influence of the board characteristics has been used by many researchers in many topics for their research which is relating to the management theory and the corporate or organizations. Further, the board characteristics have also been used to identify the relationship with the firm performance. Besides, according to Kiel and Nicholson (2003), the agency theory, stewardship theory, resources, dependency theory and stakeholders' theories are some of the relevant theoretical theories to examine their relationship. Further, the internalization theory will also be included as the theory tical theory, in which the discussion will in the following sections.

2.1.1 Agency Theory

One of the relevant theoretical theories is the agency theory. This is because it has been being widely determined as an instrument to identify and elaborate the corporate governance issue in, but not limited to the corporate field. According to Eisenhardt (1989), the agency relationship indicates that the principal delegates its duty to other party to work on behalf of the principal.

According to Viel et al. (2016), agency relationship is a relationship that the principal and the agent has the contract which they are agreed to perform. The principal hire agent to provide services on their behalf and allocating or providing the power to the agent by authorized them to perform on their behalf. In the event of both parties want to maximize their self-interest, the high chances that conflict of interest would occur in their principal and agent relationship (Viel et al., 2016).

The emphasis of the agency theory is that the owner or the principal relationship with the agent in the company. The shareholders represent the principal as they are the one who place their investment in the company by taking the risk. However, the manager or the directors of the company normally represent the agent (Fanta, Kemal & Waka, 2013). Since both parties are different persons, the conflict of interest will be occurred as the principal and the agent has a different interest (Bozec & Bozec, 2007). For example, the manager will focus on the remuneration received, but the shareholders are focusing on the value of the shares of the company.

Therefore, the agency theory shows that the independent directors are essential as they can monitor the performance of the managers, such as chief executive officer (CEO), to ensure the power is being separated, for the purpose of maximizing the shareholders' value (Saltaji, 2013). Besides, the theory also recommends that the chairperson and the CEO should be separated as it will reduce the power of the director in the board. MCCG plays an important part, as the shareholders will appoint the directors to fulfil the MCCG requirement to manage the company.

Moreover, the agency theory suggests that the company with strong corporate governance will perform better than the organization with poor governance (Bhatt & Bhatt, 2017). Agency theory is also supporting independent directors as appropriates monitors to ensure the corporate and organization functioning as to the best practice of the Corporate Governance Code (Rashid, 2015). According to Rashid (2015), independent directors are important as they provide check and balance mechanism to minimize the agency issue.

However, there are some issues in the agency theory, which are including the discrepancy of the objective between agent and principal, and risk of mutual interest between the principal or the managers and the agents (Eisenhardt, 1989). According to Bozec and Bozec (2007), in order to enhance the mutual interest, the company or the principal is required to pay the cost, as known as agency cost. The agency cost is the type of cost that the principal is require to pay in order to monito the agent to act on the best benefit of the principal (Jensen & Meckling, 1976). Therefore, maximizing the wealth of the shareholder is play an important role in monitor the agents.

2.1.2 Stewardship Theory

According to Fanta et al. (2013) and Sulaiman et al. (2015), the stewardship theory is generated based on the philosophies of psychology and sociology characteristics which are able to affect the decision of the managers of an organization. Therefore, there are three main elements in this theory which are growth, achievement and self-actualization. According to Glinkowska and Kaczmarek (2015), these elements are important as it will help the company to achieve its objectives. In another term, it can reduce the self-interest risk.

According to Davis et al. (1997), there are some similarities between the stewardship theory and agency theory as both theories provide the relationship in which the steward is considered as principal and the agents are the employees or directors, which have issue to achieve a common foal that the principal desired.

According to Fanta et al. (2013), it states that agent is able to achieve the goals set by the principal if they are being motivated and satisfied, even the agent in a loss position such as reducing its self-interest. This is because the they have a common goal and purpose. Thus, it can eliminate the conflict of interest between the principal and agent by motivating them and satisfying them (Eddleston & Kellermanns, 2007).

However, there are some arguments in this theory as this theory is suggesting that the agent should be provided shares of the company for example, to allow the agents or the directors have mutual goals. Besides, this theory is also supporting the dual position of CEO and chairperson, as known as CEO duality, in which the person is the director and the CEO of the company at the same time (Dalton & Dalton, 2011). This is because the agency theory is recommending the CEO and the director should be separated to reduce the overpower of the director to use it to maximize his or her own benefits (Dalton &

Dalton, 2011). However, the stewardship theory suggest that the Company should concentrate on the CEO duality and the CEO will execute and perform its duty to maximize for the wealth of the company (Dalton & Dalton, 2011). Thus, the company is required to identify which theory to use for separating or delegating the power to the directors.

2.1.3 Resource Dependency Theory

According to Bhatt and Bhattacharya (2015), several studies have been completed on the area to identify and examine the implication of the relationship of the board characteristics and firm performance.

According to Abdullah and Valentine (2009), resource dependency theory indicates that external resources will be used to determine whether the board of directors is able to utilize its resources to affect the firm performance. There are many types of resources in the resource's dependency theory. For example, knowledge of the directors, socialization skill, communication skill, and others, which is able to support the company in the external environment? Therefore, the directors who have a knowledge in law who able to provide the legitimate advice would enable the company to develop many strategies to enhance the firm performance. This is because if the decision made is not according to law, then the company will have to pay the penalty of non-compliance, which will ultimately affect the firm performance negatively.

According to Hillman and Dalziel (2003), the study suggesting that the bigger the board size of the company, the higher the firm performance. This is because there is a positive and significant relationship between the board size and the firm performance. Besides, the higher the board size indicates that the company will have many resources and it is able to utilize it to generating profit.

According to Hillman et al. (2009), the study recommended that the company should increase its resources by enhance or restructure its board composition, to ensure the company is able to adapt the change in the environment.

Moreover, the company is likely to enhance the firm performance if the directors are resourceful independent. This is because there is a relationship to the firm performance. Therefore, when there is a change in the environment of the company, the resources independent directors are able to overcome and adapt the change more effectively and efficiently than the one who does not have the independent resources (Peng, 2014).

2.1.4 Stakeholder Theory

Stakeholder plays an important position for an organization to be success providing consideration to the stakeholder (Friedman & Miles, 2006). Stakeholders are very important as with the stakeholders in the corporate governance, the company will never exist, as the stakeholders are the party that is contributing the company to survive. For example, the customer of the company is one of the important stakeholders of the company. This is because if it is without customers, the company will unbale to generating revenue. Another example is the shareholders. Shareholders are also one of the stakeholders. Shareholders are the one who invest their money into the company. Therefore, if there are no shareholders in the market, the is no existence of the company (Hillman et al., 2001). Thus, the stakeholders in the corporate level are including and one or any group that can affect or be affected the decision made by the companies. For examples, employees, suppliers, investors, government and others (Hillman et al., 2001).

Stakeholder theory is also used to discover how corporate social responsibility (CSR) disclosure is affected by corporate governance characteristics during global financial crisis (Dias et al., 2017).

According to Husain et al. (2018), when there is research to be made that is relating to the company or corporate, the stakeholders theory is always been used extensively to identify the relationship relating to firm performance. According to the study of Husain et al. (2018), the study shows that the firm performance can be enhanced if the has a high value in CSR disclosure. This is because high CSR disclosure indicates that the company is considering its stakeholder wealth instead of mainly focus on its own profitability. Therefore, it is able to attract more customers and receive more investment from the market. Thus, the stakeholder theory predicts that inviting more women, minority directors and directors who represent vital stakeholder groups for example creditors, clients, and community representatives are positively affect the performance of the companies (Hillman et al., 2001).

2.1.5 Internalization Theory

Internalization theory is a branch of economics theory that explains international business behavior. Internalization theory focuses on knowledge movements that link research and development to production, and the streams of parts and raw materials from an upstream production capability to a downstream one. For the company who are seeking for sustained competitive advantage and risk reduction, internationalization has become one of the vital strategic decisions to archive the company objective (Hitt et al., 2006).

Zahra et al. (2000) study recommends that international diversity have a positive direct relationship to the company performance. Additionally, international diversity has more indirect influence of improving technological learning (Zahra et al., 2000).

According to study from Wen et al. (2020), the listed companies in Chinese during the year from 2001 to 2016, with collection of large samples of directors' foreign experience data, the influence of directors with overseas experience on company tax avoidance is determined that there was a negative and significant relationship between directors with overseas experience and company tax avoidance.

The study is proposing that international experience directors can help reduce companies' tax aggressiveness. The study also found that non-independent directors with international experience have significant influences on company tax advantage than independent directors, the impact is more noticeable when directors with international experience chair on audit committees. Directors' working and studying experiences have vital influences on company tax advantage. The director with international experience can share their experiences and exposure abroad and internalize for their firms to reap certain competitive advantage in this study the tax avoidance advantage (Wen et al., 2020).

Experience, skills, and resources are important for international expansion. International diversity is positively linked to new venture performance (Shaker et al., 2000). Hence, the director international experience and knowledge would be an advantage for the company performance.

2.2 Firm Performance

For the purpose of this study, the firm performance is also representing by the company performance.

2.2.1 Return on Asset (ROA)

According to Alfaisal (2019), ROA added giving a good benchmark of whether the company has been delivering how profitable a company's assets are in generating revenue. Thus, the company is able to maximize the value of the shareholders by emphasizing the ROA. Moreover, ROA indicates the how much the profit the company is able to produce by utilizing their assets. It also considered as an indication to identify the improvement of value of the shareholders, by comparing the ROA with the previous year.

Based on the study of Salim & Yadav (2012) ROA is categorized as one of the general measurements in the term of the profitability of the company. ROA is defined as the how much the profit of an organization or a company can generate the net profit based on the total assets available in the organization or the company. Therefore, it can be used as an indication for measuring the wealth of the shareholders. Therefore, the higher the ROA, it indicates that the profitability of the is higher. Thus, there is an improvement in the firm performance. Moreover, according to Salim and Yadav (2012), ROA is commonly used as the variable to measure the firm performance, which including in the topic of corporate governance. To computing the ROA, the net profit is required to divided by its total assets. According to Bhagat and Bolton (2008), the profit after tax should be used as the net profit, instead of profit before taxation, in the computation of the ROA.

2.2.2 Return on Equity (ROE)

Besides, of ROA, ROE is another popular measurement to identify the ability of a company to produce it net profit by utilizing the share capital of the company. Therefore, according to Khadafi et al. (2015), the value of shareholders is also able to be measured by ROE. Therefore, if the ROE of a company is positive and high, it indicates that the company is able to generate higher profit with the available share capital in the company (Hakimi et al., 2016). Conversely, a low value of ROE will indicate that the company has a low profitability, which will be recommended to strategize the strategies of company to generate more income by the limited share capital in the company, in order to maximize the wealth of the shareholders (Hakimi et al., 2016).

On the other hand, in the measurement for the ROE, the net income plays an important part in the determination of the value of ROE. This is because the higher value of the net income will generate a different result in the ROE. For net income, there are a few categories which are profit before taxation, profit after taxation, profit before interest and taxation and others (Albertazzi & Gambacorta, 2009). In the determination of the net income, many research studies have recommended that the net income to be used in the measurement of ROE is the net income after taxation of a company (Vu et al.,2019; Alabdullah et al., 2018; Tran et al., 2019; Khan & Marimuthu 2017; Hermansjah et al.,2021). According to Aziz and Abbas (2019), they recommend that in order to measure the company or firm performance, the value of ROE is one of the suitable variables or determination for measuring the profitability value of a company.

2.3 Board Characteristics

Board characteristics is defined as the feature or the elements of the board of the company (Abu et al., 2016). Moreover, the concept of corporate governance is widely using the board characteristics as one of the attributions (Ghabayen, 2012). According to Rashid (2020) and Oh et al. (2019), the board size, female director, CEO duality, international experience directors, independent directors and others are considered as some of the elements or attributions of the board characteristics.

2.3.1 Board Size

According to Kusuma and Ayumardani (2016), the board size (BS) is one of an essential indications or variables that indicate the number of a directors in the company, to manage and control the company. Therefore, according to Fanta, Kemal and Waka (2013), the value of the size of the board can be identified by the number of directors in the board of directors who are managing the Company. Besides, the size of the board is also considered as one of the essential tools for the purpose of measurement in the corporate governance study.

However, there are a lot arguments in relation to the board size relationship to the firm performance. Some of the past studies shows that the size of the board has a positive relationship with the performance of the company. There is a significant relationship between board size and firm performance measured by firm performances such as ROA and ROE (Bonn, I., Yoshikawa, T& Phan, 2004). Moreover, there have been positive correlations between company performances and board size as larger boards are more consistent and it reduces the difficulty in the board to make strategic decisions and coordinate the board (Bonn et al, 2004). According to Maude, Gambo, Bello, and Rimamshung (2018) stated that larger board sizes are more effective than smaller board sizes and larger BS that comprises relevant core competencies and entrepreneurial skills will enhance firm performance. The share price and the return on stocks do affect the board monitoring and size as there has been a significant positive result with company performance (Hillman et al, 2001). Moreover, effective corporate governance mechanism which including board characteristics, is found to be related to higher firm performance, thus the correlation is found to be positively significant as well (Zaman et al, 2014). According to Coleman and Biekpe (2008), they indicated that board size is significant and has a positive impact on company performance.

Performance and the scope of board among firms have received a lot of practical considerations in the earliest works. Lipton & Lorsch (1992) recommended that a board should contains the size a from 7 to 8 members. The study also the board size would increase the time in the decision-making process if the board size is high or large because there would have arguments to either to agree or disagreement in the determination of the decision process or the excess of opinion from the directors would also increase the time used for making the decision of a company. Moreover, this explanation is also supported by the study of Jensen (2001), in which the study the larger size of the board will affect the efficiency of a company negatively. However, according to Shakir (2008), the study indicates that the larger board size would lead the company to be more productive if the board size to be 12 directors or members. Bathula (2008) has conducted a study and focusing on approximately 158 companies quoted in the stock exchange of New Zealand and indicating the board size has a significant relationship to the performance of companies.

Furthermore, many studies, such as Ilaboya & Obaretin (2015), and Adam and Mehran (2005), agree that larger or bigger size of the board of directors will have positive implication on the firm performance. This is because the larger group of directors in the board can be able to help the company to analyze the issue and make effective decision which can lead to positive relationship to the performance of the company. Moreover, this argument is also supported by the study of VanNess et al (2010), in which that the bigger size in the size of the board, the better the firm performance as they have a positive and significant relationship in the study. Further, the larger or greater size of the board will positively affect the firm performance, in which the study has been done by Cole et al (2008). These studies supported large boards even as the literature shows positive results.

Besides that, the BS and the company performance has many conflicting issues. One of the issues is in relation to the stakeholder theory. This is because the greater the bord size, the company will not be dominated by a few of the directors and it is able increase the awareness of the minor stakeholders of the company (Fernandez & Thams, 2019). In addition, the greater size of the board is also indicating that the company will be able to complete the complex tasks as the board of the company has more skill and expert to completing the complicated task (Mohapatra, 2017). However, the greater of size of the board in the company also indicating that there has negative relationship to the company performance as the cost will become higher and the company have to incur the expense in order to have bigger board size (Tulung & Ramdani, 2018). According to the study from Mohapatra (2017), 90 companies in India is being examining from the year of 2005 to 2010, it found that there is a positive relationship between the size of the board and the company performance by providing that the performance of the company is able to improve due to the power of the CEO is in dilution.

Nonetheless, Mak and Kusnadi (2005) states the negative relationship between the board size and the company performance is due to the communication difficulties. When the number of the board is in large size, it will be hard to communication for the directors to be communicated effectively and efficiently.

By applying the agency theory, the board size is considered having a negative relationship to the performance of the company as the higher number in the board will indicating the conflict of interest will be increasing. The study of Wang et al. (2018) supports the above statement.

2.3.2 Female directors

Another variable of board of characteristics is the female director. In this study, the female director is also considered as the gender diversity. Gender diversity is important to a company as it provide the skill, expertise, knowledge and others which will directly and indirectly affect the company performance (Asri, 2017). Female directors are important as they are able to provide the problem-solving skill to complete the complex task of the company (Liu et al., 2020). In addition, the female directors are also able enhance the value of the company.

Female directors are also play an important role in the topic of corporate governance as the female director is having better communication skill and listening skill. In the study of Asri (2017), 374 listed companies are used for examining the relationship between the female directors and the company performance from the year 2011 until the year 2015 with a result that concludes that the female directors have a positive and significant relationship to the company performance by stating that the female directors have better skill in communication and listening. Further, the study of Asri (2017) also indicates that the female director is have unique characteristics that is able to generate valuable value to the company and female directors are also more to risk adverse and take extra thoughtful in make the decision for the company.

According to Martín-Ugedo (2019), study shows that there is a positive relationship between female directors and the firm performance. According to Pasaribu (2017), the study states that there is less of gender diversity in companies, in which the female directors are generally lower than the male directors in the company. The study of Pasaribu (2017) has been identified that female directors has a positive relationship to the firm performance, but not significant. This is because most of the female directors are in the role of the monitoring the executive directors, which is known as the independent directors. Therefore, the female directors have an insignificant relationship to the company performance.

Furthermore, MCCG 2017 also suggesting that the board to have gender diversity in the board of directors, based on the Practice No.4.5 of MCCG 2017.the board of directors in the company should have minimum 30% of female directors for public listed company. The reason of this practice is to encouraging the female directors to participate in the top management of the company for making decision.

According to the study of Mirza et al. (2012), the study has a sample of 395 of listed companies in Pakistan for the period from 2004 until 2009, the study indicates that there is a negative relationship between the female directors and the company performance.

According to the study from Dowling and Aribi (2013), the study has a sample of 100 firms in UK from the year 2000 to 2011 and with a result that there is a negative and significant relationship between the female directors. This is due to the female directors are tended to be less confidence while making decision (Dowling & Aribi, 2013).

2.3.3 Independent directors

Independent directors are one of the elements in the board of characteristics. The independent directors are recommended to the adequate qualification such as knowledgeable, which the independent directors are able to provide the necessary advice to the company, and also include role to monitor the executive directors to ensure the interest of the shareholders and stakeholders are reserved (Varottil, 2010). Besides that, independent directors are also considered and non-executive directors of the company as the independent directors will not take part in the process of the operation in the company (Dou et al., 2015).

There are many studies indicate that the independent directors are able to make decision which is will benefit the company. According to the study of Wang (2014), the study showed that there is no significant relationship between the independent directors and company performance with the reasons of that the independent directors would principally act as a role of advisor of the company which would not affecting the company performance.

According to MCCG 2017, it is recommended that the companies should have at 50% of independent directors in the board of directors. However, if the company has more independent directors than required, it would harm the company performance. Due to the independent directors are not involved in the ordinary business and the lack of communication between the executive directors and the independent directors of the company, the higher of the number of independent directors would require the company to pay the costs to the independent directors such as remuneration of independent directors and the decision made by the independent directors would be less effective (Meng, 2018).

The relationship between the independent directors and firm performance would generate the mixture result many studies. According to the study of Müller (2014), the study has included 100 listed companies in London for the year 2010 until 2011, the result shows that there is a positive and significant relationship between the variable of independent directors and company performance. Moreover, the above result is supported by the study of Koerniadi and Rad (2012), in which there has positive relation between independent director and company performance, which indicates that the higher the number of independent directors would improve the company performance.

According to the study of Ntim (2011), in which the study has included a sample of 169 listed companies in Johannesburg Stock from the year 2002 until the year 2017, the result shows that there is a positive and significant relationship between the independent director and company performance.

2.3.4 International experience in board of directors

Chen et al. (2014) research explores the impact of independent directors, his study the independent directors' educational level, experience and international knowledge on companies' decisions toward internationalization and how companies' internationalization decisions can inspire by board directors who act as supervises and resources providers. He uses a panel company in Taiwan, the outcomes indicate that independent directors' CEO experience with international exposure are positive and it is having major linked to company internationalization. Moreover, independent directors' educational level is also positive, but not significantly linked with company internationalization (Chen et al., 2014).

Company performance is evaluated by return on assets given that past study has recorded a positive relationship between company performance and internationalization (Chen, 2014). Moreover, Vaatanen (2009) study the impact on international strategies in firm performance on Russian corporations. The study shows that the relationship of the international ventures and company performance have a significant impact. The companies with international strategies would have a substantially better profitability and labour efficiency (Vaatanen et al., 2009).

According to Daily et al. (2000), the management party with international experience is significantly and positively affect the company performance. The study of Daily et al is focusing on the CEO of the companies, in which 500 companies has been selected to identify the relationship between the CEO with international experience and firm performance. In this research study, the directors with international experience will be used as a variable to identify its relationship with company performance.

2.3.5 CEO duality

In this study, the influence that the CEO duality of a firm has effect on the firm performance will be examined. Board leadership structure plays an important element in the corporate governance study. CEO duality indicates that the CEO of the company is also the chairman of the company. In other terms, it is knowing as the directors are holding two positions in the company, which are the CEO position and chairman position or executive director in the company.

Based on the study of Finkelstein and D'Aveni (1994), for the company which has a director that holds two positions as CEO and chairman of the Company, it is categorized as CEO duality, and conversely, it is called as non-CEO duality or non-duality if there is a separation between the position of CEO and chairman.

According to the agency theory, the position of CEO and chairman should be separated. This is because by combining these two positions, the person will have high level of power to dominate the decision of the company. When the CEO duality person has self-interest, he or she would able to exercise his or her power for obtaining personal gains instead of the best interest of the company or the shareholders (Rechner et al., 1991). Therefore, it would affect the company performance negatively.

According to the Hsu et al. (2021), the study has studied listed companies in Taiwan and the result shows that there is a negative and significant relation between the CEO duality and company performance. This shows that the company will have poor performance if there is CEO duality in the company.

The role of CEO is to strategize and implement the policies of the company to manage the organization. On the other hand, the chairman role is to ensure the board to function accordingly by monitor and evaluate the directors. Moreover, the board has the role to evaluate the CEO performance by deciding the remuneration. In this situation, the CEO duality will able evaluate himself or herself and declare a higher remuneration than required. This will affect the profit of the company and thus, the firm performance is expected to have negative effect on the firm performance.

However, according to the result from Ting et al. (2017), the result shows that company performance is affected by the CEO duality positively. Thus, it shows that there is a positive relationship between the CEO and duality. This is because the CEO duality is able made the decision that is beneficial to the company instead focusing on the personal gains. Moreover, if the company is in the competitive and dynamic environment, the CEO duality will have a positive relationship because the CEO duality will have a better understanding on the company’s business and is able to control the company more effectively than the non-duality. This result is also supported by the study from Guillet et al (2013), in which it found that the CEO duality has a positive relationship with the company performance.

2.4 Control Variable

2.4.1 Company Size (CS)

According to Onofrei et al., (2015), company size can be defining as the revenue of the company, number of employees of the company, and others. In order to measure the company size quantitatively, company size can be measured by the total assets of the company (Agustin, 2021). Company size can also use to measure the company

Besides that, many studies are also studying the relationship between the company size and company performance. According to the study of Tanaka et al. (2016), the studied has included 4,854 listed companies to examine the relationship between the company size and the company performance, the result indicates that here is no significant relationship between the company size and company performance. Moreover, a study from Olawale et al. (2017) also study on the 12 listed companies to study the relationship of the firm performance and company size, and the result also shows that there is no relationship between the company size and the company performance.

According to Kuncová (2016), the study has included 42 companies in the year of 2013 to examine the relationship between company size and company performance, in which the result shows that there is a significant and positive relationship between the firm size and the company performance.

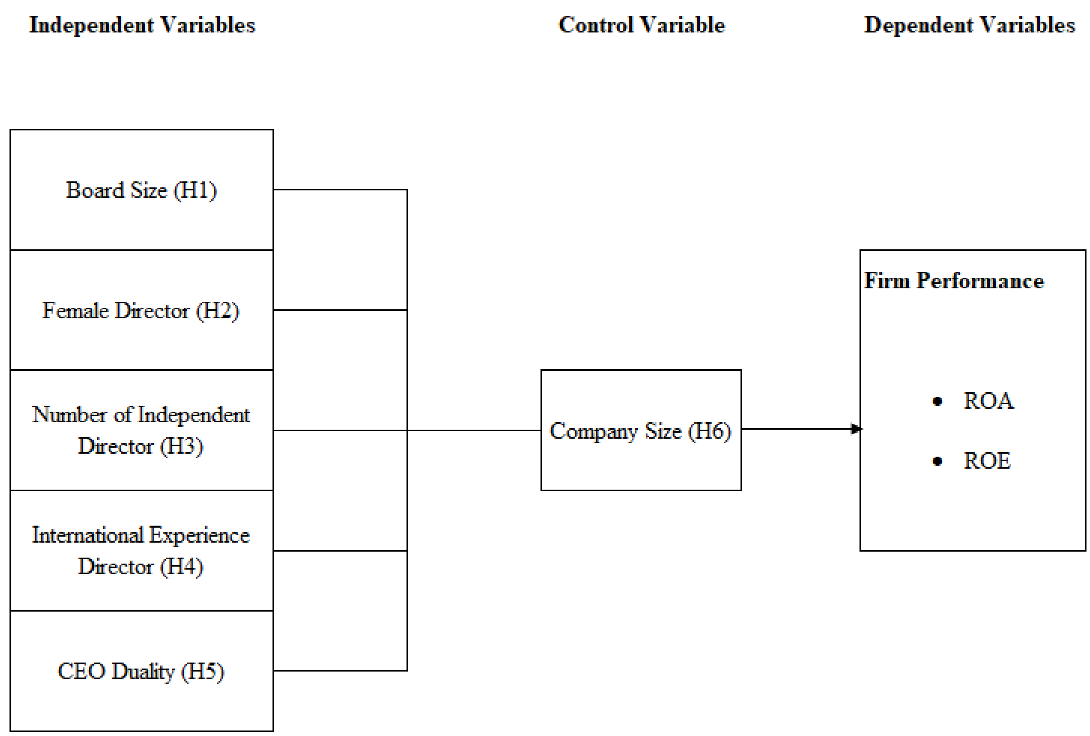
According to study of Vu et al. (2019), the study has included 693 listed companies in the year 2015 to examine the relationship between the company size and the company performance by using the ordinary least square method, in which the result shows that there is an associated positive relationship between the company size and the company performance.

According to the study of Onofrei et al. (2015), the study has included 385 listed companies in Romania to example the relationship between the company size and company performance, the result shows that there the relationship between the company size and company performance is insignificant.

On the other hand, according to study of Alqatan et al (2019), in which the study has included 100 UK non-financial companies from the year 2012 until 2015 to examine the board structure impact on firm performance, it found that there is a negative relationship between the company size and the company performance.

2.5 Research Framework

According to the literature studied, the research framework is provided as follows:



Source: Own Contraction for Research

2.6 Development of Hypothesis

According to the literature studied, the hypothesis is generated as follows:

Hypothesis 1

The null hypothesis ($H1_{0}$) for the first hypothesis developed is that there is a significant relationship between the board size and firm performance.

The alternative hypothesis ($H1_{1}$) for the first hypothesis developed is that there is no significant relationship between board size and firm performance

Hypothesis 2

The second null hypothesis ($H2_0$) is that there is no significant relationship between female director and firm performance.

The second alternative hypothesis ($H2_1$) is that there is a significant relationship between female director and firm performance.

Hypothesis 3

The third null hypothesis ($H3_0$) is that there is a significant relationship between number of independent director and firm performance.

The third alternative hypothesis ($H3_1$) is that there is no significant relationship between number of independent director and firm performance

Hypothesis 4

The fourth null hypothesis ($H1_0$) is that there is a significant relationship between international experience director and firm performance.

The fourth alternative hypothesis ($H1_1$) is that there is no significant relationship between international experience director and firm performance.

Hypothesis 5

The fifth null hypothesis ($H5_0$) is no significant relationship between CEO duality and firm performance.

The fifth alternative hypothesis ($H5_1$) is that there a significant relationship between CEO duality and firm performance.

Hypothesis 6

The sixth null hypothesis ($H6_0$) is that there no significant relationship between company size and firm performance

The sixth alternative hypothesis ($H6_1$) is that there is a significant relationship between company size and firm performance.

2.7 Summary

In summary, this chapter has reviewed the literature in relation to how the board characteristics are used to evaluate company performance by the measurement of return on assets and return on equity. Moreover, this chapter has also reviewed the relevant theories that related to the board characteristics. Furthermore, it also includes the research framework and hypothesis development.

CHAPTER 3

RESEARCH METHODOLOGY

Chapter 3 will explain the methodology that used in the process of sample section, data collection, and also data analysis. This chapter will firstly discuss the research design. Then, the data collection methods will be discussed and following by the designation of the sample of this research and the instruments that will be used in this research. Lastly, the conclusion will be provided in the last section.

3.1 Research Design

According to Al Kilani and Kobziev (2017), the research design is defined as the overall idea that the research questions have to use to answer by the researchers

The objective of this research study is to identify the influence of the board characteristics variables to the company performance that is listed in Malaysia from the year 2011 until the year 2020. The measurement to be used in the research study in relation to the company performance is ROA and ROE.

Qualitative research and quantitative research are the two common methods that used for data collection and data analysis. Qualitative research is emphasized on the data which has non-numeric in which the data is normally in the form of wordings. As for quantitative research, the research will be used as the data that is numeric to study the research.

In this research study, the method that will be used is quantitative research because the data that collected are including the numeric form such as number of independent directors, the value of return on assets and others. The data collection will be according to the annual report which are available in the official websites of the respective companies and the annual report that has been published in Bursa Malaysia. The data collected will then use to examine the influence of the board characteristics on the financial performance of listed companies in Malaysia for the year 2011 until 2020.

3.2 Data Collection Method

According to Hafez et al. (2008), inaccurate data collected would provide the error or fault result for the research study, therefore, the process of collecting date is an important role to obtain the correct result. Generally, the primary data and secondary data are the two types of data that is available to collect. In relation to the primary data, it is considered as the first-hand data that can be collected.

According to Ordanini et al. (2010), as for secondary data, it is considered as the data from the research of other parties. There are a few forms of the resources of secondary data. Secondary data can be obtained from a various source which are including case study, searching from online resources, based on the research previous completed, resources from library, and so on. Therefore, the secondary data is considered not expensive because the way of obtaining the data is easier and currently available for collection than the primary data as the primary data would normally require interviewing.

With the available of the internet, the secondary data collection will be commonly suggested to use for research purpose. This is because there is expertise available in the internet that can assist by communicating for the idea and obtain the knowledge from the media in internet.
Therefore, in this research, the data will be obtaining from the annual reports of the respective companies. Therefore, this research will use the secondary data to examine

the influence of the board characteristics on the financial performance of the listed companies in Malaysia.

3.3 Target Sampling and Sampling

Table 3.3: Lists of Listed Companies in Malaysia for the Research Study

No.	Company
1.	AXIATA GROUP BERHAD
2.	DIALOG GROUP BHD
3.	DIGI.COM BHD
4.	GENTING BHD
5.	GENTING MALAYSIA BERHAD
6.	HAP SENG CONSOLIDATED BHD
7.	HARTALEGA HOLDINGS BHD
8.	IHH HEALTHCARE BERHAD
9.	IOI CORPORATION BHD
10.	KUALA LUMPUR KEPONG BHD
11.	MAXIS BERHAD
12.	MISC BHD
13.	MR D.I.Y. GROUP (M) BERHAD
14.	NESTLE (M) BHD
15.	PETRONAS CHEMICALS GROUP BHD
16.	PETRONAS DAGANGAN BHD
17.	PETRONAS GAS BHD
18.	PPB GROUP BHD
19.	PRESS METAL ALUMINIUM HOLDINGS BERHAD
20.	SIME DARBY BHD
21.	SIME DARBY PLANTATION BERHAD
22.	TELEKOM MALAYSIA BHD
23.	TENAGA NASIONAL BHD
24.	TOP GLOVE CORPORATION BHD

25.	AIRASIA GROUP BERHAD
26.	ASTRO MALAYSIA HOLDINGS BERHAD
27.	ATA IMS BERHAD
28.	BERJAYA SPORTS TOTO BHD
29.	BERMAZ AUTO BERHAD
30.	BRITISH AMERICAN TOBACCO (M)
31.	BUMI ARMADA BERHAD
32.	BURSA MALAYSIA BHD
33.	CAHYA MATA SARAWAK BHD
34.	CARLSBERG BREWERY MALAYSIA BHD
35.	D & O GREEN TECH0LOGIES BERHAD
36.	DRB-HICOM BHD
37.	DUOPHARMA BIOTECH BERHAD
38.	FGV HOLDINGS BERHAD
39.	FRASER & NEAVE HOLDINGS BHD
40.	FRONTKEN CORPORATION BHD
41.	GAMUDA BHD
42.	GDEX BERHAD
43.	GENTING PLANTATIONS BERHAD
44.	GREATECH TECH0LOGY BERHAD
45.	GUAN CHONG BHD
46.	HEINEKEN MALAYSIA BERHAD
47.	IJM CORPORATION BHD
48.	INARI AMERTRON BERHAD
49.	KOSSAN RUBBER INDUSTRIES BHD
50.	KPJ HEALTHCARE BHD
51.	LEONG HUP INTERNATIONAL BERHAD
52.	LOTTE CHEMICAL TITAN HOLDING BERHAD
53.	MAGNUM BERHAD
54.	MALAKOFF CORPORATION BERHAD

55.	MALAYSIA AIRPORTS HOLDINGS BHD
56.	MALAYSIA BUILDING SOCIETY BHD
58.	MALAYSIAN RESOURCES CORPORATION BERHAD
59.	MATRIX CONCEPTS HOLDINGS BHD
60.	MEGA FIRST CORPORATION BHD
61.	MI TECH0VATION BERHAD
62.	MMC CORPORATION BHD
63.	MY E.G. SERVICES BHD
64.	PADINI HOLDINGS BHD
65.	PENTAMASTER CORPORATION BHD
66.	QL RESOURCES BHD
67.	SAPURA ENERGY BERHAD
68.	SCIENTEX BERHAD
69.	SERBA DINAMIK HOLDINGS BERHAD
70.	SIME DARBY PROPERTY BERHAD
71.	SKP RESOURCES BHD
72.	SP SETIA BHD
73.	SUNWAY BERHAD
74.	SUPERMAX CORPORATION BHD
75.	TIME DOTCOM BHD
76.	UEM SUNRISE BERHAD
77.	UMW HOLDINGS BHD
78.	UNISEM (M) BHD
79.	UWC BERHAD
80.	V.S INDUSTRY BHD
81.	VITROX CORPORATION BHD
82.	WESTPORTS HOLDINGS BERHAD
83.	YINSON HOLDINGS BHD
84.	YTL CORPORATION BHD
85.	YTL POWER INTERNATIONAL BHD

Note: Adopted from Bursa Malaysia Berhad (2021)

For the research study, the companies from the financial-industrial will not be included in this research study. The primary reason is financial-industrial companies such as banks derive a significant value of "sales" from interest income (earned from leans to consumers), whereas in the case of other industries, interest income is categorized as "other income" item (Trugman, 2016). Besides, companies within financial sectors often hold higher levels of debt compared to other industries as the result of financial data of the research will be affected (Trugman, 2016).

The listed companies from the Table 3.3 above are adopted from Bursa Malaysia (2021), which has been exclude the financial industrial companies from the Top 100 Listed Companies and based on the updated date on 21 June 2021.

In this research study, the total observation is only 780. This is because some of the companies are not listed among the year from 2011 to 2018. Therefore, the total observation is 780 instead of 850.

3.4 Variable Definition

Based on the research framework for this research, the definition of the measurement of dependent variables will be displayed in Table 3.4.1, independent variables will be disclosed in Table 3.4.2 and the control variables will be displayed in Table 3.4.3. Due to the instrument used are obtained from the past studies the table will also disclose the reference that used in the research study.

The tables below will show the information of the variables that including the definition or measurement for the variables and the reference used:

Table 3.4.1: Dependent Variables

Dependent Variables	Measurement or Definition	Reference used for the variables

1. Return on Equity (ROE)	Net Income after taxation / Total Equity	(Doan, 2020; Khan et al., 2021)
2. Return on Assets (ROA)	Net Income after taxation / Total Assets	(Rusdiyanto et al., 2020)

Table 3.4.2: Independent Variables

Independent Variable	Measurement or Definition	Reference used for the variables
1. Board Size	The total number of the directors in the board of directors of a company.	(Khan et al., 2021)
2. Female Directors	The percentage and the proportion of female directors in the board.	(Sobhan, 2021; Pangestu et al., 2019)
3. Independent Directors	The percentage and proportion of independent directors in the board.	(Sobhan, 2021; Ponnu & Karthigeyan, 2010)
4. International Experience Director	The proportion of international experience director in the board of directors in the annual report of the company.	Adopt from Daily et al. (2000)
5. CEO Duality	The dummy variable will be used in which the value of 1, it represents that the positions of chairperson and CEO are combined and 0 will represent the position of chairman and CEO are separated, in a company.	(Papangkorn, 2021; Saleh et al., 2020)

Table 3.4.3: Control Variables

Control Variable	Definition / Measurement	Reference used for the variables
Company size (CS)	The book value of total assets of the Company is used to measure the company size.	(Marete, 2015; Sobhan, 2021)

3.5 Data Analysis

3.5.1 Descriptive Analysis

This research study will use the descriptive analysis to analyze the data to identify the sample characteristics. The value of mean, minimum, standard deviation, and maximum is able to be determined by using the descriptive analysis. This is because according to Fooladi and Nikzad (2011), it states that the descriptive analysis can use to identify the descriptive statistics such as mean, minimum, standard deviation, maximum, correlation, kurtosis, skewness and others, for analyzing the information obtained from the collected data. According to Loeb, Dynarski, McFarland, Morris, Reardon, and Reber (2017), descriptive analysis is also providing the information for the summary of the data collected. Therefore, this research study will use this technique to obtain the information which including value of mean, minimum, standard deviation, and maximum.

3.5.2 Panel Data Regression Models

There are many methods can be used to analyze the data. For the research study, the methods that will be used for data analysis is based on the panel data regression. There are a few reasons that this method is being used. Panel data are referring to the data that are considered as a longitudinal data in which the observation is repeatedly observed over a period of time, for the same variable (Yaffee, 2003). In addition, according to Baltagi and Li (2002), by using panel data, additional sophisticated behavioral models would be able to identify. Moreover, the effective and efficient instrument that when the data contains the cross-sectional and time spans (Handa, Blomquist, Roem & Muňoz 2018). Besides, time series and cross-sectional pool data are able to generate a higher degree of freedom, bigger variation, effective and more information (Troeger, 2019). Therefore, the data collected for this research is panel data. Moreover, according to Nilsson (2017) and Troeger (2019), by using panel regression, it is able to provide better flexibility by indicating the heterogeneity constrained of the performance of the company and the temporal operating changers of the company.

There are a few types of models for statistics analysis for regression, such as random effects model, fixed effect model, and ordinary least squares (OLS). In order to obtain the most suitable and appropriate model among these three models, Wald test and Hausman test will be used to examine which of these models are the most suitable to construct the analysis.

Moreover, pooled ordinary least square regression model should be used when the sample selected is based on time series such as each year each day, each time frame and others (Wooldridge, 2010). Besides, pooled ordinary least square regression model will view all the data selected as a single section (Muhammad, 2019). In relation to fixed effect model, it has the assumption that different intercept can be accommodated with the differences among the individuals, which are the variables. As for random effect model, the error term of each company will accommodate the difference between intercepts of the variables (Zulfikar et al., 2021).

In order to determine the model to be used in the research study, the Hausman test will be used between the fixed effect model and random effect model. The Hausman test has the null hypothesis of random effect model is appropriate and the fixed effect model is appropriate is the alternative hypothesis. The decision has to be made according to the p-value which can identified by using Hausman test. In the case where the p-value is lower or lesser than 0.05, the null hypothesis has to be rejected and therefore, by accepting the alternative hypothesis, it indicates that the fixed effect model should be selected. Conversely, if the p-value is more than 0.05, then do not reject the null hypothesis and accept the null hypothesis which indicates that the random effect model should be selected.

On the other hand, Wald test will be used in the selection between the fixed effect model or pooled ordinary least squares model (Baltagi et al., 2020). Wald test has a null hypothesis of fixed effect model is appropriate and alternative hypothesis is the pooled ordinary least squares model or pooled regression model is appropriate in the Wald test (Bollen & Brand, 2010).

When the p-value is less than 0.05 or 5%, the decision is to use pooled regression model. However, conversely, when the p-value is more than 0.05, the decision is to use the fixed effect model.

On this research paper, as the pooled regression model is being use, the following is the equation models are formed, which are adopted from Chazi, Khallaf, and Zantout (2018) and Papangkorn et al. (2021) to this research study:

Model 1-ROA

$$ROAit = \alpha_1 + \beta_1 BS_{it} + \beta_2 FD_{it} + \beta_3 NID_{it} + \beta_4 NED_{it} + \beta_5 CEOD_{it} + \delta Zit + \varepsilon_{it}$$

Model 2-ROE

$$ROEit = \alpha_1 + \beta_1 BS_{it} + \beta_2 FD_{it} + \beta_3 NID_{it} + \beta_4 NED_{it} + \beta_5 CEOD_{it} + \delta Zit + \varepsilon_{it}$$

where:

ROE is representing Return on Equity
ROA is representing Return on Assets
BS is representing Board Size
FD is representing Female Director
NID is representing percentage of Independent Director

NED is representing percentage of International Experience Director

CEOD is representing CEO Duality

Z is representing Control Variables

α is representing Regression Constant

β is representing the Beta Coefficient

t is representing Observation Number in a Time Series Data Set

ε is representing Error Term

i is representing Observation Number in a Cross-Sectional Data Set

3.6 Summary

In summary, this chapter has detailed the process and outline that will be executed for this research which including the research design, sampling used, and method of collecting data. Moreover, each of the measurement of all the variables and the methods used for analysis have been explained accordingly. Furthermore, the statistical methods and methodology used for accumulate the data in this research study has been utilized for examine the relationship between the board characteristics and the company performance among the listed companies in Malaysia.

CHAPTER 4

RESULTS

In Chapter 4, the Eviews 12 will be the tool to use for analyzing the data and showing the findings of this research study. The results from the secondary data were collected to examine the relationship between the independent and control variables, and dependent variables. Furthermore, the standard deviation, maximum value, mean, and minimum value will be showed in the descriptive analysis section. Subsequently, it includes the elaboration of the correlation of the data. Lastly, the interpretation of the sample regression analysis is included in this chapter and ending with a conclusion of this chapter.

4.1 Descriptive Analysis

The information of descriptive statistics obtained from listed companies in Malaysia showing in the Table 4.1. It illustrates the descriptive analysis information such as standard deviation, maximum value, mean, and minimum.

Table 4.1: Descriptive Statistics

Dependent Variables	Mean	Std. Dev.	Maximum	Minimum	Observations
ROA	8.91	9.52	73.07	(22.59)	780
ROE	21.07	38.08	369.91	(311.30)	780
Independent Variables					
Female Directors	0.16	0.15	0.89	0.00	780

Independent Directors	0.50	0.14	0.91	0.00	780
Board Size	8.68	2.14	15.00	4.00	780
International Experienced Directors	0.99	0.06	1.00	0.44	780
CEO Duality	0.92	0.27	1.00	0.00	780
Control Variable					
Company Size (in Billion)	14.68	21.89	181.43	0.06	780

Notes: 1. Company panel data are from the year 2011 to year 2020.

According to Table 4.1, ROA has an average return at the rate of 8.91% from the year 2011 to the year 2020. Besides, it has a maximum value of 73.07% and has a minimum value of -22.59%. The ROA has a standard deviation of 9.52%. This indicates that the ROA tends to have a distance of 9.52% between the mean of 8.91%. Therefore, the range of ROA is more likely ranging from -0.61% to 18.43%.

As for ROE, it has a higher value of mean, which is 21.07%, compared to ROA. It indicates that the average return of the total equity of the listed companies in Malaysia is 21.07%, which has a higher value than the ROA value by 12.16%. Besides, ROE has a maximum value and a minimum value of 369.91% and -311.30% respectively. According to the Table 4.1, the standard deviation of ROE is 38.08%. It indicates that the range of ROE is more likely ranging from -17.01% to 59.15%. Therefore, by comparing both of the dependent variables, although ROE has a higher rate of return than ROA, ROA is more stable than ROE as its standard deviation is smaller than ROE.

On the other hand, board size has a mean of 9, after rounding up of 8.68, accordance to the Table 4.1. This shows that the average board size of Malaysia’s listed companies is 9. With a standard deviation of 2, the range of board size is more likely ranging from 6 to 10. Based on Table 4.1, the maximum value of board size of listed companies in

Malaysia is 15 and the minimum value of board size is 4, based on the entire sample selected.

For the independent variable of percentage of female directors, the average of percentage of female directors in the board of directors is 16%. With a standard deviation of 15%, the percentage of female directors are more likely ranging from 1% to 31%. The maximum percentage of female directors is 89% and the minimum value of female directors is 0%.

Moreover, the percentage of independent directors has a mean of 50%. This shows that on average, 50% of the directors in the board of directors are independent directors. For example, if the board has 8 directors, 4 of the directors, in average, are independent directors. This is also fulfilling the listing requirement that at least one over three of the directors shall be independent directors. The minimum value of proportion or percentage of independent directors is 0%, whereas the maximum value of percentage of independent directors is 91%. With standard deviation of 14%, the percentage or proportion of independent directors in the board of directors on average is raging from 36% to 64%.

In addition, the percentage of international experienced director has a mean of 99%. This indicates that 99% of the directors are having international experience, on average. This also shows that almost 99% of the directors in the listed companies in Malaysia are having international experience such and qualification obtained from overseas, working experience from overseas and others. The maximum value and minimum value of percentage of international experience are 100% and 44% respectively.

Furthermore, CEO duality variable has a mean of 0.92. Based on the 0.92 of mean, it indicates that on average, 92% of the listed companies in Malaysia is a CEO duality company. As explained in the Chapter 3, the CEO duality is a dummy variable in which the "1" is indicating the listed company is CEO Duality Company and "0" is indicating that the listed company is non-CEO Duality Company. Therefore, the maximum value of CEO duality is 1 and minimum value of CEO duality is 0, as based on the Table 4.1.

In relation to the control variable, the company size has a mean of RM14.68 billion. It indicates that the average company size of listed companies in Malaysia is RM14.68 billion. Besides, the maximum value of the company size is RM181.43 billion and the minimum value of company size is RM0.06 billion.

4.2 Correlation Analysis

The correlation analysis is used to explain the relationship of the among all the independent variables and control variable in order to validate the research study (Syazali et al, 2019). One of the primary objectives of the correlation analysis is to identify the occurrence of the multicollinearity issues (Shrestha, 2020). Multicollinearity problem occurs when the correlation among the independent variables is strongly related, in which there is more than 2 of the independent variables are strongly correlated. According to Hair et al. (2014), the occurrence of multicollinearity issues will affect the reliability of the result of the regression negatively. Therefore, the correlation analysis has been used to ensure the reliability of the result from regression and the value of the correlation among all the variables has been illustrated in the Table 4.2.

Multicollinearity problem arises can be identified by the value of the correlation between the two variables. There are a few arguments in relation to the value of the correlation for determining multicollinearity problem. One of the determining points is that when the value of the correlation between them is more than 0.9 (Akpan & Amran, 2014). However, the occurrence of multicollinearity problem can be identified when the correlation value is more than 0.8. (Wasiuzzaman & Gunasegavan, 2013). In addition, according to Zeitun (2012), when the correlation value is more than 0.7, it is considered as multicollinearity problem. Nevertheless, according to Hakimi et al. (2016), the multicollinearity problem does not exist as long as the values between the variables are less than 1. Therefore, according to Hakimi et al. (2016), the result from this study does not showing any multicollinearity problem.

Based on Table 4.2, the result shows that ROA and ROE have a significant correlation with the value of 0.74 as ROA and ROE are the dependent variables that used for measurement of profitability of the listed companies. The other independent variables are mostly not significantly correlated. For example, board size and international experienced directors have a value of 0.01. Moreover, CEO duality and female directors are not significantly correlated, as the value is 0.00. It shows that these variables are not has multicollinearity problem.

Table 4.2: Correlation Analysis

	ROA	ROE	Board Size	Female Directors	Independent Directors	International Experienced Directors	CEO Duality	Company Size
ROA	1.00							
ROE	0.74	1.00						
Board Size	-0.14	-0.07*	1.00					
Female Directors	0.06*	0.16	0.18	1.00				
Independent Directors	0.06*	0.02**	-0.09*	0.16	1.00			
International Experienced Directors	0.01***	0.02**	0.01***	-0.15	-0.33	1.00		
CEO Duality	-0.06*	0.03**	-0.02**	0.00***	0.02**	-0.04**	1.00	
Company Size	-0.35	-0.20	0.29	0.09*	0.11	0.03**	0.11	1.00

Note: 1. Significant level ***1%; **5%; *10%.

2. ROA refers to return on assets, and ROE refers to return on equity.

4.3 Regression Result

Table 4.3.1: Hausman Test

Test Summary	**ROA**	**ROE**
Chi-Sq. Statistic	16.98	11.39
Chi-Sq. d.f.	6.00	6.00
Prob.	0.01*	0.08**

Note: *Significance level at 5%, Fixed Effect Model is appropriate; ** indicates a significant level above 5%, Random-effects model is appropriate.

Table 4.3.2: Wald Test

Test Statistic	ROA			ROE		
	Value	df	Probability	Value	Df	Probability
t-statistic	(0.73)	773.00	0.47	1.77	773.00	0.08
F-statistic	0.53	(1, 773)	0.47**	3.12	(1, 773)	0.08**
Chi-square	0.53	1.00	0.47	3.12	1.00	0.08

Note: ** indicates significance level at 5%. Pooled OLS regression is appropriate

In this research study, the Hausman test is used to decide the model to be used between the random effect model or fixed effect model for analysis the result of this research study. Based on the Table 4.3.1, the p-value is less than 0.05 for ROA. Therefore, ROA should use the fixed effect model as we are rejecting the null hypothesis of this test and accepting the alternative hypothesis.

On the other hand, due to the p-value of the ROE is more than 0.05, random effect model should be selected as we are accepting the null hypothesis and rejecting the alternative hypothesis of the test. However, due to the highest r-square in fixed effect model based on the Table 4.3.3, the result did not appear to be acceptable. Thus, Wald test is used for further assessment.

Based on the table 4.3.2, the finding shows the result by using Wald test and that both ROA and ROE have a probability that is more than 0.05 or 5|%. Therefore, the null hypothesis is being rejected and the alternative hypothesis is being accepted, in which it indicates that the Pooled Regression Model will be the for analysis. Hence, the Pooled Regression Model is being used for this research study.

Table 4.3.3: Panel Regression Analysis Result

Variables		Pooled Regression Model (OLS)		Fixed Effect Model		Random Effect Model	
		ROA	ROE	ROA	ROE	ROA	ROE
Board Size	Coeff.	-1.25	-1.05	1.93	2.21	1.23	1.70
	P-value	0.21	0.30	0.05	0.03	0.22	0.09
Female Directors	Coeff.	2.74	5.38	-3.39	0.23	-2.64	0.92
	P-value	0.01***	0.00***	0.00	0.82	0.01	0.36
Independent Directors	Coeff.	2.86	0.92	0.38	-0.12	0.78	0.09
	P-value	0.00***	0.36	0.70	0.91	0.44	0.93
International Experienced Directors	Coeff.	1.86	1.87	2.00	1.10	1.36	0.90
	P-value	0.06*	0.06*	0.05	0.27	0.17	0.37
CEO Duality	Coeff.	-0.73	1.77	-0.06	-0.38	-0.21	0.06
	P-value	0.47	0.08*	0.95	0.70	0.83	0.95
Company Size	Coeff.	-9.99	-5.91	-2.28	-2.10	-4.43	-3.33
	P-value	0.0000***	0.0000***	0.02	0.04	-	0.00
C	Coeff.	-0.27	-1.20	-1.53	-0.91	-0.54	-0.59
	P-value	0.79	0.23	0.13	0.36	0.59	0.56
R-square		0.14	0.08	0.79	0.74	0.04	0.02
Adjusted R-squared		0.14	0.07	0.77	0.70	0.04	0.01
F-statistic		21.74	11.37	29.45	21.54	5.72	2.36
No. of Observation		780	780	780	780	780	780

Note: Significant level ***1%; **5%; *10%.

Based on the Table 4.3.3, the panel regression analysis for the entire sample for ROA and ROE is showed. According to the analysis completed through Hausman test and Wald test, the Pooled Regression Model (OLS) is the most appropriate model to be used in this research study. The f-statistic shows that the overall significance of the regression. As per the results, all the probability is close to zero. Thus, it indicates that the variables are highly significant.

The R-square of ROA and ROE is 14% and 8% respectively. It is used to signify the percentage independent that is explained by the independent variable. Therefore, it can be interpreted that 14% in the ROA is explained by the board size, female directors, independent directors, international experience of directors, company size and CEO duality. Based on the result on pooled regression model, it is found that the female directors, independent directors international experienced directors and company size are statistically significant with ROA, and the board characteristics of female directors, international experience directors, CEO duality, and company size are found statistically significant with ROE.

4.3.1 Board Size and Company Performance

In the research study, board size was found to have no significant impact on ROA and ROE. Thus, the regression result shows that there is no significant relationship between board size and performance of the company. Hence, the alternative hypothesis is accepted by rejecting the null hypothesis.

Furthermore, this result also has supported by the finding of Beiner et al. (2004), in which the findings indicate that the board size does not have the significant relationship with the company performance.

Nevertheless, the coefficient for board size for ROA and ROE is -1.25 and -1.05 respectively. Thus, this indicates that there is a negative relationship with the company performance, but it is not significant statistically. This also shows that when the board size increases by 1, the company performance will reduce by 1.25 for ROA and 1.05 for ROE.

Based on the result, it indicates that the higher the board size of a company, the lower the firm performance. This may due to the higher the number of board size will be making the discussion more complex, increase the decision-making process, and poor communication among the directors would result in the por company performance than the lower board size companies.

4.3.2 Female Directors and Company Performance

Based on the research finding, it shows that the female directors have a positive and significant relationship with the ROA and ROE with a significant level at 1% for both ROA and ROE.

Thus, based on the result, the null hypothesis is being rejected, and thus, accepting the alternative hypothesis. This indicates that there is a significant relationship between the female directors and company performance.

Based on the Table 4.3.3, the result show that the coefficient of female directors is 2.74 for ROA and 5.38 for ROE. This indicates when there is a increase of female director by 1, it will increase the company performance by 2.74 in respect of ROA and 5.38 in respect of ROE.

The study result is supporting the findings from the previous studies of Handa (2018), Owen and Temesvary (2017), and Setiyono and Tarazi (2014), in which they found that there were a significant and positive relationship between female directors and firm performance. Thus, based on this result, this shows that the higher the female directors in the board of the companies, the firm performance will be higher.

4.3.3 Independent Director and Company Performance

The independent directors are acting as the “watchdog” to oversee the executive directors’ decision. Based on the result, it shows that independent directors have a significant and positive relationship with the firm performance in respect of ROA with a significant level at 1%. However, the ROE results show that there is a positive relation as well between the independent director and company performance, but there is not statistically significant as the p-value is more than 10%. This result shows that there is a significant and positive relationship between company performance and independent directors. Therefore, the null hypothesis is not rejected, and reject alternative hypothesis, in which it indicates that there is a significant relationship between the company performance and independent directors.

Based on the Table 4.3.3, the result from pooled regression model show that the coefficient of independent directors is 2.86 in respect to ROA and 0.92 in respect to ROE. This indicates that the increase of independent directors of the board by 1 will increase the company performance by 2.86 for ROA and 0.92 for ROE.

Besides, this result is also consistent with the past researches of Ntim (2011), Müller (2014), and Koerniadi and Rad (2012), in which they found that there the relation between the independent directors and company performance is a significant and positive relationship.

4.3.4 International Experienced Directors and Company Performance

According to the Table 4.3.3, the international experience directors have a significant relationship in relation to company performance. This is because the result shows that they have a significant and positive relationship with the significant level of 10% for both ROA and ROE.

Furthermore, the result also shoes that the coefficient of the international experience directors is 1.86 for ROA and 1.87 for ROE. This indicates that the increase of 1 in the directors with international experience will result in increase of 1.86 of ROA and 1.87 or ROE.

Thus, there is a significant and positive relationship is found between the international experienced directors and firm performance and it is supported by the research of

the finding from the studies of Daily et al. (2000) and Wen et al. (2020). This result indicates that the higher the number of directors with international experience, it will help the companies to have a better performance. Thus, the null hypothesis is not being rejected and rejecting alternative hypothesis.

4.3.5 CEO Duality and Company Performance

Based on Table 4.3.3, the CEO duality found that there is a significant and positive relationship in relation to the company performance from the result of ROE, with a significant level at 10%. As for the result from ROA, it shows that there is an insignificant relationship between CEO duality and company performance as the significant level if more than 10%. Therefore, the result shows that there is a significant and positive relationship between CEO duality and company performance.

On the other hand, in relation to the coefficient of CEO duality, it is found that the coefficient is 1.77 from the result of ROE. This indicates that when the company has CEO duality, it enhances the company performance by 1.77 in respect of ROE. Although CEO duality has a coefficient value of -0.73 in respect of ROA, but it is not significant.

At such, the finding between CEO duality and company performance in the research study is supported by the findings from Pang et al. (2017) and Guillet et al (2013), which indicating that there is a significant relationship between the CEO duality and company performance.

As a result, the null hypothesis is rejected and the alternative hypothesis is accepted, in which there is a significant relationship between the CEO duality and company performance.

4.3.6 Company Size and Company Performance

Based on Table 4.3.3, the result of this study, it shows that there is a negative and significant relationship between the size of the company and company performance at the significant level at 1% for both ROA and ROE.

This result is contradicted by the findings of the study from Onofrei, Tudose, Durdureanu, and Anton (2015), Marete (2015), and Olawale, Ilo, and Lawal (2017) in which their findings were indicating that there was no relationship between company size and firm performance.

On the other hand, the coefficient value of company size indicates that the ROA will reduce by 9.99 with the increase of company size by 1, and the ROE will decrease by 5.91 when there is an increase of 1 in company size.

In this study, the negative relationship between the company size and firm performance indicating that the higher the company size or total assets, the lower the firm performance.

Therefore, based on the result of the research, the null hypothesis is rejected and the alternative hypothesis is accepted, which is there is a significant relationship between company size and firm performance.

4.4 Summary of Hypothesis Result

Hypothesis	**Description**	**Decision**
Hypothesis 1 $H1_1$:	There is no significant relationship between board size and company performance.	Reject $H1_0$, Accept $H1_1$
Hypothesis 2 $H2_1$:	There is a significant relationship between gender diversity and company performance.	Reject $H2_0$, Accept $H2_1$

Hypothesis 3 $H3_0$:	There is a significant relationship between number of independent director and company performance.	Do not reject $H3_0$, Reject $H3_1$
Hypothesis 4 $H4_0$:	There is a significant relationship between international experience director and company performance.	Do not reject $H4_0$, Reject $H4_1$
Hypothesis 5 $H5_1$:	There is a significant relationship between CEO duality and company performance.	Reject $H5_0$, Accept $H5_1$
Hypothesis 6 $H6_1$:	There is a significant relationship between company size and company performance.	Reject $H6_0$, Accept $H6_1$

4.5 Conclusion

This chapter, all of the hypotheses were tested and analyzed with different measurement. Besides, all the results have been interpreted and presented in tabulation form and marking the significant variables. In next chapter, the summary of the result will be represented which including implication of the study, recommendation, limitation and future study, and lastly, conclusion.

CHAPTER 5;

DISCUSSION AND CONCLUSION

This chapter includes a summary of the statistical analysis, discussion of major findings, implication of the study, limitations of the study, recommendation, limitation and for future research, and conclusion.

5.1 Implication and recommendation

The objective of this study of research is to examine the relationship between the board characteristics to the company performance of the listed companies in Malaysia. The findings of the research indicate that there is a mix result in which some of the board characteristics variables are related to firm performance and some is not significantly related to the company performance. Thus, the result of this study will able to provide some useful information to some parties.

First and foremost, this research is able to assist the listed companies to make decision. For example, making the decision for increasing the board of directors at the optimal level to gain better performance in the market. For example, the company could increase the number female directors as the female directors are positively and significantly related to the firm performance.

Additionally, the company could also increase the independent directors in the board of directors as it is positive and significantly related to the firm performance. Therefore, the company could focus on the variables that have significantly relationship such as female directors, independent directors, international experience director, CEO duality and company size, to enhance the performance of the company.

On the other hand, the listed companies can increase the number of international experience directors as it has a positive and significant relationship to the company performance, if the listed companies decide to enhance the company performance by increase the number of international experience directors, it would generate positive effect on the company performance. This is because the study also indicates that increasing the board size of the company is not significantly related the company performance. Hence, the company is recommended to increase the board size by increasing the number of directors by valuing the directors with international experience and the female directors, to increase the company performance, accordance to the findings in this study.

Besides, this research also able to help the policymaker, Suruhanjaya Syarikat Malaysia is able toto generate and develop some new or amend some codes of the corporate governance. For example, the independent directors have a positive and significant relationship with the firm performance which indicates the policymaker use this matter to develop future code of corporate governance.

Furthermore, the study also shows that there is a significant relationship between the female director to the firm performance. This also provides the policymaker could use it as an indication for developing the code on the female directors. According to the MCCG 2017, the Practice 4.5 states that the female directors must be comprehended minimum of thirty percent of the board of directors. Therefore, the policymaker can enhance this requirement to increase or reduce the female directors in a company for corporate governance purpose.

Moreover, the research findings are also able to help the stakeholders to make decision on their investment. This is because the stakeholders can use the information from this research study to identify the suitable company by understanding which variables are affecting the firm performance, and make the decision based on the analysis. This would help the stakeholders to make the decision making for investment, as a reference.

Furthermore, it also assists the stakeholder to enhance the value of the investment. For example, as the board size has a positive and significant relationship with the firm performance, the stakeholders can use this as a reference, to identify the suitable company to invest into.

The study also contributes from the academic perspective. The research found that the company size has a negative and significant relationship with the company performance. This shows that the bigger the company size, the lower the company performance. This would due to the increase of the fixed assets will has a slow generation of cash flow to the company and it will incur the company to have higher maintenance fee for maintaining the fixed assets of the Company. This is because the company size is measured by the total assets of the Company. Thus, the higher the company size will lead to lower the firm performance.

5.2 Limitation and recommendation for Future Study

One of the limitations of this research is that it is merely tested the accounting variables, in which it excludes the market indicators such as inflation, economic condition and others. Moreover, due to the time limitation, the researcher has restricted the sample size to only include the 85 companies listed in Malaysia. This indicates that it could theoretically reduce and decrease the reliability and accuracy of the result. This is because the researcher is only given six months to complete the study. Therefore, it is recommended for the future study to include more sample size to enhance the accuracy of the study.

Besides that, the period selected is only including the from the year 2011 to year 2020 due to time limitation. Thus, it is recommended to include the longer duration to enhance the quality of the research. In addition, it is recommended to use other analysis method such as CAMELS test, multiple linear regression method and others. Furthermore, this research has a limited independent and dependent variable measurement. Therefore, it is recommended for future study to include more independent and dependent variable measurements.

Moreover, this study has limited geographical area in which the study is only focusing on the listed companies in Malaysia. For future study purpose, it is recommended to include others countries companies to test the variables.

5.3 Conclusion

There are a lot of studies has been conducted to determine the relationship between board characteristics and company performance of listed companies. However, many of the studies do not provide and generate the same result. Therefore, the main objective of this research is to examine the relationship variables of board characteristics and the firm performance of listed companies in Malaysia. Hence, the variables of the board characteristics are being examined to the company performance of listed company in Malaysia.

Subsequently, the top 85 listed companies have been selected in this study for the period starting from the year 2011 to year 2020. Two popular profitability measurements have been used to identify the firm performance, which are ROA and ROE. Based on the result from the descriptive study, ROE variable is found that it has a higher rate than ROA variables.

Then, based on the regression analysis result, its findings show that there is a signification relationship and for the variables of female director, independent directors, international experience directors, CEO duality, and company size, to the firm performance. Among these examined board characteristics variables that have significant relationship to the form performance, only the company size variable has a negative and significant relationship to the firm performance, whereas the others have a positive and significant relationship to the firm performance. On the other hand, board size is found that they have no significant relationship to the firm performance. Based on the findings, it is able to provide some implications to some parties such as listed company, policymakers, stakeholders, and contribution to the academic perspective.

Meanwhile, this research also has some limitations and the recommendation for future study also provided.

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